TO: **HONORABLE CHAIRMAN AND PLANNING COMMISSION**

FROM: **RON WHISENAND, COMMUNITY DEVELOPMENT DIRECTOR**

SUBJECT: **GENERAL PLAN AMENDMENT 06-003 AND REZONE 06-005 AT GOLDEN HILL ROAD NORTH OF HIGHWAY 46 (APN 025-431-037, 038 AND 039) APPLICANT – PASO 160, LLC- KEN MUNDEE**

DATE: **AUGUST 14, 2007**

Needs: For the Planning Commission to consider a General Plan Amendment and Rezone application to re-designate and rezone the subject property from Agricultural/Airport Overlay to Parks and Open Space/Airport Overlay.

Facts:

1. The project site is an undeveloped 160-acre parcel (comprised of 3 lots) located northeast of Highway 46 at the northern terminus of Golden Hill Road. (See Attachment 1, Vicinity Map).

2. The City Council adopted a General Plan update in December 2003 which includes a Land Use Element and accompanying Land Use Map identifying locations for various land use designations. The current zoning of the property is Residential Agriculture Planned Development (RA PD). The General Plan Land Use Designation is Agriculture (AG)/Airport Overlay.

3. The applicant proposes to amend the land use designation to Parks and Open Space/Airport Overlay and rezone the property from Agriculture to Parks and Open Space/Airport Overlay.

4. The property is also located in the Airport Planning Area (Zone 5), which is regulated by the Airport Land Use Plan (ALUP). See Attachment 2, Airport Land Use Matrix. The San Luis Obispo County Airport Land Use Commission (ALUC) has purview over legislative amendments for determining consistency with the ALUP. The ALUC considered this amendment on June 20, 2007, and determined that the General Plan Amendment and Rezone request was consistent with the ALUP. See Attachment 3, Notice of Airport Land Use Commission Action.

5. The Development Review Committee (DRC) considered this request on July 2, 2007. The DRC review was primarily for informational purposes only, however they did express concerns regarding land use compatibility, infrastructure necessary to serve future potential land uses, and potential traffic impacts. It was noted that these concerns would be evaluated should a future development application be proposed for the property.

6. A & T Arborists prepared an Arborist Report for the project site, which includes an inventory and survey of all trees (blue oaks and valley oaks) on the property. The inventory documented approximately 304 oak trees on the property. Development of the property as intended would result in removal of a significant number of oak trees, many of which have been identified as being in poor condition. The exact number of trees to be requested for removal would be based on a specific development project. Future development plans for

the site would be required to include oak tree protection measures as well as mitigation (replacement) for impacts to or removal of identified oak trees.

7. Althouse and Meade conducted a Preliminary Biological Assessment and floristic survey of the project site (November 2006), and identified flora and fauna on the property. The field survey resulted in identification of 162 species of plants on the property including 110 native species, 52 introduced species, with one special-status plant (shinning navarretia) mapped on the site. The project site has six designated habitat types including annual grassland, blue oak woodland, riparian, ephemeral drainage, vernal pool, and seasonal wetland. More than 108 animal species, including 11 special status species, have the potential to occur on the project site. Site surveys in 2006 observed Golden eagle and active nesting onsite (2 adults and 1 juvenile). Zoological species with the potential to occur include pallid bat, burrowing owl, vernal pool fairy shrimp, white-tailed kite, loggerhead shrike, California linderiella, western spadefoot toad, American badger, and San Joaquin Kit Fox. The Mitigated Negative Declaration prepared for these amendments includes a protocol for future mitigation measures that would apply to the future development of the project site should a development project be proposed. See Initial Study, Attachment 4)

8. Associated Transportation Engineers (ATE) prepared a Traffic Study (July 2007) for the proposed amendments. The study considered potential impacts that would need to be mitigated should any future development occur on the site, and in particular evaluate traffic impacts from an intended conceptual development plan for a large-scale recreation vehicle resort with 600 RV spaces. Again, future development of the site would be subject to a project-specific traffic and circulation impact analysis. Any development that would be more intense than agriculture would result in increased traffic impacts. Traffic mitigations would likely include participation in Highway 46 improvements, and extension of Golden Hill Road to Dry Creek Road. Mitigation protocols regarding traffic impacts are included in the MND for these amendments.

