

**EL DORADO COUNTY DEVELOPMENT SERVICES  
PLANNING COMMISSION STAFF REPORT**



**Agenda of:** October 25, 2007

**Item No.:** 11.a.

**Staff:** Mel Pabalinas

**REZONE**

**FILE NUMBER** Z07-001/G3 Enterprise

**APPLICANT:** RRM Design Group

**PROPERTY  
OWNER:** G3 Enterprise Inc.

**REQUEST:** Rezone from Mineral Resource (MR) to Estate Residential Ten-acre-Planned Development (RE-10-PD)

**LOCATION:** One mile south of U.S. Highway 50, one mile west South Shingle Road; in the Cameron Park area, Supervisorial District II (Exhibit A)

**APN:** 109-010-09, -10, -13, -14 and 109-020-01

**PROPERTY  
SIZE:** 537 acres

**GENERAL PLAN:** Rural Residential (Exhibit B)

**ZONING:** Mineral Resource (MR) (Exhibit C)

**ENVIRONMENTAL DOCUMENT:** Negative Declaration

**SUMMARY RECOMMENDATION:** Recommend approval

**BACKGROUND**

Portions of the site have been historically mined for limestone in association with the Marble Valley Limestone Quarry, most recently by El Dorado Limestone Mine. In 1983, based on the Open File Report (OFR 83-29) prepared for the Department of Conservation (DOC), the

mine was deemed inactive despite containing large reserves of high quality carbonate rock. As such, the site retained its Mineral Land Classification of MRZ-2a.

A subsequent Open File Report (OFR 2000-03) in 2001 by DOC concluded that the site was no longer considered a significant mineral resource, removing its MRZ-2a designation. Furthermore, a supporting letter from the State Geologist indicated that mining of limestone in the Marble Valley Area is not considered “economically viable now or in the foreseeable future” (Attachment 4). These OFR files have been adopted by El Dorado County as referenced under General Plan Policy (Conservation and Open Space Element) 7.2.2.1.

## **STAFF ANALYSIS**

Staff has reviewed the project for consistency with the County’s regulations and requirements. An analysis of the proposal and issues for the Planning Commission/Board of Supervisor consideration are provided in the following sections.

### **Project Description**

The applicant is requesting a rezone of the above property from Mineral Resource (MR) zone district to Residential Estate-10 acre minimum (RE-10) with a Planned Development (-PD) overlay. The proposed underlying zoning would conform to the General Plan Land Use Designation of Rural Residential (RR) which provides a density range of one dwelling unit per 10 to 160 acres. No development or improvement is proposed concurrent with the zone change.

### **Site Description**

Consisting of five individual legal parcels, the 530-acre site is located approximately 1 mile south of Highway 50 and 1 mile west of South Shingle Springs. The site is accessed via both improved public and unimproved private roads connecting from Deer Creek Road from northwest, Shingle Lime Mine Road from the northeast, and Amber Fields Drive from the southeast. Historically, the property was utilized as a grazing, limestone mine, and processing and rock crushing facility associated with the defunct Marble Valley Limestone Deposit quarry, located to the west. Though predominantly undeveloped, small areas located in the middle of the site contains two dwelling units, three unoccupied accessory buildings, and two accessory buildings utilized by a construction company.

The site is located within the elevation range of 800 feet at the southwest to 1,280 feet along the eastern border. The property is characterized by three types of soil from two soil series: Auburn Series (AwD and AxD), a well drained and shallow to moderately deep soil type formed from metabase or metasedimentary rock, with moderate permeability; Sobrante Series (SuC), a well drained moderately deep soil, formed from basic igneous and metamorphic rocks, with moderate permeability. Additionally, two soil classifications not associated with series, Serpentine (SaF) rocks formed from Serpentine bedrock, and Quarries (Qu) are also present on the site. Sobrante Series is considered an agricultural “choice” soil

type designated as prime or local importance. Serpentine rock formation is commonly accompanied by areas of Gabbro soils which is prevalent to rare “endemic” plants (Exhibit D)

Along with its several tributaries, Deer Creek, a predominantly intermittent watercourse, traverses the site from the northwest meandering into through the middle of the site to the southwest. This wetland feature flows into Consumnes River, which eventually connects to Suisun Bay via the Mokelumne and San Joaquin Rivers. The site also contains several smaller seasonal wetlands that connect to Deer Creek and its tributaries. In total, the amount of wetland and drainage feature is estimated at 3.54 acres (Exhibit E).

The balance of the biotic habitats is encompassed by the following: Mixed oak woodland (242 acres) primarily consisting of Valley oaks, Blue oaks, California black oak located along the riparian corridor; Montane manzanita chaparral (129 acres) including Whiteleaf manzanita, various shrub species, and mixture of native and non-native grass, primarily occupies the western half of the site; Oak savannah (103 acres), contains a mix of Valley oak, Blue oak and grassland understory; Ruderal area (39 acres), contains non-native grass and forbs within previously disturbed area; and Mixed chaparral (14 acres) includes small areas of mixed chaparral and shrubs within oak savannah habitat located within northeast section.

**Site Information**

Tables 1 and 2 detail the specific land use information of the site and the surrounding properties.

**Table 1. Current Site Land Use Information**

	<b>Project Site</b>
<b>General Plan Designation</b>	Rural Residential (RR)
<b>Zoning</b>	Mineral Resource (MR)
<b>Use(s)</b>	Residential, Accessory Building
<b>Size (in acres)</b>	537
<b>Rare Plant Mitigation Area</b>	Mitigation Area 1
<b>School District</b>	Buckeye Union
<b>Fire District</b>	El Dorado County Fire Protection District
<b>Water/Sewer District</b>	109-010-09, -10 EID; 109-010-13, -14; -020-01 Unassigned
<b>County Region</b>	Rural Region
<b>Traffic Analysis Zone(s)</b>	343 and 167
<b>Supervisory District</b>	District No.2
<b>Flood Zone</b>	C
<b>FIRM Panel Numbers</b>	060040 0725C
<b>Legal Parcels</b>	Yes
<b>Census Tract</b>	308.04

**Table 2. Surrounding Properties Land Use Information**

	<b>General Plan Designation</b>	<b>Zoning Designation</b>	<b>Existing Use</b>
<b>North</b>	Low Density Residential (LDR)	Residential Estate 5-acre (RE-5), Planned Agricultural 20-acre (PA-20)	Residential
<b>East</b>	Low Density Residential (LDR)	Residential Estate 5-acre (RE-5)	Residential
<b>South</b>	Low Density Residential (LDR), Public Facilities (PF), Open Space (OS)	Open Space (OS), Residential Agricultural 40-acre (RA-40), Residential Estate 5-acre (RE-5)	Residential, EID Waste Water Treatment Plant
<b>West</b>	Low Density Residential (LDR)	RE-5/PD	Marble Valley Subdivision

**General Plan**

Land Use Element General Plan Policy 2.2.5.2 requires all discretionary projects to be reviewed for consistency with applicable General Plan Policies. Specifically, the project has been reviewed for consistency with the following policies.

- **Land Use Element Policy 2.2.5.2 (Project Consistency with General Plan)**

This policy requires verification of discretionary project applications for consistency with the applicable General Plan policies. Based on consistency matrix (Table 2.4) under General Plan Policy 2.2.1.5, the proposed rezone to Residential Estate 10-acre/ Planned Development (RE-10/PD) would be consistent with the Rural Residential (RR) designation of the site. Subsequent development proposal of the site would subject to the general plan policies under Objective 2.2.3 (Planned Developments).

- **Land Use Element Policy 2.2.5.3 (Rezone Consistency)**

In order to assess the appropriate density and specific site conditions, this policy requires evaluation of future rezone based on specific criteria including:

1. Availability of an adequate public water source or an approved Capital Improvement Project to increase service for existing land use demands;
2. Availability and capacity of public treated water system;
3. Availability and capacity of public waste water treatment system;

Two of the properties (APN 109-010-09, -10) composing the site are located within El Dorado Irrigation District (EID) service and could potentially be served for public water and sewer. The remaining properties would require an annexation into EID for future consideration of these services.

As of January 1, 2006, the estimated water supply available in the Western/Eastern Supply Region is 2,285 equivalent dwelling units (EDU). If public water and sewer is proposed to serve the future development of the site, the project would be required to obtain a Facility Improvement Letter (FIL). The FIL provides a preliminary assessment of the development which includes determining the amount of required EDU of water based on the availability, details of the required off and on-site improvements and/or utility easements to facilitate construction/extension of water and sewer lines, and submittal of facility improvement plans depicting the construction details in accordance with EID standards.

4. Distance to and capacity of the serving elementary and high school;

The nearest elementary school to the site is Blue Oak Elementary School within the Buckeye Union School District. The school is located at 2391 Merrychase Drive in Cameron Park, approximately two miles north of the site. The school is within capacity.

This nearest high school to the site is Ponderosa High School within the El Dorado Union High School District. The school is located at 3661 Ponderosa Road in Shingle Springs, approximately five miles northeast of the site. The school is currently nearing capacity.

5. Response time from nearest fire station handling structure fires;

The site is within the El Dorado County Fire Protection District. The nearest station to the site is located at 3860 Ponderosa Road in Shingle Springs, located approximately 5 miles northeast of the site. The projected emergency response time is between 6 to 7 minutes.

6. Distance to nearest Community Region or Rural Center;

The nearest Community Region to the site is the Shingle Springs located approximately one-half mile from the site.

7. Erosion hazard;

The site contains varying type of soil composition. Auburn Series (AwD and AxD) is well-drained soils underlain by hard metamorphic rock. This type of soil is permeable, slow to medium surface runoff and slight to moderate erosion hazard. Serpentine Rock Land (SaF) is excessively drained, with very rapid surface runoff is very, and the erosion hazard is slight to moderate. Sobrante Series (SuC) has moderate permeability, slow to medium surface runoff, and slight to moderate erosion hazard. Subsequent development of the site would be required to provide site specific geotechnical and soil survey prior to site design.

8. Septic and leach field capability;

The site is located within a region constraint with areas of steep slope, serpentine rocks, and historical data of inadequate percolation. Though the anticipated minimum size of each parcel to be created is 10 acres, subsequent development would be required to prove adequate area for septic leachfields and capable of utilizing conventional system.

9. Groundwater capability to support wells;

Based on the existing constraints associated with existing topography and soil types and historical groundwater data in the area, groundwater supply within the site is limited. Development of the site would require water flow and quality testing as part of the application proposal.

10. Critical flora and fauna habitat areas;

As discussed above, the site contains an array of biotic areas that would provide for potentially suitable habitat for different types of protected species of flora and fauna including oak woodland, rare "endemic" plants and animals such as Valley elderberry longhorn beetle and California horned lizard.

11. Important timber production areas;

The site is not considered an important source of timber.

12. Important agricultural areas;

The Sobrante soil series (SuC) area of the property is considered "choice" agricultural soils. As determined by the Agricultural Commission, this portion of the site is irregularly shaped and isolated and has been disturbed by previous mining operation. The Commission concluded that utilizing this area agriculturally would not be practical and limited viability.

13. Important mineral resource areas;

The site was historically mined for large lime deposits. Though currently zoned as Mineral Resource (MR), the mining on the site has been inactive and the Department of Conservation does not consider the limestone site to be economically viable. The MRZ-2a designation of the site has been removed.

14. Capacity of the transportation system serving the area;

The site is accessed via public and private roads that meander through estate-size residential and rural subdivisions. These roads are currently adequate for the existing subdivisions but would need to be improved in order to accommodate an increase in use and vehicular traffic.

15. Existing land use pattern;

Except for the use of the existing buildings, the site is predominantly undeveloped.

16. Proximity to perennial water course;

The site is traversed by Deer Creek running from the northwest meandering southwest. Though predominantly intermittent, portions of Deer Creek contain year round waters.

17. Important historical/archeological sites;

Based on the record search conducted, the site has numerous historical records considered to be highly sensitive for prehistoric and historic-period cultural resources. A specific cultural resource study would be required as part of development application of a proposal.

18. Seismic hazards and present of active faults;

The site is adjacent to East Bear Mountain Fault and its isolated sections. This fault system is not considered active.

19. Consistency with existing Conditions, Covenants, and Restrictions.

There are no existing CC&Rs subject to the site.

- **Land Use Element Policy 2.2.2.7 (Mineral Resource Sites)**

This policy regulates the uses within sites designated to contain significant mineral resource. Though previously mined of lime deposits, the mine has been inactive and is no longer considered economically viable. The MRZ-2a designation of the site has been removed.

- **Agricultural and Forestry Element Policies 8.1.1.5 (Choice Agricultural Soils) and 8.1.3.5 (Agricultural Use)**

These policies regulate non-agricultural uses on “choice” agricultural soils, a type of soil associated with prime or locally significant farmland. The site contains Sobrante series (SuC), a type of “choice” agricultural soil. This section of soil is irregularly shaped, isolated and has been disturbed by the railroad tracks associated with the previous mining operation. A representative from the Agricultural Commission determined that utilizing this area agriculturally would be impractical and would not be economically viable.

- **Agricultural and Forestry Element Policy 8.1.2.2 (Grazing Lands)**

This policy regulates the creation of lots under 40 acres for properties with historical grazing. Portions of the site have been historically used for grazing. A representative from Agricultural Commission indicated that the area is no longer considered suitable and would be impractical for grazing given the insufficient amount of grassland on-site and the need of feed supply to accommodate such an operation.

## **Zoning**

The subject site is zoned Mineral Resource (MR), based on the previous existence of the limestone operation. The proposed rezone to Residential Estate 10-acre minimum/Planned Development (RE-10/PD) would be consistent with the Rural Residential land use designation and the related policies of the General Plan.

Section 17.70.080 of the El Dorado County Zoning Ordinance (Residential Estate) establishes the development standards regulating various uses including single family residences, agricultural uses (i.e. grazing, processing) and agricultural support services. Implemented under Sections 17.02 and 17.04, the Planned Development overlay would provide for subsequent review of future development of the project site. Specifically, implementation of planned development concepts would provide for innovative planning and development techniques in further enforcing various General Plan strategies. Some of these strategies include provisions for open space, clustered development design which would further the County goals in developing to the natural topography, and preserving sensitive biological and cultural resources.

## **Other Issues**

### *Agency Comments*

On February 21, 2007, the project was distributed for agency review and comment. The following discussion details the agency comments, including a brief staff response (Attachment 3).

### El Dorado County Agricultural Commission

The Commission considered the zone change request at its scheduled meeting on April 11, 2007. The Commission provided conditions requiring future parcels created along the agriculturally zoned lands to the south maintain a minimum size of 10 acres and a 200-foot setback for incompatible agricultural uses. This condition shall be applied to the future development proposal.

In a separate discussion regarding the existence of choice soils at the site, an Agricultural Commission representative indicated that the choice soils on the site may have insufficient viability given the limited area, irregular narrow shape, and isolated location. The Commission representative also indicated that conducting a grazing operation on the site would not be suitable practical given the existing insufficient grassland and the amount of feed supply to serve the operation.



Cameron Estates Community Services District (CSD)

A CSD representative expressed their concern regarding the future development of the site which would border the private community of Cameron Estates maintained by the District. Specifically, the CSD is concerned with the ingress and egress to the future development. The agency requests additional notification of future development proposals.

Pacific Gas and Electric (PG&E)

PG&E requires a dedication of a 12.5-foot wide easement along public roadways, private drives or IOD for purposes of locating underground facilities. This comment shall be considered as part of future development review.

El Dorado County Resource Conservation District (RCD)

The RCD commented on the future development impacts on the mineral resources on site. As discussed above, the lime deposit is no longer considered to be economically viable resulting in the removal of Mineral Resource MRZ-2a designation of the site by the Department of Conservation.

El Dorado County Department of Transportation -Zone of Benefit (ZOB) Division

The ZOB expressed its concern involving the potential development impacts on the Fernwood Cothrin Road ZOB. Specifically, a representative from the ZOB is concerned that the future development would impact the zone roads and contribute to the drainage. The agency request additional information upon submittal of formal development application.

El Dorado Local Area Formation Commission (LAFCO)

LAFCO commented on the potential need for annexation of the future development into EID and the El Dorado Hills CSD. Future development proposal would be required to coordinate with these agencies in order to initiate annexation proceedings.

In the absence of a specific development proposal, the County of El Dorado Department of Transportation (DOT), El Dorado Transit, and El Dorado County Air Quality Management District (AQMD) did not provide specific comments. Subsequent development proposal would be distributed to all affected agencies/departments for review and comments.

**ENVIRONMENTAL REVIEW**

In accordance to California Environmental Quality Act (CEQA), an Initial Study/Negative Declaration was prepared to determine if the project would have significant effects on the environment. The document was circulated for a 30-day public review period. Based on the Initial Study, the proposed zone change would not cause any physical change or affects to the site but concluded that subsequent development would have less than significant effect on resources including air quality, biological resource, noise, and traffic. Future development

proposal for the site would be subject to further review in order to analyze the specific the environmental impacts associated with the project and applicable recommended mitigation measures.

**NOTE:** This project is located within or adjacent to an area which has wildlife resources (riparian lands, wetlands, watercourse, native plant life, rare plants, threatened and endangered plants or animals, etc.), and was referred to the California Department of Fish and Game. In accordance with State Legislation (California Fish and Game Code Section 711.4), the project is subject to a fee of \$1,850.00 after approval, but prior to the County filing the Notice of Determination on the project. This fee, less \$50.00 processing fee, is forwarded to the State Department of Fish and Game and is used to help defray the cost of managing and protecting the State's fish and wildlife resources. Under the revised statute effective January 1, 2007, a project proponent asserting a project will have no effect on fish and wildlife should contact the CDFG and the CDFG will review the project, make the appropriate determination, and in "no effect" cases, the CDFG will provide the project proponent with documentation of exemption from the filing fee requirement.

**RECOMMENDATION:** Recommend approval

Attachment 1.....	Findings
Attachment 2.....	Agency Comments
Attachment 3.....	Supporting Documents
Attachment 4.....	Initial Study/Negative Declaration
Exhibit A.....	Vicinity Map
Exhibit B.....	General Plan Land Use Map
Exhibit C.....	Zoning Map
Exhibit D.....	Soils Map
Exhibit E.....	Wetland/Drainage Map



May 7, 2007

Mel Pabalinas, Project Planner  
El Dorado County Planning Services  
2850 Fairlane Court  
Placerville, CA 95667

07 MAY - 9 PM 3:13  
RECEIVED  
PLANNING DEPARTMENT

**SUBJECT: Z 07-0001 – G3 Enterprises, Inc. (RRM Design Group)/APN 109-020-01, 109-010-09, -10, -13, -14**

Dear Mr. Pabalinas:

This letter is being sent to you in response to a meeting you had with the District on April 16, 2007 regarding the District's comment letter (copy enclosed) to the proposed application **Z 07-0001 – G3 Enterprises, Inc. (RRM Design Group)/APN 109-020-01, 109-010-09, -10, -13, -14**. At this meeting, you indicated the project is just a rezone with no development at this time.

If this is the situation than, the District has determined this project will have an insignificant air quality impact.

When the project does consider development, than the cumulative air quality impact must be addressed for the project requires a change in the existing land use designation (i.e. general plan amendment, rezone), and projected emissions (ROG, NOx, CO, or PM<sub>10</sub>) are greater than the emissions anticipated for the site if developed under the existing land use designation (El Dorado County APCD – CEQA Guide First Edition – February 2002, Chapter 3, subsection 3.3.6 Significance Criteria for Determining Cumulative Impacts, Chapter 3, page 7)

If you have any questions regarding these comments, please do not hesitate to contact this office at (530) 621-6662.

Respectfully,

  
Dennis Otani, Senior Air Quality Specialist  
Air Quality Management District

DMO:do

Enclosure

File Z 07-0001 – G3 Enterprises, Inc. (RRM Design Group)/APN 109-020-01, 109-010-09, -10, -13, -14

h:\apcd\landuse\2007Planning\Zoning\050707MelPabalinasZ07-0001G3EnterprisesNOARzoneCP

**ATTACHMENT 2**

*Environmental  
Health Division*

*Air Quality  
Management  
District*

*Solid Waste &  
Hazardous  
Materials  
Divisions*

*Vector Control*



**PLACERVILLE  
OFFICE**  
2850 Fairlane Ct.  
Building C  
Placerville, CA 95667

Ph. 530.621.5300  
Fax. 530.642.1531  
Fax. 530.626.7130

**SOUTH LAKE  
TAHOE OFFICE**  
68 Lake Tahoe Blvd.  
Ste 303  
South Lake Tahoe, CA  
96150

Ph. 530.573.3450  
Fax. 530.542.3364



EL DORADO COUNTY  
ENVIRONMENTAL MANAGEMENT  
PLACERVILLE OFFICE  
2850 FAIRLANE CT, BLDG C  
PLACERVILLE, CA 95667  
PHONE: (530) 621-5300  
FAX: (530) 642-1531

### Interoffice Memorandum

3/26/07

To: Aaron Mount, Project Planner  
EDC Development Services Department

From: Environmental Management Dept.

Subject: **G 3 ENTERPRISES, INC.**

**COPY**

Environmental Management Department staff have reviewed the subject application. Should this project be conditionally approved, it is the recommendation of this Department that the following conditions be a part of that action:

#### **Air Quality Management:**

The District has reviewed the proposed project **Z 07-0001 – G3 Enterprises, Inc. (RRM Design Group)/APN 109-020-01, 109-010-09, -10, -13, -14**. The District has determined this project will have a significant cumulative air quality impact. Therefore, the following summary of issues **SHALL** be addressed:

1. The cumulative air quality impact must be addressed for the project requires a change in the existing land use designation (i.e. general plan amendment, rezone), and projected emissions (ROG, NO<sub>x</sub>, CO, or PM<sub>10</sub>) are greater than the emissions anticipated for the site if developed under the existing land use designation (El Dorado County APCD – CEQA Guide First Edition – February 2002, Chapter 3, subsection 3.3.6 Significance Criteria for Determining Cumulative Impacts, Chapter 3, page 7)
2. The project construction will involve grading and excavation operations, which will result in a temporary negative impact on air quality with regard to the release of particulate matter (PM<sub>10</sub>) in the form of dust. Current county records indicate this property is located within the Asbestos Review Area (copy enclosed). **Therefore**, District Rule 223.2 Fugitive Dust-Asbestos Hazard Mitigation, which address the regulations and mitigation measures for fugitive dust emissions shall be adhered to during the construction process. Mitigation measures for the control of fugitive dust shall comply with the requirements of Rule 223.2. In addition, an **Asbestos Dust Mitigation**

**Plan (ADMP) Application with appropriate fees shall be submitted to and approved by the District prior to start of project construction.**

3. Project construction may involve road development and **should adhere** to District **Rule 224 Cutback and Emulsified Asphalt Paving Materials**.
4. Burning of wastes that result from "Land Development Clearing" must be permitted through the DISTRICT. Only vegetative waste materials may be disposed of using an open outdoor fire (**Rule 300 Open Burning**).
5. The project construction will involve the application of architectural coating, which shall adhere to **District Rule 215 Architectural Coatings**.
6. The District's goal is to strive to achieve and maintain ambient air quality standards established by the U.S. Environmental Protection Agency and the California Air Resources Board and to minimize public exposure to toxic or hazardous air pollutants and air pollutants that create unpleasant odors. The following are measures used to reduce impacts on air quality from equipment exhaust emissions:

**Heavy Equipment and Mobile Source Mitigation Measures.**

- Use low-emission on-site mobile construction equipment.
- Maintain equipment in tune per manufacturer specifications.
- Retard diesel engine injection timing by two to four degrees.
- Use electricity from power poles rather than temporary gasoline or diesel generators.
- Use reformulated low-emission diesel fuel.
- Use catalytic converters on gasoline-powered equipment.
- Substitute electric and gasoline-powered equipment for diesel-powered equipment where feasible.
- Do not leave inactive construction equipment idling for prolonged periods (i.e., more than two minutes).
- Schedule construction activities and material hauls that affect traffic flow to off-peak hours.
- Configure construction parking to minimize traffic interference.
- Develop a construction traffic management plan that includes, but is not limited to: Providing temporary traffic control during all phases of construction activities to improve traffic flow; Rerouting construction trucks off congested streets; and provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.

The above District rules are found in the El Dorado County Air Pollution Control District Rules and Regulations. A copy of the District Rules and Regulations and "Guide to Air Quality Assessment, Determining Significance of Air Quality Impacts Under the California Environmental Quality Act, February 2002", are available at our Department or from the Department's web page located at the following internet address: [www.co.el-dorado.ca.us/emd](http://www.co.el-dorado.ca.us/emd).

If you have any questions regarding these comments, please do not hesitate to contact this office at (530) 621-6662.

**COPY**

**Environmental Health:**

No comments.

**CC: RRM Design Group  
210 East F Street  
Oakdale CA 95351**

**COPY**



Pacific Gas and Electric Company  
Land Services Office  
343 Sacramento Street  
Auburn, CA 95603

MAY 11 PM 4:32  
RECEIVED  
PLANNING DEPARTMENT

Direct: (530) 889-3160  
Fax: (530) 889-3392  
Email: PHF2@pge.com

May 8, 2007

County Of El Dorado  
Planning Services  
Att. Aaron Mount  
2850 Fairlane Court  
Placerville, CA 95667

RE: G3 ENTERPRISES, INC / Z 07-0001:  
West of Shingle Lime Mine Road

Dear Mr. Mount:

PG&E has reviewed this project and has the following comments:

Dedicate a standard 12.5 foot Public Utility Easement for underground facilities and appurtenances adjacent to all public ways, private drives and/or Irrevocable Offer of Dedication.

PG&E operates and maintains tower lines which are located within or adjacent to the proposed project boundaries. **Land use is restricted within the easement.** One of PG&E's concerns is for continued access to the structures and lines with heavy equipment for maintenance and repair of the towers, insulators, and wires. Another is for adequate ground clearance from the wires as set forth in California Public Utilities Commission General Order No. 95 for the proposed improvements. Should an infraction occur, the developer will be responsible for the costs of raising or the relocating of the facilities. The planting of trees is considered an unacceptable use within our easements. Unless approved by PG&E's Vegetation Management personal.

This project will need to be reviewed in greater detail. The developer will need to work closely with PG&E in obtaining a no objection letter for this project to ensure the safety and reliability of PG&E's facilities and the public prior to final approval by the city or any construction activities take place. **Please submit 3 sets of plans and a copy of this letter to the following address:**

**Pacific Gas & Electric Company  
Attn: Paul Fluckey  
Land Services Office  
343 Sacramento Street**

**Auburn, CA 95603**

Please show the following information on the plans to be submitted to PG&E for review:

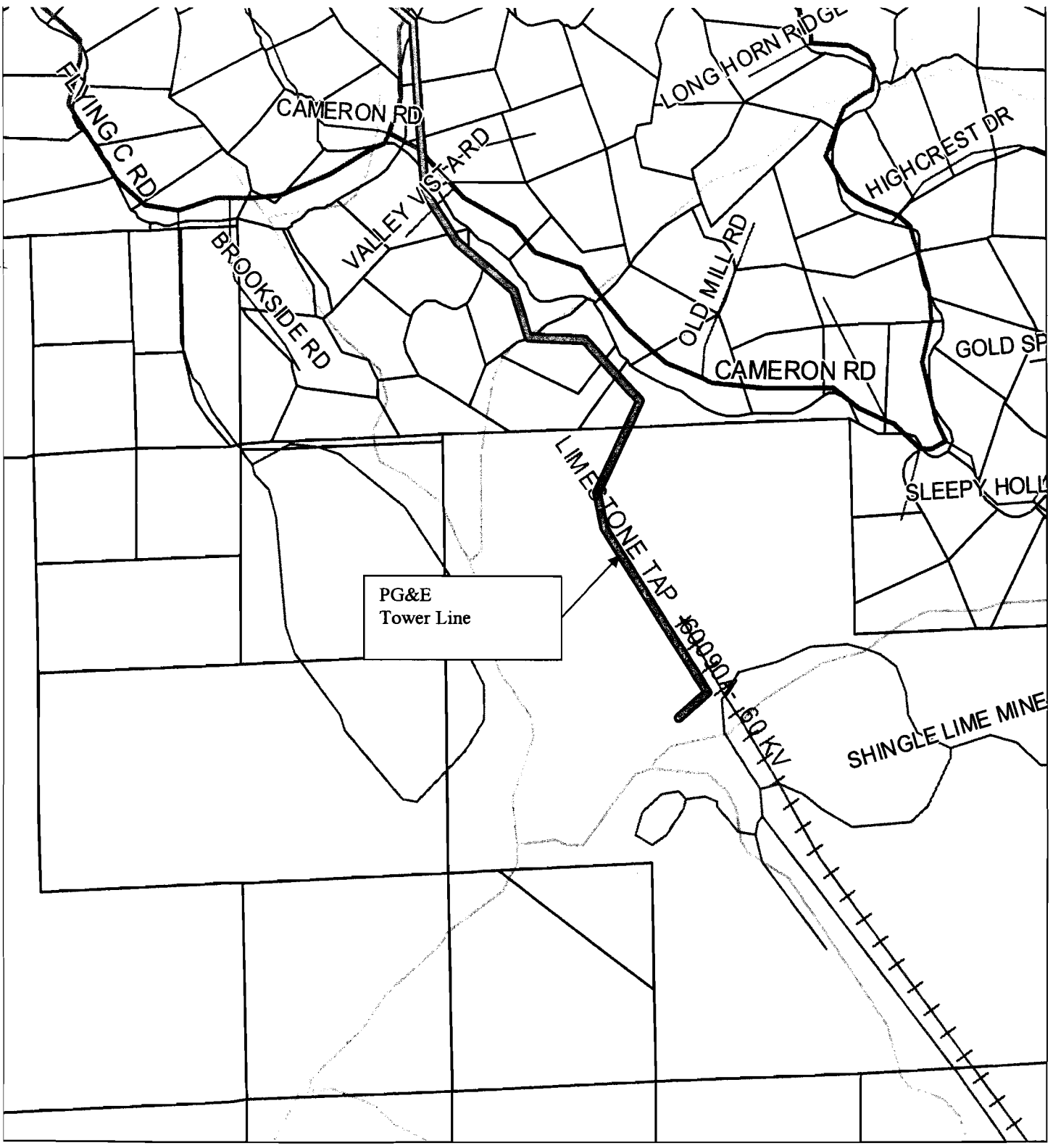
- PG&E's Easement Area in Relation to Project Area
- Tower Structures
- Light Fixture Locations
- Proposed Building Locations
- Wire Shots to determine Wire Height if any significant grading is proposed
- Landscaping Plans
- Grading Plans (Existing & Proposed)

Please contact me with any questions at (530) 889-3160 or PHF2@pge.com.

Sincerely,

  
Paul Fluckey  
Land Agent





PG&E  
Tower Line

LIMESTONE TAP

160 KV  
1000000

SHINGLE LIME MINE

FLYING C RD

CAMERON RD

VALLEY VISTA RD

BROOKSIDE RD

LONG HORN RIDGE

OLD MILL RD

HIGHCREST DR

CAMERON RD

GOLD SP

SLEEPY HOLM

## Cameron Estates Community Services District

P.O. Box 171 Shingle Springs CA 95682

Phone and FAX: 530.677.5889 Email: cecsd@sbcglobal.net

---

---

March 23, 2007

El Dorado County Planning Services  
Aaron Mount, Project Planner  
2850 Fairlane Court  
Placerville, CA 95667

RE: Z 07-0001 G3 Enterprises, Inc.

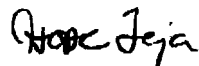
Dear Mr. Mount:

We are writing in response to your recent notification of a technical advisory meeting (TAC) regarding the application of G3 Enterprises to change the zone district designation of their 531.5 acre parcel from MR (Mineral Resources) to RE-10/PD (Estate Residential Ten-Acre Planned Development).

As this development borders our Community Services District, we are concerned with the future impact on our community. Our District is particularly concerned with road ingress and egress to the development. Cameron Estates is a private, gated community, and as such access to Cameron Estates CSD roads will not be considered without prior approval of the CSD Board of Directors. Our Board requests notification of any future development plans for this project.

Representatives of Cameron Estates plan to attend the TAC meeting on March 26, 2007 at 2 p.m. Thank you.

Respectfully,



Hope Leja  
General Manager

# Cameron Estates Community Services District

P.O. Box 171  
Shingle Springs, CA 95682

Voice: 530/677-5889  
Fax: 530/677-5889  
[cecsd@sbcglobal.net](mailto:cecsd@sbcglobal.net)

To: Aaron Mount, Project Planner	Date: March 26, 2007
Company: El Dorado County Planning Services	Pages: 2 including cover

Dear Mr. Mount:

This faxed correspondence is in response to a TAC meeting regarding Z 07-0001 G3 Enterprises, Inc. to be held on Monday, March 26, 2007 at 2 p.m. Representatives of Cameron Estates CSD will be in attendance. Thank you.

Respectfully,

Hope Leja  
General Manager/Secretary

**FAX**



# AGRICULTURAL COMMISSION

311 Fair Lane  
Placerville, CA 95667  
(530) 621-5520  
(530) 626-4756 FAX  
[eldcag@co.el-dorado.ca.us](mailto:eldcag@co.el-dorado.ca.us)

*Greg Boeger, Chair – Agricultural Processing Industry*  
*John Winner, Vice-chair – Forestry/Related Industries*  
*Chuck Bacchi – Livestock Industry*  
*Tom Heflin – Fruit and Nut Farming Industry*  
*David Pratt – Fruit and Nut Farming Industry*  
*Lloyd Walker – Other Agricultural Interests*  
*Gary Ward – Livestock Industry*

## MEMORANDUM

**DATE:** April 18, 2007

**TO:** Rommel Pabalinas  
Development Services-Planning

**FROM:** Greg Boeger  
Chair

**SUBJECT: G3 ENTERPRISES, INC. (RRM DESIGN GROUP)**

During the Agricultural Commission's regularly scheduled meeting held on April 11, 2007, the following discussion and motion occurred regarding a request to change the zone district designation from MR (Mineral Resources) to RE-10/PD (Estate Residential Ten-Acre/Planned Development). The property, identified by Assessor's Parcel number 109-020-01, 109-010-09, -10, 13,-14, consists of 531.5 acres, and is located on the west side of Shingle Lime Mine Road approximately 1.04 miles south of the intersection with Durock Road, in the Cameron Park area. (District 2)

Steve Burton informed the Commission of his site visit, stating there were two issues. Two parcels with Agricultural zoning border the Mineral Resources parcel and a sliver of Sobrante Silt Loam soil that is actually the area where the railroad track once ran through the property.

John Wilbanks, representing G3 Enterprises, told the Ag Commission members that the request before them was basically a "clean-up request" on zoning since the mine site is abandoned now and is no longer considered a mining resource by the Department of Conservation. The RE-10 zoning is consistent with the underlying rural lands. The Agriculturally zoned property to the south is also owned by G3 Enterprises and at the current time, they do not have plans to develop the land.

Staff recommends that the Commission **CONDITIONALLY APPROVE** the request so that parcels which are created adjacent to the agriculturally zoned lands shall be large enough and of such dimensions to meet the 200 foot agriculture setback requirements but in no case shall they be less than ten acres pursuant to General Plan Policy 8.1.3.1 regarding buffering.

*It was moved by Mr. Winner and seconded by Mr. Heflin to **CONDITIONALLY APPROVE** the request to change the zone district designation from MR*

Rommel Pabalinas  
April 18, 2007  
RE: G3 Enterprises, Inc.  
Page 2

***(Mineral Resources) to RE-10/PD (Estate Residential Ten-Acre/Planned Development) and that the parcels that are created adjacent to agriculturally zoned lands shall be large enough and of such dimensions to meet the 200 foot agriculture setback requirements but in no case shall they be less than ten acres pursuant to General Plan Policy 8.1.3.1 regarding buffering. Motion passed.***

**AYES:** Ward, Winner, Boeger, Heflin, Pratt, Walker

**NOES:** None

**ABSENT:** Bacchi

If you have any questions regarding the Agricultural Commission's actions, please contact the Agriculture Department at (530) 621-5520.

GB:na

cc: G3 Enterprises, Inc.  
RRM Design Group



**El Dorado County Resource Conservation District**

100 Forni Road, Suite A • Placerville, CA 95667 • Phone (530) 295-5630, FAX (530) 295-5635

March 20, 2007

Aaron Mount, Project Planner  
El Dorado County Planning Department  
2850 Fairlane Court  
Placerville, CA 95667

07 APR 11 PM 4:49  
RECEIVED  
PLANNING DEPARTMENT

Subject: Initial Review for Z07-0007 – G3 Enterprises, INC. (RRM Design Group).

Dear Aaron:

The Resource Conservation District (District) has reviewed the Initial Consultation information for the proposed project. The project requests a zone district designation from MR (Mineral Resources) to RE-10/PD (State Residential Ten-Acre/ Planned Development). The purpose of the Mineral Resources component of the El Dorado County General Plan is to identify and protect important mineral resources from incompatible development. The mineral resources impact analysis should focus on the potential loss of availability of the mineral resources due to land use conversion and the cumulative impacts of the proposed zone designation. Pursuant to Section 15063 of the State CEQA Guidelines, the District recommends an environmental impact report be prepared based on the following conditions:

The determination of impacts of the proposed project is base on criteria *a* and *b* in the CEQA environmental checklist:

- 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?
- 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?

Loss of access to mineral resources for the purpose of future extraction could be considered to be primarily an economic issue. According to CEQA Guidelines Section 15131(a) purely economic impacts are not considered physical environmental impacts. The potential loss of such resources, if any, due to the proposed zone designation should be described.

It appears the project area may be located within areas designated as MRZ-2 indicating that significant mineral deposits are present, or there is a high likelihood for their presence and development should be controlled. The State's Surface Mining and Reclamation Act (SMARA) provide a mineral lands classification process. Areas classified as MRZ-2 are of greatest importance and designated by the Mining and Geology Board as "regionally significant" and incorporated into Title 14, Division 2 of the California Code of Regulations. Such designations require that a lead agency's land use decisions involving designated areas are made in accordance with its mineral resources management policies and that it consider the importance of the mineral resources to the region or to the state.

In addition, the cumulative impacts of the proposed project should be analyzed. Cumulative impacts may result in incremental adverse environmental and social conditions when combined with approved projects in the drainage area. An EIR will require the lead agency to prepare a more detailed evaluation of the cumulative impacts of the proposed project.

The District appreciates the opportunity to comment on this project.

For: Robert L. Beegle, President  
Board of Directors

By: Mark Egbert  
District Manager

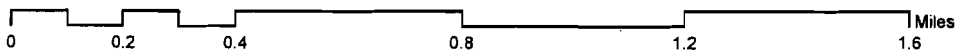
Post-it® Fax Note		7671	Date	# of pages ▶
To	TIMOTHY CITRUS		From	MEL
Co./Dept.			Co.	
Phone #			Phone #	
Fax #	209-247-3511		Fax #	

# UNITED STATES INTERMODAL Location Map

Date: March 20, 2007

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: 2005 El Dorado County Aerial

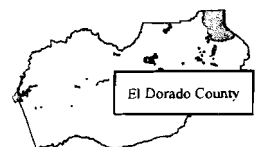


1:20,833



UNITED STATES INTERMODAL Parcels  
Lafrobe\_Roads  
Shingle\_Springs\_Roads

The El Dorado County and Georgetown Divide Resource Conservation District (RCD) make no representation or warranties regarding the accuracy of data or maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any user or third party on account of or arising from the use of data or maps.



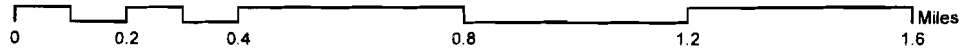
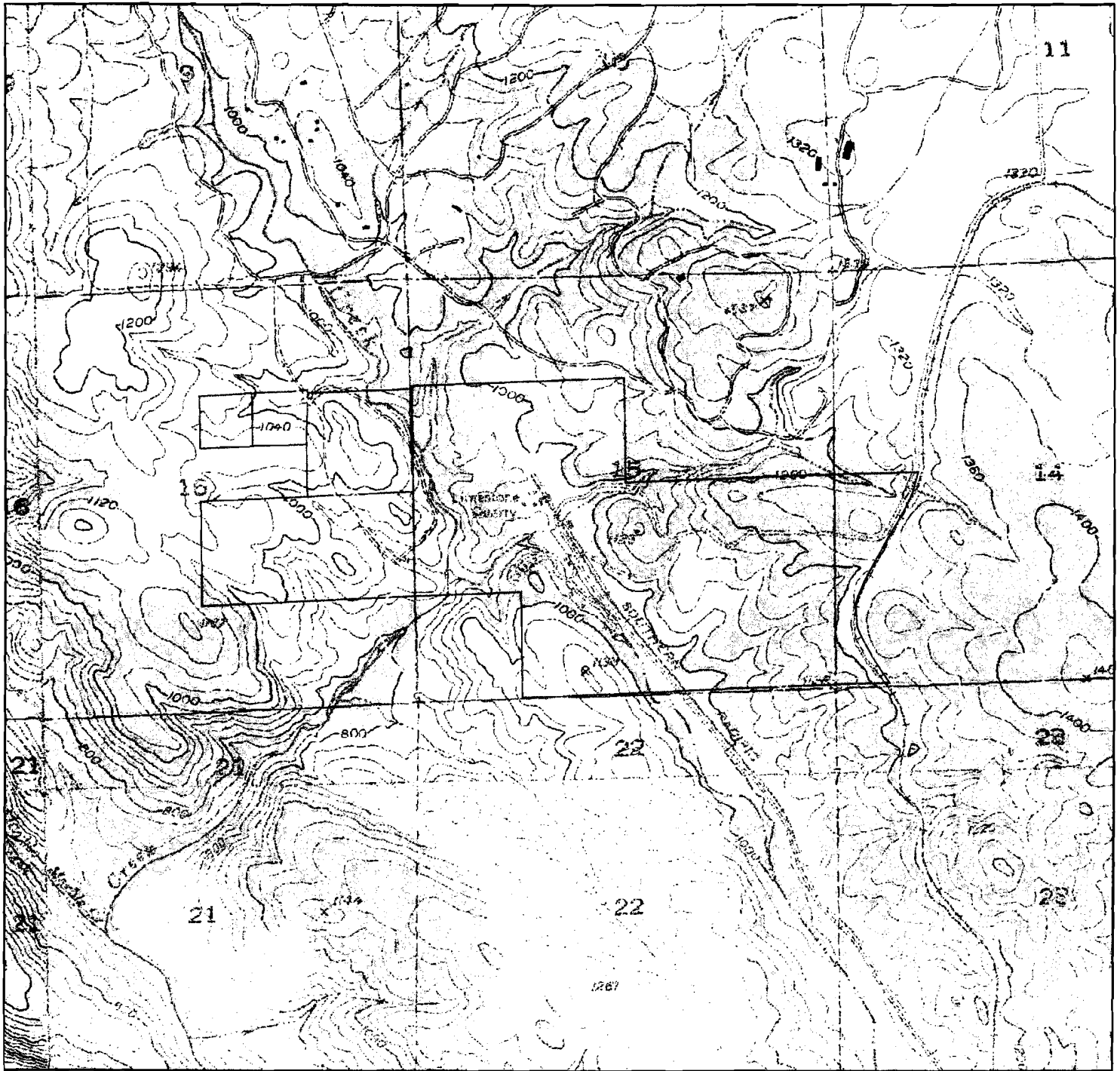
El Dorado County

Date: March 20, 2007

# UNITED STATES INTERMODAL Location Map

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: USGS Topographic



Miles  
1.6

1:20,833



UNITED STATES INTERMODAL Parcels  
Latrobe\_Roads  
Shingle\_Springs\_Roads

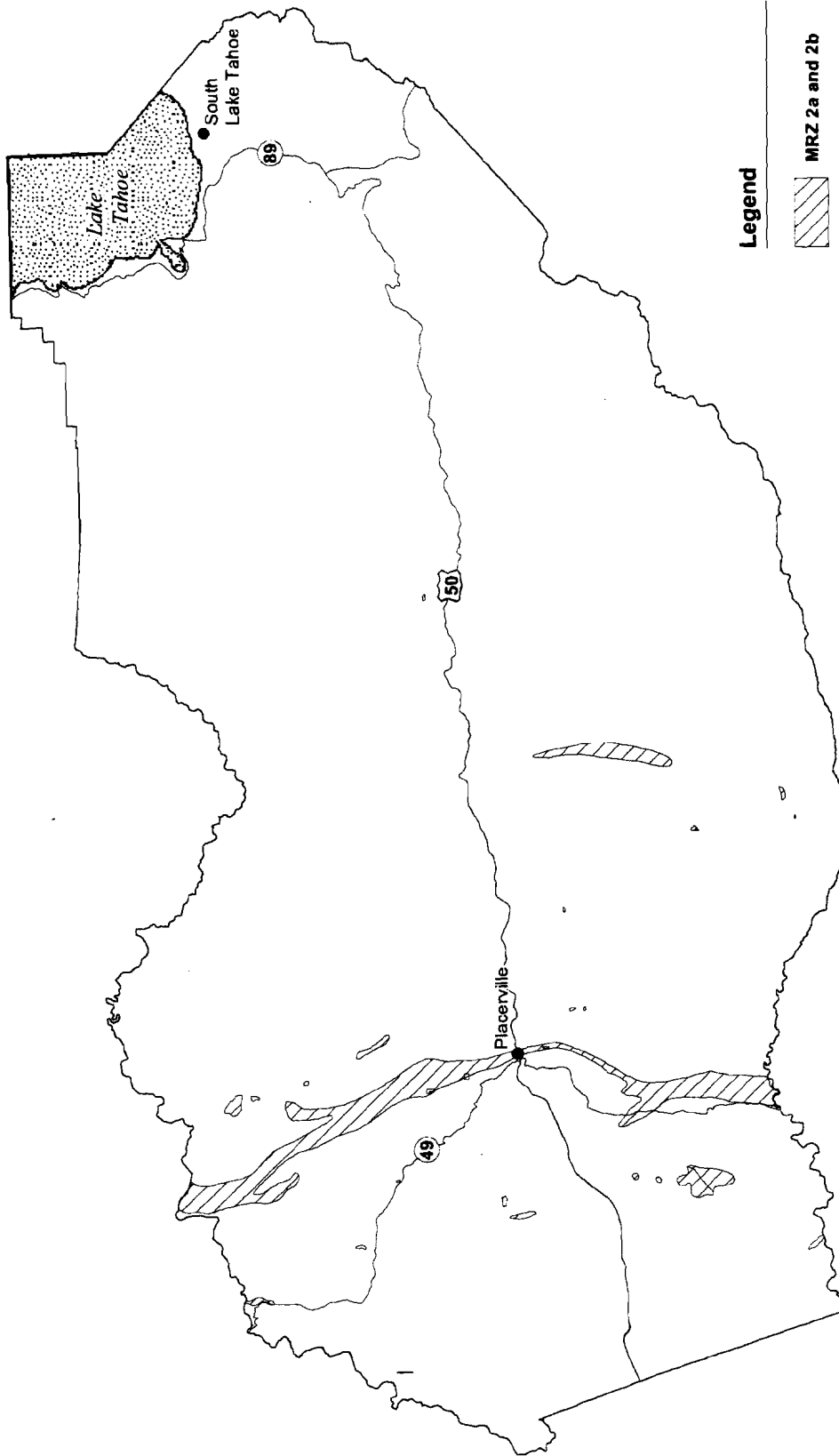
The El Dorado County and Georgelown Divide Resource Conservation District (RCD) makes no representations or warranties regarding the accuracy of data on maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any user or third party on account of or arising from the use of data or maps.



El Dorado County



Figure CO-1  
Important Mineral Resource Areas



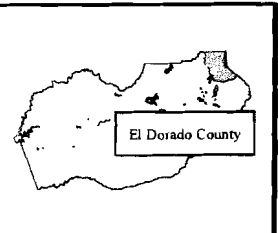
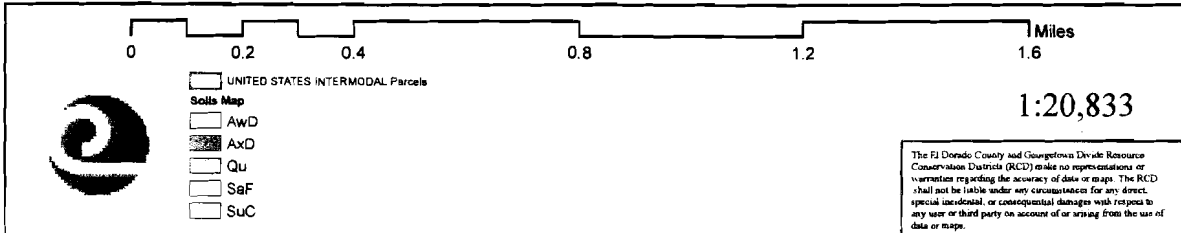


# UNITED STATES INTERMODAL Soils Map

Date: March 20, 2007

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: 2005 Aerial



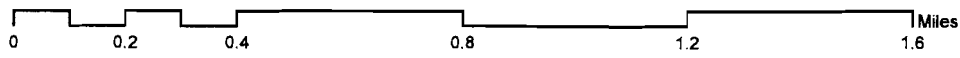
The El Dorado County and Georgetown District Resource Conservation Districts (RCD) make no representations or warranties regarding the accuracy of data or maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any use or third party on account of or arising from the use of data or maps.

Date: March 20, 2007

# UNITED STATES INTERMODAL Important Biological Cooridors Map

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: 2005 Aerial



1:20,833



- Bio\_Corr\_UTM
- UNITED STATES INTERMODAL Parcels
- Lalrobe\_Roads
- Shingle\_Springs\_Roads



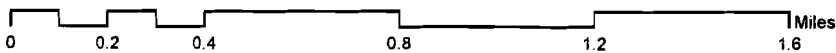
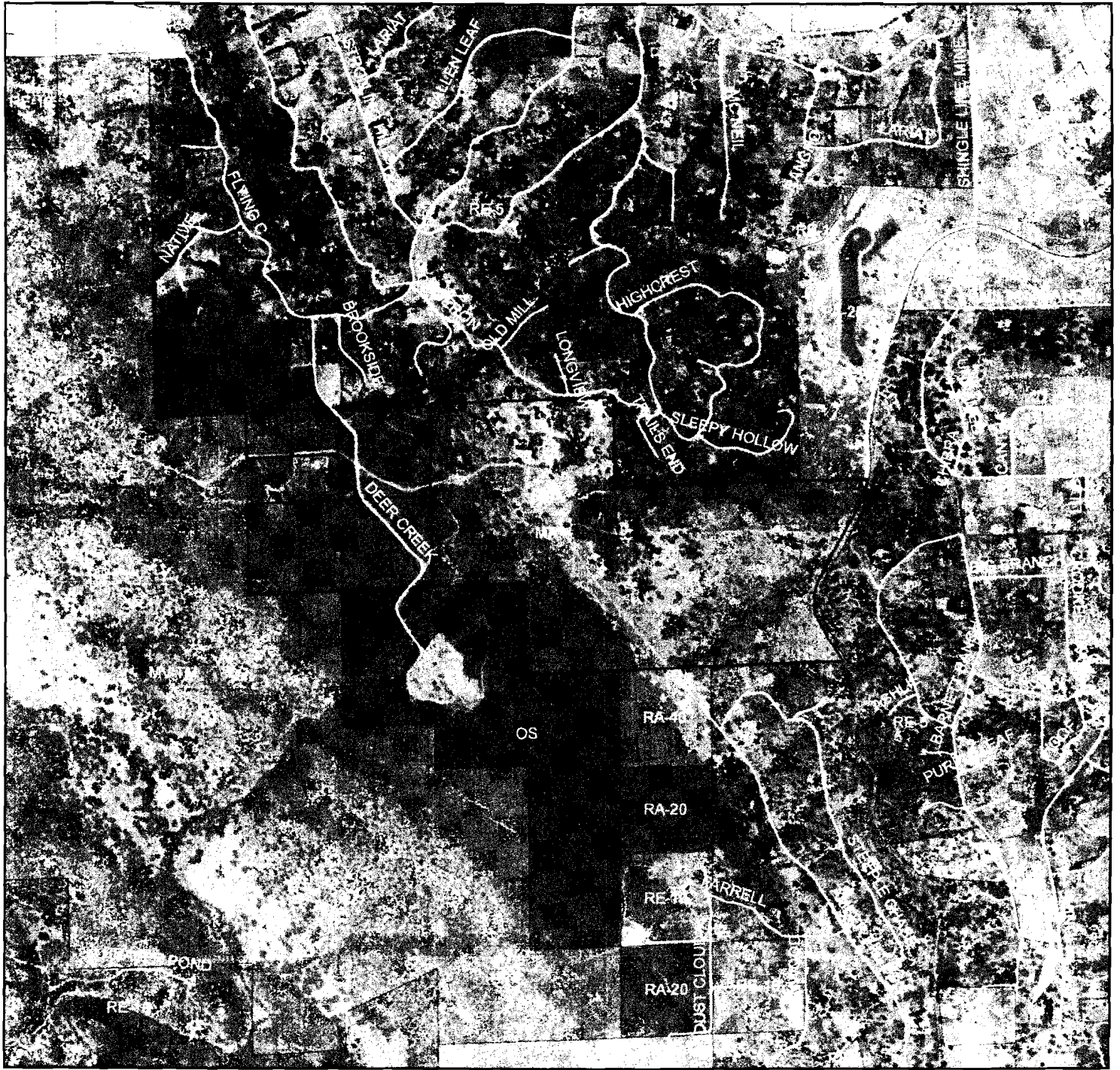
The El Dorado County and Georgetown Divide Resource Conservation District (RCD) make no representations or warranties regarding the accuracy of data or maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any user or third party on account of or arising from the use of data or maps.

Date: March 20, 2007

# UNITED STATES INTERMODAL Zoning Map

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: 2005 Aerial



UNITED STATES INTERMODAL Parcels

1:24,000

The El Dorado County and Georgetown Divide Resource Conservation District (RCD) makes no representations or warranties regarding the accuracy of data or maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any user or third party on account of or arising from the use of this or maps.

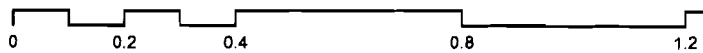


Date: March 20, 2007

# UNITED STATES INTERMODAL Wetlands Map

Project: UNITED STATES INTERMODAL  
Approximate Acres: 531.46  
Assisted By: Mark Egbert

Field Office: Placerville Service Center  
Agency: RCD  
Image: 2005 Aerial



- wetlands
- UNITED STATES INTERMODAL Parcels
- Latrobe\_Roads
- Shingle\_Springs\_Roads

Miles  
1.6

1:20,833

The El Dorado County and Georgetown Divide Resource Conservation District (RCD) makes no representations or warranties regarding the accuracy of data or maps. The RCD shall not be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any user or third party on account of or arising from the use of data or maps.

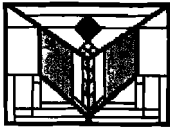


Aaron D Mount/PV/EDC  
03/20/2007 11:16 AM

To Rommel Pabalinas/PV/EDC@TCP  
cc  
bcc  
Subject Fw: Z 07-0001 G3 Enterprises, Inc.

Aaron Mount  
Associate Planner  
El Dorado County  
530-621-5355

— Forwarded by Aaron D Mount/PV/EDC on 03/20/2007 11:16 AM —



Elizabeth Zangari/PV/EDC  
03/20/2007 11:14 AM

To Aaron D Mount/PV/EDC@TCP  
cc  
Subject Z 07-0001 G3 Enterprises, Inc.

Aaron,

The proposed re-zoning for the mineral resources parcel does in itself impact any of the road zones of benefit. However, potential future development may . The project site includes on parcel that shares a corner with the Fernwood Cothrin Road Zone of Benefit. Our concern is that future development may use the zone roads as primary access without contributing to the zone. Additional development near the area may also be in either a drainage maintenance and/or road maintenance zone of benefit. I realize this request is strictly for re-zoning, and not for conditioning planned development, so I trust we would have a chance for another review should additional development be proposed.

Thank you for the opportunity to comment on this project.

Elizabeth Zangari  
Department Analyst  
El Dorado Co. Dept. of Transportation  
2441 Headington Rd., Placerville  
(530)642-4954

# EL DORADO LAFCO

## LOCAL AGENCY FORMATION COMMISSION

550 Main Street Suite E • Placerville, CA 95667  
Phone: (530) 295-2707 • Fax: (530) 295-1208  
lafco@co.el-dorado.ca.us  
www.co.el-dorado.ca.us/lafco

PLANNING DEPARTMENT  
RECEIVED  
MARCH 13 11:40

March 12, 2007

Aaron Mount  
Project Planner  
El Dorado County Planning Department  
2850 Fair Lane  
Placerville, CA 95667

Re: Z 07-0001 – G3 Enterprises, Inc. (RRM Design Group)

Dear Mr. Mount:

Thank you for the opportunity to provide comments on the above project that is set on the Technical Advisory Committee agenda for March 26, 2007. LAFCO's State mandated role is to promote orderly growth and development and to encourage efficient service areas for local service providers. LAFCO has reviewed the information relating to this project and would like to comment on the request to rezone APNs 109-020-01, 109-010-09, 109-010-10, 109-010-13 and 109-010-14 from Mineral Resources (MR) to Estate Residential Ten-Acre/Planned Development (RE-10/PD). Based on available information, parcels 109-010-09 and 109-010-10 appear to be within the El Dorado Irrigation District (EID). Please note that parcels 109-020-01, 109-010-13 and 109-010-14 do not appear to be within the boundary of EID. These parcels currently have contiguity to the EID service area on the southern boundary of APN 109-010-14 and on the southern and western boundaries of APN 109-020-01. Upon completion of all terms and conditions associated with the approved Marble Valley Reorganization (LAFCO Project No. 05-08), there will be additional points of contiguity with EID. LAFCO has identified the probable need for annexation of the above parcels in order to receive municipal water and wastewater services for the planned development. We would like to recommend that the applicant contact LAFCO near the end of the tentative map approval process to inquire about annexation into EID.

It should be noted, however, that annexation of the above mentioned parcels would create an EID service island out of APN 109-010-12. Are there any future development projects associated with this parcel? If so, and if the two projects are at approximately the same stage in the planning process, it may be advantageous to coordinate the two projects into a single LAFCO application.

After finalization of the Marble Valley Reorganization, the subject parcels will also be contiguous to El Dorado Hills CSD boundaries; however they are not within its sphere of influence (SOI). Our assumption is that the landowner does not intend for the future

---

#### COMMISSIONERS

Public Member: Francesca Loftis • Alternate Public Member: Norm Rowett  
City Members: Carl Hagen, Ted Long • Alternate City Member: Roberta Colvin  
County Members: Ron Briggs, James R. Sweeney • Alternate County Member: Helen Baumann  
Special District Members: Gary Costamagna, Vacant • Alternate Special District Member: Robert Larsen

#### STAFF

José C. Henriquez, Executive Officer • Erica Sanchez, Policy Analyst • Allison Parsons, Commission Clerk  
Denise Tebaldi, Administrative Assistant • Tom Gibson, Commission Counsel



planned development to be served by the El Dorado Hills CSD. If that is the case, LAFCO has no comment regarding the provision of parks and recreation services. If the applicant planned for the development to receive park and recreation services from the district, then please advise them to contact LAFCO directly to discuss the matter. Based on the current SOI, annexation into El Dorado Hills CSD would first require a SOI amendment.

The above project has been identified as one requiring LAFCO involvement for a future boundary change. Since LAFCO will also require an environmental review for the application, it is in the best interest of the applicant and all involved parties if one CEQA document is prepared that covers all of the necessary processes. LAFCO respectfully submits the following list of potential issues to address in the Initial Study:

**Cumulative Impacts:** The Initial Study needs to consider potential cumulative impacts based on a range of recent, probable and reasonably foreseeable projects, including recently approved, pending and expected EID annexation requests, land use projects recently approved by the County and pending projects slated to move forward with the approval of the County's General Plan.

**Water Supply, Pumping and Treatment Facilities:** The Initial Study should include a discussion of the potential water supply impacts that may occur as a result of the project. This would entail how much water would be required to adequately serve this project, and whether that water is currently projected to be available, the existing infrastructure that will be used to deliver service; the location, size and capacity of existing infrastructure, and how this water requirement will affect the overall water supply for the service area. Attention should also be given to any potential adverse effects that may occur to surrounding residents who are currently receiving water service. The same scope of discussion should occur in regards to local pumping and treatment facilities. What is the location and size of the existing infrastructure of the nearest water treatment facility and does it have the capacity to serve the proposed project? Will additional infrastructure be required for pumping the water to the project site? In addition, overall cumulative impacts to water availability as a result of this project should be examined.

**Agricultural Land Issues:** Where applicable, the Initial Study should address agricultural impacts, especially in relation to water supply shortages and new water supply facilities. LAFCO requires that any potential adverse impacts on agricultural uses be identified. This would include any project that increases demand on existing and future water supplies, potentially impacting the physical and economic integrity of agricultural land in the County due to increased competition for scarce resources, increased costs caused by construction of infrastructure needed to increase water supply, and introduction of water infrastructure into agricultural lands. In addition, the Initial Study should also discuss any economic impacts to agricultural activities in the surrounding area as well as any efforts to be undertaken to minimize any conflicts in land use.

**Water Quality/Wastewater Treatment Issues:** The same scope of discussion that was required for water issues should also be studied for waste water treatment issues.

**Road Circulation:** The Initial Study should address issues associated with transportation; specifically how future residents of the project will access the proposed community, assuming that no access would be available through the adjacent Marble Valley Subdivision, which is proposed to be a gated community.

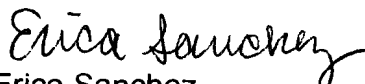
**Regional Growth Goals:** The Initial Study should identify the income category housing that the proposed development will provide and how that fits into the County's RHNA target goals for housing allocations.

**Mitigation Measures:** The adequacy of any proposed mitigation measures intended to lessen any adverse environmental effects of this project needs to be addressed by the Initial Study.

In addition, please ensure that LAFCO is listed as a Responsible Agency for this project when the environmental document is prepared and circulated. Once again, we thank you for giving LAFCO the opportunity to comment and we look forward to receiving additional materials in the future.

Please contact me at (530) 295-2707 if you have any questions.

Sincerely,



Erica Sanchez

LAFCO Policy Analyst



---

**COUNTY OF EL DORADO  
DEPARTMENT OF TRANSPORTATION**



**INTEROFFICE MEMORANDUM**

---

**Date:** March 23, 2007

**To:** Mel Pabalinas, Project Planner

**From:** Jon Vegna, DOT Transportation Planning 

**Subject:** Z 2007-0001

**Project:** G3 Enterprizes, Inc.

**Location:** Shingle Lime Mine Road, approximately 1 mile south of Durock Road  
intersection in the Cameron Park area

**APN:** 109-010-09, -10, -13, & -14

---

This Department has reviewed the above referenced rezone application and submits the following comments:

Due to the fact that a specific use has not been identified at this time, the DOT will review and provide conditions when a specific project is submitted for the Planned Development.

RRM Design Group  
210 East F Street  
Oakdale CA 95361  
P: (209) 847-1794  
F: (209) 847-2511  
www.rrmdesign.com

12-15-06

El Dorado Planning Services  
2850 Fairlane Court  
Placerville, CA 95667

Re: General Plan Amendment and Zone Change

Dear El Dorado Planning Department:

On behalf of the applicant G3 Enterprises, Inc., we are filing this application to change zoning no longer applicable to the subject property.

In accordance with the California Code of Regulations, the County conserves lands known to contain important mineral resources, and maintains all Mineral Land Classification reports produced by the State Department of Conservation as they pertain to El Dorado County (Policy 7.2.1.1). As such, the County designated the subject area with a Mineral Resource (-MR) overlay, under the presumption of likely resource extraction, and with the condition that such mining would be compatible with adjacent land uses (Policy 7.2.1.2). Zone changes removing the -MR Combining Zone District from the base zone district shall be considered by the County only when studies of caliber equal to State Classification Reports prove that a significant mineral deposit no longer exists (Policy 7.2.3.12).

According to letters from the Department of Conservation, and Open-File Report (2000-03), which, according to General Plan Policy 7.2.11 the County has accepted and adopted), the area in question is no longer considered a mineral resource for limestone. At the time of the 1984 report, the area was classified MRZ-2a for limestone. As early as 1996 and certainly by 2001 the subject property ceased to be considered a significant source of mineral resources, as indicated in a letter by Department of Conservation Assistant Director Jason Marshall, dated August 24, 2004. Correspondingly, the Department of Conservation no longer mapped the area with a MRZ-2a Classification.

In the 2004 General Plan Update, the County responded in likeness and removed the Mineral Resource Overlay, however maintained the Mineral Resource base zone district. According to the Placer County Zoning Ordinance 17.46.010, the purpose of the Mineral Resource District is to "provide for the orderly development and protection of lands containing mineral resources and to provide for the protection from encroachment of unrelated and incompatible land uses tending to have adverse effects on the development or use of these so designated lands."

**ATTACHMENT 3**

Name  
Date  
Page 2 of 2

Provided the de-classification of the subject lands as a significant source of minerals, we are requesting a zone change of 5 parcels from MR to RE-10. The affected land amounts to approximately 531.5 acres, and will not change the site's development capacity. Both zone districts, MR and RE-10, allow a minimum parcel size of 10 acres, with one dwelling unit per parcel.

The subject parcels are: 109-010-09; 10; 13; 14; and 109-020-01. The property is generally located within the Shingle Springs area, west of Shingle Lime Mine Road, approximately 4,000 feet south of the Durock Road intersection, and east of Marble Valley.

No developments for the subject property have been planned at this time.

Enclosed in this application are supporting documents demonstrating the change in land classification:

- Letter from the State Department of Conservation Assistant Director Jason Marshall, dated August, 24,2004
- Letter from Jason Marshall to El Dorado County, Dated March 27, 1996.
- Letter from State Geologist to El Dorado County, Dated January 6, 1997.
- A copy of the MRZ map showing the area no longer mapped as MRZ-2a.
- A copy of the MRZ map showing the area originally mapped as MRZ-2a.

Attached is the Application, along with 2 exhibits and a Vicinity Map. Exhibit 1 shows Existing Land Use and Zoning designations, while Exhibit 2 depicts proposed Land Use and Zoning designations. As shown in the two exhibits, we are requesting a rezone of the Mineral Resource parcels on the property. Please let us know if more information is required

Thank you very much for your time and consideration.

Sincerely,

RRM DESIGN GROUP

Tina Chang  
Planner

Attachment or Enclosure

cc:



DEPARTMENT OF CONSERVATION  
STATE OF CALIFORNIA

August 24, 2004

John B. Wilbanks  
RRM Design Group  
131 South Second Avenue  
Oakdale, CA 95361

RECEIVED  
PLANNING DEPARTMENT

DIRECTOR'S OFFICE

801 K STREET  
SACRAMENTO  
CALIFORNIA  
95814

PHONE  
916/322-1080

FAX  
916/445-0732

INTERNET  
consvr.ca.gov

ARNOLD  
SCHWARZENEGGER  
VERNOR

Thank you for your inquiry into the El Dorado Limestone Mine located approximately two miles south of Cameron Park in El Dorado County. The enclosed documents will illustrate that the Department of Conservation no longer considers this area as a mineral resource for limestone.

Enclosed are copies of the following supporting documents:

- Letter from Jason Marshall to El Dorado County, dated March 27, 1996.
- Letter from State Geologist to El Dorado County, dated January 6, 1997.
- Letter of transmittal for Open-File Report 2000-03 from the State Mining and Geology Board to El Dorado County, dated April 4, 2003. A copy of Open-File Report 2000-03: Mineral Land Classification of El Dorado County, California, 2001. A copy of the MRZ map showing the area no longer mapped as MRZ-2a.
- Open-File Report 83-29: Mineral Land Classification of the Placerville 15' Quadrangle, El Dorado and Amador Counties, California, 1983. A copy of the MRZ map showing the area originally mapped as MRZ-2a.

The Open-File Report by Loyd and others (OFR 83-29) indicates that the mine was inactive at the time of the report and states that geologic information suggests large tonnages of high quality carbonate rock remain available at the mine site.

However, as early as 1996 and certainly by 2001, the Department no longer considered this area to contain a significant mineral resource. The Open-File Report by Busch (OFR 2000-03) shows that the area is no longer mapped as MRZ-2a and does not mention the mines south of Cameron Park as a significant source of limestone. In addition, the letter from the State Geologist states that the mining of the limestone resources in the area of the Marble Valley Project is not economically viable now or in the foreseeable future.

Please feel free to contact me, at (916) 445-8733, if you have any questions, or need additional information regarding this issue.

Sincerely,

Jason R. Marshall, Assistant Director

Enclosures (7)

Z 07-0001

DEPARTMENT OF CONSERVATION

DIVISION OF ADMINISTRATION  
DIVISION OF MINES AND GEOLOGY  
DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES



SACRAMENTO 814-3528

Phone (916) 322-1680

FAX (916) 445-0732

TDD (916) 324-2555

RECEIVED  
PLANNING DEPARTMENT

January 6, 1997

Mr. Roger Trout, Senior Planner  
El Dorado County Planning Department  
2850 Fairlane Court  
Placerville, CA 95667  
Dear Mr. Trout:

In response to your letter dated December 3, 1996 regarding "Statement of Reasons for Land Use Change in Marble Valley", and in compliance with Public Resources Code Section 2762, I have directed geologists with the Division of Mines and Geology's (DMG) Mineral Land Classification Program to review the following: (1) the Notice of Proposed Adoption: Statement of Reasons for a Change in Land Use in the Area Known as Marble Valley; (2) the Draft Statement of Reasons in Support of Change in Land Use of the Area Known as Marble Valley and Findings Based Thereon; and (3) Exhibits A through F of the Draft Statement of Reasons in Support of Change in Land Use of the Area Known as Marble Valley and Findings Based Thereon (received separately along with a cover letter dated December 12, 1996 from Lisa L. Halko, Attorney, representing the SH Cowell Foundation). In March 1996 DMG staff geologists also reviewed the Notice of Preparation of a Draft EIR for Marble Valley Rezone, Planned Development, Development Agreement, and Subdivision, State Clearing House #95032018, and the results of the geologic review were presented in a March 29, 1996 letter to you from Jason Marshall, Assistant Director of the Department of Conservation's Office of Governmental and Environmental Relations.

On the basis of the review by DMG staff, it is concluded that the information presented in (1) through (3), in particular, the information presented in the Valuation Report, Marble Valley Limestone Deposit Located in El Dorado County, California [Exhibit F of document (2)], is consistent with conclusions presented in the March 29 letter -- in essence, that development (mining) of the limestone resources in the area of the Marble Valley Project is not economically viable now or in the foreseeable future. These limestone deposits no longer warrant a MRZ-2a classification.

**Z 07-0001**



**EL DORADO COUNTY PLANNING DEPARTMENT  
2850 FAIRLANE COURT  
PLACERVILLE, CA 95667**

**ENVIRONMENTAL CHECKLIST FORM  
AND DISCUSSION OF IMPACTS**

**Project Title:** G3 Enterprise Rezone (File Application No. Z07-001)

**Lead Agency Name and Address:** El Dorado County, 2850 Fairlane Court, Placerville, CA 95667

**Contact Person:** Rommel Pabalinas, Senior Planner

**Phone Number:** 916-358-3638

**Property Owner's Name and Address:** G3 Enterprise Inc.; 502 East Whitmore; Modesto, CA 95358

**Project Applicant's Name and Address:** RRM Design Group; 210 East F Street; Oakdale, CA 95351

**Project Agent's Name and Address:** Same as Applicant

**Project Engineer's / Architect's Name and Address:** N/A

**Project Location:** Approximately 1 mile south of Highway 50, 1 mile west of South Shingle Road

**Assessor's Parcel No:** 109-010-09, -10, -13, -14 and 109-020-01

**Zoning:** Mineral Resources (MR)

**Section:** 19    **T:** 9N    **R:** 9E

**General Plan Designation:** Rural Residential (RR)

**Description of Project:**

**Project Proposal**

The applicant is requesting a rezone of the above property from Mineral Resource (MR) zone district to Residential Estate-10 acre minimum (RE-10) with a Planned Development (-PD) overlay. The proposed underlying zoning would conform to the General Plan Land Use Designation of Rural Residential (RR) which provides a density range of one dwelling unit per 10 to 160 acres. Section 17.70.080 of the El Dorado County Zoning Ordinance establishes the standards regulating the various uses which includes single family residences, agricultural uses (ie. grazing, processing) and agricultural support services.

Though no actual development or improvement is proposed concurrent with zone change, the Planned Development overlay zone would provide for subsequent review of future development on the project site. Specifically, implementation of planned development concepts would provide for innovative planning and development techniques to further various General Plan strategies. Some of these strategies include provisions for open space, clustering development design which furthers the County's goals in developing to the natural topography, and preserving of sensitive biological and cultural resources. Chapter 17.02 of the El Dorado County Zoning Ordinance further implements the principles of the Planned Development.