9. Per the California Environmental Quality Act (CEQA), an Initial Study was conducted. No significant environmental impacts that could not be mitigated were identified as result of this request to amend the land use designation and zoning of this property, and a Draft Mitigated Negative Declaration was prepared.

10. Staff contacted the Native American Heritage Commission in compliance with Senate Bill 18, regarding the consultation process for Native American Sacred Places. The Commission referred four tribes to the City to contact. The City contacted the tribes, and one tribe followed up on a site investigation, however, no tribes expressed an interest in a formal consultation regarding sacred places on this property.

Analysis and Conclusions: As noted above, the proposed project is request for amendments to the land use category and zoning of this property. Although the applicant has prepared conceptual development plans for use in technical studies, a development project has not been submitted for this property.

The applicant is requesting the General Plan amendments and rezoning to allow a broader range of land uses in the future than what is currently permitted in the AG-RA land use category and zone. The surrounding land use designations and uses include: Park and

Open Space (grazing/agricultural uses) to the southeast; Business Park to the south (commercial/industrial development); Residential Agriculture Planned Development to the east (grazing/agricultural uses); Public Facilities and Business Park to the north (undeveloped); and low-density single-family estate homes (in the County jurisdiction) to the west. The POS land use category and zoning would allow for a range of low-density land uses including certain agricultural uses, wine tasting facilities, parks, public facilities, and (conditionally) resorts, hotels, and motels. These uses would support the intent of the 2006 Economic Strategy by creating opportunities for tourist-oriented economic development. The Economic Strategy also recognizes the value of protecting agricultural land which could be realized by retaining the property in agricultural land use.

The City has received considerable input from the neighboring property owners to the west of the property regarding these proposed amendments. Property owners are primarily concerned with potential impacts from future development of this site, should the land use amendments be approved. The neighbors are aware of the intended future development project (of the RV park) that the applicant is planning to submit. Again, the comments from the neighbors are primarily concerned with land use compatibility issues that could result from the applicant's future project. Compatibility impacts from development of this site may include: increased traffic in the vicinity; light/glare; noise; site disturbance with significant grading, tree removals, paving, and destruction of wildlife habitat.

Staff met with several neighbors to explain the amendment process, and also indicated that should a development project be applied for this property that project-specific development impacts will be evaluated. Staff also ensured the neighboring property owners that they will continue to have an opportunity to be involved in the public review process if a development project is proposed at this site. A copy of the correspondence received is included in Attachment 4.

An important issue for the Planning Commission to consider regarding the proposed amendments relates to traffic impacts. The existing traffic condition and level of service from the primary access for this property (Highway 46) operates below acceptable levels of service. This means that with all other (cumulative) projects approved and the projected traffic impacts that would result from the land uses already included and evaluated in the General Plan and General Plan EIR, and with planned road improvements, that any traffic that would result from intensification of land uses through modifying what could be allowed to be developed through this amendment, would use up road traffic capacity that has already been attributed to land uses in the General Plan. In essence, development that could occur as a result from amending the uses permitted on this property could use up traffic capacity for other properties as currently zoned. Therefore, if other properties chose to develop their land with uses already permitted in the zoning ordinance, they might be precluded if there is not enough traffic capacity available for their development. Future development of this site would therefore need to ensure there is adequate traffic capacity available for their use above what is currently (negligibly) available now on the highway. As noted above, (consistent with the Circulation Element in the General Plan), one method to help mitigate traffic impacts that may result from this project is to extend Golden Hill Road to Dry Creek Road. This improvement will improve parallel route circulation off the highway, and offset the need for traffic to access the site from Highway 46.

Another consideration regarding these proposed amendments is in regard to the loss of agricultural land. This site is one of the few remaining large properties designated for agricultural use. Conversion of this property to other land uses would permanently remove 160 acres from potential use for agricultural purposes. There are several other properties designated for Parks and Open Space in the near vicinity (north of Highway 46), therefore the Commission should consider the need and importance of converting this property at this time.

There are six different Airport Land Use Planning Zones that regulate specific activities permitted in the ALUP. The zones pertain to the level of safety and airport compatibility in relation to airport activities, flight paths, and noise generation. The ALUP Land Use Matrix defines uses that are considered compatible or prohibited by each zone. The density limitations in the Land Use Matrix provide further limitations on the density of persons that may be allowed per acre, and at any one time. The applicant's property is in Zone 5. The Airport Land Use Commission reviewed the project at its June 20, 2007 meeting and determined the proposed land use amendment and rezoning to be consistent with the Airport Land Use Plan.

The ALUC expressed concern with the potential use of the site as a RV resort with specific concerns related to density, proximity to the runway, and noise. The ALUC recognized that these potential concerns would be evaluated when development plans are submitted for the project site at a later date. Since both the General Plan and the ALUP apply to this property, the City could only allow uses that are consistent with both General Plan policies and regulations of the ALUP and permitted in the applicable Zoning District.

An Initial Study was prepared in accordance with the California Environmental Quality Act (CEQA). Staff determined that no significant environmental impacts would result from this project, and prepared a Mitigated Negative Declaration for consideration. As noted above, mitigations establish the protocol for mitigating potential impacts that would occur as a result from any level of development above what could be allowed under agricultural zoning.

Reference: Paso Robles General Plan and EIR, Paso Robles Zoning Ordinance, Airport Land Use Plan

Fiscal Impact: No direct fiscal impact.

Options: After opening the public hearing and taking public testimony, the Planning Commission is requested to take one of the actions listed below:

1. Evaluate the proposed land use changes in light of General Plan and Economic Strategy policies, as well as, potential impacts to agricultural resources, biological resources, grading, traffic and land use compatibility of the surrounding area. If the Commission finds policy support and determines that impacts can be mitigated, then direct staff to return with an appropriate resolution of support.

2. Make specific findings that this request is not consistent with the City's General Plan, Zoning Ordinance, Economic Strategy and/or will result in an incompatible

land use in the area, and/or will result in significant impacts on environmental resources and City infrastructure capacity to deny these amendment requests.