The actual change of the underlying zone would not anticipate any physical or environmental impacts; however, this initial study provides a general discussion and assumption of the future development and potential impacts. Subsequent proposal would be required to submit development plans and studies subject for review by various agencies from which project specific mitigation measures would be determined and applied.

**Project Location and Surrounding Property Information**

Setting

Consisting of five individual legal parcels, the 530-acre site is located approximately 1 mile south of Highway 50 and 1 mile west of South Shingle Springs. The site is accessed via both improved public and unimproved private roads connecting from Deer Creek Road from northwest, Shingle Lime Mine Road from the northeast, and Amber Fields Drive from the southeast. Historically, the property was utilized as a grazing, limestone mine, and processing and rock crushing facility associated with the defunct Marble Valley Limestone Deposit quarry, located to the west. Though predominantly undeveloped, small areas located in the middle of the site contains two dwelling units, three unoccupied accessory buildings, and two accessory buildings utilized by a construction company.

The site is located within the elevation range from 800 feet at the southwest to 1,280 feet along the eastern border.



The property is characterized by three types of soil from two soil series: Auburn Series (AwD and AxD), a well drained and shallow to moderately deep soil type formed from metabase or metasedimentary rock, with moderate permeability; Sobrante Series (SuC), a well drained moderately deep soil, formed from basic igneous and metamorphic rocks, with moderate permeability. Additionally, two soil classifications not associated with these series, Serpentine (SaF) rocks formed from Serpentine bedrock, and Quarries (Qu) are also present on the site. Sobrante Series is considered an agricultural “choice” soil type designated as prime or local importance. Serpentine rock formation is commonly accompanied by areas of Gabbro soils which is prevalent to rare “endemic” plants (Exhibit D).

Along with its several tributaries, Deer Creek, an predominantly intermittent watercourse, traverses the site from the northwest meandering through the middle of the site due southwest. This wetland feature flows into the Consumnes River, which eventually connects to Suisun Bay via the Mokelumne and San Joaquin Rivers. The site also contains several smaller seasonal wetlands that connect to Deer Creek and its tributaries. In total, the approximate amount of wetland and drainage feature is estimated at 3.54 acres (Exhibit E).

The balance of the biotic habitats is encompassed by the following: Mixed oak woodland (242 acres) primarily consisting of Valley oaks, Blue oaks, California black oak located along the riparian corridor; Montane manzanita chaparral (129 acres) including Whiteleaf manzanita, various shrub species, and mixture of native and non-native grass, primarily occupies the western half of the site; Oak savannah (103 acres), contains a mix of Valley oak, Blue oak and grassland understory; Ruderal area (39 acres), contains non-native grass and forbs within previously disturbed area; and Mixed chaparral (14 acres) includes small areas of mixed chaparral and shrubs within oak savannah habitat located within northeast section.

**Site Information**

Tables 1 and 2 below details the specific land use information for the site and the surrounding properties.

**Table 1. Current Site Land Use Information**

	<b>Project Site</b>
<b>General Plan Designation</b>	Rural Residential (RR)
<b>Zoning</b>	Mineral Resource (MR)
<b>Use(s)</b>	Residential
<b>Size (in acres)</b>	537
<b>Rare Plant Mitigation Area</b>	Mitigation Area 1
<b>School District</b>	Buckeye Union
<b>Fire District</b>	El Dorado County Fire Protection District
<b>Water/Sewer District</b>	109-010-09, -10 EID; 109-010-13, -14; -020- 01Unassigned
<b>County Region</b>	Rural Region
<b>Traffic Analysis Zone(s)</b>	343 and 167
<b>Supervisory District</b>	District No.2
<b>Flood Zone</b>	C
<b>FIRM Panel Numbers</b>	060040 0725C
<b>Legal Parcels</b>	Yes
<b>Census Tract</b>	308.04

	<b>General Plan Designation</b>	<b>Zoning Designation</b>	<b>Existing Use</b>
<b>North</b>	Low Density Residential (LDR)	Residential Estate 5-acre (RE-5), Planned Agricultural 20-acre (PA-20)	Residential
<b>East</b>	Low Density Residential (LDR)	Residential Estate 5-acre (RE-5)	Residential
<b>South</b>	Low Density Residential (LDR), Public Facilities (PF), Open Space (OS)	Open Space (OS), Residential Agricultural 40-acre (RA-40), Residential Estate 5-acre (RE-5)	Residential, EID Waste Water Treatment Plant
<b>West</b>	Low Density Residential (LDR)	RE-5/PD	Marble Valley Subdivision

**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.): N/A**

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

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

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

**DETERMINATION**

**On the basis of this initial evaluation:**

- I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: Rommel Pabalinas For: El Dorado County

**EVALUATION OF ENVIRONMENTAL IMPACTS**

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is a fair argument that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a. Earlier Analysis Used. Identify and state where they are available for review.
  - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
  - a. the significance criteria or threshold, if any, used to evaluate each question; and
  - b. the mitigation measure identified, if any, to reduce the impact to less than significant.

**ENVIRONMENTAL IMPACTS**

<b>I. AESTHETICS. <i>Would the project:</i></b>				
a. Have a substantial adverse effect on a scenic vista?			<b>X</b>	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			<b>X</b>	
c. Substantially degrade the existing visual character quality of the site and its surroundings?			<b>X</b>	

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>I. AESTHETICS. <i>Would the project:</i></b>			
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			<b>X</b>

**Discussion:**

A substantial adverse effect to Aesthetics would occur if implementation of the project would:

- Result in the introduction of physical features that are not characteristic of the surrounding development;
- Substantially change the natural landscape; or
- Obstruct an identified public scenic vista.

a-d. The project site is not within a State Scenic Highway or in an area identified as Scenic Resources. However, the site immediately borders Marble Valley to the west which is identified to be a Scenic View under General Plan EIR Table 5.3.1. Scenic Views are considered areas that contain broader viewshed which includes mountain ranges, valleys, and ridgelines that can be seen from viewpoints along roadways or corridors. The 2,000-acre Marble Valley area has received a tentative subdivision map approval for a total of 398 custom residential lots, several open space parcels and supporting parcels.

Though no development is requested, the proposed rezone would establish an underlying zone of Residential Estate-10/PD and standards for future residential development. Some of these standards and policies include provisions for oak canopy retention/replacement, minimization of wetland impacts, avoidance of significant cultural resource areas, incorporation of area for open space, and site and architectural design. The anticipated development would conform to the surrounding existing and future residential uses.

Therefore, the proposed rezone would have less than significant impact to aesthetic and scenic resources.

<b>II. AGRICULTURE RESOURCES. <i>Would the project:</i></b>			
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Locally Important Farmland (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>X</b>	
b. Conflict with existing zoning for agricultural use, or a Williamson Act Contract?			<b>X</b>
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?		<b>X</b>	

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

**Discussion:**

A substantial adverse effect to Agricultural Resources would occur if:

- There is a conversion of choice agricultural land to nonagricultural use, or impairment of the agricultural productivity of agricultural land;
- The amount of agricultural land in the County is substantially reduced; or
- Agricultural uses are subjected to impacts from adjacent incompatible land uses.

a-c. A portion of the property is composed of Sobrante Series soil, which is considered a type of “choice” agricultural land considered of local significance. General Plan Policy 8.1.1.5 (Conservation and Open Space Element) require lands with this type of soil to be zoned agricultural with a minimum size of 20 acres, unless otherwise determined by the Board of Supervisor.

The proposed zoning of Residential Estate-10 acre minimum (RE-10) allows various uses from residential to limited agricultural. In evaluation of the soil composition and its historical uses of the property, a representative from the Agricultural Commission concluded that the portion containing “choice soils” is inadequate in area of coverage, irregularly shaped and isolated, and has been disturbed by the previous intense historical mining use, and would not be practical to be retained for exclusive agricultural use. The Commission recommended that future non-agricultural uses (ie. residential development) adjacent to the lands zoned agriculturally maintain a 200-foot setback and 10-acre in size.

The proposed rezone would establish uses regulated under the Residential Estate Zoning District standards. Under this district, the allowed uses of the property vary from residential to limited agricultural/horticulture activities. Future development of the site would be subject to applicable standards and policies that would minimize impact on potential agricultural use of the site. Therefore, the proposed rezone would have less than significant impact.

b The property is not agriculturally zoned nor subject to Williamson Act Contract requirements. Therefore, the proposed rezone would have no impact.

<b>III. AIR QUALITY. <i>Would the project:</i></b>				
a. Conflict with or obstruct implementation of the applicable air quality plan?			<b>X</b>	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			<b>X</b>	
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			<b>X</b>	
d. Expose sensitive receptors to substantial pollutant concentrations?				<b>X</b>
e. Create objectionable odors affecting a substantial number of people?				<b>X</b>

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

**Discussion:**

A substantial adverse effect on Air Quality would occur if:

- Emissions of ROG and No<sub>x</sub>, will result in construction or operation emissions greater than 82lbs/day (See Table 5.2, of the El Dorado County Air Pollution Control District – CEQA Guide);
- Emissions of toxic air contaminants cause cancer risk greater than 1 in 1 million (10 in 1 million if best available control technology for toxics is used) or a non-cancer Hazard Index greater than 1. In addition, the project must demonstrate compliance with all applicable District, State and U.S. EPA regulations governing toxic and hazardous emissions.

El Dorado County is within the area of Sacramento Region designated as Mountain Counties Air Basin. According to the Sacramento Regional Ozone Air Quality Attainment Plan (AQAP) this region is considered to be non-attainment with Reactive Organic Gases (ROG), 24-hour PM10, and Nitrous Oxide (NO<sub>x</sub>) in accordance to federal and state standards. The County is in attainment of Carbon Monoxide (CO) and Sulfur (SO<sub>x</sub>) and Nitrogen Dioxide (NO<sub>2</sub>) for ambient air quality standards. General Plan Goal 6.7 details specific air quality policies involving project design, implementation of best management practices and promoting public awareness of air quality.

Air quality in El Dorado County is regulated by various local, state and federal government agencies. The County Air Quality Management District (AQMD) at the local level is responsible for ensuring air quality conditions in the County through comprehensive program of planning, regulation, enforcement, technical innovation and promotion of understanding air quality issues. The strategy for clean air includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, issuance of permits for stationary sources of air pollution, inspection of stationary sources of air pollution and response to complaints, monitoring of ambient air quality conditions. AQMD's *Guide to Air Quality Assessment: Determining Significance of Air Quality Impacts under California Environmental Quality Act* provides an outline for quantitative and qualitative analysis for the estimation of construction and operational emissions and mitigation measures to reduce impacts.

a-c. With the proposed rezone, the anticipated uses would be residential development, which based on the site acreage and zone, is approximately (50) 10-acre residential lots. A future development proposal would be required to provide an Air Quality analysis, which includes evaluation of operational effects from the anticipated residential traffic, grading/construction activity, and disturbance in areas on the property with naturally occurring asbestos subject to review by the AQMD. Therefore, the project would anticipate less than significant impact.

d-e. The rezone would anticipate future development of the property. Residential development is not considered a sensitive receptor and would not create objectionable odor. Therefore, the project would not anticipate any impact.

<b>IV. BIOLOGICAL RESOURCES. <i>Would the project:</i></b>			
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>X</b>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			<b>X</b>

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>IV. BIOLOGICAL RESOURCES. <i>Would the project:</i></b>			
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X
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?			X
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X
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?			X

**Discussion:**

A substantial adverse effect on Biological Resources would occur if the implementation of the project would:

- Substantially reduce or diminish habitat for native fish, wildlife or plants;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a native plant or animal community;
- Reduce the number or restrict the range of a rare or endangered plant or animal;
- Substantially affect a rare or endangered species of animal or plant or the habitat of the species; or
- Interfere substantially with the movement of any resident or migratory fish or wildlife species.

An analysis of the existing environmental and biotic setting of the site was conducted by Live Oak Associates, Inc (Attachment A). The study provides a summary of evaluation of the biological resources, regulatory background relevant to the resources, and recommended mitigations of future development impacts. Though the proposed rezone would have no impact on the existing biotic condition, future residential development impacts may be considered significant. Specific discussion of each resource is provided below.

a-e. Table 3 of the attached analysis identifies and describes the type of plant and animal species and its habitat that potentially exist on the site. The type of species varies from threatened or endangered species of rare “endemic” plants to California horned lizard and Valley elderberry longhorn beetle. Four of the seven rare plants listed under protection by Chapter 17.71 (Ecological Preserves) including Pine Hill ceanothus, Layne’s ragwort, Red Hills soaproot and Bisbee Peak Rush-rose, have the potential to occur in areas of the located on Serpentine Rock. The analysis recommends subsequent focused surveys during its blooming period (March to August) to determine the physical presence of these plants.

General Plan Policy (Conservation and Open Space Element) 7.4.4.4 regulates development impacts to oak woodland canopy. Though the site contains approximately 300 acres of mixed oak woodland and oak savannah, a specific delineation of oak canopy would need to be identified in order to establish the required retention and replacement of canopy.

Given the array of biotic habitats ranging from oak woodland to the riparian corridor, the analysis identified 15 special status animal species that may potentially occur or migrate on the site. Examples of these species include the Western pond turtle, Cooper’s hawk, Ferruginuos hawk, and the Valley elderberry longhorn beetle. The proposed rezone would

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

have no impact to the species' habitat; however, the analysis anticipates less than significant impact from future development given that it would have no effect on breeding success and that it would have relatively small reduction to foraging or roosting habitat considering the abundance of biotic environment regionally. Future development impacts on individual Valley elderberry longhorn beetle would require a federal take permit.

The study identified approximately 3.5 acres of drainage and wetlands and its associated habitats. Detailed delineation of these riparian features would need to be conducted in order to determine its jurisdictional status. Moreover, subsequent development plans would be subject to review for conformance to applicable standards.

Impacts are considered less than significant.

- f. El Dorado County currently does not have any habitat conservation plan. No impact is anticipated.

V. CULTURAL RESOURCES. <i>Would the project:</i>				
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			X	
b. Cause a substantial adverse change in the significance of archaeological resource pursuant to Section 15064.5?			X	
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	
d. Disturb any human remains, including those interred outside of formal cemeteries?				X

**Discussion:**

a-c. In accordance with General Plan Policy (Conservation and Open Space Element) 7.5.1.3, the applicant provided record search of cultural and archeological data on the property conducted by the North Central Information Center (CSU-Sacramento) The record search included study of State of California Office of Historic Preservation records, base maps, historic maps, and literature for the County. Given its environmental setting and historical mining activities, the site is highly sensitive for prehistoric and historic-period cultural resources. The record search recommended further detailed evaluation of these recorded resources of significance that could include specific and appropriate avoidance measures subject to future development of the site. The project is a rezone and is not considering development, therefore impacts are considered less than significant.

- d. Standard construction provision, noted below, would be included on all of the development/construction plans to ensure protection of discovered human remains:

*In the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.98 of the Public Resources Code. If the remains are determined to be Native American, the Coroner must contact the Native American Heritage Commission within 24 hours. The treatment and disposition of human remains shall be completed consistent with guidelines of the Native American Heritage Commission.*

Therefore, the proposed rezone would anticipate no impact to Cultural Resources.



Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

VI. GEOLOGY AND SOILS. <i>Would the project:</i>			
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.		X	
ii) Strong seismic ground shaking?		X	
iii) Seismic-related ground failure, including liquefaction?		X	
iv) Landslides?		X	
b. Result in substantial soil erosion or the loss of topsoil?		X	
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?		X	
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?		X	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?		X	

**Discussion:**

A substantial adverse effect on Geologic Resources would occur if the implementation of the project would:

- Allow substantial development of structures or features in areas susceptible to seismically induced hazards such as groundshaking, liquefaction, seiche, and/or slope failure where the risk to people and property resulting from earthquakes could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards;
  - Allow substantial development in areas subject to landslides, slope failure, erosion, subsidence, settlement, and/or expansive soils where the risk to people and property resulting from such geologic hazards could not be reduced through engineering and construction measures in accordance with regulations, codes, and professional standards; or
  - Allow substantial grading and construction activities in areas of known soil instability, steep slopes, or shallow depth to bedrock where such activities could result in accelerated erosion and sedimentation or exposure of people, property, and/or wildlife to hazardous conditions (e.g., blasting) that could not be mitigated through engineering and construction measures in accordance with regulations, codes, and professional standards.
- a-e. There are no Earthquake Fault Zones subject to the Alquist-Priolo Earthquake Fault Zoning Act (formerly Special Studies Zone Act) in El Dorado County. There are no active faults on the project site; however, the project site is located in a region of the Sierra Nevada foothills where numerous faults (e.g. Melones fault zone and east of the East Bear Mountains fault zone) have been mapped.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

No portion of El Dorado County is located in a Seismic Hazard Zone (i.e., a regulatory zone classification established by the California Geological Survey that identifies areas subject to liquefaction and earthquake-induced landslides). Lateral spreading, which is typically associated with liquefaction hazard, subsidence, or other unstable soil/geologic conditions do not present a substantial risk in the western County where the project site is located.<sup>1</sup> The project site is commercially developed with existing pavement and supporting infrastructure and foundation underneath the existing building.

The rezone would establish subsequent development subject to various development standards including El Dorado County Zoning, Subdivision and Grading Ordinances and Design and Improvement Manual. Future proposal would be required to submit development plans for review by affected agencies. All grading activities exceeding 50 cubic yards of graded material or grading completed for the purpose of supporting a structure must meet the provisions contained in the *Chapter 15.14 of the County of El Dorado - Grading, Erosion, and Sediment Control Ordinance* (Ordinance No. 4719, adopted March 3, 2007). This ordinance is designed to limit erosion, control the loss of topsoil and sediment, limit surface runoff, and ensure stable soil and site conditions for the intended use in compliance with the El Dorado County General Plan.

Future development of the site will require an annexation to El Dorado Irrigation District (EID) service area for public water and sewer. EID would evaluate the development and require a submittal of a Facility Improvement Plan detailing the construction standards for sewer and water facilities.

Impacts are considered less than significant.

<b>VII. HAZARDS AND HAZARDOUS MATERIALS. <i>Would the project:</i></b>				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
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?				X
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
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 result in a safety hazard for people residing or working in the project area?				X
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?				X
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>VII. HAZARDS AND HAZARDOUS MATERIALS. <i>Would the project:</i></b>			
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?			<b>X</b>

**Discussion:**

A substantial adverse effect due to Hazards or Hazardous Materials would occur if implementation of the project would:

- Expose people and property to hazards associated with the use, storage, transport, and disposal of hazardous materials where the risk of such exposure could not be reduced through implementation of Federal, State, and local laws and regulations;
- Expose people and property to risks associated with wildland fires where such risks could not be reduced through implementation of proper fuel management techniques, buffers and landscape setbacks, structural design features, and emergency access; or
- Expose people to safety hazards as a result of former on-site mining operations.

a-h. With the proposed zoning, the site would anticipate residential development. This type of development would typically not involve transport, use, emission, or disposal of hazardous materials. The site is not listed to have any hazardous materials in accordance with Government Code 65962.5.

The project site is not identified as a hazardous materials site pursuant to Government Code Section 65962.5, therefore, the project does not anticipate any impact.

Cameron Park Airport, a public airport, is located approximately 3 miles northwest of the project site. The project is outside of the airport safety zone or airport land use plan area.

The map of El Dorado County Fire Hazard Zones identifies the site to be within moderate to high risk for wildfire. Future residential development will be based on the density established by the proposed zoning. The development proposal would be reviewed for conformance with fire standards including road and accessibility, defensible space and setbacks, and necessary fire facilities. Therefore, no impact is anticipated.

<b>VIII. HYDROLOGY AND WATER QUALITY. <i>Would the project:</i></b>			
a. Violate any water quality standards or waste discharge requirements?			<b>X</b>
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)?			<b>X</b>
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?			<b>X</b>

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>VIII. HYDROLOGY AND WATER QUALITY. <i>Would the project:</i></b>			
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 which would result in flooding on- or off-site?			<b>X</b>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			<b>X</b>
f. Otherwise substantially degrade water quality?			<b>X</b>
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?			<b>X</b>
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			<b>X</b>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			<b>X</b>
j. Inundation by seiche, tsunami, or mudflow?			<b>X</b>

**Discussion:**

A substantial adverse effect on Hydrology and Water Quality would occur if the implementation of the project would:

- Expose residents to flood hazards by being located within the 100-year floodplain as defined by the Federal Emergency Management Agency;
  - Cause substantial change in the rate and amount of surface runoff leaving the project site ultimately causing a substantial change in the amount of water in a stream, river or other waterway;
  - Substantially interfere with groundwater recharge;
  - Cause degradation of water quality (temperature, dissolved oxygen, turbidity and/or other typical stormwater pollutants) in the project area; or
  - Cause degradation of groundwater quality in the vicinity of the project site.
- a-h. The proposed rezone would establish an underlying zone allowing future residential development. Development impacts on water quality and drainage would be analyzed and verified through subsequent regulatory review of requisite preliminary construction and grading plans and technical studies analyzing site layout, drainage design, and utility details subject to permitting by various agency standards. Anticipated impacts are considered less than significant.
- i.-j. The project is not within the vicinity of levee or dam or any body of water that would result to a seiche or tsunami. Therefore, no project impacts are anticipated from or to these resources.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>IX. LAND USE PLANNING. <i>Would the project:</i></b>			
a. Physically divide an established community?			X
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?			X
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?			X

**Discussion:**

A substantial adverse effect on Land Use would occur if the implementation of the project would:

- Result in the conversion of Prime Farmland as defined by the State Department of Conservation;
- Result in conversion of land that either contains choice soils or which the County Agricultural Commission has identified as suitable for sustained grazing, provided that such lands were not assigned urban or other nonagricultural use in the Land Use Map;
- Result in conversion of undeveloped open space to more intensive land uses;
- Result in a use substantially incompatible with the existing surrounding land uses; or
- Conflict with adopted environmental plans, policies, and goals of the community.

a-c. There is no established community on the property. However, the proposed residential zone would allow future residential development that would conform to the surrounding residential uses. The zone would conform to the Rural Residential Land Use Designation. El Dorado County has no habitat conservation plan. Therefore, no impact is anticipated.

<b>X. MINERAL RESOURCES. <i>Would the project:</i></b>			
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?			X
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?			X

**Discussion:**

A substantial adverse effect on Mineral Resources would occur if the implementation of the project would:

- Result in obstruction of access to, and extraction of mineral resources classified MRZ-2x, or result in land use compatibility conflicts with mineral extraction operations.

a & b. Though the site was historically a site of a limestone quarry, the El Dorado County Limestone Mine, is no longer operating. The site maintains its zoning as MR, this designation has been omitted given that the mineral resource has been determined to be not economically viable. The site has since been determined to have no mineral resource of

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

significance by the State Department of Conservation. Therefore, future residential development of the site would not have any impacts.

<b>XI. NOISE. Would the project result in:</b>			
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			<b>X</b>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			<b>X</b>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			<b>X</b>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			<b>X</b>
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 level?			<b>X</b>
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?			<b>X</b>

**Discussion:**

A substantial adverse effect due to Noise would occur if the implementation of the project would:

- Result in short-term construction noise that creates noise exposures to surrounding noise sensitive land uses in excess of 60dBA CNEL;
  - Result in long-term operational noise that creates noise exposures in excess of 60 dBA CNEL at the adjoining property line of a noise sensitive land use and the background noise level is increased by 3dBA, or more; or
  - Results in noise levels inconsistent with the performance standards contained in Table 6-1 and Table 6-2 in the El Dorado County General Plan.
- a-d. The change in zoning would establish future development that would be specifically analyzed for acoustical impacts. Future residential development would anticipate less than significant short term noise associated with construction minimized by muffling the mechanical equipment, and regulated by construction activity hours. Similarly, long term operational noise impacts (ie. vehicular traffic, yard activity) associated with common residential noise and sound are typically intermittent, would conform to the ambient residential noise and could be considered less than significant.
- e-f. The project site is not within any airport land use plan. There are no private airstrips in the vicinity of the project site. There would be no aircraft-related noise impacts.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>XII. POPULATION AND HOUSING. <i>Would the project:</i></b>				
a. Induce substantial population growth in an area, either directly (i.e., by proposing new homes and businesses) or indirectly (i.e., through extension of roads or other infrastructure)?			<b>X</b>	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				<b>X</b>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				<b>X</b>

**Discussion:**

A substantial adverse effect on Population and Housing would occur if the implementation of the project would:

- Create substantial growth or concentration in population;
  - Create a more substantial imbalance in the County's current jobs to housing ratio; or
  - Conflict with adopted goals and policies set forth in applicable planning documents.
- a. Based on the Land Use Density and Residential Range formula under General Plan Policy (Land Use Element 2.2.1.3, the anticipated residential development would introduce a minimum of approximately 140 persons at complete buildout, which is considered less than significant.
- b-c. Future residential development would displace two dwelling units, one of which is currently occupied. This amount is not considered substantial. No impact is anticipated.

<b>XIII. PUBLIC SERVICES. <i>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 public services:</i></b>				
a. Fire protection?				<b>X</b>
b. Police protection?				<b>X</b>
c. Schools?				<b>X</b>
d. Parks?				<b>X</b>
e. Other government services?				<b>X</b>

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

**Discussion:**

A substantial adverse effect on Public Services would occur if the implementation of the project would:

- Substantially increase or expand the demand for fire protection and emergency medical services without increasing staffing and equipment to meet the Department's/District's goal of 1.5 firefighters per 1,000 residents and 2 firefighters per 1,000 residents, respectively;
- Substantially increase or expand the demand for public law enforcement protection without increasing staffing and equipment to maintain the Sheriff's Department goal of one sworn officer per 1,000 residents;
- Substantially increase the public school student population exceeding current school capacity without also including provisions to adequately accommodate the increased demand in services;
- Place a demand for library services in excess of available resources;
- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Be inconsistent with County adopted goals, objectives or policies.

a-e. Determination of services including fire protection, water/sewer, drainage, would be verified based on the specific development. Future development proposals would be reviewed by various agencies for site design and layout, accessibility, adequate fire emergency facilities, defensible setbacks and on-site recreation. Agency comments would be considered as part of the development review, and further enforced during Improvement Plan, Final Map and building permit process. Therefore, the rezone request anticipates less than significant impact to public services.

<b>XIV. RECREATION.</b>				
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?				X
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?				X

**Discussion:**

A substantial adverse effect on Recreational Resources would occur if the implementation of the project would:

- Substantially increase the local population without dedicating a minimum of 5 acres of developed parklands for every 1,000 residents; or
- Substantially increase the use of neighborhood or regional parks in the area such that substantial physical deterioration of the facility would occur.

a-b. There are no existing parks within the vicinity of the site. Through the principles of Planned Development, future developments would be required to provide reserve open space areas in the form of passive or active recreation which would lessen the need and use of other existing recreational parks in the area. Siting of these areas would be further verified through plan reviews for accessibility and use. Therefore, no impact is anticipated.



Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>XV. TRANSPORTATION/TRAFFIC. <i>Would the project:</i></b>			
a. Cause an increase in traffic which 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)?			X
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X
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?			X
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X
e. Result in inadequate emergency access?			X
f. Result in inadequate parking capacity?			X
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X

**Discussion:**

A substantial adverse effect on Traffic would occur if the implementation of the project would:

- Result in an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system;
- Generate traffic volumes which cause violations of adopted level of service standards (project and cumulative); or
- Result in, or worsen, Level of Service "F" traffic congestion during weekday, peak-hour periods on any highway, road, interchange or intersection in the unincorporated areas of the county as a result of a residential development project of 5 or more units.

a-b,d-g. Specific development of the site would be required to submit detailed plans and studies evaluating circulation and traffic impacts. Subject to various agencies review including El Dorado County Department of Transportation and Development Services, El Dorado County Fire Protection District and El Dorado Transit Department, the development would be verified for conformance to standards involving vehicular traffic volume effects, site design and improvements, accommodations for alternative modes of transportation. Agency comments would be considered during subsequent project and environmental review of the development proposals resulting in specific conditions and/or mitigation measures. Therefore, anticipated impacts would be considered less than significant.

c. The site is not within any airport safety zone and, therefore would not present an air traffic hazard. No changes in air traffic patterns would occur or be affected by this and future project proposal. No impact is anticipated

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>XVI. UTILITIES AND SERVICE SYSTEMS. <i>Would the project:</i></b>			
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X
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?			X
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X
e. Result in a determination by the wastewater treatment provider which 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?			X
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X
g. Comply with federal, state, and local statutes and regulations related to solid waste?			X
h. Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.			X

**Discussion:**

A substantial adverse effect on Utilities and Service Systems would occur if the implementation of the project would:

- Breach published national, state, or local standards relating to solid waste or litter control;
- Substantially increase the demand for potable water in excess of available supplies or distribution capacity without also including provisions to adequately accommodate the increased demand, or is unable to provide an adequate on-site water supply, including treatment, storage and distribution;
- Substantially increase the demand for the public collection, treatment, and disposal of wastewater without also including provisions to adequately accommodate the increased demand, or is unable to provide for adequate on-site wastewater system; or
- Result in demand for expansion of power or telecommunications service facilities without also including provisions to adequately accommodate the increased or expanded demand.

a-h. Specific development of the site would be required to identify the source of water and wastewater system. The site is within an area that could be served, upon annexation, by El Dorado Irrigation District for public water and sewer or given the anticipated size minimum size of each property at 10 acres, each individual lot could adequately accommodate on-site domestic water and septic. Development plans and associated studies would be required subject to review by various agencies for conformance to required regulatory standards and improvements necessary to provide the service. Impacts to these services and systems are considered less than significant.

Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:</b>				
a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?			X	
b. 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)?			X	
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

**Discussion**

a-c. The proposed rezone does not anticipate any physical effects to the site. However, with the zone change to a residential designation, the subsequent proposal would be required to submit development plans and studies subject review of potential individual or cumulative environmental impacts by various affected agencies and consideration of specific mitigation measures and standard conditions minimizing the impacts. The proposed rezone would less than significant impact.

**ATTACHMENTS:**

- A. G3 Biotic Evaluation
- B. North Central Information Center (CSU-Sacramento) Record Search

**EXHIBITS:**

- A. Vicinity Map
- B. General Plan Land Use Map
- C. Zoning Map
- D. Soils Map
- E. Wetland/Drainage Map

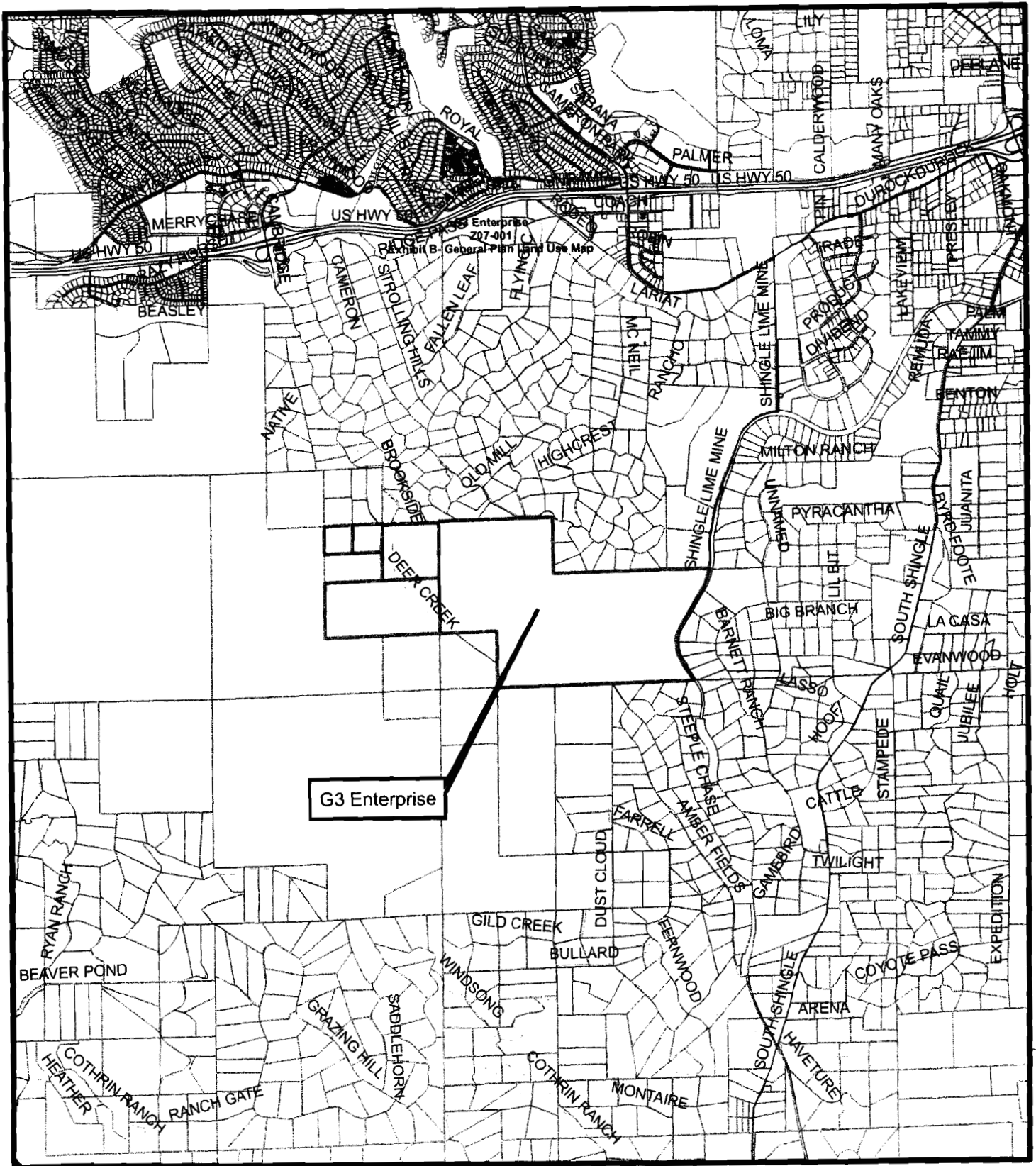
Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporation	Less Than Significant Impact	No Impact
--------------------------------	---	------------------------------	-----------

**SUPPORTING INFORMATION SOURCE LIST**

The following documents are available at the El Dorado County Planning Department in Placerville.

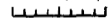
- El Dorado County 2004 General Plan
- El Dorado County Zoning Ordinance (Title 17 - County Code)
- County of El Dorado Drainage Manual (Resolution No. 67-97, Adopted March 14, 1995)
- County of El Dorado Grading, Erosion and Sediment Control Ordinance (Ordinance No. 3883, amended Ordinance Nos. 4061, 4167, 4170, 4719)
- El Dorado County Design and Improvement Manual Standards
- California Environmental Quality Act (CEQA) Statutes (Public Resources Code Section 21000, et seq.)
- Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act (Section 15000, et seq.)