3. Amend, modify, or reject the above-listed action.

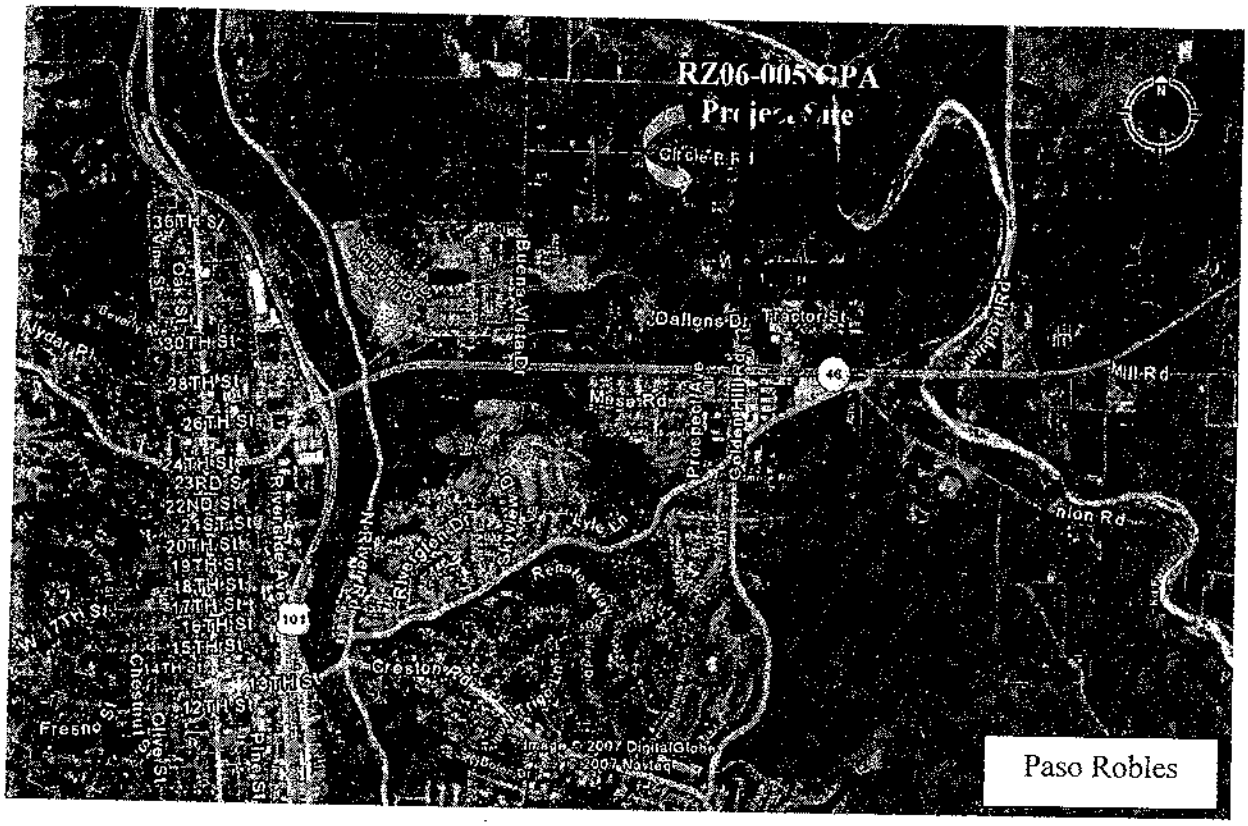
4. Request additional information and analysis.

Staff Report Prepared By: Susan DeCarli and
Tammy Seale, PMC Consultants

Attachments:

1. Vicinity Map
2. Airport Land Use Zone Map and Land Use Matrix
3. Notice of Airport Land Use Commission Action
4. Environmental Review - Initial Study
5. Correspondence Received
6. Newspaper and Mail Notice Affidavits

Attachment 1
Vicinity Map



Mundee General Plan Amendment and Rezone
Golden Hill Rd, north of Highway 46
City of Paso Robles
RZ 06/005 GPA

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PASO ROBLES MOTORCOACH RESORT

CONCEPT PLAN

TABI
PASO ROBLES MUNICIPAL AIRPORT LAI

	Zone 1	Zone 2 [4]	Zone 3 [4]	Zone 4 [4]	Zone 5	Zone 6
Agriculture & Animal Keeping						
Crop production including dry and irrigated farming	O [5]	O	O	O	O	O
Truck Farming, Specialty Crops, Orchards, Vineyards, Landscape Nurseries, Greenhouses	X	O	O	O	O	O
Crop Processing & Packaging, Wineries	X	O	O	O	O	O
Pasture and Rangeland Grazing	O [5]	O	O	O	O	O
Hogs, Dairies, Bee Keeping	X	O	O	O	O	O
Commercial Poultry	X	X	X	X	X	O
Fish Farms, Game Preserves	X	O [6,7,8]	O [8,17]	O [8,16]	O	O
Feed Lots, Stockyards, Sales Yards	X	O [6,7,8]	O [8,17]	O [8,16]	O	O
Animal Hospital, Veterinary Clinic, Kennels, Pet Boarding, Equestrian Facilities, Exotic Animals	X	O [6,7,8]	O [8,17]	O [8,16]	O	O
Roadside Stands, Farmers Markets	X	O [6,7]	O [17]	O [16]	O	O
Residential [9]						
Single Family Residential	X	X	X	X	X	X
Multi-Family Residential, Mobile Home Parks	X	X	X	X	X	X
Group Homes, Convalescent Facilities, Nursing Homes	X	X	X	X	X	X
Granny Flat (1,200 square feet or less)	X	X	X	X	O [10]	O
Caretaker Residence (1,200 square feet or less)	O [10]	O [10]	O [10]	O [10]	O [10]	O
Institutional, Public & Quasi-Public						
All Schools, Hospitals, Correctional Facilities	X	X	X	X	X	O
Libraries, Day Care Centers, Social Clubs/Lodges, Churches	X	X	X	X	X	O
Parks, Playgrounds, Picnic Areas	X	O [6,7]	O [17]	O [16]	O	O
Athletic Fields	X	O [6,7]	O [17]	O [16]	O	O
Cemeteries – People or Pets	X	O	O	O	O	O
Public Utility Facilities (except Electric Plants)	O [11]	O [7]	O [7]	O [7]	O	O
Electric Power Plants and overhead transmission lines	X	X	X	X	X	X
Communications						
Broadcast Studios	X	O	O	O	O	O
Transmission Stations, Towers, Antennas	X	X	X	X	X	X
Resource Extraction						
Mining – Sand, Gravel, Fill Dirt	X	X	X	X	O	O