# G3 Enterprise Rezone Rezone Application No. Z07-001

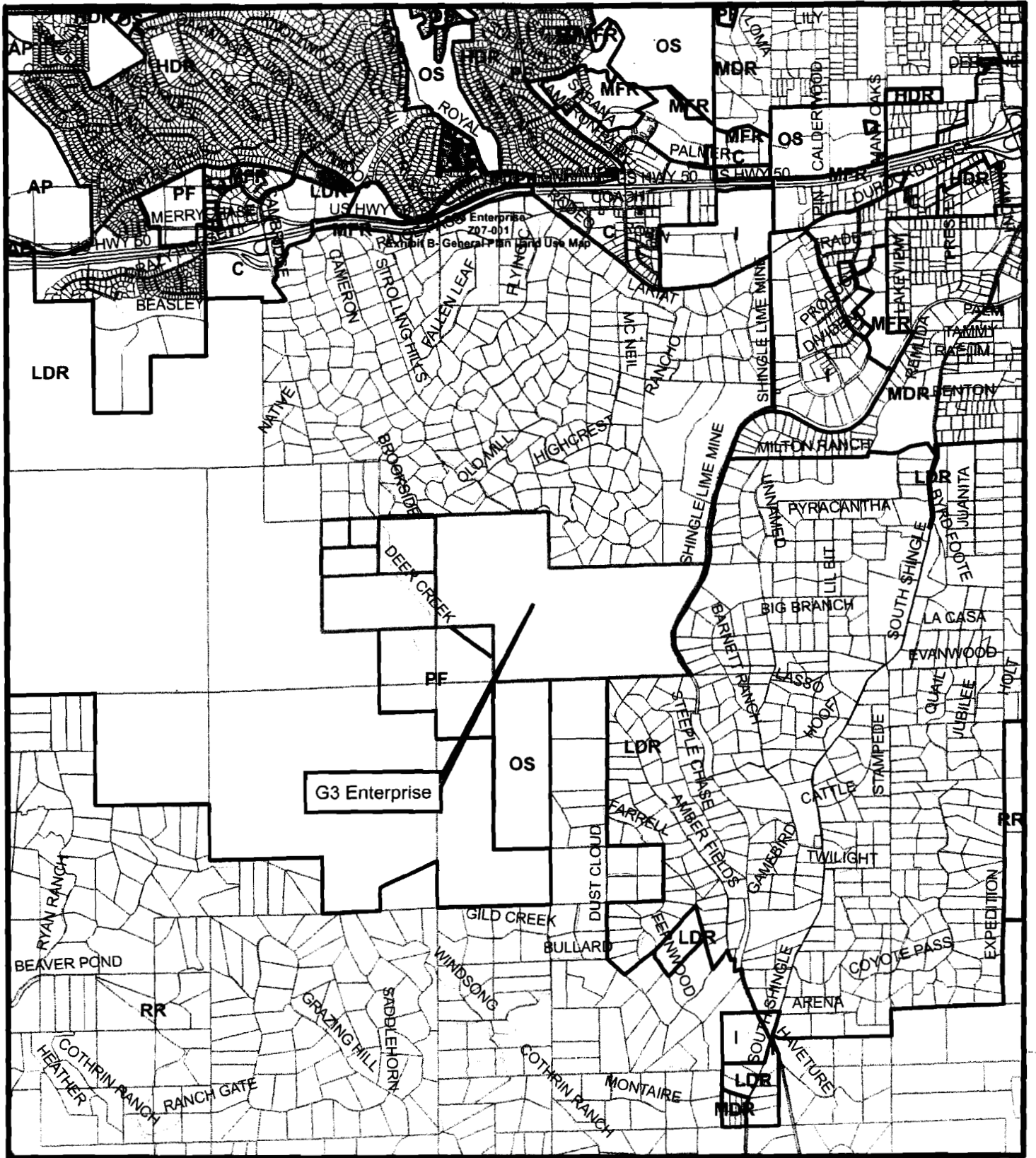


G3 Enterprise

**Exhibit A- Vicinity Map**



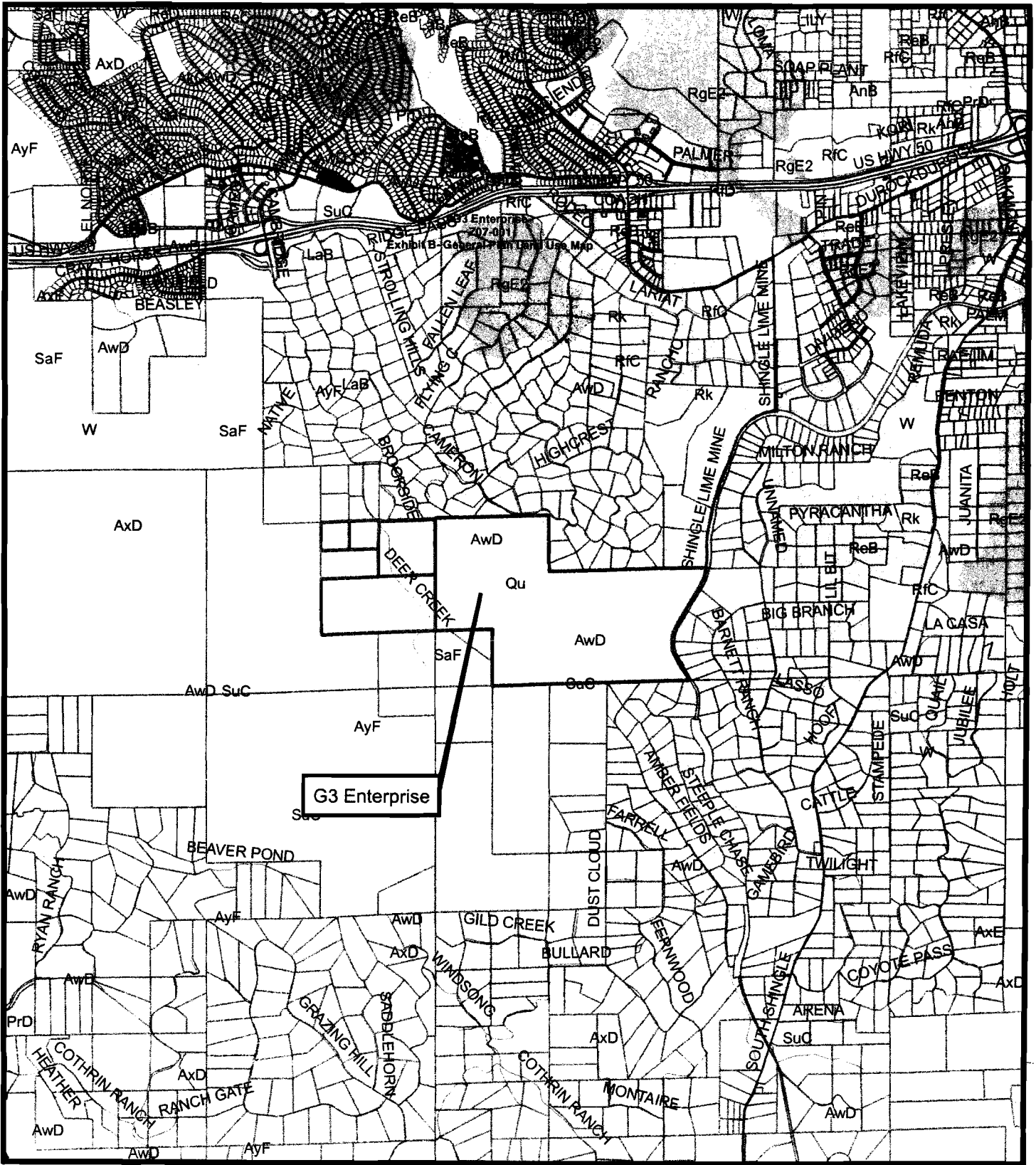
# G3 Enterprise Rezone Rezone Application No. Z07-001



**Exhibit B- General Plan Land Use Map**



**G3 Enterprise Rezone  
Rezone Application No. Z07-001**

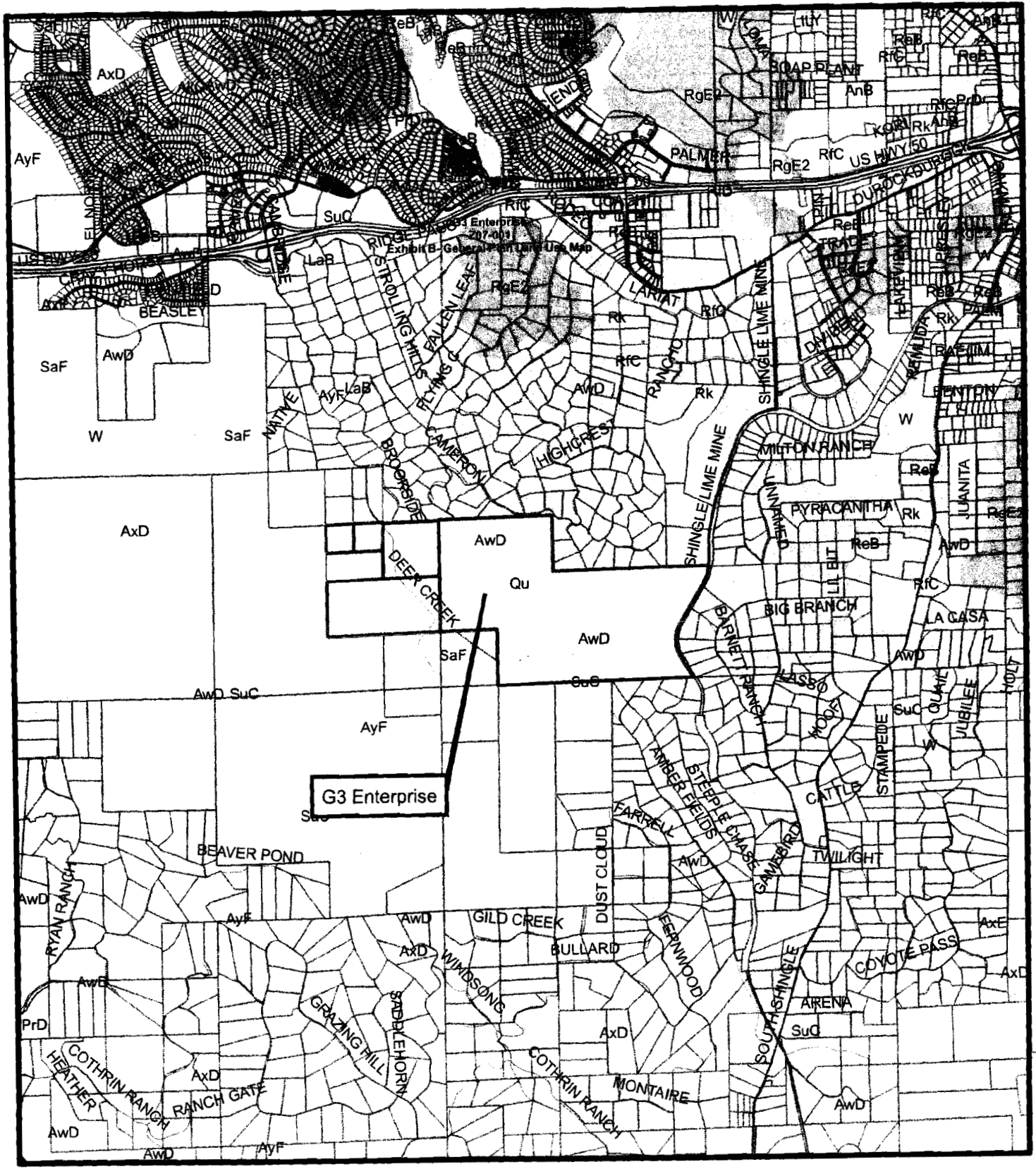


**Exhibit D- Soils Map**





# G3 Enterprise Rezone Rezone Application No. Z07-001



**Exhibit E- Wetland/Drainage M:**





# **LIVE OAK ASSOCIATES, INC.**

an Ecological Consulting Firm

## **G-3 PROPERTY BIOTIC EVALUATION EL DORADO COUNTY, CALIFORNIA**

Prepared by

LIVE OAK ASSOCIATES, INC.

Rick Hopkins, Ph.D., Principal and Senior Conservation Biologist  
Davinna Ohlson, M.S. Assistant Project Manager and Plant/Wildlife Ecologist  
Neal Kramer, M.S., Botanist and Wetland Scientist

Prepared for

G-3 Enterprises  
Attn: Robert Lubeck  
502 E. Whitmore Avenue  
Modesto, CA 95358

December 20, 2006

PN 949-01

---

San Jose Office 6830 Via Del Oro, Suite 205 • San Jose, CA 95119 • Phone: 408-224-8300 • Fax: 408-224-1411  
Oakhurst Office P.O. Box 2697 • 49430 Road 426, Suite B • Oakhurst, CA 93644 • Phone: 559-642-4880 • Fax: 559-642-4883

**ATTACHMENT A**

**Z 07-0001**

## EXECUTIVE SUMMARY

Live Oak Associates, Inc., conducted an investigation of the biological resources of an approximately 531.46-acre site in western El Dorado County, California, and evaluated likely impacts to such resources resulting from the planned rezoning of individual parcels of the site. The site is located in the Sierra foothills and is accessed by Deer Creek Road, Shingle Lime Mine Road, and Amber Fields Drive.

The site consists of an abandoned limestone mine, sparse rural residences, grazed fields, and open space. Mixed oak woodlands and montane manzanita chaparral dominate the site. Other natural biotic habitats occurring on the site include oak savannah and mixed chaparral. Deer Creek and some of its tributaries flow through the site, and several seasonal wetlands are also present.

While a zoning change would, by itself, have no effect on biotic resources of the site or the region within which it is located, eventual development of individual parcels might damage or modify biotic habitats used by sensitive plant and wildlife species. All mitigations outlined below for potential impacts from future development activities would reduce said impacts to a less-than-significant level.

Four rare plants—Pine Hill ceanothus (*Ceanothus roderickii*; federal listing status: endangered; state listing status: rare; CNPS list: 1B), Layne's ragwort (*Senecio layneae* federal listing status: threatened; state listing status: rare; CNPS list: 1B), Red Hills soaproot (*Chlorogalum grandiflorum*; federal listing status: none; state listing status: none; CNPS list: 1B), and Bisbee Peak rush-rose (*Helianthemum suffrutescens*; federal listing status: none; state listing status: none; CNPS list: 3)—have the potential to occur in areas of the site associated with serpentine-derived soils and the gabbro-derived soils of the Pine Hill formation, which includes the western half of the site. Future project impacts to Pine Hill ceanothus and Layne's ragwort and habitat supporting these species would be considered significant under CEQA. As a CNPS 1B plant with no federal or state listing, impacts to Red Hills soaproot may be considered significant under CEQA. Project impacts to Bisbee Peak rush-rose would be considered less-than-significant under CEQA. Mitigations have been provided that would reduce impacts to these species to a less-than-significant level. Mitigations should also be consistent with the County's General Plan policies related to rare plants, any requirements specified in the USFWS's recovery plan for gabbro soil plants that may occur on the site, and any other federal or state regulations protecting these plant communities.

A number of special status animal species may regularly pass through or over the site during migration, may be resident to the site, or may infrequently forage, nest, or roost on the site. For these species, the project would result in a less-than-significant impact on foraging, roosting, or nesting habitat, as similar habitat is regionally abundant.

Impacts to the valley elderberry longhorn beetle, western pond turtle, tree-nesting raptors, and bat species may occur as a result of future ground disturbance activities on the site. Implementation of proposed mitigation measures to ensure that future ground disturbance does

not result in harm or injury to any of these species would reduce impacts to a less-than-significant level.

Jurisdictional waters are presumed to be present on the site in the form of Deer Creek, tributaries to Deer Creek, and seasonal wetlands. These features are likely governed by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and/or California Department of Fish and Game. Future projects should be designed so that they avoid the placement of fill within potential jurisdictional waters. This includes complying with the County's General Plan policies establishing buffers and setbacks for riparian habitats and wetlands. If impacts to Deer Creek, its tributaries, and seasonal wetlands cannot be avoided, then an onsite restoration plan should be developed to mitigate for the significantly impacted habitat; if onsite mitigation is not possible, then offsite mitigation should occur in the vicinity of the site.

El Dorado County considers oak woodlands to be a sensitive natural community. Oak woodlands occurring on the site represent a significant percentage of the site's habitat matrix. The western half of the site is also part of the Pine Hill formation supporting plants endemic to gabbro- and serpentine-derived soils. Development resulting in the loss of these habitats would be considered a significant adverse impact under CEQA. Compliance with the County's General Plan policies for retaining and replacing oak woodland habitat for development projects would mitigate impacts to this habitat to a less-than-significant level. A tree removal permit may also need to be obtained from the County for the removal of native oak trees. Compliance with Chapter 17.71 of the County Code, including payment of appropriate Rare Plant Mitigation Area fees to be determined by the development of specific parcels, would mitigate impacts to rare plant habitats to a less-than-significant level.

Impacts to habitat for and movement of native wildlife, and degradation of water quality in seasonal creeks, reservoirs, and downstream waters, would be considered less than significant.

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	I
TABLE OF CONTENTS .....	III
1.0 INTRODUCTION .....	1
2.0 EXISTING CONDITIONS .....	4
2.1 BIOTIC HABITATS .....	7
2.1.1 Mixed Oak Woodland .....	7
2.1.2 Montane Manzanita Chaparral .....	10
2.1.3 Mixed Chaparral .....	10
2.1.4 Oak Savannah .....	11
2.1.5 Ruderal/Developed .....	12
2.1.6 Seasonal Drainages and Wetlands .....	13
2.2 MOVEMENT CORRIDORS .....	14
2.3 SPECIAL STATUS PLANTS AND ANIMALS .....	15
2.4 ENDANGERED, THREATENED, OR SPECIAL STATUS PLANT AND ANIMAL SPECIES MERITING FURTHER DISCUSSION .....	24
2.4.1 Special Status Plants .....	24
2.4.2 Valley Elderberry Longhorn Beetle ( <i>Desmocerus californicus dimorphus</i> ). Federal Listing Status: Threatened; State Listing Status: None. ....	25
2.5 JURISDICTIONAL WATERS .....	26
2.6 OTHER SENSITIVE NATURAL COMMUNITIES .....	27
3.0 IMPACTS AND MITIGATIONS .....	28
3.1 SIGNIFICANCE CRITERIA .....	28
3.2 RELEVANT GOALS, POLICIES, AND LAWS .....	29
3.2.1 Threatened and Endangered Species .....	29
3.2.2 Migratory Birds .....	30
3.2.3 Birds of Prey .....	30
3.2.4 Wetlands and Other Jurisdictional Waters .....	30
3.2.5 Local Ordinances, General Plans, or Habitat Conservation Plans .....	32
3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE .....	33
3.3.1 Loss of Habitat for Special Status Plants .....	34
3.3.2 Loss of Habitat for Special Status Animals .....	36
3.3.3 Impacts to Individual Valley Elderberry Longhorn Beetles .....	37
3.3.4 Impacts to Western Pond Turtles .....	39
3.3.5 Disturbance to Active Raptor Nests .....	40
3.3.6 Disturbance to Native Wildlife Nursery Sites .....	41
3.3.7 Interference with the Movement of Native Wildlife .....	42
3.3.8 Loss of Habitat for Native Wildlife .....	42
3.3.9 Disturbance to Waters of the United States and Riparian Habitats .....	43
3.3.10 Disturbance to Oak Woodlands and Other Sensitive Natural Communities .....	45
3.3.11 Degradation of Water Quality in Seasonal Drainages, Stock Ponds, and Downstream Waters .....	45
LITERATURE CITED .....	47
APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA .....	49

APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY OCCUR ON THE STUDY AREA..... 54  
APPENDIX C: U.S. FISH AND WILDLIFE SERVICE CONSERVATION GUIDELINES FOR THE VALLEY ELDERBERRY LONGHORN BEETLE ..... 59

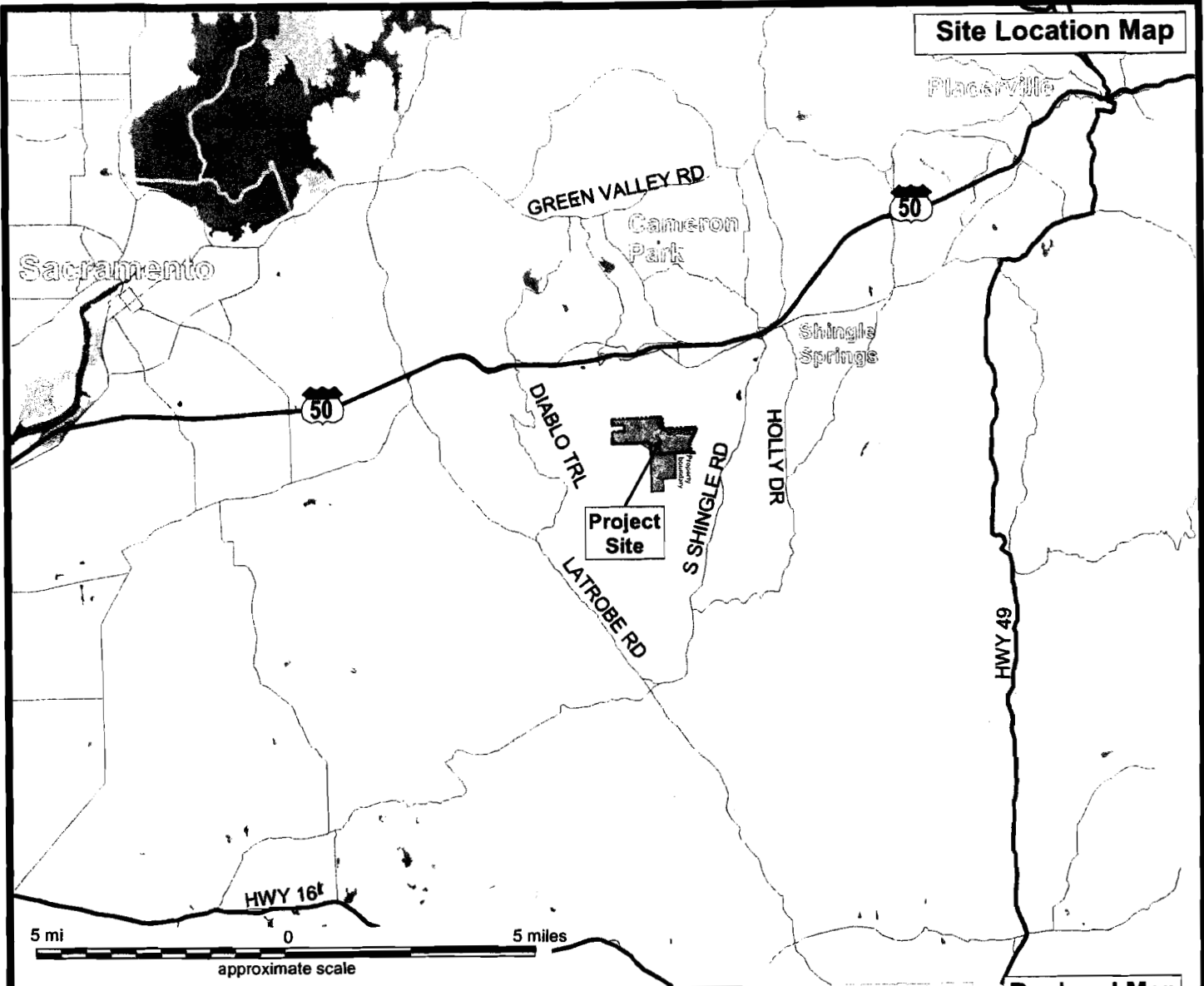
## 1.0 INTRODUCTION

Live Oak Associates, Inc. (LOA), has prepared the following report, which describes the biotic resources of a 531.46-acre site (APNs 109-010-09, -10, -13, and -14, and 109-020-01) located near Shingle Springs in El Dorado County, California, and evaluates likely impacts to these resources resulting from a rezoning designation in the *El Dorado County General Plan* and zoning map. Shingle Springs is located in western El Dorado County, approximately 20 miles east of Sacramento (Figure 1). The proposed project site is located in the Shingle Springs 7.5" USGS quadrangle in sections 14, 15, and 16 of township 9 north, range 9 east.

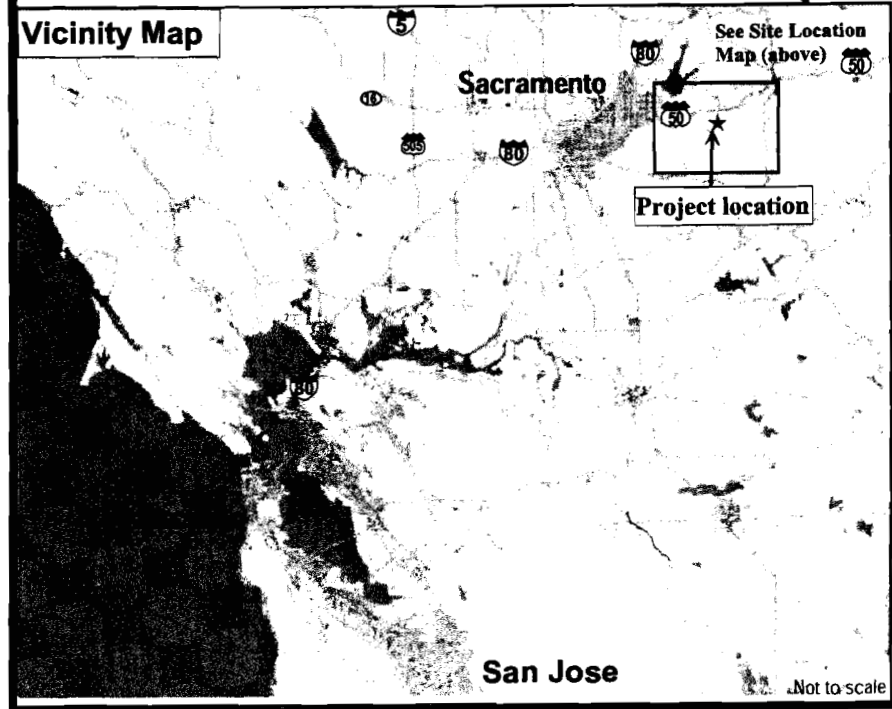
The various parcels within the study area have been assigned a land use designation of "rural residential" with a "Mineral Resources" zoning. The site is being proposed for rezoning to "Residential Estate-10." While a zoning change would, by itself, have no effect on biotic resources of the site or the region within which it is located, eventual development of individual parcels might damage or modify biotic habitats used by sensitive plant and wildlife species. In such cases, site development may be regulated by state or federal agencies, subject to provisions of the California Environmental Quality Act (CEQA), and/or covered by policies and ordinances of El Dorado County. This report addresses issues related to: 1) sensitive biotic resources occurring on the study area; 2) the federal, state, and local laws regulating such resources; and 3) mitigation measures which may be required to reduce the magnitude of anticipated impacts. As such, the objectives of this report are to:

- Summarize all site-specific information related to existing biological resources;
- Make reasonable inferences about the biological resources that could occur onsite based on habitat suitability and the proximity of the site to a species' known range;
- Summarize all state and federal natural resource protection laws that may be relevant to possible future site development;
- Identify and discuss project impacts to biological resources likely to occur on the site within the context of CEQA or any state or federal laws; and

**Site Location Map**



**Regional Map**



See  
Vicinity Map  
(left)



**Live Oak Associates, Inc.**

**G-3 Property  
Site / Vicinity Map**

Date	Project #	Figure #
11/10/06	949-01	1

.Not to scale



- Identify avoidance and mitigation measures that would reduce impacts to a less-than-significant level as identified by CEQA and that are generally consistent with recommendations of the resource agencies for affected biological resources.

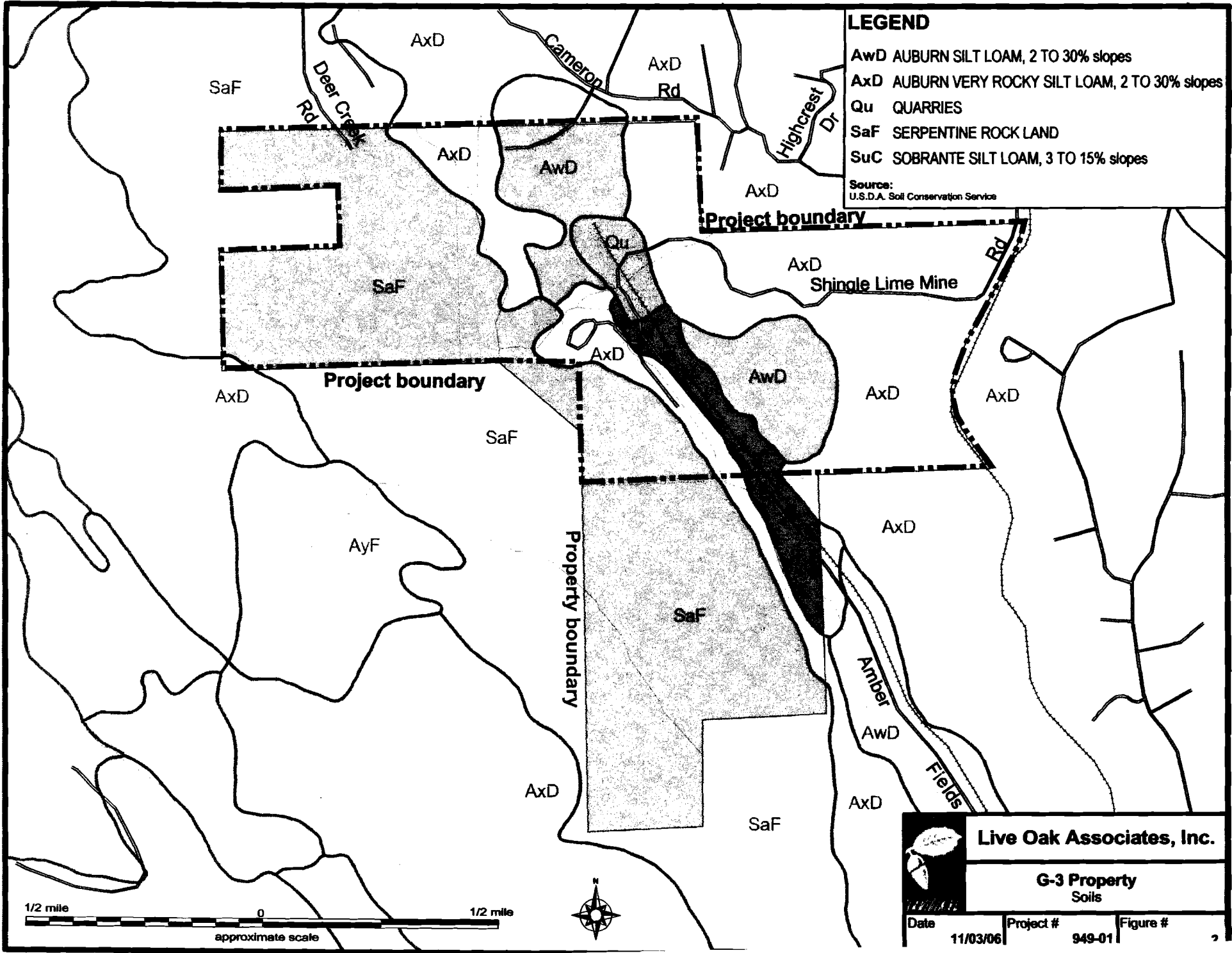
Natural resource issues related to these state and federal laws have been identified in past planning studies conducted in El Dorado County, and it is reasonable to presume that such issues could be relevant to the site examined in this report. For example, a number of state and federally listed plants, as well as other special status plant and animal species (i.e., California species of special concern), have been documented in western El Dorado County. Such species include state and/or federally listed plants like Stebbins' morning-glory, Pine Hill ceanothus, and Layne's ragwort, and animals like the valley elderberry longhorn beetle and California red-legged frog. The western pond turtle, a number of listed raptors (including the burrowing owl), and listed bat species, all California Species of Special Concern, have also been documented in the region. This report evaluates the site's suitability for these and other species.

The analysis of impacts, as discussed in Section 3.0 of this report, is based on the known and potential biotic resources of the study area discussed in Section 2.0. Sources of information used in the preparation of this analysis included: 1) the *California Natural Diversity Data Base* (CDFG 2005), 2) the *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001), 3) the *El Dorado County General Plan* (2004), and 4) manuals and references related to plants and animals of the San Joaquin Valley region. A reconnaissance-level field survey of the study area was conducted on September 20-22, 2006, by LOA ecologist Davinna Ohlson and LOA botanist Neal Kramer, at which time the principal biotic habitats and land uses of the site were identified, and the constituent plants and animals of each were noted.

## 2.0 EXISTING CONDITIONS

The 531.46-acre site is located in the Sierra foothills and is accessed by Deer Creek Road, Shingle Lime Mine Road, and Amber Fields Drive. The site is bounded on all sides by open space and, additionally, to the north by rural residential development, to the east by railroad tracks, and to the south by the Deer Creek Waste Water Treatment Plant. The site itself consists of an abandoned limestone mine, sparse rural residences, grazed agricultural lands, and open space. Deer Creek and some of its tributaries flow through the site. The site ranges in elevation from approximately 800 ft. (243 m) National Geodetic Vertical Datum (NGVD) southwest of Amber Fields Drive to approximately 1280 ft. (390 m) NGVD along the site's eastern boundary near the railroad tracks. Surrounding lands are primarily undeveloped with some rural residential development scattered throughout.

Three soil types from two soil series are present on the site (Figure 2; Table 1). The Auburn series consist of shallow to moderately deep, well-drained soils formed in material weathered from metabasic or metasedimentary rock such as amphibolite schist, greenstone schist, or diabase. Sobrante soils consist of moderately deep, well-drained soils formed in material weathered from basic igneous and metamorphic rocks, mainly amphibolite schist, diabase, andesite, or basalt. Additionally, two soil classifications not associated with series, serpentine rock land and quarries, are present on the site. Serpentine rock land occurs in areas having a serpentine bedrock layer, while quarries soils have variable qualities but typically occur as quarry deposits. None of these soils has an underlying hardpan layer upon which vernal pools may form, and none is considered hydric, although hydric inclusions may occur. Serpentine soils provide a harsh environment for plant growth due to low concentrations of calcium and magnesium, lack of nutrients such as nitrogen, potassium, and phosphorus, and high concentrations of heavy metals. These soils have the potential to support special status plant species endemic to serpentine habitats.



**Live Oak Associates, Inc.**

**G-3 Property  
Soils**

Date	Project #	Figure #
11/03/06	949-01	2

Serpentine rock lands occurring on the site are also part of the south end of the Pine Hill formation, which consists of gabbro soils (USFWS 2002). Gabbro soils are rich in iron and magnesium and contain low concentrations of cobalt, chromium, and nickel. A number of plant species are endemic to these soils as well.

**Table 1. Soils of the site.**

Soil Series/Soil	Map Symbol	Parent Material	Surface Permeability	Hardpan	Hydric
<b>Auburn Series</b> Auburn silt loam, 2-30% slopes Auburn very rocky silt loam, 2-30% slopes	AwD AxD	Material weathered from amphibolite schist	Moderate	No	No
<b>Quarries</b>	Qu	n/a	n/a	No	No
<b>Serpentine Rock Land</b>	SaF	Serpentine bedrock	n/a	No	No
<b>Sobrante Series</b> Sobrante silt loam, 3-15% slopes	SuC	Material weathered from basic igneous and metamorphic rocks	Moderate	No	No

Source: Natural Resource Conservation Service 1974

The Sierra Nevada foothills experience a Mediterranean climate with warm to hot dry summers often exceeding 90°F and cool winters as low as 32°F. Annual precipitation in the general vicinity of the site is highly variable from year to year and is nearly all rain; any snow that falls quickly melts. Average annual rainfall is approximately 39 inches, most of which falls between October and March (WRCC 2006). Stormwater readily infiltrates the soils of and surrounding the site, but when field capacity has been reached, gravitational water flows into Deer Creek and its tributaries as shallow groundwater or as surface sheet flow.

While lands in the region have been developed as residential subdivisions and commercial centers, lands immediately surrounding the site have been developed as modest roads and individual residences, with large tracts of open space still in the region, particularly to the south and west. Deer Creek and its tributaries serve as wildlife movement corridors; therefore, sensitive plant and animal species occurring in the natural habitats in the region could access the site with relative ease.

## 2.1 BIOTIC HABITATS

Six biotic habitats were identified on the project site. Where possible, these habitats have been named pursuant to Sawyer and Keeler-Wolf (1995) and Holland (1986). For the purposes of this report, these have been identified as "mixed oak woodland," "montane manzanita chaparral," "mixed chaparral," "oak savannah," "ruderal/developed," and "seasonal drainages and wetlands" (Figure 3; Table 2). A list of the vascular plant species observed within the study area and the terrestrial vertebrates using, or potentially using, the site are provided in Appendices A and B, respectively.

**Table 2. Approximate area of habitats occurring on the site.**

Habitat	Acres	Percent of Total
Mixed oak woodland	241.93	45.5
Montane manzanita chaparral	129.76	24.4
Mixed chaparral	14.04	2.6
Oak savannah	103.18	19.4
Ruderal/developed	39.06	7.4
Seasonal drainages and wetlands	3.49	0.7
<b>Total</b>	<b>531.46</b>	<b>100.0</b>

canopy?