TABLE 10 (continued)
PASO ROBLES MUNICIPAL AIRPORT LAND USE COMPATIBILITY MATRIX [1,2,3]

	Zone 1	Zone 2 [4]	Zone 3 [4]	Zone 4 [4]	Zone 5	Zone 6
Commercial Recreational						
Arcades, Bowling Alleys, Skating Rinks, Dance and Pool Halls, Card Rooms, Gyms, Health Spas, Indoor Theaters and Auditoriums	X	X	O [17]	O [16]	O	O
Outdoor Theaters, Amusement Parks, Carnivals, Fairs	X	X	O [17]	O [16]	O	O
Golf Courses, Tennis Courts	X	O [6,7]	O [17]	O [16]	O	O
Swimming Pools, Water Slides	X	X	O [17]	O [16]	O	O
Retail Commercial						
Aircraft Fuel, Aircraft Sales and Aircraft Repairs, Flying Schools	O	X	X	X	X	X
Vehicles and Parts Sales, Building Materials, Food and Beverage Sales	X	O [6,7]	O [17]	O [16]	O	O
Shopping Centers	X	X	X	X	O	O
Banks	X	X	O [17]	O [16]	O	O
Gasoline Service Stations	X	X	O [17]	O [16]	O	O
Restaurant and Food Take-Out, General Retail Stores, Tasting Rooms	X	X	O [17]	O [16]	O	O
Convention Centers	X	X	O [17]	O [16]	O	O
Fuel Dealers, Fuel Storage	O	O [13]	O [13]	O [13]	O	O
Service Commercial						
Office Buildings, Public Buildings, Research Laboratories	O [4,5]	X	O [17]	O [16]	O	O
Appliance and Equipment Repair, Car Wash	X	O [6,7]	O [17]	O [16]	O	O
Personal Services, Health Clinics	X	X	O [17]	O [16]	O	O
Recycling	X	O [6,7,14]	O [14,17]	O [14,16]	O	O
Transient Lodgings						
Hotels and Motels, Bed and Breakfast	O [6]	X	O [17]	O [16]	O	O
RV Parks	X	X	X	X	O	O
Wholesale & Storage						
Mini-Storage	X	O [6,7]	O [17]	O [16]	O	O
Warehouse, Wholesale and Distributing	O [15]	O [6,7]	O [17]	O [16]	O	O
Petroleum and Chemical Products – Bulk Storage	O	O [13]	O [13]	O [13]	O	O
Manufacturing & Processing						
Indoor Processes	O [15]	X	O [17]	O [16]	O	O
Outdoor Fabrication Yards	X	X	O [17]	O [16]	O	O
Transportation						
Vehicle Storage and Parking	O	O [6,7]	O [17]	O [16]	O	O
Taxi Stands, Bus Stations/Terminals	O [12]	O	O	O	O	O
Truck Terminals	O [15]	O	O	O	O	O

Notes to Table 10:

1. Land use groups are identified as being "compatible" or "prohibited" using the following interpretations:

   Compatible – Compatible land uses are designated in the Land Use Matrix by the symbol "O". The associated land use groups are at a level of intensity or density, or location, which is not considered to present a significant risk to the safety of persons on the ground or to persons in aircraft overflying the proposed use, nor are the land use groups sensitive to anticipated aircraft noise or frequent aircraft overflights.