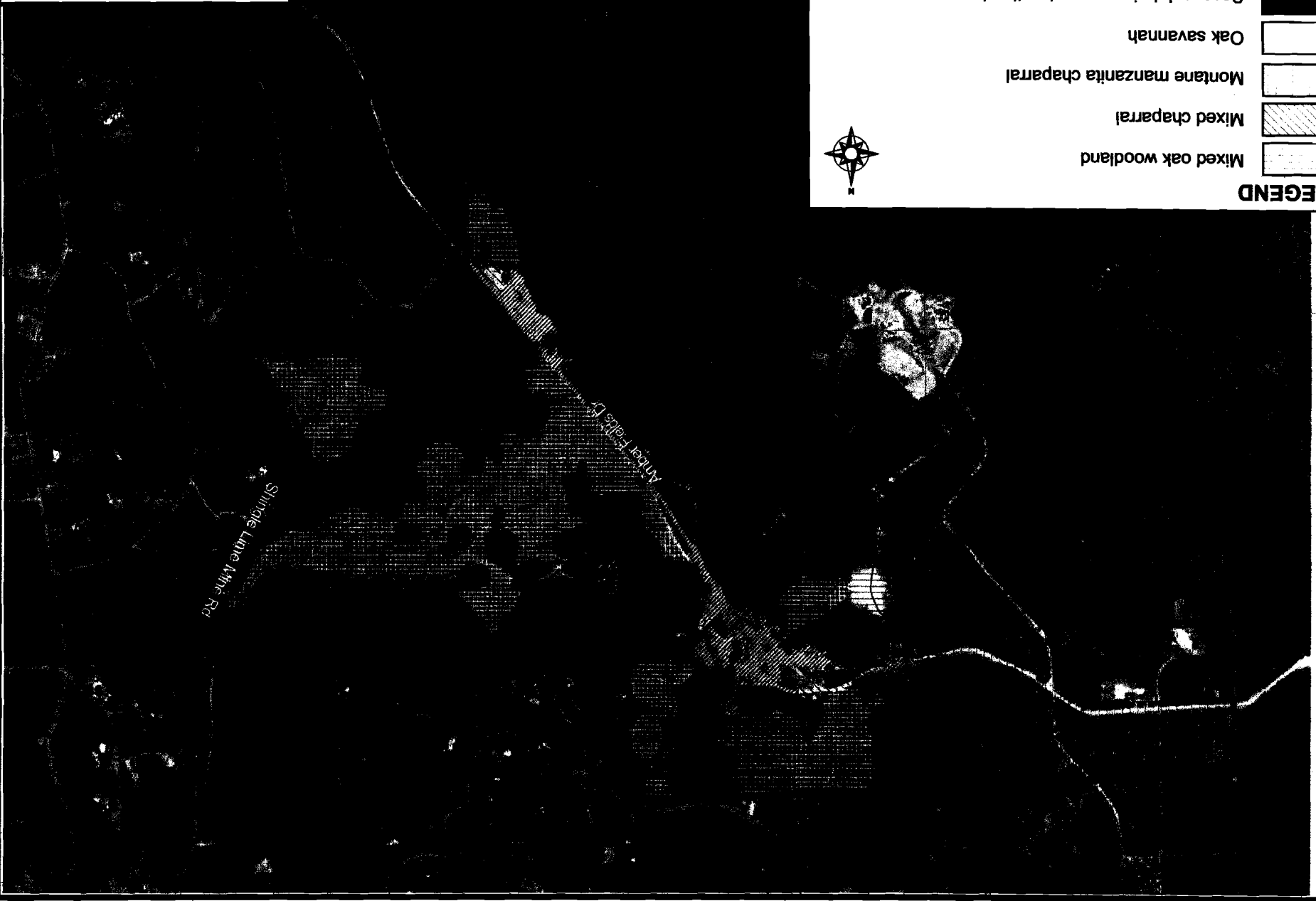
should this be added? oak canopy

### 2.1.1 Mixed Oak Woodland

Mixed oak woodlands with a moderately open canopy comprise approximately 242 acres of the site, most of which occurs along the upland zones of various drainages and associated riparian habitat throughout the site. Valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), California black oak (*Quercus kelloggii*), and interior live oak (*Quercus wislizenii* var. *wislizenii*) occurs throughout this habitat. Other native trees observed throughout this habitat include California buckeye (*Aesculus californicus*) and toyon (*Heteromeles arbutifolia*). Due to the open nature of the woodland canopy, herb and shrub layers are present in most of this habitat. Understory shrubs observed in the woodlands include buckbrush (*Ceanothus cuneatus*), hollyleaf redberry (*Rhamnus ilicifolia*), California wild rose (*Rosa californica*), and snowberry (*Symphoricarpos albus* var. *laevigatus*). Vegetation in the herbaceous understory layer primarily consists of native annual and perennial grass and forb species, including coastal wood fern (*Dryopteris arguta*), goose grass (*Galium aparine*), dogtail grass (*Cynosurus echinatus*), and field hedge parsley (*Torilis arvensis*).

Date 12/15/06  
Project # 949-01  
Figure # 3

Live Oak Associates, Inc.  
G-3 Property  
Biotic Habitats



approximate scale  
2,000 feet  
0  
2,000 feet



**LEGEND**

- Mixed oak woodland
- Mixed chaparral
- Montane manzanita chaparral
- Oak savannah
- Seasonal drainages and wetlands
- Ruderal / developed

Amphibians and reptiles such as the California newt (*Taricha torosa*), ensatina (*Ensatina eschscholtzii*), and gopher snake (*Pituophis catenifer*), have the potential to occur in oak woodlands where sufficient cover (e.g., rock outcrops, logs, and dense leaf litter) exists. Western fence lizards (*Sceloporus occidentalis*) and western rattlesnakes (*Crotalus viridis*) were observed in oak woodlands of the site.

Oak woodlands also provide habitat to a number of resident and migratory birds. Birds observed in the oak woodlands of the site include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), ruby-crowned kinglet (*Regulus calendula*), wrentit (*Chamaea fasciata*), western kingbird (*Tyrannus verticalis*), and purple finch (*Carpodacus purpureus*). Several granary trees constructed by acorn woodpeckers (*Melanerpes formicivorus*) were also observed on the site. Other resident and migratory birds that may occur in oak woodlands on the site include Cassin's vireo (*Vireo cassinii*), oak titmouse (*Baeolophus inornatus*), and bushtit (*Psaltriparus minimus*). Raptors such as the Cooper's hawk (*Accipiter cooperii*) and sharp-shinned hawk (*Accipiter striatus*) may nest, forage, or winter in oak woodlands and adjacent habitats occurring on the site.

The understory vegetation in mixed-oak woodlands provide foraging habitat and cover for several mammal species. The brush rabbit (*Sylvilagus bachmani*), California meadow vole (*Microtus californicus*), and black-tailed deer (*Odocoileus hemionus* ssp. *columbianus*), which was observed on the site, primarily feed on forbs and grasses, while the deer mouse (*Peromyscus maniculatus*) prefers insects and seeds. A mixture of over- and understory vegetation provides abundant leaf litter and a variety of flowers, leaves, and berries for the dusky-footed woodrat (*Neotoma fuscipes*). The western gray squirrel (*Sciurus griseus*) forages on a broad variety of fruits and green foliage both in trees and on the ground. The abundance of small mammals also potentially attracts larger mammalian predators known to occur in the region, including coyotes (*Canis latrans*), which were heard on the site, gray foxes (*Urocyon cinereoargenteus*), and bobcats (*Lynx rufus*).

### **2.1.2 Montane Manzanita Chaparral**

Approximately 130 acres of montane manzanita chaparral dominated by whiteleaf manzanita (*Arctostaphylos viscida* ssp. *viscida*) occurs in the western half of the site. Other shrub species prevalent throughout this habitat include chamise (*Adenostoma fasciculatum*), toyon, coyote brush (*Baccharis pilularis*), sticky monkeyflower (*Mimulus aurantiacus*), redberry buckthorn (*Rhamnus crocea*), and hoary coffeeberry (*Rhamnus tomentella* ssp. *tomentella*). The herbaceous understory is relatively sparse and consists of a mix of native and non-native grasses and forbs such as creeping sage (*Salvia sonomensis*), barbed goatgrass (*Aegilops triuncialis*), California melic (*Melica californica*), annual fescue (*Vulpia microstachys*), as well as the same grasses as those found in the oak savannah of the site, described in Section 2.1.3.

Chaparral communities provide habitat for a variety of reptiles, including the skilton skink (*Eumeces skiltonianus skiltonianus*), western fence lizard, California alligator lizard (*Gerrhonotus multicarinatus*), night snake (*Hypsiglena torquata*), and western rattlesnake.

Resident birds observed in the sagebrush chaparral onsite include the western scrub-jay (*Aphelocoma californica*) and wrenit (*Chamaea fasciata*). Other resident birds commonly found in chaparral communities include the California quail (*Callipepla californica*), bushtit, and California towhee (*Pipilo crissalis*), all of which find cover and suitable foraging habitat in the dense shrubs and understory vegetation.

A variety of mammals, including the brush rabbit, California pocket mouse (*Perognathus californicus*), and deer mouse, favor the dense chaparral brush and feed largely on grasses and forbs or insects. Other mammals likely utilizing this habitat on the site include the coyote, gray fox, and bobcat.

### **2.1.3 Mixed Chaparral**

Small patches of mixed chaparral are present within the oak savannah habitat in the northeast part of the site. Dominant shrubs in this habitat include coyote brush, chamise, buckbrush, and



Yerba santa (*Eriodictyon californicum*). Ponderosa pine (*Pinus ponderosa*) and foothill pine (*Pinus sabiniana*) also occur in this habitat in the eastern part of the site.

Wildlife species occurring in the adjacent oak savannah habitats discussed below are also expected to occur in the mixed chaparral habitats of the site.

#### **2.1.4 Oak Savannah**

Approximately 103 acres of oak savannah with a grassland understory occur in the northeast portion of the site. This habitat is grazed by cattle, particularly southeast of Shingle Lime Mine Road and Amber Fields Drive. The oak matrix consists of Valley oak, blue oak, California black oak, and interior live oak.

Grasslands constitute the oak savannah understory and are dominated by annual grasses and forbs of European origin. Non-native annual grasses common to this habitat include soft chess (*Bromus hordaceus*), foxtail chess (*Bromus madritensis*), wild oats (*Avena fatua*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), and silver hairgrass (*Aira caryophylla*). Common non-native forbs include curly dock (*Rumex crispus*), prickly lettuce (*Lactuca serriola*), yellow star thistle (*Centaurea solstitialis*), Italian thistle (*Carduus pycnocephalus*), and milk thistle (*Silybum marianum*).

Although not as abundant as the non-native grasses, native perennial grasses were also observed within this habitat and include blue wild rye (*Elymus glaucus*), foxtail barley (*Hordeum jubatum*), and foxtail fescue (*Vulpia myuros*). Native forbs observed in the grasslands include clarkia (*Clarkia* sp.), Monterey centaury (*Centaurium muehlenbergii*), navarretia (*Navarretia* sp.), yarrow (*Achillea millefolium*), and panicked willowherb (*Epilobium brachycarpum*).

Grasslands provide important habitat to many terrestrial vertebrates. As many as 25 species of reptiles and amphibians, 100 species of birds, and 50 species of mammals are known to use grassland habitats of central California (Mayer and Laudenslayer 1988). A number of these

species are expected to utilize grasslands occurring in the oak savannah habitats of the site throughout all or part of the year as breeding and foraging habitat.

Logs and brush piles present in this habitat provide habitat for several reptile species, including the western fence lizard, which was observed in this habitat, California alligator lizard, gopher snake, and western rattlesnake, which forage in grasslands for small mammals and birds.

Resident and migratory birds breed and forage in grassland habitats. Birds observed in these areas of the site include the turkey vulture, red-tailed hawk, wild turkey (*Meleagris gallopavo*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*). Woodpecker granary trees and owl pellets, likely belonging to barn owls (*Tyto alba*) seen elsewhere on the site, were also observed in this habitat.

Mammals are common to grasslands of the site. Botta's pocket gopher (*Thomomys bottae*) and California meadow vole holes were observed on the site. Small mammals often attract predators, including reptiles and birds previously discussed. Carnivorous mammals expected to occur in this habitat include the coyote, gray fox, and bobcat. These predators may also prey on large mammals such as the black-tailed deer observed on the site.

#### **2.1.5 Ruderal/Developed**

A small amount of ruderal, non-native grassland habitat is present along Amber Fields Drive. The term "ruderal" refers to habitats that have been heavily disturbed by human factors and that support vegetation that is adapted to such disturbed conditions. Ruderal areas of the site include those areas where limestone mining activities historically occurred. Several buildings and homes, both occupied and abandoned, were also present in these areas.

Vegetation observed in ruderal areas of the site include such non-native grasses and forbs as orchard grass (*Dactylis glomerata*), Italian ryegrass (*Lolium multiflorum*), smilo grass (*Piptatherum miliaceum*), prickly lettuce, bird's foot trefoil (*Lotus corniculatus*), and horehound

(*Marrubium vulgare*). Native plants observed include Canada horseweed (*Conyza canadensis*) and woolly mullein (*Verbascum thapsus*).

Wildlife species occurring in adjacent habitats discussed above are likely to pass through the ruderal areas of the site. Additionally, bats may roost in structures existing onsite that have limited light and air flow, two conditions suitable for bats. Bat species that may roost in these structures and forage over adjacent habitats for insects include the Mexican free-tailed bat (*Tadarida brasiliensis*) and Townsend's big-eared bat (*Corynorhinus townsendii*).

#### **2.1.6 Seasonal Drainages and Wetlands**

Seasonal drainages and wetlands, and their associated riparian habitat, comprise approximately 3.5 acres of the site and consist of Deer Creek, three large seasonal tributaries, several smaller seasonal tributaries, a small reservoir in the northeast corner of the site, and several seasonal wetlands. Some reaches of Deer Creek and the large seasonal tributaries conveyed water at the time of the September survey, while the smaller tributaries and wetlands were dry.

Hydrophytic vegetation observed in and along these features include California amaranth (*Amaranthus californicus*), water cress (*Rorippa nasturtium-aquaticum*), black-sand spikerush (*Eleocharis pachycarpa*), soft rush (*Juncus effuses*), duckweed (*Lemna* sp.), bearded sprangletop (*Leptochloa fascicularis*), swamp grass (*Crypsis schoenoides*), monkeyflower (*Mimulus guttatus*), and southern cattail (*Typha domingensis*).

Riparian woodland habitat was associated with the seasonal drainages, except for the drainages occurring in the grassland and oak woodland habitats east of Amber Fields Drive. Riparian trees and shrubs present include California black walnut (*Juglans californica*), white alder (*Alnus rhombifolia*), Fremont cottonwood (*Populus fremontii*), blue elderberry (*Sambucus mexicana*), sandbar willow (*Salix exigua*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), and California wild grape (*Vitis californica*). The herb and shrub understory consisted of species including Himalayan blackberry (*Rubus discolor*), mugwort (*Artemisia douglasiana*), spearmint

(*Mentha spicata* var. *spicata*), rice cutgrass (*Leersia oryzoides*), and deergrass (*Muhlenbergia rigens*).

The seasonal drainages and wetlands provide a seasonal source of drinking water for species occurring in the surrounding habitats and, when wet, may also provide breeding habitat for amphibians such as the pacific treefrog (*Hyla regilla*), which were observed along the drainage in the northern portion of the site east of Deer Creek, and western toad (*Bufo boreas*). A garter snake (*Thamnophis* sp.) was seen in a dry channel in the northwest corner of the site.

Mammalian species occurring in adjacent habitats on and off the site, such as coyotes, foxes, bobcats, and raccoons (*Procyon lotor*), may also forage along the drainages.

## 2.2 MOVEMENT CORRIDORS

Many terrestrial animals need more than one biotic habitat in order to perform all of their biological activities. With increasing encroachment of humans on wildlife habitats, it has become important to establish and maintain linkages, or movement corridors, for animals to be able to access locations containing different biotic resources that are essential to maintaining their life cycles. Terrestrial animals use ridges, canyons, riparian areas, and open spaces to travel between their required habitats.

The importance of an area as a "movement corridor" depends on the species in question and its consistent use patterns. Animal movements generally can be divided into three major behavioral categories:

- Movements within a home range or territory;
- Movements during migration; and
- Movements during dispersal.

While no detailed study of animal movements has been conducted for the study area, knowledge of the site, its habitats, and the ecology of the species potentially occurring onsite permits

sufficient predictions about the types of movements occurring in the region and whether or not proposed development would constitute a significant impact to animal movements.

A number of reptiles, birds, and mammals may use the upland habitats of the site as part of their home range and dispersal movements. The movements of these species, however, do not indicate that the upland areas function as a significant movement corridor. Reptiles, birds, and mammals would, for the most part, move through these portions of the site as they would also do on surrounding, undeveloped parcels.

Deer Creek and its tributaries likely facilitate the movement of amphibians, reptiles, birds, and mammals within and through the site.

### **2.3 SPECIAL STATUS PLANTS AND ANIMALS**

Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the state's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described more fully in Section 3.2, state and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to the state. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened, or endangered (CNPS 2001). Collectively, these plants and animals are referred to as "special status species."

A number of special status plants and animals occur in the site's vicinity. These species, and their potential to occur in the study area, are listed in Table 3 on the following pages. Sources of information for this table included *California's Wildlife, Volumes I, II, and III* (Zeiner et. al

1988), *California Natural Diversity Data Base* (CDFG 2006), *Endangered and Threatened Wildlife and Plants* (USFWS 2006), *State and Federally Listed Endangered and Threatened Animals of California* (CDFG 2006), and *The California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001). This information was used to evaluate the potential for special status plant and animal species that occur on the site.

Figure 4 depicts the location of special status species found by the California Natural Diversity Data Base (CNDDDB). It is important to note that the CNDDDB is a volunteer database; therefore, it may not contain all known or gray literature records. For example, a number of special status plants have been documented in areas north of Highway 50 (Fig. 4). These documented occurrences likely represent a disproportionate survey effort in these areas, which have been subject to intense development over the years, rather than an absence of these species on and in the vicinity of the project site.

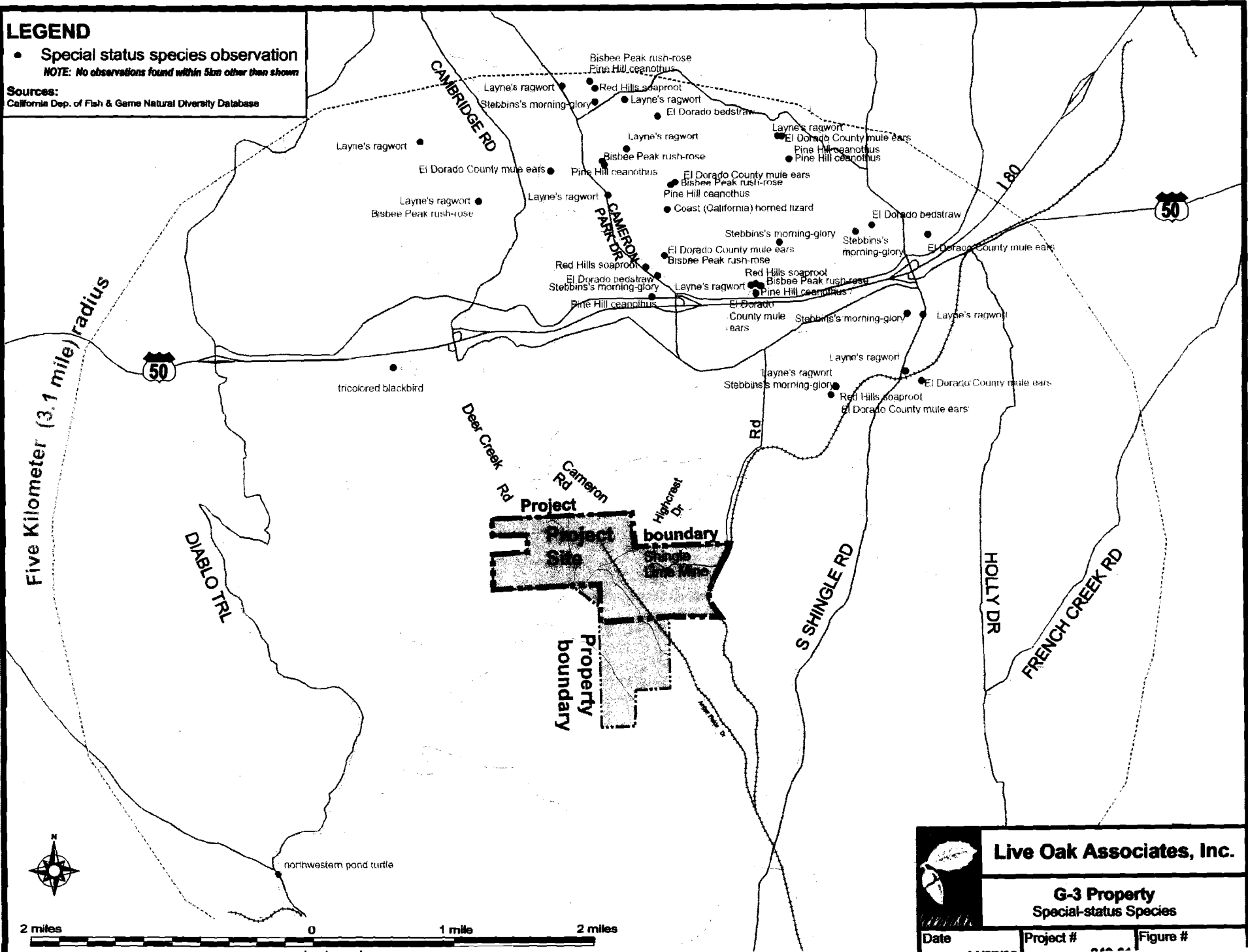
A search of published accounts for all of the relevant special status plant and animal species was conducted for the Shingle Springs USGS 7.5-minute quadrangle in which the site occurs, and for the eight surrounding quadrangles (Pilot Hill, Coloma, Garden Valley, Placerville, Fiddletown, Latrobe, Folsom SE, and Clarksville) using the California Natural Diversity Data Base Rarefind 2005. All species listed as occurring in these quadrangles on CNPS Lists 1A, 1B, 2, or 4 were also reviewed.

**LEGEND**

- Special status species observation

NOTE: No observations found within 5km other than shown

Sources:  
California Dep. of Fish & Game Natural Diversity Database



**Live Oak Associates, Inc.**

**G-3 Property  
Special-status Species**

Date \_\_\_\_\_ Project # \_\_\_\_\_ Figure # \_\_\_\_\_

**TABLE 3. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.**

**PLANTS (adapted from CDFG 2005 and CNPS 2001)**

*Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act*

Species	Status	Habitat	*Occurrence in the Study Area
Stebbin's morning-glory ( <i>Calystegia stebbinsii</i> )	FE, CE, CNPS 1B	Chaparral openings and on gabbroic soils of cismontane woodlands at elevations between 185 and 730 meters. Blooms April-July.	<b>Unlikely.</b> Gabbroic soils are absent from the site. This species has been documented within three miles of the site as recently as 2003, the nearest occurrence located approximately 1.4 miles northeast of the site.
Pine Hill ceanothus ( <i>Ceanothus roderickii</i> )	FE, CR, CNPS 1B	Chaparral and cismontane woodland on serpentinite or gabbroic soils at elevations between 260 and 630 meters. Blooms April-June.	<b>Possible.</b> The site supports habitat suitable for this species. This species has been documented within three miles of the site, the nearest occurrence located approximately 1.6 miles north of the site.
Pine Hill flannelbush ( <i>Fremontodendron decumbens</i> )	FE, CR, CNPS 1B	Chaparral and cismontane woodlands on rocky, gabbroic soils or serpentinite at elevations between 425 and 760 meters. Blooms April-July.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the species occurs at elevations above those of the site and has not been documented in the site's vicinity.
El Dorado bedstraw ( <i>Galium californicum</i> ssp. <i>sierrae</i> )	FE, CR, CNPS 1B	Chaparral, cismontane woodlands, and lower montane coniferous forests on gabbroic soils at elevations between 100 and 585 meters. Blooms May-June.	<b>Unlikely.</b> Gabbroic soils are absent from the site. This species has been documented within three miles of the site, the nearest occurrence located approximately 1.7 miles north of the site.
Layne's ragwort ( <i>Senecio layneae</i> )	FT, CR, CNPS 1B	Chaparral and cismontane woodlands on rocky, gabbroic soil or serpentinite at elevations between 200 and 1000 meters. Blooms April-August.	<b>Possible.</b> The site supports habitat suitable for this species. This species has been documented within three miles of the site, the nearest occurrence located approximately 1.4 miles northeast of the site in 1994.

*Other special status plants listed by CNPS*

Species	Status	Habitat	*Occurrence in the Study Area
Jepson's onion ( <i>Allium jepsonii</i> )	CNPS 1B	Chaparral, cismontane woodland, and lower montane coniferous forests on volcanic soils and serpentinite at elevations between 300 and 1320 meters. Blooms May-August.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the nearest and most recent documented occurrence of this species is more than 6 miles from the site.
Nissenan manzanita ( <i>Arctostaphylos nissenana</i> )	CNPS 1B	Closed-cone coniferous forests and chaparral on rocky soils at elevations between 450 and 1100 meters. Blooms February-March.	<b>Absent.</b> While the site supports habitat suitable for this species, the species occurs at elevations above those of the site and has not been documented in the site's vicinity.



**TABLE 3. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.**

**PLANTS – cont'd.**

*Other special status plants listed by CNPS*

Species	Status	Habitat	*Occurrence in the Study Area
Big-scale balsamroot ( <i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i> )	CNPS 1B	Chaparral, cismontane woodlands, and valley and foothill grasslands, sometimes on serpentinite, at elevations between 90 and 1400 meters. Blooms March-June.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the nearest and most recent documented occurrence of this species is more than 14 miles to the northwest of the site in 1920.
Red Hills soaproot ( <i>Chlorogalum grandiflorum</i> )	CNPS 1B	Chaparral, cismontane woodlands, and lower montane coniferous forests on gabbroic soils or serpentinite at elevations between 245 and 1170 meters. Blooms May-June.	<b>Possible.</b> Suitable habitat exists on the site for this species. This species has been documented within three miles of the site as recently as 2003, the nearest occurrence located approximately 1.7 miles northeast of the site.
Brandegees's clarkia ( <i>Clarkia biloba</i> ssp. <i>brandegeae</i> )	CNPS 1B	Chaparral and cismontane woodlands, often along roadcuts, at elevations between 225 and 915 meters. Blooms May-July.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the nearest documented occurrence of this species is located more than 7 miles from the site.
Tuolumne button-celery ( <i>Eryngium pinnatisectum</i> )	CNPS 1B	Cismontane woodlands, lower montane coniferous forests, and vernal pools on mesic soils at elevations between 70 and 915 meters. Blooms June-August.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the nearest and most recent documented occurrence of this species is more than 8 miles to the southwest of the site in 1941.
Bisbee Peak rush-rose ( <i>Helianthemum suffrutescens</i> )	CNPS 3	Chaparral, often on serpentinite, gabbroic, or lone soils, at elevations between 45 and 840 meters. Blooms April-June.	<b>Possible.</b> The site supports habitat suitable for this species. This species has been documented within three miles of the site as recently as 1998, the nearest occurrence located approximately 1.8 miles northeast of the site.
Parry's horkelia ( <i>Horkelia parryi</i> )	CNPS 1B	Chaparral and cismontane woodlands, especially on lone formations, at elevations between 80 and 1035 meters. Blooms April-June.	<b>Absent.</b> Lone soils on which this species is typically found are absent from the site. The nearest documented occurrence of this species is located more than 10 miles from the site.
Sanford's arrowhead ( <i>Sagittaria sanfordii</i> )	CNPS 1B	Assorted shallow freshwater marshes and swamps at elevations up to 610 meters. Blooms May-October.	<b>Absent.</b> Marshes and swamps are absent from the site.
Oval-leaved viburnum ( <i>Viburnum ellipticum</i> )	CNPS 2	Chaparral, cismontane woodlands, and lower montane coniferous forests at elevations between 215 and 1400 meters. Blooms May-June.	<b>Unlikely.</b> While the site supports habitat suitable for this species, the nearest documented occurrence of this species is from 1901 and is located more than 10 miles from the site.
El Dorado County mule ears ( <i>Wyethia reticulata</i> )	CNPS 1B	Chaparral, cismontane woodland, lower montane coniferous forests on clay or gabbroic soils at elevations between 185 and 630 meters. Blooms April-July.	<b>Unlikely.</b> Gabbroic soils do not occur on the site. This species has been documented within three miles of the site as recently as 2003, the nearest occurrence located approximately 1.3 miles northeast of the site.

**TABLE 3. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.**

ANIMALS (adapted from CDFG 2006 and USFWS 2006)

*Species Listed as Threatened or Endangered under the State and/or Federal Endangered Species Act*

Species	Status	Habitat	*Occurrence in the Study Area
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	FT	Vernal pools of California's Central Valley.	<b>Absent.</b> Vernal pools are absent from the site.
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	FE	Deep vernal pools of California.	<b>Absent.</b> Vernal pools are absent from the site.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	FT	Mature elderberry shrubs of California's Central Valley and Sierra Foothills.	<b>Possible.</b> Elderberry shrubs occurring on the site provide suitable habitat for this species. This species has been documented approximately seven miles west of the site.
California tiger salamander ( <i>Ambystoma californiense</i> )	FT, CT	Breeds in vernal pools and stock ponds of central California; adults aestivate in grassland habitats adjacent to the breeding sites.	<b>Absent.</b> Suitable breeding and aestivation habitat was absent from the site. CTS have not been documented within ten miles of the study area.
California red-legged frog ( <i>Rana aurora draytonii</i> )	FT, CSC	Perennial rivers, creeks, and stock ponds of the Sierra foothills and coast range, preferring pools with overhanging vegetation.	<b>Unlikely.</b> While Deer Creek provides suitable habitat for the California red-legged frog, this species has been considered potentially extirpated from the region for more than 30 years (Mark Jennings, pers. comm.). Tributaries to Deer Creek occurring on the site convey seasonal flows and, therefore, would not constitute suitable habitat for this species. No stock ponds occur on the site.
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	FT, CE	Nests in the upper canopy of large trees, especially conifers, near lakes, reservoirs, and river systems.	<b>Unlikely.</b> Marginally suitable habitat for this species is present where Deer Creek flows off the site. However, this species has not been documented within three miles of the site or in the western part of El Dorado County south of Highway 50.
Swainson's hawk ( <i>Buteo swainsoni</i> )	CT	Uncommon resident and migrant in the Central Valley. Forages in grasslands and fields close to riparian areas.	<b>Unlikely.</b> Grasslands and riparian habitats of the site are limited and, therefore, do not provide suitable foraging or breeding habitat for this species.
Bank swallow ( <i>Riparia riparia</i> )	CT	Nests in vertical banks or cliffs, gravel pits, and highway cuts, primarily near riparian areas.	<b>Absent.</b> Suitable habitat for this species is absent from the site.

*California Species of Special Concern*

Species	Status	Habitat	*Occurrence in the Study Area
Western spadefoot ( <i>Scaphiopus hammondi</i> )	CSC	Primarily occurs in grasslands, but also occurs in valley and foothill hardwood woodlands. Requires vernal pools or other temporary wetlands for breeding.	<b>Unlikely.</b> While temporary wetlands occur on the site and serve as potential breeding pools, this species has not been documented in the site's vicinity.

**TABLE 3. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.**

**ANIMALS – cont'd.**

*California Species of Special Concern*

Species	Status	Habitat	*Occurrence in the Study Area
Foothill yellow-legged frog ( <i>Rana boylei</i> )	CSC	Frequents partly shaded, shallow, swiftly-flowing streams and riffles with rocky substrate in a variety of habitats.	<b>Unlikely.</b> While Deer Creek provides suitable habitat for the foothill yellow-legged frog, this species is considered potentially extirpated from the region (Mark Jennings, pers. comm.).
Western pond turtle ( <i>Actinemys marmorata</i> )	CSC	An aquatic turtle of ponds, marshes, slow-moving rivers, streams and irrigation ditches with aquatic vegetation. Needs basking sites and sandy banks or grassy open fields for egg laying.	<b>Possible.</b> Deer Creek and some of its tributaries provide potentially suitable habitat for the western pond turtle. This species has been documented within three miles of the site as recently as 1988, the nearest occurrence located along Deer Creek approximately 2.5 miles southwest of the site.
California horned lizard ( <i>Phrynosoma coronatum frontale</i> )	CSC	Grasslands, scrublands, oak woodlands, etc. of central California. Common in sandy washes with scattered shrubs.	<b>Possible.</b> The site provides potentially suitable habitat for this species. This species has been documented within three miles of the site in chaparral habitat similar to that of the site.
White-tailed kite ( <i>Elanus leucurus</i> )	CP	Open grasslands and agricultural areas throughout central California.	<b>Possible.</b> The oak savannah provides potentially suitable, albeit marginal, foraging and breeding habitat for this species.
Northern harrier ( <i>Circus cyaneus</i> )	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; uncommon in wooded habitats.	<b>Unlikely.</b> Grasslands occurring in the oak savannah provide poor foraging and breeding habitat for this species.
Sharp-shinned hawk ( <i>Accipiter striatus</i> )	CSC	Breeds in the mixed conifer forests of the northern Sierra Nevada. This species winters in a variety of habitats of the state.	<b>Possible.</b> Mixed woodlands of the site provide suitable breeding habitat for this species.
Cooper's hawk ( <i>Accipiter cooperii</i> )	CSC	Breeds in oak woodlands, riparian forests and mixed conifer forest of the Sierra Nevada, but winters in a variety of lowland habitats.	<b>Possible.</b> Mixed woodlands of the site provide suitable breeding habitat for this species.
Northern goshawk ( <i>Accipiter gentilis</i> )	CSC	Breeds in coniferous forests and mixed woodlands.	<b>Possible.</b> Mixed woodlands of the site provide suitable breeding habitat for this species.
Ferruginous hawk ( <i>Buteo regalis</i> )	CSC	Breeds in the Pacific Northwest and Canada. Winters in a variety of California habitats, including grasslands, savannahs, and wetlands.	<b>Possible.</b> This species may winter in trees on the site. This species would not breed on the site.
Merlin ( <i>Falco columbarius</i> )	CSC	Frequents open habitats at low elevation near water and tree stands. Favors coastlines, lakeshores, and wetlands. Breeds in Alaska and Canada.	<b>Possible.</b> Foraging habitat is marginal, and breeding habitat is absent from the site. However, this species may occasionally pass through the site during winter migration.

**TABLE 3. LIST OF SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY**

ANIMALS – cont'd.

*California Species of Special Concern*

Species	Status	Habitat	*Occurrence in the Study Area
Prairie falcon ( <i>Falco mexicanus</i> )	CSC	Frequents dry, open terrain. Breeding sites are located on cliffs.	<b>Unlikely.</b> Grassland habitats of the site are limited in size and, therefore, provide poor foraging habitat for this species. Breeding habitat is absent from the site.
Burrowing owl ( <i>Athene cunicularia</i> )	CSC	Frequents open, dry annual or perennial grasslands, deserts, and scrublands characterized by low growing vegetation. This species is dependent upon burrowing mammals, most notably the California ground squirrel, for nest burrows.	<b>Absent.</b> Ground squirrel and other small mammal burrows of suitable size for the burrowing owl were absent from the site.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	CSC	Frequents open habitats with sparse shrubs and trees, other suitable perches, bare ground, and low herbaceous cover. Can often be found in cropland.	<b>Possible.</b> Suitable foraging and breeding habitat is present on the site for this species.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	CSC	Breeds near fresh water, primarily emergent wetlands, with tall thickets. Forages in grassland and cropland habitats.	<b>Unlikely.</b> Grasslands of the site provide limited foraging habitat for this species. Breeding habitat is absent from the site.
Silver-haired bat ( <i>Lasionycteris noctivagans</i> )	CSC	Feeds over streams, ponds, and open brushy areas. Roosts in hollow trees beneath exfoliating bark and abandoned woodpecker holes.	<b>Possible.</b> Foraging and roosting habitat is present on the site for this species.
Yuma myotis ( <i>Myotis yumanensis</i> )	CSC	Open forests and woodlands with water sources. Roosts in caves, mines, buildings, and crevices.	<b>Possible.</b> This species may forage over the site. Existing structures onsite provide marginal roosting and breeding habitat.
Townsend's western big-eared bat ( <i>Corynorhinus townsendii townsendii</i> )	CSC	Primarily a cave-dwelling bat that may also roost in buildings. Occurs in a variety of habitats.	<b>Possible.</b> This species may forage over the site. Existing structures onsite provide marginal roosting and breeding habitat.
Pallid bat ( <i>Antrozous pallidus</i> )	CSC	Roosts in rocky outcrops, cliffs, and crevices with access to open habitats for foraging. May also roost in caves, mines, hollow trees and buildings.	<b>Possible.</b> This species may forage over the site. Existing structures onsite also provide marginal roosting and breeding habitat.
California mastiff bat ( <i>Eumops perotis</i> ssp. <i>californicus</i> )	CSC	Frequents open, semi-arid to arid habitats, including conifer, and deciduous woodlands, coastal scrub, grasslands, palm oasis, chaparral and urban. Roosts in cliff faces, high buildings, trees and tunnels.	<b>Possible.</b> This species may forage over the site. Existing structures onsite also provide potential roosting and breeding habitat.

**TABLE 3. SPECIAL STATUS SPECIES THAT COULD OCCUR IN THE PROJECT VICINITY.**

ANIMALS – cont'd.

*California Species of Special Concern*

Species	Status	Habitat	*Occurrence in the Study Area
Ringtail ( <i>Bassariscus astutus</i> )	CP	Occurs in riparian and heavily wooded habitats near water.	<b>Possible.</b> Potentially suitable habitat is present along Deer Creek and some of its tributaries. However, this species has not been documented on or in the vicinity of the site.
American Badger ( <i>Taxidea taxus</i> )	CSC	Found in drier open stages of most shrub, forest and herbaceous habitats with friable soils.	<b>Possible.</b> This species may establish burrows on the site in fields with sparse to moderately dense vegetation. However, no evidence of badgers (e.g., sightings or burrows) was observed on the site. This species has not been documented within three miles of the site.

**\*Explanation of Occurrence Designations and Status Codes**

Present: Species observed on the sites at time of field surveys or during recent past.

Likely: Species not observed on the site, but it may reasonably be expected to occur there on a regular basis.

Possible: Species not observed on the sites, but it could occur there from time to time.

Unlikely: Species not observed on the sites, and would not be expected to occur there except, perhaps, as a transient.

Absent: Species not observed on the sites, and precluded from occurring there because habitat requirements not met.

STATUS CODES

FE Federally Endangered  
 FT Federally Threatened  
 FPE Federally Endangered (Proposed)  
 FC Federal Candidate

CE California Endangered  
 CT California Threatened  
 CR California Rare  
 CP California Protected  
 CSC California Species of Special Concern

CNPS California Native Plant Society Listing  
 1A Plants Presumed Extinct in California  
 1B Plants Rare, Threatened, or Endangered in California and elsewhere  
 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere

3 Plants about which we need more information – a review list  
 4 Plants of limited distribution – a watch list

## 2.4 ENDANGERED, THREATENED, OR SPECIAL STATUS PLANT AND ANIMAL SPECIES MERITING FURTHER DISCUSSION

Most of the special status plant and animal species that have been documented in the region may occur rarely or occasionally on the site (Table 1). For these species, sufficient information exists to evaluate the potential imposed impacts future development may have on them. A few of the state- or federally-listed species require additional in-depth analysis. Below are detailed discussions that include an analysis of their legal status, ecology, and the suitability of the site to support them.

### 2.4.1 Special Status Plants

Four rare plants—Pine Hill ceanothus (*Ceanothus roderickii*; federal listing status: endangered; state listing status: rare; CNPS list: 1B), Layne's ragwort (*Senecio layneae* federal listing status: threatened; state listing status: rare; CNPS list: 1B), Red Hills soaproot (*Chlorogalum grandiflorum*; federal listing status: none; state listing status: none; CNPS list: 1B), and Bisbee Peak rush-rose (*Helianthemum suffrutescens*; federal listing status: none; state listing status: none; CNPS list: 3)—have the potential to occur in areas of the site located on serpentine rock land.

A recovery plan has been developed by the USFWS for six plant species, including Pine Hill ceanothus and Layne's ragwort, occurring on gabbro soils in chaparral and woodland habitats in the Sierra Nevada foothills (USFWS 2002). Among other objectives, the recovery plans calls for habitat for these species to be protected in a network of conservation areas. The Pine Hill Preserve consists of five physically separate preserves throughout the Pine Hill formation, from Folsom Lake in the north to Highway 50 in the south.

**Ecology.** Pine Hill ceanothus, a perennial evergreen shrub; Layne's ragwort, a perennial herb; and Red Hills soaproot, a perennial evergreen shrub; occur in chaparral openings or cismontane woodlands, while Bisbee Peak rush-rose, a perennial herb, is restricted to chaparral habitats. All of these species occur primarily on gabbro soils but occasionally can be found on adjacent serpentine soils. Most known occurrences of these species are scattered throughout western El

Dorado County on the Pine Hill gabbro formation and adjacent serpentine (USFWS 2002; CNDDDB 2006).

**Potential to Occur on the Site.** None of these four species have been documented on or in the immediate vicinity of the site. However, this part of the Pine Hill formation has not been subject to as intensive surveys as areas north of Highway 50 in the Cameron Park area. The chaparral and mixed oak woodland habitats of the western part of the site occurring on serpentine rock land provide potentially suitable habitat for all four species, and, based on the lack of intensive survey efforts in the region, one or more species could potentially occur on the site. \*

**2.4.2 Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). Federal Listing Status: Threatened; State Listing Status: None.**

The USFWS proposed to recognize the VELB as a threatened species in 1978, and in 1980 listed the VELB as a threatened species (USFWS 1980). The USFWS published a recovery plan for the VELB in 1984 (USFWS 1984). In recent months, the USFWS has announced that the VELB may be delisted, thereby resulting in there being no federal regulation over the species.

**Life History and Ecology.** A member of the longhorn beetle family known as Cerambycidae, adult VELB range in length from approximately 15 to 25 millimeters and are red and black. The common name “longhorn beetle” refers to the long antennae that extend to at least the middle of the beetle’s abdomen.

Throughout much of its range, particularly in the San Joaquin Valley, the blue elderberry naturally occurs at low population densities in riparian habitat. Favored locations in the lower Sierra foothills, however, include dry exposed foothill slopes and rocky road shoulders, such as those occurring in the Central Valley. It particularly favors well-watered spots where it can grow rapidly (up to 6 feet in a single year) into small trees. Not uncommonly, it can be found growing in granite outcrops of the foothills, sometimes occupying a crack in otherwise solid rock.

The valley elderberry longhorn beetle (VELB) inhabits elderberries of various sized, ages, and growth forms. Young shrubs are seldom infested with VELB. VELBs typically prefer large,

mature plants of good health (Barr 1991). Adult beetles lay their eggs in the bark of large stems (i.e., stems greater than 1 inch in diameter). The larvae that emerge from these eggs then bore through the bark into the pith of the stem where they feed and mature. Mature beetles eat an exit hole in the stem somewhat smaller than the diameter of a pencil. The adults feed on the flowers and leaves of elderberry bushes prior to laying their eggs and beginning the cycle over.

**Potential to Occur on the Site.** Although this species has not been documented in the immediate vicinity of the site (the closest sighting is approximately 7 miles west of the site), suitable habitat is present on the site itself in the form of blue elderberry shrubs scattered along the various drainages of the site. \*

## 2.5 JURISDICTIONAL WATERS

Jurisdictional waters include rivers, creeks, and drainages that have a defined bed and bank and which, at the very least, carry ephemeral flows. Jurisdictional waters also include lakes, ponds, reservoirs, and wetlands. Such waters may be subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), the California Department of Fish and Game (CDFG), and the California Regional Water Quality Control Board (RWQCB). See Section 3.2.4 of this report for additional information.

A formal wetland delineation of the site was conducted by LOA during the September 2006 surveys but has not been submitted to the USACE for verification at this time. However, jurisdictional waters are presumed to be present on the site in the form of Deer Creek, tributaries to Deer Creek, and seasonal wetlands.

Deer Creek, an intermittent watercourse that conveyed water at the time of the September 2006 survey, is represented as a USGS blue line and is characterized as having a defined bed and bank. Deer Creek flows southwest into the Cosumnes River, which connects to Suisun Bay via the Mokelumne and San Joaquin Rivers. Several tributaries to Deer Creek occurring on the site are also represented as USGS blue lines and had a defined bed and bank. Some of these drainages still conveyed water at the time of the September 2006 surveys.



If Deer Creek and its tributaries are determined to be jurisdictional waters, the limit of USACE jurisdiction, as well as that of the RWQCB, would be the ordinary high water level. These features would also likely be subject to the jurisdiction of the CDFG up to the top of bank or the edge of associated riparian vegetation, whichever is greater. Tributary waters lacking a defined bed and bank would not be subject to the CDFG's jurisdiction.

A number of seasonal wetlands are present on the site. Wetlands are only considered to be jurisdictional if they connect to other Waters of the United States per the U.S Supreme Court decision *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (SWANCC Decision). Most of these wetlands occurred adjacent to Deer Creek and its tributaries and, therefore, would likely be considered jurisdictional by the USACE. Wetlands that are considered by the USACE to be isolated from other Waters of the U.S. would be disclaimed by this agency but may still be subject to the RWQCB's jurisdiction.

Despite our analysis of the extent of agency jurisdiction, it is important to note that these agencies are the final arbiters and could claim jurisdiction over some or all of these features.

## **2.6 OTHER SENSITIVE NATURAL COMMUNITIES**

El Dorado County and the CDFG consider oak woodlands to be a sensitive natural community. Oak woodlands occurring on the site are functioning, productive, relatively undisturbed habitats and represent a significant percentage of the site's habitat matrix.

The western half of the site is part of the Pine Hill formation supporting plants endemic to gabbro- and serpentine-derived soils (USFWS 2002). El Dorado County has established designated "rare plant mitigation areas" based on their potential to support habitat for rare plants, particularly rare plants endemic to the Pine Hill gabbro formation. APNs 109-010-09, -10, -13, and -14, and 109-020-01 are designated as Rare Plant Mitigation Area 1. See Section 3.2.5 for further discussion of these designations.

### 3.0 IMPACTS AND MITIGATIONS

#### 3.1 SIGNIFICANCE CRITERIA

Approval of general plans, area plans, and specific projects is subject to the provisions of the California Environmental Quality Act (CEQA). The purpose of CEQA is to assess the impacts of proposed projects on the environment before they are carried out. CEQA is concerned with the significance of a proposed project's impacts. For example, a proposed development project may require the removal of some or all of a site's existing vegetation. Animals associated with this vegetation could be destroyed or displaced. Animals adapted to humans, roads, buildings, pets, etc., may replace those species formerly occurring on the site. Plants and animals that are state and/or federally listed as threatened or endangered may be destroyed or displaced. Sensitive habitats such as wetlands and riparian woodlands may be altered or destroyed.

Whenever possible, public agencies are required to avoid or minimize environmental impacts by implementing practical alternatives or mitigation measures. According to Section 15382 of the CEQA Guidelines, a significant effect on the environment means a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic interest."

Specific project impacts to biological resources may be considered "significant" if they would:

- 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;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Furthermore, CEQA Guidelines Section 15065(a) states that a project may trigger the requirement to make a “mandatory findings of significance” if the project has the potential to

Substantially 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 an endangered, rare or threatened species, or eliminate important examples of the major periods of California history or prehistory.

### **3.2 RELEVANT GOALS, POLICIES, AND LAWS**

#### **3.2.1 Threatened and Endangered Species**

State and federal “endangered species” legislation has provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by the California Native Plant Society are collectively referred to as “species of special status.” Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the “take” of a listed species. “Take” is defined by the state of California as “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” (California Fish and Game Code, Section 86). “Take” is more broadly defined by the federal Endangered Species Act to include “harm” (16 USC, Section 1532(19), 50 CFR, Section 17.3). Furthermore, the CDFG and the USFWS are responding agencies under the California Environmental Quality Act (CEQA). Both

agencies review CEQA documents in order to determine the adequacy of their treatment of endangered species issues and to make project-specific recommendations for their conservation.

### **3.2.2 Migratory Birds**

State and federal laws also protect most birds. The Federal Migratory Bird Treaty Act (16 U.S.C., sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

### **3.2.3 Birds of Prey**

Birds of prey are also protected in California under provisions of the State Fish and Game Code, Section 3503.5, which states that it is “unlawful to take, possess, or destroy any birds in the order *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.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by the CDFG.

### **3.2.4 Wetlands and Other Jurisdictional Waters**

Natural drainage channels and adjacent wetlands may be considered “Waters of the United States” (hereafter referred to as “jurisdictional waters”) subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE). The extent of jurisdiction has been defined in the Code of Federal Regulations but has also been subject to interpretation of the federal courts.

Jurisdictional waters generally include:

- All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- All interstate waters including interstate wetlands;
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce;

- All impoundments of waters otherwise defined as waters of the United States under the definition;
- Tributaries of waters identified in paragraphs (a)(1)-(4) (i.e. the bulleted items above).

As recently determined by the United States Supreme Court in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (the SWANCC decision), channels and wetlands isolated from other jurisdictional waters cannot be considered jurisdictional on the basis of their use, hypothetical or observed, by migratory birds.

The USACE regulates the filling or grading of such waters under the authority of Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by "ordinary high water marks" on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils saturated intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (USACE 1987).

All activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE (Wetland Training Institute, Inc. 1991). Such permits are typically issued on the condition that the applicant agrees to provide mitigation that result in no net loss of wetland functions or values. No permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The filling of isolated wetlands, over which the USACE has disclaimed jurisdiction, is regulated by the RWQCB. It is unlawful to fill isolated wetlands without filing a Notice of Intent with the RWQCB. The RWQCB is also responsible for enforcing National Pollution Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit. All projects requiring federal money must also comply with Executive Order 11990 (Protection of Wetlands).

The California Department of Fish and Game has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1602 of the California Fish and Game Code (2003). Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates that certain measures will be implemented which protect the habitat values of the drainage in question.

### **3.2.5 Local Ordinances, General Plans, or Habitat Conservation Plans**

The County of El Dorado has a number of adopted general plan policies related to the protection of biological resources. Any proposed activities on the site should be in compliance with these policies, wherever possible.

The County has specific policies regarding protection of oak woodlands, riparian and wetland habitats, and rare plant habitats, discussed below. No habitat conservation plans are known to be in effect for the site and surrounding areas.

*Oak woodlands.* El Dorado County has adopted policies for the protection of oak woodlands for all new developments resulting in soil disturbance on parcels that 1) are over 1 acre and have at least 1% total canopy cover or 2) are less than 1 acre and have at least 10 percent total canopy cover by woodland habitats. If development is to impact oak woodland habitat meeting one of the two above criteria, the project applicant must adhere to prescribed tree canopy retention and replacement standards as specified in the General Plan. This includes retaining existing canopy cover at percentages based on the percent existing cover. Woodland habitat should also be replaced at a 1:1 ratio based on a formula developed by the County that accounts for the number of trees and acreage affected. If the applicant chooses not to mitigate for oak woodland impacts via adherence to retention and replacement standards, the applicant must contribute sufficient funding to the County's Integrated Natural Resources Management Plan (INRMP) to fully compensate for impacts to oak woodland habitat (El Dorado County 2004).

Except under special exemptions, the County further requires approval of a tree removal permit for the removal of any native oak tree with a single main trunk of at least 6 inches diameter at breast height (dbh), or a multiple trunk with an aggregate of at least 10 inches dbh.

Riparian and wetland habitats. El Dorado County has adopted policies to provide buffers and special setbacks for the protection of riparian and wetland habitats (Policy 7.3.3.4 of the *General Plan*). The County requires a minimum setback of 100 feet from all perennial streams, rivers, and lakes, and 50 feet from intermittent streams and wetlands. Exceptions to these setback requirements may be made for necessary projects such as road and bridge repair and construction, but only when appropriate mitigation measures and Best Management Practices are incorporated into the project.

Rare plants. El Dorado County has adopted policies for protecting special status plants endemic to the Pine Hill formation through the establishment and management of ecological preserves (i.e., the Pine Hill Preserve) consistent with Chapter 17.71 of the County Code and the USFWS *Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills* (2002). To assist with funding these preserves, the County has established “rare plant mitigation areas” based on a parcel’s potential to support habitat for special status plant species. Development occurring on parcels designated as Rare Plant Mitigation Areas 1 (“rare plant soils study area”) and 2 (“El Dorado County Irrigation District service area”) must mitigate for impacts by either 1) paying an ecological preserve fee determined by the type of development to occur on the parcel or 2) participating in a rare plant off-site mitigation program.

### **3.3 IMPACTS AND MITIGATIONS SPECIFIC TO THE PROJECT SITE**

No specific projects have been proposed for the site at this time. Therefore, the following analysis assumes that most of or the entire site would be proposed for development. However, the proposed zone change will not result in a significant change in the development potential of the site and, therefore, will not directly create any significant impacts.

### 3.3.1 Loss of Habitat for Special Status Plants

**Potential Impacts.** Of the 16 special status plant species potentially occurring within the project vicinity, potentially suitable habitat occurs on the site for only four of these species: Pine Hill ceanothus, Layne's ragwort, Red Hills soaproot, and Bisbee Peak rush-rose (Table 3).

Pine Hill ceanothus, Layne's ragwort, and Red Hills soaproot all occur in chaparral or oak woodland habitats on serpentinite or gabbroic soils; Bisbee Peak rush-rose occurs on similar soils in chaparral habitats only. Because these species are associated with serpentine-derived soils and the gabbro-derived soils of the Pine Hill formation, which includes the western half of the site, this portion of the site provides potentially suitable habitat for these species. However, it was not possible to confirm their presence or absence based on the September field survey.

It is not currently known if Pine Hill ceanothus, Layne's ragwort, Red Hills soaproot, and Bisbee Peak rush-rose are present on the site. Focused surveys within the chaparral and oak woodland habitats within and in the vicinity of any future proposed construction footprints should be conducted to determine these species' presence on, or absence from, the site. These focused special status plant surveys should be conducted prior to ground disturbance and should occur during the appropriate blooming season for these four species. Surveys conducted in May and July should be sufficient to confirm their presence or absence.

Pine Hill ceanothus and Layne's ragwort are both federally or state listed as endangered or threatened. If Pine Hill ceanothus or Layne's ragwort were found during the focused special status plant surveys, then project impacts to these species and habitat supporting these species would be considered significant under CEQA.

These two species, along with Red Hills soaproot, also appear on the CNPS 1B list ("Plants rare, threatened or endangered in California and elsewhere"). As a CNPS 1B plant with no federal or state listing, impacts to Red Hills soaproot may be considered significant under CEQA. If detected, an assessment would need to be conducted to determine if impacts to these species should be considered significant.



If focused rare plant surveys determine that these species are absent from areas impacted by future development, then there would be no impact on habitat for these species, and mitigation would not be warranted.

Bisbee Peak rush-rose is listed as a CNPS 3 species ("Plants about which more information is needed"). Because the CNPS 3 list is a review list, impacts to these species are typically not considered significant under CEQA. Therefore, if Bisbee Peak rush-rose, a CNPS 3 species, were detected on the site during the surveys, project impacts would be considered less-than-significant under CEQA. Occurrences of this species would be reported to the CNPS, but no mitigations would be warranted.

**Mitigation.** Should one or more populations of Pine Hill ceanothus, Layne's ragwort, or Red Hills soaproot be detected within the project footprint, and should their loss be considered significant under CEQA, then mitigation measures would be required to offset permanent impacts to these plant populations. If the project cannot be redesigned to avoid impacts to the identified species, then compensation measures should include development of a site restoration plan for these species. At a minimum, the plan should contain the following elements: 1) location of restoration areas, 2) propagation and planting techniques to be employed for the restoration effort, 3) timetable for implementation, 4) monitoring plan and performance criteria, 5) adaptive management techniques, and 6) site maintenance plan. The plan would need to be approved by the County prior to the start of project construction and should occur in the immediate vicinity of the identified population(s). The objective of this mitigation measure would be to replace the special status plants and habitat lost during project buildout. This and any other compensation (on- or off-site mitigation) for anticipated impacts should be consistent with the County's General Plan policies related to rare plants, any requirements specified in the USFWS's recovery plan for gabbro soil plants that may occur on the site, and any other federal or state regulations protecting these plant communities.

Implementation of the above measures are expected to reduce project impacts to a less-than-significant level to any special status plant species that may occur on the site.

### **3.3.2 Loss of Habitat for Special Status Animals**

**Potential Impacts.** Thirty special status animal species occur, or once occurred, regionally (Table 2). Of these, 13 species would be absent from or unlikely to occur on the site due to a lack of suitable habitat for these species or because the site occurs outside of the species' known range. These species include the vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander, western spadefoot, California red-legged frog, foothill yellow-legged frog, bald eagle, northern harrier, Swainson's hawk, prairie falcon, burrowing owl, bank swallow, and tricolored blackbird.

Fifteen special status animal species may occur more frequently as regular foragers or may be resident on the site. These include the California horned lizard, white-tailed kite, sharp-shinned hawk, Cooper's hawk, northern goshawk, ferruginous hawk, merlin, loggerhead shrike, silver-haired bat, Yuma myotis, Townsend's western big-eared bat, pallid bat, California mastiff bat, ringtail, and American badger. These species either occur on the site incidental to home range and migratory movements, thus using the site infrequently, or may forage on the site year-round or during migration. Ringtails may move through the riparian zone from time to time but are expected to move out of an area during construction.

Project buildout would have no effect on the breeding success of these species and would, at most, result in a relatively small reduction of foraging and/or roosting habitat that is abundantly available regionally. Therefore, the loss of habitat for these species would be considered less than significant.

The remaining two species—the valley elderberry longhorn beetle (VELB) and western pond turtle—may occur on the site more frequently. Both species occur in aquatic or riparian habitats. Although no development plans have been prepared at this time, impacts to habitat for these species would be considered less-than-significant. Construction activities may, however, result in mortality to individuals of these species (see Sections 3.3.3 and 3.3.4).

**Mitigation.** No mitigation measures are warranted.

### **3.3.3 Impacts to Individual Valley Elderberry Longhorn Beetles**

**Potential Impacts.** Elderberry shrubs constitute the primary habitat for the valley elderberry longhorn beetle (VELB) and were observed in riparian habitats along Deer Creek and its tributaries. No exit holes were observed in these shrubs during the September 2006 field survey, but an exhaustive survey of these plants for sign of the VELB was not conducted at that time.

The USFWS presumes that take of the VELB may occur whenever construction work takes place within 100 feet of an individual elderberry shrub. Therefore, any site development that proposes to remove or substantially encroach on an elderberry shrub should presume that take authorization would likely be required from the Service and would subsequently be considered a significant impact under CEQA.

While no specific projects or construction activities are proposed at this time, any future development activities that result in the loss of any elderberry shrubs or affect the persistence of elderberry shrubs would be considered a significant impact under CEQA. The loss of these shrubs would also likely be considered a "take" under the Federal Endangered Species Act and require either a Section 7 (requires a Federal Nexus) or Section 10 consultation with the USFWS.

**Mitigation.** Although no specific projects or construction activities are proposed at this time, implementation of the avoidance measures outlined below would provide protection to VELB habitat associated with impacts due to future ground disturbance on individual parcels. If the avoidance measures are implemented to their fullest extent, a Section 7 (with a federal nexus) or Section 10 (without a federal nexus) permit for incidental "take" of the VELB will not be required from the Endangered Species Office in Sacramento, California. However, if minimization or compensation measures are deemed necessary, a Section 7 or Section 10 permit may be required.

\* We should discuss

Mitigation Alternative 1: Avoidance. Complete avoidance of a sensitive resource (i.e., wetlands or endangered/threatened species habitat) is usually considered the preferred approach for any project. For VELB, complete avoidance is assumed when a 100-foot development-free buffer is established around each elderberry shrub with one inch or greater diameter (USFWS 1999). If avoidance is not possible, either minimization or compensation measures, or a combination thereof, will be required.

Mitigation Alternative 2: Minimization. Minimization measures that can be implemented to reduce impacts to elderberry shrubs, and thereby the VELB, are as follows:

1. Prior to the start of construction, all elderberry shrubs to be avoided should be protected and prominently marked (including fencing and signage) so construction crews will not enter the established setbacks (25 feet to 100 feet from the drip line of the shrub's canopy). A biological monitor should be present to instruct work crews about the status of the VELB, and the importance of avoiding elderberry shrubs that will not otherwise be affected by construction. All contractors working on the project should be briefed as to the significance and possible penalties for not complying with the conditions of the incidental take permit issued by the USFWS.
2. Permanent guardrails should be placed around the elderberry shrubs that are in "high danger" areas, and temporary fencing should be placed around shrubs that are in secluded areas. Fencing should be placed within the 100-foot buffer zone prior to construction and should be as far away (20 feet is preferred) from the drip line of each shrub as possible.
3. Elderberry shrubs within the 100-foot buffer zone should be flagged and signed. Legible signs should be erected on the fencing of each shrub with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines and imprisonment."
4. Construction should preferably take place between the months of July and January when the VELB is not within its flight season, which is considered to occur from February through June. However, from a construction standpoint, it may not be possible to complete construction during the times of year that the shrubs are dormant (November through February). From November through February, weather conditions may restrict construction activities on and in the vicinity of the site.
5. A qualified biologist should visit the site periodically when construction is occurring within 100 feet of the shrubs to make sure that no shrubs have been impacted from project construction. If there are any impacts that occur during construction or unauthorized takes of the beetle or its habitat, the biological monitor will immediately report them to the USFWS and the California Department of Fish and Game (CDFG).

6. Areas adjacent to the elderberry shrubs should be watered several times a day when construction is occurring within 100 feet of any elderberry shrub to minimize dust. No oil-based (petroleum) palliatives should be used.
7. Extreme care should be taken when working in close proximity of the elderberry shrubs to ensure that physical injury to roots does not occur. Use of heavy equipment within 50 feet of each shrub will be extremely limited to that which is absolutely necessary to complete any proposed work. Further compaction of the soil around the roots will be minimized to the greatest extent possible.

Mitigation Alternative 3: Compensation. Extensive compensation measures may be required if the elderberry shrubs on the project site are removed, including compliance with standard mitigation ratios set forth by the USFWS (Appendix C). In addition to having to plant replacement elderberry shrubs and associated native species, the project proponent would be required to consult with the USFWS via either a Section 7 (requires a Federal Nexus) or Section 10 of the Endangered Species Act as it relates to getting "take" authorization of a listed species if the development scenario results in the removal of any or all of the elderberry shrubs.

### **3.3.4 Impacts to Western Pond Turtles**

**Potential Impacts.** Although no development plans have been proposed for the site at this time, construction activities occurring in or along Deer Creek, its tributaries, or seasonal wetlands on the site during cool or wet periods may result in mortality to individual western pond turtles. The loss of these individuals would constitute a significant impact under CEQA.

**Mitigation.** Implementation of the following measures should be taken during any construction occurring in or along Deer Creek, its tributaries, or seasonal wetlands on the site to avoid take of individual western pond turtles.

- Pre-construction surveys should be conducted to ensure that western pond turtles are absent from the construction area.
- The construction zone should be cleared, and silt fencing should be erected and maintained around construction zones to prevent western pond turtles from moving into these areas.
- A biological monitor should be present onsite during particular times of construction to ensure that no western pond turtles are harmed, injured, or killed during project buildout.

These measures would reduce impacts to this species to a less-than-significant level. Projects impacting habitat for this species should also comply with policy and mitigation measures

established in the County's General Plan regarding protection of special status species and their habitat.

### **3.3.5 Disturbance to Active Raptor Nests**

**Potential Impacts.** Although no stick nests were observed during the September 2006 survey, trees throughout the oak woodland, oak savannah, and riparian habitats of the site provide suitable nesting habitat for red-tailed hawks, northern goshawks, and other tree-nesting raptors.

No specific projects or construction activities are proposed on the site at this time, but site development may occur in the future. If future construction activities will occur during the breeding season (1 February through 31 August), a qualified ornithologist should conduct a pre-construction survey for tree-nesting raptors in all trees on and adjacent to the project site within 30 days of the onset of site disturbance in order to determine the presence of any active raptor nests. Pre-construction surveys during the non-breeding season are not necessary for tree-nesting raptors, as they are expected to abandon their roosts during construction.

If a raptor were to nest on the site in the future prior to construction, such activities could result in the abandonment of active nests or direct mortality to these birds. Construction activities that adversely affect the nesting success of raptors or result in mortality of individual birds constitute a violation of state and federal laws (see Section 3.2.3) and would be considered a significant impact under CEQA.

**Mitigation.** If possible, trees planned for removal should be removed during the non-breeding season (1 September through 31 January). If nesting raptors are detected on or adjacent to the site during the breeding season pre-construction survey, a suitable construction-free buffer should be established around all active nests. The precise dimension of the buffers (up to 250 feet for raptors) should be determined at that time and may vary depending on location and species. The buffer areas should be enclosed with temporary fencing, and construction equipment and workers should not enter the enclosed setback areas. Buffers should remain in

place for the duration of the breeding season or until it has been confirmed by a qualified biologist that all chicks have fledged and are independent of their parents.

Implementation of the above measures will mitigate impacts to tree-nesting raptors to a less-than-significant level.

### **3.3.6 Disturbance to Native Wildlife Nursery Sites**

**Potential Impacts.** Abandoned structures and hollow trees on the site provide potential roosting habitat for special status bat species, including the silver-haired bat, Townsend's western big-eared bat, pallid bat, and California mastiff bat, which occur regionally, as well as for non-listed bats. The proposed project includes the demolition of these structures. The loss of a maternity colony for any bat species, regardless of the species' status, would constitute a potentially significant impact.

**Mitigation.** The project proponent should conduct pre-demolition bat surveys in buildings to be demolished and tree snags to determine if bats are present on the site. If no bats are observed to be roosting in these buildings, then no further action would be required and demolition can proceed. However, if bats are found to be roosting on the site, the project proponents should exclude bats prior to demolition to ensure no harm or take would occur to any bats as a result of demolition activities. Demolition should occur after 31 August and before 1 March to avoid interfering with an active nursery. If a non-breeding bat hibernaculum is found in the structures to be demolished, the individuals should be safely evicted, under the direction of a qualified bat biologist, through a "partial dismantle" process, whereby the roosting area is opened to allow airflow through and sunlight into the building, making it unsuitable habitat and undesirable for the bats to return to the site. Demolition should then follow no later than the following day (i.e., there should be no less than one night between initial disturbance for airflow and the demolition). This action should allow bats to leave during the night, thus increasing their chances of finding new roosts with a minimum of potential predation during daylight hours.

Snags should also be surveyed for bats prior to tree removal. If bats are determined to be present in the snags, they should be safely evicted under the direction of a qualified biologist.

By implementing the above mitigation, impacts to bats would be reduced to a less-than-significant level.

### **3.3.7 Interference with the Movement of Native Wildlife**

**Potential Impacts.** Deer Creek and its tributaries may facilitate the movements of some species through the site. Should future development activities require construction near or across these drainages (i.e., bridge construction), such activities may result in a temporary disruption of local wildlife movements during daylight hours but is not expected to result in any permanent or substantial changes in use or movement patterns once construction is complete. Therefore, wildlife species presently using these drainages are expected to continue moving through these natural drainages after project buildout.

Future site development is not expected to have a significant effect on home range and dispersal movements of native wildlife that occur immediately on the site. Therefore, the project will result in a less-than-significant impact on the movements of native wildlife.

**Mitigation.** Mitigation measures would not be warranted.

### **3.3.8 Loss of Habitat for Native Wildlife**

**Potential Impacts.** The habitats of the site are likely to comprise only a portion of most wildlife's entire home range or territory. As such, some species may disperse through the site, but most wildlife presently using the site do so as part of their normal movements for foraging, mating, and caring for young. Individuals of the various vertebrate species presently occupying the site would be displaced or lost from any future proposed development areas.

Future development could affect up to 531.46 acres, nearly all of which can currently be used by native wildlife. Future development would primarily result in the loss of mixed oak woodlands,



chaparral, and oak savannah habitats dominated by native plant species (see Section 3.3.10 regarding disturbance to oak woodland habitats on the site). Future development could also impact seasonal drainages, seasonal wetlands, and riparian habitats (see Section 3.3.9 regarding disturbance to Deer Creek, its tributaries, and seasonal wetlands on the site).

Even after individual parcels are developed, large areas of chaparral habitats in surrounding lands will remain. This suggests that development of individual projects, when considered by itself, will neither result in a wildlife population dropping below self-sustaining levels nor threaten to eliminate an animal community. Furthermore, mitigations have been proposed for a number of species previously discussed (see Sections 3.3.1 to 3.3.3) to adequately offset habitat losses.

The loss of chaparral habitat is not expected to affect the persistence and presence of local wildlife. Therefore, impacts to native wildlife due to the loss of a portion of chaparral habitat resulting from future development of individual parcels is considered less than significant under CEQA.

**Mitigation.** Mitigation measures would not be warranted.

### **3.3.9 Disturbance to Waters of the United States and Riparian Habitats**

**Potential Impacts.** A formal wetland delineation of the site was conducted by LOA during the September 2006 surveys but has not been submitted to the USACE for verification at this time. However, jurisdictional waters are presumed to be present on the site in the form of Deer Creek, tributaries to Deer Creek, and seasonal wetlands.

Regardless of the USACE determination of the onsite waterways and wetlands, there is a good potential that the Regional Water Quality Control Board (RWQCB) will claim jurisdiction over these features and that the California Department of Fish and Game (CDFG) will exert jurisdiction over the drainages. The placement of fill within these features and the loss of

associated riparian and wetland habitat value would constitute a significant adverse impact under CEQA.

**Mitigation.** The following mitigations should be implemented as part of project planning and construction to reduce impacts to seasonal drainages and wetlands occurring on the site to a less-than-significant level under CEQA.

The preferred method of mitigation would be avoidance of all Waters of the U.S. and State by designing projects so that they avoid the placement of fill within potential jurisdictional waters and seasonal drainages. This includes complying with the County's General Plan policies establishing buffers and setbacks for riparian habitats and wetlands.

If the impacts to Deer Creek, its tributaries, and seasonal wetlands cannot be avoided, then an onsite restoration plan should be developed to mitigate for the significantly impacted habitat; if onsite mitigation is not possible, then offsite mitigation should occur in the vicinity of the site. The restoration plan would need to be approved by the responsible agency prior to the start of project activities. This mitigation measure would compensate for permanent acreage impacts at up to a 3:1 replacement-to-loss ratio (3 acres conserved for each acre developed), depending upon the quality of the habitat, as well as reseeded of vegetation in temporarily disturbed areas.

The Restoration Plan should include the following information:

1. Designate locations to restore lost habitat. Appropriate habitat will be created in suitable areas.
2. Describe the methods by which the restoration will occur including size of area to be restored, species to be planted, and plant installation guidelines.
3. Develop a timetable for implementation of the restoration plan
4. Develop a monitoring plan and performance criteria.
5. Describe remedial measures to be performed in the event that initial restoration measures are unsuccessful in meeting the performance criteria.
6. Describe site maintenance activities to follow restoration activities. These may include weed control, irrigation, and control of herbivory by livestock and wildlife.

Regulatory issues. The applicant should also comply with all state and federal regulations related to construction work that will impact seasonal drainages and wetlands occurring on the site. This may require obtaining a Section 404 Clean Water Act permit from the USACE, Section 401 Water Quality Certification from the RWQCB, and Section 1600 Streambed Alteration Agreement from the CDFG prior to initiating any construction within these habitats, if deemed necessary.

### **3.3.10 Disturbance to Oak Woodlands and Other Sensitive Natural Communities**

**Potential Impacts.** El Dorado County considers oak woodlands to be a sensitive natural community. Oak woodlands occurring on the site are functioning, productive, relatively undisturbed habitats and represent a significant percentage of the site's habitat matrix. The western half of the site is also part of the Pine Hill formation supporting plants endemic to gabbro- and serpentine-derived soils. Development resulting in the loss of these habitats would be considered a significant adverse impact under CEQA.

**Mitigation.** Compliance with the County's General Plan policies for retaining and replacing oak woodland habitat for development projects (see Section 3.2.5) would mitigate impacts to this habitat to a less-than-significant level. A tree removal permit may also need to be obtained from the County for the removal of native oak trees.

Compliance with Chapter 17.71 of the County Code (see Section 3.2.5), including payment of appropriate Rare Plant Mitigation Area fees to be determined by the development of specific parcels, would mitigate impacts to rare plant habitats to a less-than-significant level.

### **3.3.11 Degradation of Water Quality in Seasonal Drainages, Stock Ponds, and Downstream Waters**

**Potential Impacts.** Eventual site development, including soil and slope stabilization, may require grading that leaves the soil of construction zones barren of vegetation and, therefore, vulnerable to sheet, rill, or gully erosion. Eroded soil is generally carried as sediment in surface runoff to be deposited in natural creek beds, canals, and adjacent wetlands. Furthermore, urban

runoff is often polluted with grease, oil, pesticide and herbicide residues, heavy metals, etc. These pollutants may eventually be carried to sensitive wetland habitats used by a diversity of native wildlife species.

The applicant must comply with the provisions of a County grading permit, including standard erosion control measures that employ best management practices (BMPs). Projects involving the grading of large tracts of land must also be in compliance with provisions of a General Construction permit (a type of NPDES permit) available from the California Regional Water Quality Control Board. Compliance with the above permits should result in no impact to water quality in seasonal creeks, reservoirs, and downstream waters from the proposed project and should not result in the deposition of pollutants and sediments in sensitive riparian and wetland habitats.

**Mitigation.** Mitigation measures would not be warranted.

## LITERATURE CITED

- Barr, C.B. 1991. The distribution, habitat, and status of the valley elderberry longhorn beetle, *Desmocerus californicus dimorphus* Fisher (Insecta: Coleoptera: Cerambycidae). U.S. Fish & Wildlife Service. Sacramento, CA. 133 pp.
- California Department of Fish and Game. 2002. California fish and game code. Gould Publications. Binghamton, NY.
- \_\_\_\_\_. 2006. California natural diversity database. The Resources Agency, Sacramento, CA.
- \_\_\_\_\_. 2006. Annual report on the status of California state listed threatened and endangered animals and plants. The Resources Agency, Sacramento, CA.
- California Native Plant Society. 2001. Inventory of Rare and Endangered Vascular Plants of California (6th Edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA.
- El Dorado County Planning Department. 2004. *2004 El Dorado County General Plan*. El Dorado County Planning Department, El Dorado County, California.
- Holland, R.F. 1986. Preliminary Description of the terrestrial natural communities of California. Resources Agency, Sacramento, CA. 156 pp.
- Natural Resource Conservation Service. 1974. Soil Survey. El Dorado Area, California. USDA.
- Sawyer, John O. and Todd Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento, California.
- U.S. Corps of Engineers. 1987. Corps of Engineers wetlands delineation manual. Department of the Army.
- U.S. Fish and Wildlife Service. 1980. Listing the Valley Elderberry Longhorn Beetle as a threatened species with critical habitat. Federal Register 45:52803-52807.
- \_\_\_\_\_. 1984. Recovery plan for the Valley Elderberry Longhorn Beetle. Portland, OR. 62 pp. (prepared by Richard A. Arnold).
- \_\_\_\_\_. 2002. *Recovery Plan for Gabbro Soil Plants of the Central Sierra Nevada Foothills*. USFWS, Portland, Oregon.
- \_\_\_\_\_. 2006. Endangered and threatened wildlife and plants.

Wetland Training Institute, Inc. 1991. Federal Wetland Regulation Reference Manual. B.N. Goode and R.J. Pierce (eds.) WTI 90-1. 281pp.

WRCC (Western Regional Climate Center). 2006. Climate summary for Placerville, California. WRCC: Reno, Nevada.

Zeiner, David C., William F. Laudenslayer, Kenneth E. Mayer and Marshal White. Ed. 1988. California's wildlife, volume I, amphibians and reptiles. Department of Fish and Game. Sacramento, CA. 272 pp.

\_\_\_\_\_. 1988. California's wildlife, volume II, birds. Department of Fish and Game. Sacramento, CA. 731 pp.

\_\_\_\_\_. 1988. California's wildlife, volume III, mammals. Department of Fish and Game. Sacramento, CA. 407 pp.

## APPENDIX A: VASCULAR PLANTS OF THE STUDY AREA

The plants species listed below were observed on the Shingle Springs G-3 property during the field surveys conducted by Live Oak Associates on September 20-22, 2006. The U.S. Fish and Wildlife Service wetland indicator status of each plant has been shown following its common name.

OBL - Obligate  
 FACW - Facultative Wetland  
 FAC - Facultative  
 FACU - Facultative Upland  
 UPL - Upland  
 +/- - Higher/lower end of category  
 NI - No investigation

<b>AMARANTHACEAE – Amaranth Family</b>		
<i>Amaranthus californicus</i>	California amaranth	FACW
<b>ANACARDIACEAE – Sumac Family</b>		
<i>Toxicodendron diversilobum</i>	Poison oak	UPL
<b>APIACEAE – Carrot Family</b>		
<i>Daucus carota*</i>	Queen Anne’s lace	UPL
<i>Torilis arvensis*</i>	Field hedge parsley	UPL
<b>APOCYNACEAE – Dogbane Family</b>		
<i>Apocynum cannabinum</i>	Indian hemp	FAC
<i>Vinca major*</i>	Greater periwinkle	UPL
<b>ASCLEPIADACEAE – Milkweed Family</b>		
<i>Asclepias fascicularis</i>	Narrowleaf milkweed	FAC
<b>ASTERACEAE - Sunflower Family</b>		
<i>Achillea millefolium</i>	Yarrow	FACU
<i>Artemisia douglasiana</i>	Mugwort	FACW
<i>Aster chilensis</i>	Common California aster	FAC
<i>Baccharis pilularis</i>	Coyote brush	UPL
<i>Calycadenia multiglandulosa</i>	Sticky calycadenia	UPL
<i>Carduus pycnocephalus*</i>	Italian thistle	UPL
<i>Centaurea solstitialis*</i>	Yellow star thistle	UPL
<i>Conyza canadensis</i>	Canada horseweed	FAC
<i>Ericameria arborescens</i>	Golden-fleece	UPL
<i>Euthamia occidentalis</i>	Western goldenrod	OBL
<i>Gnaphalium californicum</i>	California cudweed	UPL
<i>Helenium puberulum</i>	Sneezeweed	FACW
<i>Helianthus californicus</i>	California sunflower	OBL
<i>Hemizonia fitchii</i>	Fitch’s spikeweed	UPL
<i>Heterotheca grandiflora</i>	Telegraph weed	UPL
<i>Holocarpha virgata ssp. virgata</i>	Virgate tarweed	UPL
<i>Holozonia filipes</i>	Hareleaf	FACU
<i>Hypochaeris radicata*</i>	Rough cat’s-ear	UPL

<i>Lactuca serriola</i> *	Prickly lettuce	FAC
<i>Madia elegans</i>	Common madia	UPL
<i>Psilocarphus tenellus</i> var. <i>tenellus</i>	Slender woolly-heads	FAC
<i>Silybum marianum</i> *	Milk thistle	UPL
<i>Solidago</i> sp.	Goldenrod	-
<i>Xanthium strumarium</i>	Cocklebur	FAC+
<b>BETULACEAE – Birch Family</b>		
<i>Alnus rhombifolia</i>	White alder	FACW
<b>BRASSICACEAE – Mustard Family</b>		
<i>Rorippa curvisiliqua</i>	Western yellow cress	OBL
<i>Rorippa nasturtium-aquaticum</i>	Water cress	OBL
<b>CAPRIFOLIACEAE – Honeysuckle Family</b>		
<i>Sambucus mexicana</i>	Blue elderberry	FAC
<i>Symphoricarpos albus</i> var. <i>laevigatus</i>	Common snowberry	FACU
<b>CORNACEAE – Dogwood Family</b>		
<i>Cornus glabrata</i>	Brown dogwood	FACW
<b>CYPERACEAE – Sedge Family</b>		
<i>Carex</i> sp.	Sedge	-
<i>Cyperus erythrorhizos</i>	Red-root flatsedge	OBL
<i>Cyperus niger</i>	Black flatsedge	FACW+
<i>Eliocharis pachycarpa</i> *	Black-sand spikerush	OBL
<b>DRYOPTERIDACEAE – Wood Fern Family</b>		
<i>Dryopteris arguta</i>	Coastal wood fern	UPL
<b>ERICACEAE – Heath Family</b>		
<i>Arctostaphylos</i> sp.	Manzanita	UPL
<i>Arctostaphylos viscida</i> ssp. <i>viscida</i>	Whiteleaf manzanita	UPL
<b>EUPHORBIACEAE – Spurge Family</b>		
<i>Chamaesyce</i> sp.	Prostrate spurge	-
<i>Eremocarpus setigerus</i>	Turkey mullein	UPL
<b>FABACEAE – Legume Family</b>		
<i>Cercis occidentalis</i>	Western redbud	UPL
<i>Hoita macrostachya</i>	Leather-root	OBL
<i>Lathyrus latifolius</i> *	Perennial sweet pea	UPL
<i>Lotus corniculatus</i> *	Bird's foot trefoil	FAC
<i>Lotus purshianus</i> var. <i>purshianus</i>	Spanish clover	UPL
<i>Lotus scoparius</i>	California broom	UPL
<i>Medicago polymorpha</i> *	Burclover	UPL
<i>Trifolium hirtum</i> *	Rose clover	UPL
<i>Vicia tetrasperma</i> *	Slender vetch	UPL
<b>FAGACEAE – Oak Family</b>		



<i>Quercus douglasii</i>	Blue oak	UPL
<i>Quercus kelloggii</i>	California black oak	UPL
<i>Quercus lobata</i>	Valley oak	FAC*
<i>Quercus wislizenii</i> var. <i>wislizenii</i>	Interior live oak	UPL
<b>GENTIANACEAE – Gentian Family</b>		
<i>Centaurium muehlenbergii</i>	Monterey centaury	FAC
<b>HIPPOCASTANACEAE – Buckeye Family</b>		
<i>Aesculus californica</i>	California buckeye	UPL
<b>HYDROPHYLLACEAE – Waterleaf Family</b>		
<i>Eriodictyon californicum</i>	Yerba santa	UPL
<b>HYPERICACEAE – St. John's Wort Family</b>		
<i>Hypericum concinnum</i>	Gold-wire	UPL
<i>Hypericum perforatum</i> *	Klamathweed	UPL
<b>JUGLANDACEAE – Walnut Family</b>		
<i>Juglans californica</i>	California black walnut	FAC
<b>JUNCACEAE – Rush Family</b>		
<i>Juncus articulatus</i>	Jointleaf rush	OBL
<i>Juncus bufonius</i>	Toad rush	FACW+
<i>Juncus effusus</i>	Soft rush	OBL
<i>Juncus mexicanus</i>	Mexican rush	FACW
<i>Juncus xiphioides</i>	Iris-leaved rush	OBL
<b>LAMIACEAE – Mint Family</b>		
<i>Lepechinia calycina</i>	Pitcher sage	UPL
<i>Marrubium vulgare</i> *	Horehound	FAC
<i>Mentha pulegium</i> *	Pennyroyal	OBL
<i>Mentha spicata</i> var. <i>spicata</i> *	Spearmint	OBL
<i>Salvia sonomensis</i>	Creeping sage	UPL
<i>Stachys</i> sp.	Hedge nettle	-
<i>Trichostema lanceolatum</i>	Vinegar weed	UPL
<b>LEMNACEAE – Duckweed Family</b>		
<i>Lemna</i> sp.	Duckweed	OBL
<b>LILIACEAE – Lily Family</b>		
<i>Chlorogalum</i> sp.	Soap plant	-
<b>LYTHRACEAE – Loosestrife Family</b>		
<i>Lythrum hyssopifolium</i> *	Hyssop loosestrife	FACW
<b>MORACEAE – Mulberry Family</b>		
<i>Ficus carica</i> *	Edible fig	UPL
<b>OLEACEAE – Olive Family</b>		
<i>Fraxinus latifolia</i>	Oregon ash	FACW
<b>ONAGRACEAE – Evening Primrose Family</b>		
<i>Clarkia</i> sp.	Clarkia	-
<i>Epilobium brachycarpum</i>	Panicled willowherb	UPL
<i>Epilobium densiflorum</i>	Dense-flowered Boisduvalia	OBL
<i>Epilobium</i> sp.	Willowherb	-
<b>PINACEAE – Pine Family</b>		
<i>Pinus ponderosa</i>	Ponderosa pine	FACU

<i>Pinus sabiniana</i>	Foothill pine	UPL
<b>PLANTAGINACEAE – Plantain Family</b>		
<i>Plantago lanceolata*</i>	English plantain	FAC-
<i>Plantago major*</i>	Common plantain	FACW-
<b>POACEAE - Grass Family</b>		
<i>Aegilops triuncialis*</i>	Barbed goatgrass	UPL
<i>Agrostis exarata</i>	Spike bentgrass	FACW
<i>Aira caryophylllea*</i>	Silver hairgrass	UPL
<i>Avena fatua*</i>	Wild oat	UPL
<i>Brachypodium distachyon*</i>	Purple false brome	UPL
<i>Briza minor*</i>	Rattlesnake grass	FACW-
<i>Bromus diandrus*</i>	Ripgut brome	UPL
<i>Bromus hordeaceus*</i>	Soft chess	FACU-
<i>Bromus madritensis*</i>	Foxtail chess	NI
<i>Crypsis schoenoides*</i>	Swamp grass	OBL
<i>Cynodon dactylon*</i>	Bermuda grass	FAC
<i>Cynosurus echinatus*</i>	Dogtail grass	UPL
<i>Dactylis glomerata*</i>	Orchard grass	FACU
<i>Echinochloa crus-galli*</i>	Barnyard grass	FACW
<i>Elymus glaucus</i>	Blue wildrye	FACU
<i>Hordeum brachyantherum ssp. brachyantherum</i>	Meadow barley	FACW
<i>Hordeum jubatum</i>	Foxtail barley	FAC+
<i>Hordeum marinum ssp. gussoneanum*</i>	Mediterranean barley	FAC
<i>Hordeum murinum*</i>	Foxtail barley	NI
<i>Leersia oryzoides</i>	Rice cutgrass	OBL
<i>Leptochloa fascicularis</i>	Bearded sprangletop	OBL
<i>Lolium multiflorum*</i>	Italian ryegrass	UPL
<i>Melica californica</i>	California melic	UPL
<i>Muhlenbergia rigens</i>	Deergrass	FACW
<i>Phalaris aquatica*</i>	Harding grass	FAC+
<i>Piptatherum miliaceum*</i>	Smilo grass	UPL
<i>Polypogon monspeliensis*</i>	Rabbitsfoot grass	FACW
<i>Vulpia microstachys</i>	Small fescue	UPL
<i>Vulpia myuros</i>	Rattail fescue	FACU*
<b>POLEMONIACEAE – Phlox Family</b>		
<i>Navarretia sp.</i>	Navarretia	-
<b>POLYGONACEAE – Buckwheat Family</b>		
<i>Eriogonum sp.</i>	Wild buckwheat	-
<i>Polygonum punctatum</i>	Water smartweed	OBL
<i>Rumex conglomerates</i>	Green dock	FACW
<i>Rumex crispus*</i>	Curly dock	FACW-
<i>Rumex salicifolius</i>	Willow dock	OBL
<b>PTERIDIACEAE – Brake Family</b>		
<i>Adiantum jordanii</i>	California maidenhair fern	UPL
<b>RANUNCULACEAE – Buttercup Family</b>		
<i>Aquilegia formosa</i>	Crimson columbine	FAC

<i>Clematis ligusticifolia</i>	Virgin's bower	FAC
<b>RHAMNACEAE – Buckthorn Family</b>		
<i>Ceanothus cuneatus</i>	Buck brush	UPL
<i>Ceanothus integerrimus</i>	Deer brush	UPL
<i>Ceanothus tomentosus</i>	Woolly leaf ceanothus	UPL
<i>Rhamnus crocea</i>	Spiny redberry	UPL
<i>Rhamnus ilicifolia</i>	Holly-leaf redberry	UPL
<i>Rhamnus tomentella</i> ssp. <i>tomentella</i>	Hoary coffeeberry	UPL
<b>ROSACEAE – Rose Family</b>		
<i>Adenostoma fasciculatum</i>	Chamise	FAC
<i>Heteromeles arbutifolia</i>	Toyon	UPL
<i>Horkelia californica</i> ssp. <i>dissita</i>	California horkelia	UPL
<i>Rosa californica</i>	California rose	FAC+
<i>Rosa gymnocarpa</i>	Wood rose	NI
<i>Rubus discolor</i> *	Himalayan blackberry	FACW*
<i>Rubus ursinus</i>	California blackberry	FACW*
<b>RUBIACEAE – Madder Family</b>		
<i>Galium aparine</i>	Goose grass	FACU
<i>Galium parisiense</i> *	Wall bedstraw	FACU
<b>SALICACEAE – Willow Family</b>		
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood	FACW
<i>Salix exigua</i>	Sandbar willow	OBL
<i>Salix laevigata</i>	Red willow	UPL
<i>Salix lasiolepis</i>	Arroyo willow	FACW
<b>SCROPHULARIACEAE – Figwort Family</b>		
<i>Kickxia elatine</i> *	Sharp-leaved fluellin	NI*
<i>Mimulus aurantiacus</i>	Sticky monkeyflower	UPL
<i>Mimulus cardinalis</i>	Scarlet monkeyflower	OBL
<i>Mimulus guttatus</i>	Common monkeyflower	OBL
<i>Scrophularia californica</i>	California figwort	FAC
<i>Verbascum blattaria</i> *	Moth mullein	FACW
<i>Verbascum thapsus</i>	Woolly mullein	UPL
<i>Veronica catenata</i> *	Chain speedwell	OBL
<b>TYPHACEAE – Cattail Family</b>		
<i>Typha domingensis</i>	Southern cattail	OBL
<b>VERBENACEAE – Vervain Family</b>		
<i>Phyla nodiflora</i> var. <i>nodiflora</i>	Garden lippia	FACW
<b>VISCACEAE – Mistletoe Family</b>		
<i>Phoradendron villosum</i>	Oak mistletoe	UPL
<b>VITACEAE – Grape Family</b>		
<i>Vitis californica</i>	California wild grape	FACW

\* Introduced non-native species

**APPENDIX B: TERRESTRIAL VERTEBRATE SPECIES THAT POTENTIALLY  
OCCUR ON THE STUDY AREA**

The species listed below are those that may reasonably be expected to use the habitats of the study area routinely from time to time. The list was not intended to include birds that are vagrants or occasional transients. Terrestrial vertebrate species observed in or adjacent to the study area in September 2006 have been noted with an asterisk.

**CLASS AMPHIBIA (Amphibians)**

**ORDER CAUDATA (Salamanders)**

**FAMILY SALAMANDRIDAE (Newts)**

California newt *Taricha torosa*

**FAMILY PLETHODONTIDAE (Lungless Salamanders)**

Ensatina *Ensatina eschscholtzii*

**ORDER ANURA (Frogs and Toads)**

**FAMILY BUFONIDAE (True Toads)**

Western toad *Bufo boreas*

**FAMILY HYLIDAE (Tree Frogs and Relatives)**

\*Pacific treefrog *Hyla regilla*

**CLASS REPTILIA (Reptiles)**

**ORDER TESTUDINES (Turtles)**

**FAMILY EMYDIDAE (Box and Western Turtles)**

Western pond turtle *Actinemys marmorata*

**ORDER SQUAMATA (Lizards and Snakes)**

**SUBORDER SAURIA (Lizards)**

**FAMILY PHRYNOSOMATIDAE**

\*Western fence lizard *Sceloporus occidentalis*

California horned lizard *Phrynosoma coronatum frontale*

**FAMILY SCINCIDAE (Skinks)**

Skilton skink *Eumeces skiltonianus skiltonianus*

Gilbert's skink *Eumeces gilberti*

**FAMILY ANGUIDAE (Alligator Lizards and Relatives)**

California alligator lizard *Elgaria multicarinata*

**SUBORDER SERPENTES (Snakes)**

**FAMILY COLUBRIDAE (Colubrids)**

Ringneck snake *Diadophis punctatus*

Sharp-tailed snake *Contia tenuis*

Racer *Coluber constrictor*

Gopher snake *Pituophis catenifer*

Common kingsnake *Lampropeltis getula*

Western terrestrial garter snake *Thamnophis elegans*

Western aquatic garter snake *Thamnophis couchii*

Night snake *Hypsiglena torquata*

**FAMILY VIPERIDAE (Vipers)**

\*Western rattlesnake *Crotalus viridis*

**CLASS AVES (Birds)**

- ORDER CICONIIFORMES (Hérons, Storks, Ibises and Relatives)**  
**FAMILY CATHARTIDAE (New World Vultures)**  
 \*Turkey vulture *Cathartes aura*
- ORDER FALCONIFORMES (Vultures, Hawks and Falcons)**  
**FAMILY ACCIPITRIDAE (Hawks, Old World Vultures and Harriers)**  
 White-tailed kite *Elanus leucurus*  
 Sharp-shinned hawk *Accipiter striatus*  
 Cooper's hawk *Accipiter cooperii*  
 Northern goshawk *Accipiter gentilis*  
 \*Red-tailed hawk *Buteo jamaicensis*  
 Ferruginous hawk *Buteo regalis*  
 Golden eagle *Aquila chrysaetos*
- FAMILY FALCONIDAE (Caracaras and Falcons)**  
 Merlin *Falco columbarius*
- ORDER GALLIFORMES (Magapodes, Curassows, Pheasants and Relatives)**  
**FAMILY PHASIANIDAE (Quails, Pheasants and Relatives)**  
 Ring-necked pheasant *Phasianus colchicus*  
 \*Wild turkey *Meleagris gallopavo*
- FAMILY ODONTOPHORIDAE (New World Quail)**  
 California quail *Callipepla californica*
- ORDER COLUMBIFORMES (Pigeons and Doves)**  
**FAMILY COLUMBIDAE (Pigeons and Doves)**  
 Rock dove *Columba livia*  
 \*Mourning dove *Zenaida macroura*
- ORDER STRIGIFORMES (Owls)**  
**FAMILY TYTONIDAE (Barn Owls)**  
 \*Barn owl *Tyto alba*
- FAMILY STRIGIDAE (Typical Owls)**  
 Western screech owl *Otus kennicottii*  
 Great horned owl *Bubo virginianus*
- ORDER CAPRIMULGIFORME (Goatsuckers and Relatives)**  
**FAMILY CAPRIMULGIDAE (Goatsuckers)**  
 Common poorwill *Phalaenoptilus nuttallii*
- ORDER APODIFORMES (Swifts and Hummingbirds)**  
**FAMILY TROCHILIDAE (Hummingbirds)**  
 Anna's hummingbird *Calypte anna*
- ORDER PICIFORMES (Woodpeckers and Relatives)**  
**FAMILY PICIDAE (Woodpeckers and Wrynecks)**  
 \*Acorn woodpecker *Melanerpes formicivorus*  
 Northern flicker *Colaptes auratus*  
 Nuttall's woodpecker *Picoides nuttallii*
- ORDER PASSERIFORMES (Perching Birds)**  
**FAMILY TYRANNIDAE (Tyrant Flycatchers)**  
 Black phoebe *Sayornis nigricans*  
 Ash-throated flycatcher *Myiarchus cinerascens*  
 \*Western kingbird *Tyrannus verticalis*
- FAMILY LANIIDAE (Shrikes)**  
 Loggerhead shrike *Lanius ludovicianus*
- FAMILY VIREONIDAE (Typical Vireos)**  
 Cassin's vireo *Vireo cassinii*

<b>FAMILY CORVIDAE (Jays, Magpies and Crows)</b>	
*Western scrub-jay	<i>Aphelocoma californica</i>
American crow	<i>Corvus brachyrhynchos</i>
<b>FAMILY HIRUNDINIDAE (Swallows)</b>	
Tree swallow	<i>Tachycineta bicolor</i>
Violet-green swallow	<i>Tachycineta thalassina</i>
<b>FAMILY PARIDAE (Titmice and Relatives)</b>	
Oak titmouse	<i>Baeolophus inornatus</i>
<b>FAMILY AEGITHALIDAE (Bushtit)</b>	
Bushtit	<i>Psaltriparus minimus</i>
<b>FAMILY SITTIDAE (Nuthatches)</b>	
White-breasted nuthatch	<i>Sitta carolinensis</i>
<b>FAMILY TROGLODYTIDAE (Wrens)</b>	
Bewick's wren	<i>Thryomanes bewickii</i>
<b>FAMILY REGULIDAE (Kinglets)</b>	
*Ruby-crowned kinglet	<i>Regulus calendula</i>
<b>FAMILY SYLVIIDAE (Old World Warblers and Gnatcatchers)</b>	
Blue-gray gnatcatcher	<i>Poliopitila caerulea</i>
<b>FAMILY TURDIDAE (Thrushes)</b>	
Western bluebird	<i>Sialia mexicana</i>
Hermit thrush	<i>Catharus guttatus</i>
American robin	<i>Turdus migratorius</i>
<b>FAMILY TIMALIIDAE (Babblers)</b>	
*Wrentit	<i>Chamaea fasciata</i>
<b>FAMILY MIMIDAE (Mockingbirds and Thrashers)</b>	
Northern mockingbird	<i>Mimus polyglottos</i>
California thrasher	<i>Toxostoma redivivum</i>
<b>FAMILY STURNIDAE (Starlings and Allies)</b>	
European starling	<i>Sturnus vulgaris</i>
<b>FAMILY PARULIDAE (Wood Warblers and Relatives)</b>	
Orange-crowned warbler	<i>Vermivora celata</i>
Yellow warbler	<i>Dendroica petechia</i>
<b>FAMILY EMBERIZIDAE (Emberizines)</b>	
Spotted towhee	<i>Pipilo maculatus</i>
California towhee	<i>Pipilo crissalis</i>
Lark sparrow	<i>Chondestes grammacus</i>
Sage sparrow	<i>Amphispiza belli</i>
Fox sparrow	<i>Passerella iliaca</i>
Song sparrow	<i>Melospiza melodia</i>
*White-crowned sparrow	<i>Zonotrichia leucophrys</i>
Dark-eyed junco	<i>Junco hyemalis</i>
<b>FAMILY CARDINALIDAE (Cardinals, Grosbeaks and Allies)</b>	
Black-headed grosbeak	<i>Pheucticus melanocephalus</i>
Lazuli bunting	<i>Passerina amoena</i>
<b>FAMILY ICTERIDAE (Blackbirds, Orioles and Allies)</b>	
Red-winged blackbird	<i>Gelaius phoeniceus</i>
Western meadowlark	<i>Sturnella neglecta</i>
Brewer's blackbird	<i>Euphagus cyanocephalus</i>
Brown-headed cowbird	<i>Molothrus ater</i>
<b>FAMILY FRINGILLIDAE (Finches)</b>	

*Purple finch	<i>Carpodacus purpureus</i>
House finch	<i>Carpodacus mexicanus</i>
Lesser goldfinch	<i>Carduelis psaltria</i>
American goldfinch	<i>Carduelis tristis</i>

**CLASS MAMMALIA (Mammals)**

**ORDER INSECTIVORA (Insectivores)**

**FAMILY SORICIDAE (Shrews)**

Ornate shrew	<i>Sorex ornatus</i>
--------------	----------------------

**ORDER CHIROPTERA (Bats)**

**FAMILY VESPERTILIONIDAE (Evening Bats)**

Little brown myotis	<i>Myotis lucifugus</i>
Yuma myotis	<i>Myotis yumanensis</i>
California myotis	<i>Myotis californicus</i>
Silver-haired bat	<i>Lasionycteris noctivagans</i>
Western pipistrelle	<i>Pipistrellus hesperus</i>
Big brown bat	<i>Eptesicus fuscus</i>
Western red bat	<i>Lasiurus blossevillii</i>
Hoary bat	<i>Lasiurus cinereus</i>
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>
Pallid bat	<i>Antrozous pallidus</i>

**FAMILY MOLOSSIDAE (Free-tailed Bats)**

Mexican free-tailed bat	<i>Tadarida brasiliensis</i>
Western mastiff bat	<i>Eumops perotis</i>

**ORDER LAGOMORPHA (Rabbits, Hares and Pika)**

**FAMILY LEPORIDAE (Rabbits and Hares)**

Brush rabbit	<i>Sylvilagus bachmani</i>
--------------	----------------------------

**ORDER RODENTIA (Rodents)**

**FAMILY SCIURIDAE (Squirrels, Chipmunks and Marmots)**

California ground squirrel	<i>Spermophilus beecheyi</i>
Western gray squirrel	<i>Sciurus griseus</i>

**FAMILY GEOMYIDAE (Pocket Gophers)**

Botta's pocket gopher	<i>Thomomys bottae</i>
-----------------------	------------------------

**FAMILY HETEROMYIDAE (Pocket Mice and Kangaroo Rats)**

California pocket mouse	<i>Chaetodipus californicus</i>
-------------------------	---------------------------------

**FAMILY MURIDAE (Mice, Rats and Voles)**

Deer mouse	<i>Peromyscus maniculatus</i>
Dusky-footed woodrat	<i>Neotoma fuscipes</i>
California vole	<i>Microtus californicus</i>

**ORDER CARNIVORA (Carnivores)**

**FAMILY CANIDAE (Foxes, Wolves and Relatives)**

*Coyote	<i>Canis latrans</i>
Gray fox	<i>Urocyon cinereoargenteus</i>

**FAMILY PROCYONIDAE (Raccoons and Relatives)**

Ringtail	<i>Bassariscus astutus</i>
Raccoon	<i>Procyon lotor</i>

**FAMILY MUSTELIDAE (Weasels and Relatives)**

Long-tailed weasel	<i>Mustela frenata</i>
--------------------	------------------------

**FAMILY MEPHITIDAE (Skunks)**

Western spotted skunk	<i>Spilogale gracilis</i>
-----------------------	---------------------------

Striped skunk	<i>Mephitis mephitis</i>
<b>FAMILY FELIDAE (Cats)</b>	
Mountain lion	<i>Puma concolor</i>
Bobcat	<i>Lynx rufus</i>
<b>ORDER ARTIODACTYLA (Even-toed Ungulates)</b>	
<b>FAMILY CERVIDAE (Deer, Elk and Relatives)</b>	
*Black-tailed deer	<i>Odocoileus hemionus ssp. columbianus</i>



**APPENDIX C: U.S. FISH AND WILDLIFE SERVICE CONSERVATION GUIDELINES  
FOR THE VALLEY ELDERBERRY LONGHORN BEETLE**

**United States Department of the Interior  
Fish and Wildlife Service  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825**

**Conservation Guidelines for the Valley Elderberry Longhorn Beetle**

Revised July 9, 1999

The following guidelines have been issued by the U.S. Fish and Wildlife Service (Service) to assist Federal agencies and non-federal project applicants needing incidental take authorization through a section 7 consultation or a section 10(a)(1)(B) permit in developing measures to avoid and minimize adverse effects on the valley elderberry longhorn beetle. The Service will revise these guidelines as needed in the future. The most recently issued version of these guidelines should be used in developing all projects and habitat restoration plans. The survey and monitoring procedures described below are designed to avoid any adverse effects to the valley elderberry longhorn beetle. Thus a recovery permit is not needed to survey for the beetle or its habitat or to monitor conservation areas. If you are interested in a recovery permit for research purposes please call the Service's Regional Office at (503) 231-2063.

**Background Information**

The valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), was listed as a threatened species on August 8, 1980 (Federal Register 45: 52803-52807). This animal is fully protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). The valley elderberry longhorn beetle (beetle) is completely dependent on its host plant, elderberry (*Sambucus* species), which is a common component of the remaining riparian forests and adjacent upland habitats of California's Central Valley. Use of the elderberry by the beetle, a wood borer, is rarely apparent. Frequently, the only exterior evidence of the elderberry's use by the beetle is an exit hole created by the larva just prior to the pupal stage. The life cycle takes one or two years to complete. The animal spends most of its life in the larval stage, living within the stems of an elderberry plant. Adult emergence is from late March through June, about the same time the elderberry produces flowers. The adult stage is short-lived. Further information on the life history, ecology, behavior, and distribution of the beetle can be found in a report by Barr (1991) and the recovery plan for the beetle (USFWS 1984).

**Surveys**

Proposed project sites within the range of the valley elderberry longhorn beetle should be surveyed for the presence of the beetle and its elderberry host plant by a qualified biologist. The beetle's range extends throughout California's Central Valley and associated foothills from about the 3,000-foot elevation contour on the east and the watershed of the Central Valley on the west (Figure 1). All or portions of 31 counties are included: Alameda, Amador, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Madera, Mariposa, Merced, Napa, Nevada, Placer, Sacramento, San Benito, San Joaquin, San Luis Obispo, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba.

If elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level occur on or adjacent to the proposed project site, or are otherwise located where they may be directly or indirectly affected by the proposed action, minimization measures which include planting replacement habitat (conservation planting) are required (Table 1).

All elderberry shrubs with one or more stems measuring 1.0 inch or greater in diameter at ground level that occur on or adjacent to a proposed project site must be thoroughly searched for beetle exit holes (external evidence of beetle presence). In addition, all elderberry stems one inch or greater in diameter at ground level must be tallied by

diameter size class (Table 1). As outlined in Table 1, the numbers of elderberry seedlings/cuttings and associated riparian native trees/shrubs to be planted as replacement habitat are determined by stem size class of affected elderberry shrubs, presence or absence of exit holes, and whether a proposed project lies in a riparian or non-riparian area.

Elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level are unlikely to be habitat for the beetle because of their small size and/or immaturity. Therefore, no minimization measures are required for removal of elderberry plants with no stems measuring 1.0 inch or greater in diameter at ground level with no exit holes. Surveys are valid for a period of two years.

#### **Avoid and Protect Habitat Whenever Possible**

Project sites that do not contain beetle habitat are preferred. If suitable habitat for the beetle occurs on the project site, or within close proximity where beetles will be affected by the project, these areas must be designated as avoidance areas and must be protected from disturbance during the construction and operation of the project. When possible, projects should be designed such that avoidance areas are connected with adjacent habitat to prevent fragmentation and isolation of beetle populations. Any beetle habitat that cannot be avoided as described below should be considered impacted and appropriate minimization measures should be proposed as described below.

#### **Avoidance: Establishment and Maintenance of a Buffer Zone**

Complete avoidance (i.e., no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level. Firebreaks may not be included in the buffer zone. In buffer areas construction-related disturbance should be minimized, and any damaged area should be promptly restored following construction. The Service must be consulted before any disturbances within the buffer area are considered. In addition, the Service must be provided with a map identifying the avoidance area and written details describing avoidance measures.

#### **Protective Measures**

1. Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the Service, provide a minimum setback of at least 20 feet from the dripline of each elderberry plant.
2. Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.
3. Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
4. Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

#### **Restoration and Maintenance**

Restore any damage done to the buffer area (area within 100 feet of elderberry plants) during construction. Provide erosion control and re-vegetate with appropriate native plants.

Buffer areas must continue to be protected after construction from adverse effects of the project. Measures such as fencing, signs, weeding, and trash removal are usually appropriate.

No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level.

The applicant must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed.

Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five (5) feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).

### **Transplant Elderberry Plants That Cannot Be Avoided**

Elderberry plants must be transplanted if they can not be avoided by the proposed project. All elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level must be transplanted to a conservation area (see below). At the Service's discretion, a plant that is unlikely to survive transplantation because of poor condition or location, or a plant that would be extremely difficult to move because of access problems, may be exempted from transplantation. In cases where transplantation is not possible the minimization ratios in Table 1 may be increased to offset the additional habitat loss.

Trimming of elderberry plants (e.g., pruning along roadways, bike paths, or trails) with one or more stems 1.0 inch or greater in diameter at ground level, may result in take of beetles. Therefore, trimming is subject to appropriate minimization measures as outlined in Table 1.

1. Monitor. A qualified biologist (monitor) must be on-site for the duration of the transplanting of the elderberry plants to insure that no unauthorized take of the valley elderberry longhorn beetle occurs. If unauthorized take occurs, the monitor must have the authority to stop work until corrective measures have been completed. The monitor must immediately report any unauthorized take of the beetle or its habitat to the Service and to the California Department of Fish and Game.

2. Timing. Transplant elderberry plants when the plants are dormant, approximately November through the first two weeks in February, after they have lost their leaves. Transplanting during the non-growing season will reduce shock to the plant and increase transplantation success.

#### **3. Transplanting Procedure.**

a. Cut the plant back 3 to 6 feet from the ground or to 50 percent of its height (whichever is taller) by removing branches and stems above this height. The trunk and all stems measuring 1.0 inch or greater in diameter at ground level should be replanted. Any leaves remaining on the plant should be removed.

b. Excavate a hole of adequate size to receive the transplant.

c. Excavate the plant using a Vemeer spade, backhoe, front end loader, or other suitable equipment, taking as much of the root ball as possible, and replant immediately at the conservation area. Move the plant only by the root ball. If the plant is to be moved and transplanted off site, secure the root ball with wire and wrap it with burlap. Dampen the burlap with water, as necessary, to keep the root ball wet. Do not let the roots dry out. Care should be taken to ensure that the soil is not dislodged from around the roots of the transplant. If the site receiving the transplant does not have adequate soil moisture, pre-wet the soil a day or two before transplantation.

d. The planting area must be at least 1,800 square feet for each elderberry transplant. The root ball should be planted so that its top is level with the existing ground. Compact the soil sufficiently so that settlement does not occur. As many as five (5) additional elderberry plantings (cuttings or seedlings) and up to five (5) associated native species

plantings (see below) may also be planted within the 1,800 square foot area with the transplant. The transplant and each new planting should have its own watering basin measuring at least three (3) feet in diameter. Watering basins should have a continuous berm measuring approximately eight (8) inches wide at the base and six (6) inches high.

e. Saturate the soil with water. Do not use fertilizers or other supplements or paint the tips of stems with pruning substances, as the effects of these compounds on the beetle are unknown.

f. Monitor to ascertain if additional watering is necessary. If the soil is sandy and well-drained, plants may need to be watered weekly or twice monthly. If the soil is clayey and poorly-drained, it may not be necessary to water after the initial saturation. However, most transplants require watering through the first summer. A drip watering system and timer is ideal. However, in situations where this is not possible, a water truck or other apparatus may be used.

#### **Plant Additional Seedlings or Cuttings**

Each elderberry stem measuring 1.0 inch or greater in diameter at ground level that is adversely affected (i.e., transplanted or destroyed) must be replaced, in the conservation area, with elderberry seedlings or cuttings at a ratio ranging from 1:1 to 8:1 (new plantings to affected stems). Minimization ratios are listed and explained in Table 1. Stock of either seedlings or cuttings should be obtained from local sources. Cuttings may be obtained from the plants to be transplanted if the project site is in the vicinity of the conservation area. If the Service determines that the elderberry plants on the proposed project site are unsuitable candidates for transplanting, the Service may allow the applicant to plant seedlings or cuttings at higher than the stated ratios in Table 1 for each elderberry plant that cannot be transplanted.

#### **Plant Associated Native Species**

Studies have found that the beetle is more abundant in dense native plant communities with a mature overstory and a mixed understory. Therefore, a mix of native plants associated with the elderberry plants at the project site or similar sites will be planted at ratios ranging from 1:1 to 2:1 [native tree/plant species to each elderberry seedling or cutting (see Table 1)]. These native plantings must be monitored with the same survival criteria used for the elderberry seedlings (see below). Stock of saplings, cuttings, and seedlings should be obtained from local sources. If the parent stock is obtained from a distance greater than one mile from the conservation area, approval by the Service of the native plant donor sites must be obtained prior to initiation of the revegetation work. Planting or seeding the conservation area with native herbaceous species is encouraged. Establishing native grasses and forbs may discourage unwanted non-native species from becoming established or persisting at the conservation area. Only stock from local sources should be used.

#### **Examples**

##### **Example 1**

The project will adversely affect beetle habitat on a vacant lot on the land side of a river levee. This levee now separates beetle habitat on the vacant lot from extant Great Valley Mixed Riparian Forest (Holland 1986) adjacent to the river. However, it is clear that the beetle habitat located on the vacant lot was part of a more extensive mixed riparian forest ecosystem extending farther from the river's edge prior to agricultural development and levee construction. Therefore, the beetle habitat on site is considered riparian. A total of two elderberry plants with at least one stem measuring 1.0 inch or greater in diameter at ground level will be affected by the proposed action. The two plants have a total of 15 stems measuring over 1.0 inch. No exit holes were found on either plant. Ten of the stems are between 1.0 and 3.0 inches in diameter and five of the stems are greater than 5.0 inches in diameter. The conservation area is suited for riparian forest habitat. Associated natives adjacent to the conservation area are box elder (*Acer negundo californica*), walnut (*Juglans californica* var. *hindsii*), sycamore (*Platanus racemosa*), cottonwood (*Populus fremontii*), willow (*Salix gooddingii* and *S. laevigata*), white alder (*Alnus rhombifolia*), ash (*Fraxinus latifolia*), button willow (*Cephalanthus occidentalis*), and wild grape (*Vitis californica*).

Minimization (based on ratios in Table 1):

- Transplant the two elderberry plants that will be affected to the conservation area.
- Plant 40 elderberry rooted cuttings (10 affected stems compensated at 2:1 ratio and 5 affected stems compensated at 4:1 ratio, cuttings planted:stems affected)
- Plant 40 associated native species (ratio of associated natives to elderberry plantings is 1:1 in areas with no exit holes):

5 saplings each of box elder, sycamore, and cottonwood

5 willow seedlings

5 white alder seedlings

5 saplings each of walnut and ash

3 California button willow

2 wild grape vines

Total: 40 associated native species

- Total area required is a minimum of 1,800 sq. ft. for one to five elderberry seedlings and up to 5 associated natives. Since, a total of 80 plants must be planted (40 elderberries and 40 associated natives), a total of 0.33 acre (14,400 square feet) will be required for conservation plantings. The conservation area will be seeded and planted with native grasses and forbs, and closely monitored and maintained throughout the monitoring period.

## **Example 2**

The project will adversely affect beetle habitat in Blue Oak Woodland (Holland 1986). One elderberry plant with at least one stem measuring 1.0 inch or greater in diameter at ground level will be affected by the proposed action. The plant has a total of 10 stems measuring over 1.0 inch. Exit holes were found on the plant. Five of the stems are between 1.0 and 3.0 inches in diameter and five of the stems are between 3.0 and 5.0 inches in diameter. The conservation area is suited for elderberry savanna (non-riparian habitat). Associated natives adjacent to the conservation area are willow (*Salix* species), blue oak (*Quercus douglasii*), interior live oak (*Q. wislizenii*), sycamore, poison oak (*Toxicodendron diversilobum*), and wild grape.

Minimization (based on ratios in Table 1):

- Transplant the one elderberry plant that will be affected to the conservation area.
- Plant 30 elderberry seedlings (5 affected stems compensated at 2:1 ratio and 5 affected stems compensated at 4:1 ratio, cuttings planted:stems affected)
- Plant 60 associated native species (ratio of associated natives to elderberry plantings is 2:1 in areas with exit holes):

20 saplings of blue oak, 20 saplings of sycamore, and 20 saplings of willow, and seed and plant with a mixture of native grasses and forbs

• Total area required is a minimum of 1,800 sq. ft. for one to five elderberry seedlings and up to 5 associated natives. Since, a total of 90 plants must be planted (30 elderberries and 60 associated natives), a total of 0.37 acre (16,200 square feet) will be required for conservation plantings. The conservation area will be seeded and planted with native grasses and forbs, and closely monitored and maintained throughout the monitoring period.

#### **Conservation Area—Provide Habitat for the Beetle in Perpetuity**

The conservation area is distinct from the avoidance area (though the two may adjoin), and serves to receive and protect the transplanted elderberry plants and the elderberry and other native plantings. The Service may accept proposals for off-site conservation areas where appropriate.

1. Size. The conservation area must provide at least 1,800 square feet for each transplanted elderberry plant. As many as 10 conservation plantings (i.e., elderberry cuttings or seedlings and/or associated native plants) may be planted within the 1800 square foot area with each transplanted elderberry. An additional 1,800 square feet shall be provided for every additional 10 conservation plants. Each planting should have its own watering basin measuring approximately three feet in diameter. Watering basins should be constructed with a continuous berm measuring approximately eight inches wide at the base and six inches high.

The planting density specified above is primarily for riparian forest habitats or other habitats with naturally dense cover. If the conservation area is an open habitat (i.e., elderberry savanna, oak woodland) more area may be needed for the required plantings. Contact the Service for assistance if the above planting recommendations are not appropriate for the proposed conservation area.

No area to be maintained as a firebreak may be counted as conservation area. Like the avoidance area, the conservation area should connect with adjacent habitat wherever possible, to prevent isolation of beetle populations.

Depending on adjacent land use, a buffer area may also be needed between the conservation area and the adjacent lands. For example, herbicides and pesticides are often used on orchards or vineyards. These chemicals may drift or runoff onto the conservation area if an adequate buffer area is not provided.

2. Long-Term Protection. The conservation area must be protected in perpetuity as habitat for the valley elderberry longhorn beetle. A conservation easement or deed restrictions to protect the conservation area must be arranged. Conservation areas may be transferred to a resource agency or appropriate private organization for long-term management. The Service must be provided with a map and written details identifying the conservation area; and the applicant must receive approval from the Service that the conservation area is acceptable prior to initiating the conservation program. A true, recorded copy of the deed transfer, conservation easement, or deed restrictions protecting the conservation area in perpetuity must be provided to the Service before project implementation.

Adequate funds must be provided to ensure that the conservation area is managed in perpetuity. The applicant must dedicate an endowment fund for this purpose, and designate the party or entity that will be responsible for long-term management of the conservation area. The Service must be provided with written documentation that funding and management of the conservation area (items 3-8 above) will be provided in perpetuity.

3. Weed Control. Weeds and other plants that are not native to the conservation area must be removed at least once a year, or at the discretion of the Service and the California Department of Fish and Game. Mechanical means should be used; herbicides are prohibited unless approved by the Service.

4. Pesticide and Toxicant Control. Measures must be taken to insure that no pesticides, herbicides, fertilizers, or other chemical agents enter the conservation area. No spraying of these agents must be done within one 100 feet of the area, or if they have the potential to drift, flow, or be washed into the area in the opinion of biologists or law enforcement personnel from the Service or the California Department of Fish and Game.

5. Litter Control. No dumping of trash or other material may occur within the conservation area. Any trash or other foreign material found deposited within the conservation area must be removed within 10 working days of discovery.

6. Fencing. Permanent fencing must be placed completely around the conservation area to prevent unauthorized entry by off-road vehicles, equestrians, and other parties that might damage or destroy the habitat of the beetle, unless approved by the Service. The applicant must receive written approval from the Service that the fencing is acceptable prior to initiation of the conservation program. The fence must be maintained in perpetuity, and must be repaired/replaced within 10 working days if it is found to be damaged. Some conservation areas may be made available to the public for appropriate recreational and educational opportunities with written approval from the Service. In these cases appropriate fencing and signs informing the public of the beetle's threatened status and its natural history and ecology should be used and maintained in perpetuity.

7. Signs. A minimum of two prominent signs must be placed and maintained in perpetuity at the conservation area, unless otherwise approved by the Service. The signs should note that the site is habitat of the federally threatened valley elderberry longhorn beetle and, if appropriate, include information on the beetle's natural history and ecology. The signs must be approved by the Service. The signs must be repaired or replaced within 10 working days if they are found to be damaged or destroyed.

### **Monitoring**

The population of valley elderberry longhorn beetles, the general condition of the conservation area, and the condition of the elderberry and associated native plantings in the conservation area must be monitored over a period of either ten (10) consecutive years or for seven (7) years over a 15-year period. The applicant may elect either 10 years of monitoring, with surveys and reports every year; or 15 years of monitoring, with surveys and reports on years 1, 2, 3, 5, 7, 10, and 15. The conservation plan provided by the applicant must state which monitoring schedule will be followed. No change in monitoring schedule will be accepted after the project is initiated. If conservation planting is done in stages (i.e., not all planting is implemented in the same time period), each stage of conservation planting will have a different start date for the required monitoring time.

Surveys. In any survey year, a minimum of two site visits between February 14 and June 30 of each year must be made by a qualified biologist. Surveys must include:

1. A population census of the adult beetles, including the number of beetles observed, their condition, behavior, and their precise locations. Visual counts must be used; mark-recapture or other methods involving handling or harassment must not be used.
2. A census of beetle exit holes in elderberry stems, noting their precise locations and estimated ages.
3. An evaluation of the elderberry plants and associated native plants on the site, and on the conservation area, if disjunct, including the number of plants, their size and condition.
4. An evaluation of the adequacy of the fencing, signs, and weed control efforts in the avoidance and conservation areas.
5. A general assessment of the habitat, including any real or potential threats to the beetle and its host plants, such as erosion, fire, excessive grazing, off-road vehicle use, vandalism, excessive weed growth, etc.

The materials and methods to be used in the monitoring studies must be reviewed and approved by the Service. All appropriate Federal permits must be obtained prior to initiating the field studies.



Reports. A written report, presenting and analyzing the data from the project monitoring, must be prepared by a qualified biologist in each of the years in which a monitoring survey is required. Copies of the report must be submitted by December 31 of the same year to the Service (Chief of Endangered Species, Sacramento Fish and Wildlife Office), and the Department of Fish and Game (Supervisor, Environmental Services, Department of Fish and Game, 1416 Ninth Street, Sacramento, California 95814; and Staff Zoologist, California Natural Diversity Data Base, Department of Fish and Game, 1220 S Street, Sacramento, California 95814). The report must explicitly address the status and progress of the transplanted and planted elderberry and associated native plants and trees, as well as any failings of the conservation plan and the steps taken to correct them. Any observations of beetles or fresh exit holes must be noted. Copies of original field notes, raw data, and photographs of the conservation area must be included with the report. A vicinity map of the site and maps showing where the individual adult beetles and exit holes were observed must be included. For the elderberry and associated native plants, the survival rate, condition, and size of the plants must be analyzed. Real and likely future threats must be addressed along with suggested remedies and preventative measures (e.g. limiting public access, more frequent removal of invasive non-native vegetation, etc.).

A copy of each monitoring report, along with the original field notes, photographs, correspondence, and all other pertinent material, should be deposited at the California Academy of Sciences (Librarian, California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118) by December 31 of the year that monitoring is done and the report is prepared. The Service's Sacramento Fish and Wildlife Office should be provided with a copy of the receipt from the Academy library acknowledging receipt of the material, or the library catalog number assigned to it.

Access. Biologists and law enforcement personnel from the California Department of Fish and Game and the Service must be given complete access to the project site to monitor transplanting activities. Personnel from both these agencies must be given complete access to the project and the conservation area to monitor the beetle and its habitat in perpetuity.

#### Success Criteria

A minimum survival rate of at least 60 percent of the elderberry plants and 60 percent of the associated native plants must be maintained throughout the monitoring period. Within one year of discovery that survival has dropped below 60 percent, the applicant must replace failed plantings to bring survival above this level. The Service will make any determination as to the applicant's replacement responsibilities arising from circumstances beyond its control, such as plants damaged or killed as a result of severe flooding or vandalism.

#### Service Contact

These guidelines were prepared by the Endangered Species Division of the Service's Sacramento Fish and Wildlife Office. If you have questions regarding these guidelines or to request a copy of the most recent guidelines, telephone (916) 414-6600, or write to:

U.S. Fish and Wildlife Service  
Ecological Services  
2800 Cottage Way, W-2605  
Sacramento, CA 95825

#### Literature Cited

- Barr, C. B. 1991. The distribution, habitat, and status of the valley elderberry longhorn beetle *Desmocerus californicus dimorphus*. U.S. Fish and Wildlife Service; Sacramento, California.
- Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished Report. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.

USFWS. 1980. Listing the valley elderberry longhorn beetle as a threatened species with critical habitat. Federal Register 45:52803-52807.

USFWS. 1984. Recovery plan for the valley elderberry longhorn beetle. U.S. Fish and Wildlife Service, Endangered Species Program; Portland, Oregon.

Table 1: Minimization ratios based on location (riparian vs. non-riparian), stem diameter of affected elderberry plants at ground level, and presence or absence of exit holes.

Location	Stems (maximum diameter at ground level)	Exit Holes on Shrub Y/N (quantify) <sup>1</sup>	Elderberry Seedling Ratio <sup>2</sup>	Associated Native Plant Ratio <sup>3</sup>
non-riparian	stems $\geq 1''$ & $\leq 3''$	No:	1:1	1:1
		Yes:	2:1	2:1
non-riparian	stems $> 3''$ & $< 5''$	No:	2:1	1:1
		Yes:	4:1	2:1
non-riparian	stems $\geq 5''$	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems $\geq 1''$ & $\leq 3''$	No:	2:1	1:1
		Yes:	4:1	2:1
riparian	stems $> 3''$ & $< 5''$	No:	3:1	1:1
		Yes:	6:1	2:1
riparian	stems $\geq 5''$	No:	4:1	1:1
		Yes:	8:1	2:1

<sup>1</sup> All stems measuring one inch or greater in diameter at ground level on a single shrub are considered occupied when exit holes are present anywhere on the shrub.

<sup>2</sup> Ratios in the Elderberry Seedling Ratio column correspond to the number of cuttings or seedlings to be planted per elderberry stem (one inch or greater in diameter at ground level) affected by a project.

<sup>3</sup> Ratios in the Associated Native Plant Ratio column correspond to the number of associated native species to be planted per elderberry (seedling or cutting) planted.

2404000  
To/FR. OTHER  
EL DORADO-6

# NORTH CENTRAL INFORMATION CENTER

CSU-SACRAMENTO - 6000 J STREET, ADAMS BLDG., #103, SACRAMENTO, CA 95819-6100  
916-278-6217 ncic@csus.edu FAX 916-278-5162

RECEIVED  
PLANNING DEPARTMENT

RECEIVED

July 27, 2006

File No: ELD-06-147

Tina Chang  
RRM Design Group  
210 East F Street  
Oakdale, CA 95361

RRM Design Group

**Re: Record Search Results for General Plan and Zone Change Application for G3 Property**

Dear Ms. Chang;

Per your request received by our office on July 26, 2006, a complete records search for the above referenced project was conducted by reviewing the State of California Office of Historic Preservation records, base maps, historic maps, and literature for El Dorado County on file at this office. Review of this information indicates that the proposed project area contains three recorded prehistoric archaeological sites and seven historic-period resources listed with the California Historical Resources Information System (CHRIS). This office has ten records of cultural resource studies conducted within or adjacent to the current project area. State and Federal inventories list no historic properties (buildings, structures, or objects) within the proposed project area.

In this part of El Dorado County, prehistoric-period habitation sites are primarily found adjacent to streams or on ridges or knolls, especially those with a southern exposure (Moratto 1984:290). This region is known as the ethnographic-period territory of the Nisenan, also called the Southern Maidu. The Nisenan had permanent settlements along major rivers in the Sacramento Valley and foothills, and would travel yearly into higher elevations to hunt or gather seasonal plant resources (Wilson and Towne 1978:387-389). The subject property includes gently rolling hills and seasonal waterways among the lower foothills of the western Sierra Nevada Mountains. Deer Creek and several related tributaries cross the G3 property, supporting stands of oaks and other deciduous trees. Two of the previously recorded prehistoric sites are located directly adjacent to minor tributaries of Deer Creek, while the third is located near the top of an open, grassy knoll a few hundred feet from the creek. Given the environmental setting, there is a high sensitivity for prehistoric or ethnohistoric-period Native American sites in the project area.

The 1866 GLO plat of T 9N/R 9E shows an assortment of roads, cabins, houses, and mines in the project area, with a large portion of the area illustrated as "chamizal." The "Sacramento and Placerville Railroad" (a.k.a. Sacramento Valley Railroad, Southern Pacific Railroad) is shown along the eastern property boundary. The limestone quarry and associated outbuildings, roads, and railroad spur in Section 15 appear on the 1949 edition of the USGS

**ATTACHMENT B**

Shingle Springs 7.5' Quad. Other roads in the vicinity were added to the quad as photorevisions circa 1973. Clark (1970) notes that Deer Creek was placer mined during the Gold Rush, and was the site of dragline dredging during the 1930s and 1940s. The previously recorded historic-period resources include remnants of at least two miners' dwellings (stacked-rock walls, hearths) with associated debris and tailings piles, remains of two lime kilns, the limestone quarry and associated features as shown on the USGS Shingle Springs 7.5' Quad, and the foundation of an early twentieth-century cabin or house that may also have associations with local mining. The main route of the Sacramento Valley Railroad has also been recorded with the CHRIS, although the portion adjacent to the current project has not been specifically investigated. Given the known patterns of local historic land use, there is a high sensitivity for historic-period cultural resources in the G3 project area.

**LITERATURE REFERENCED DURING SEARCH:** In addition to the official records and maps for archaeological sites and studies in El Dorado County, the following inventories and references were also reviewed: the National Register of Historic Places (NRHP) - Listed Properties (2006) and Determinations of Eligibility (2006); the California Register of Historic Resources (CRHR) - Listed Properties (2006) and Determinations of Eligibility (2006); the California Inventory of Historic Resources (1976); California State Historical Landmarks (1996 and updates); California Points of Historical Interest (1992 and updates); the Office of Historic Preservation's Historic Property Directory (2006); Caltrans State and Local Bridge Surveys (1987 and 2000); Gold Districts of California (Clark 1970); California Gold Camps (Gudde 1975); California Place Names (Gudde 1969); Historic Spots in California (Hoover et al. 1966 and 1990); Trail of the First Wagons Over the Sierra Nevada (Graydon 1986); Historical Souvenir of El Dorado County (Sioli 1883); Historic Mining Ditches of El Dorado County and the Formation of the El Dorado Irrigation District (Starns 1998); El Dorado County Historical Cemeteries (Starns 2002); the Smithsonian Institution's Handbook of North American Indians, Volume 8, California (Wilson and Towne 1978:387-389); and California Archaeology (Moratto 1984).

**NCIC LIBRARY REPORTS CONSULTED:** Most, if not all, of the G3 property has been investigated for cultural resources. Several archaeological survey reports that describe identical areas have conflicting project location maps, suggesting either that property boundaries have been altered during the past two decades, or that they were simply mapped incorrectly. The following reports detail cultural resource investigations within or immediately adjacent to the current project area:

- NCIC #1457 (McGowan 1991) "Cultural Resources Sensitivity Study for the El Dorado County Southern Pacific Right-of-Way Acquisition Project"
- NCIC #1464 (Derr 1997) "Deer Creek Wastewater Treatment Plant Expansion Project: Cultural Resource Report"
- NCIC #3765 (Windmiller 1996) "Cultural Resources Inventory for the Marble Valley Development Off-Site Utilities and Road Extension, El Dorado County, California"
- NCIC #4568 (Jablonowski 1990) "An Archaeological Study of the 500-Acre Gallo Property Located Near Cameron Park, El Dorado County, California"
- NCIC #4588 (Derr 1990) "A Cultural Resources Study for the Cameron Park/Deer Creek Interceptors and Effluent Pipeline Project: Initial Study"

NCIC #4595 (Starns 1991) "Test Pit Excavations at Two Historic Sites Along Deer Creek, Cameron Park, CA"

NCIC #4597 (Archeo-Tec 1990) "Cultural Resources Evaluation of a 120 Acre Parcel Located to the South of the Intersection of U.S. Highway 50 and Cambridge Road, El Dorado County, California"

NCIC #4598 (Archeo-Tec 1989) "Cultural Resources Evaluation of the Marble Valley Property, El Dorado County, California"

NCIC #6541 (Windmiller 1997) "Supplemental Inventory and Evaluation of Cultural Resources: Marble Valley Development, El Dorado County, California"

NCIC #6625 (Peak & Associates, Inc. 2005) "Cultural Resources Inventory: Recycled Water Seasonal Storage Reservoirs, El Dorado and Sacramento Counties, California"

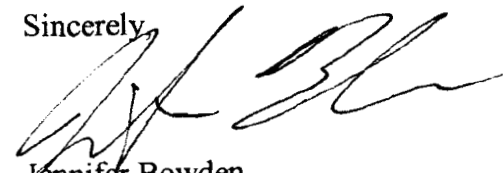
Starns 1989: "A Survey of the Cultural Resources of the Cameron Road - Deer Creek Area, Cameron Park, California"

### **RECOMMENDATIONS:**

- 1) There is a *high sensitivity* for both prehistoric archaeological sites and historic-period cultural resources in the project area. Although most (if not all) of the G3 property has been surveyed for these resources in the past, the recorded resources have not been evaluated for their significance with regard to the NRHP, CRHR, or other applicable criteria. It is recommended that a cultural resources professional undertake these evaluations, so that any future plans for the property may take into account the potential effects to any significant cultural resources, and be designed accordingly. Additional archaeological survey may also be necessary to ensure complete coverage of areas that may have been omitted from previous investigations.
- 2) Review for possible historic structures has included only those sources listed in the attached bibliography and should not be considered comprehensive. The Office of Historic Preservation has determined that buildings, structures, and objects 45 years or older may be of historical value. If the subject parcel contains such properties not noted in our research, they should be assessed by an architectural historian.
- 3) If cultural resources are encountered during any future ground-disturbing activities, avoid altering the materials and their context until a cultural resource consultant has evaluated the situation. Project personnel should not collect cultural resources. Prehistoric resources include chert or obsidian flakes, projectile points, and other flaked-stone artifacts; mortars, grinding slicks, pestles, and other groundstone tools; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic resources include stone or adobe foundations or walls; structures and remains with square nails; mine shafts, tailings, or ditches; and refuse deposits or bottle dumps, often located in old wells or privies.
- 4) Identified cultural resources should be recorded on DPR 523 (A-J) historic resource recordation forms, available at [www.ohp.parks.ca.gov](http://www.ohp.parks.ca.gov).

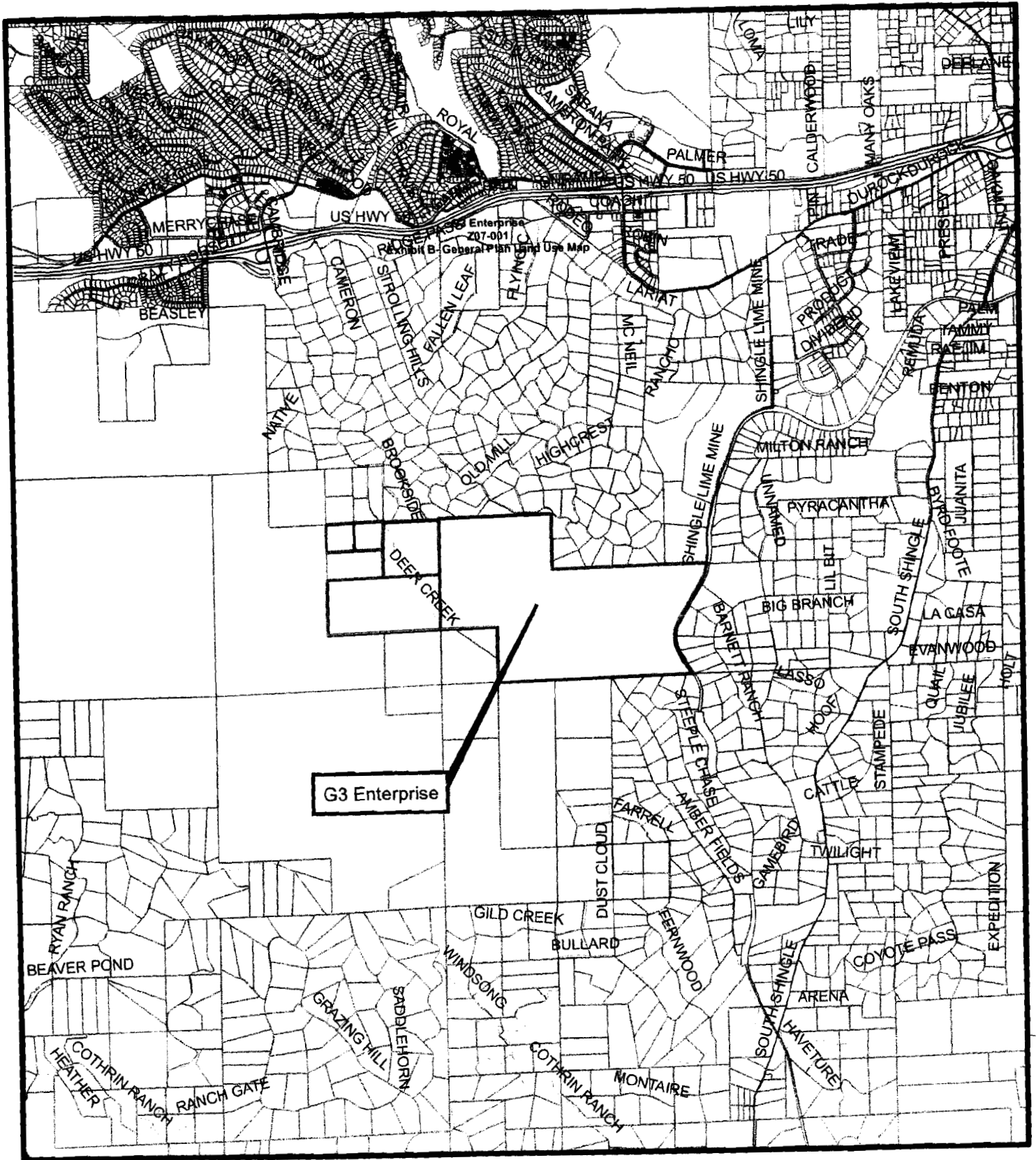
Thank you for using our services. Please contact our office at (916) 278-6217 if you have any questions about this record search. A billing statement is enclosed.

Sincerely,



Jennifer Bowden  
Researcher

# G3 Enterprise Rezone Rezone Application No. Z07-001



**Exhibit A- Vicinity Map**

Map prepared by  
Mel Piquadras  
El Dorado County  
Planning Services

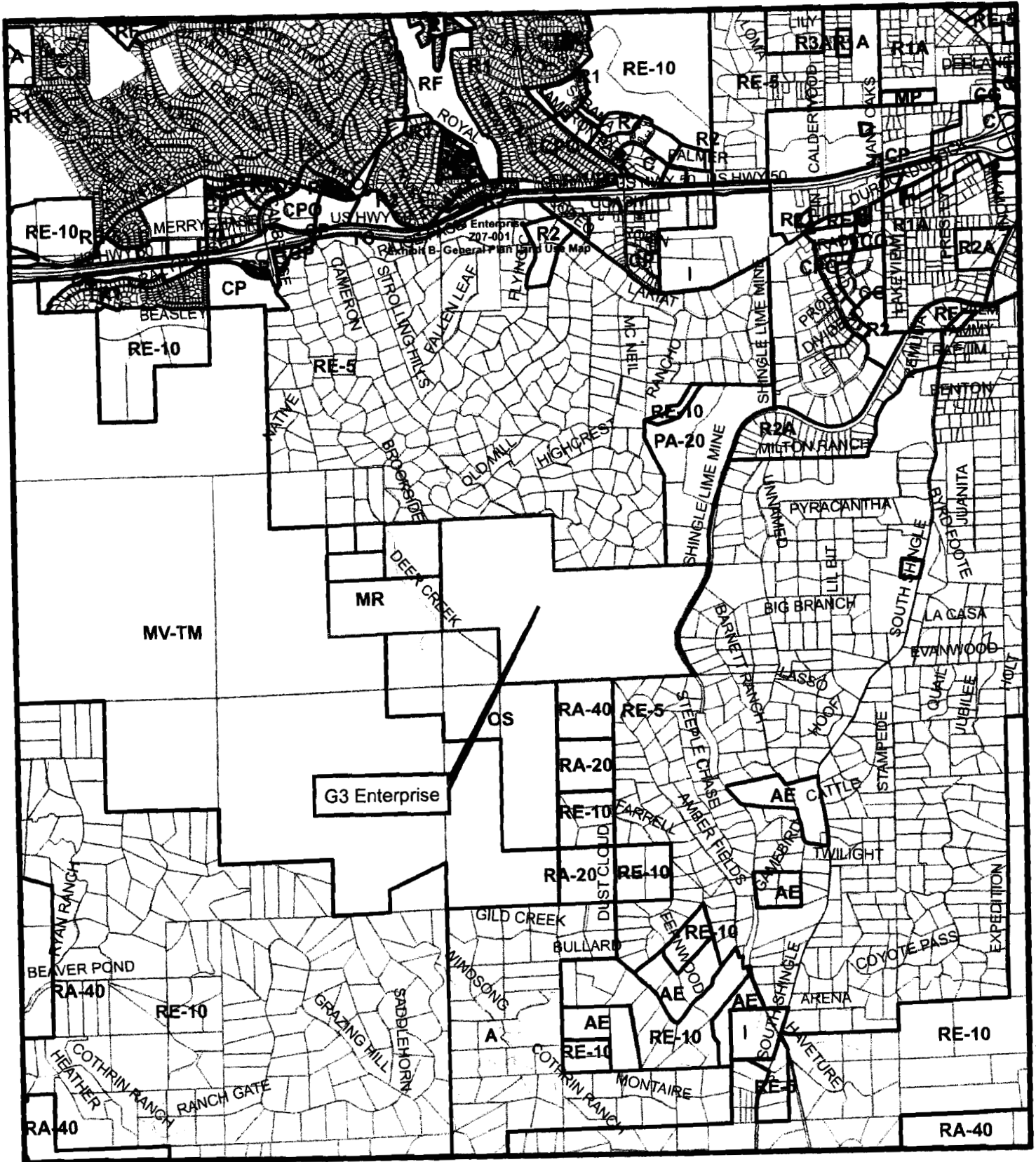
0 385 770 1,540 Feet







# G3 Enterprise Rezone Rezone Application No. Z07-001

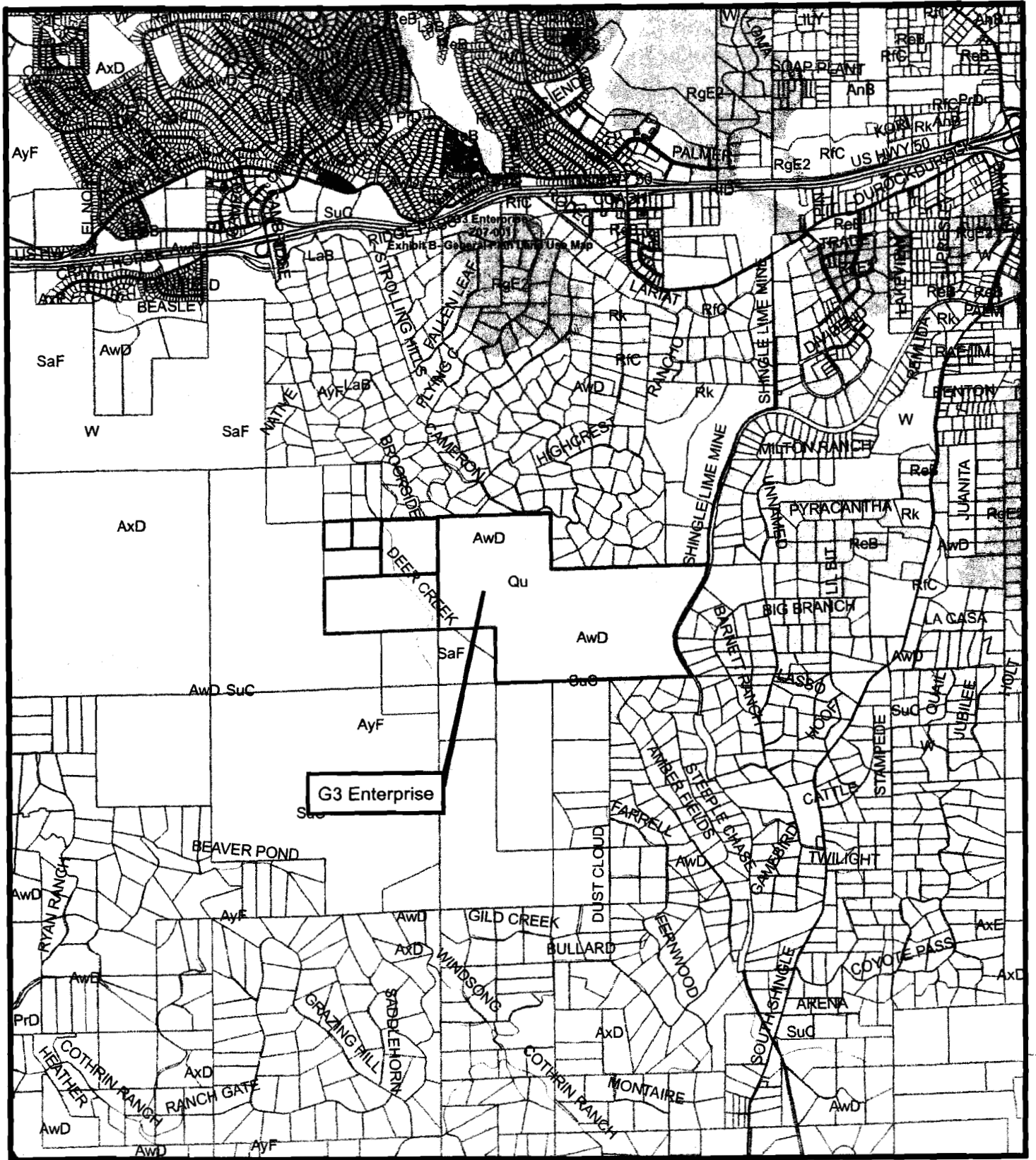


**Exhibit C- Zoning Map**





**G3 Enterprise Rezone  
Rezone Application No. Z07-001**



**Exhibit E- Wetland/Drainage M.**