   Prohibited – Prohibited land uses are designated in the Land Use Matrix by the symbol "X". The associated land use groups are at a level of intensity or density, or location, which presents a significant risk to the safety of persons on the ground or to persons in aircraft overflying the proposed use, or the land use groups are sensitive to anticipated aircraft noise or frequent aircraft overflights.

2. Review of a proposed local action by the ALUC is not required if the proposed local action is consistent with the Land Use Matrix and does not entail adoption of or an amendment to a general plan, specific plan, zoning ordinance, or building regulations unless such review is desired by the referring agency. If a prohibited land use is the proposed local action, it is considered to be inconsistent with this plan and is subject to review by the ALUC whether or not approval of the proposed land use entails adoption of or an amendment to a general plan, specific plan, zoning ordinance, or building regulations. See Section 6, Procedural Policies.

3. All uses that constitute a hazard to flight, including tall physical objects, glare or other visual interference to a pilot and electronic interference with aircraft operations are specifically excluded from these zones regardless of whether they meet other qualifying criteria, unless such prohibition is precluded by applicable state statutes. Land use development that may cause the attraction of birds is also prohibited. Dedication of an avigation easement to the Airport is required of all new development within the Airport Planning Area.

4. In locations along portions of existing or proposed instrument approach procedure routes, restrictions of object heights to less than indicated by FAR Part 77 may be necessary so as not to impair the utilization of these procedures. The applicable criteria are set forth in the United States Standard for Terminal Instrument Procedures (TERPS). Review of objects relative to these criteria normally is conducted by the FAA as part of aeronautical studies.

5. Allowed as a temporary use of Airport lands provided the activity does not interfere with Airport operations.

6. The use intensity of this activity shall not exceed an average of 20 persons per gross acre, maximum 40 persons per single acre, at any time. Usage calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at any single point in time, whether indoors or outside.

7. No structures, congregations of equipment or vehicles, or public venues shall be located within 250 feet of the extended runway centerlines in Zone 2.

The ALUC generally supports clustering of both residential and non-residential development as a means for both enhancing safety compatibility in the vicinity of airports and accomplishing other development objectives. Clustering occurs when development on a site or within an overall compatibility zone is concentrated in only a portion of the area and the remaining area is held to a low-intensity usage such as agriculture, landscaping, or undeveloped open space.

8. Land uses that incorporate the use of any weapons or implements that would launch a projectile into the air other than animal tranquilizers are expressly prohibited.

9. As a general policy, new residential development is an undesirable land use within the Airport Planning Area (See Policy G-1, Section 4.3). (As such it is the intent of the ALUP to prohibit subdivision of land within the Planning Area, or changes to land use or zoning, in a manner that would accommodate additional dwelling units.) Existing parcels would, however, be entitled to be occupied by existing or new residential dwellings in accordance with General Plan and Zoning in effect as of January 1, 2005.

10. In areas were aircraft noise is expected to exceed 55 dB CNEL, inhabited structures must be designed to achieve an interior noise level of 45 dB CNEL or less.

11. Allowed when the use is secondary to other acceptable land uses.

12. Allowed only to the extent that such uses support the flow of passengers and workers to and from the Airport.

13. For otherwise acceptable land uses, the limit for above-ground storage of hazardous materials is 2,000 gallons.

14. Allowed if dust, fumes, and other aspects of the process are carried out in a controlled environment

15. A compatible use only when the activity is an integral part of an acceptable on-Airport land use.

16. The use intensity of this activity shall not exceed an average of 40 persons per gross acre, maximum 120 persons per single acre, at any time. Usage calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at any single point in time, whether indoors or outside.

17. The use intensity of this activity shall not exceed an average of 60 persons per gross acre, maximum 120 persons per single acre, at any time. Usage calculations shall include all people (e.g., employees, customers/visitors, etc.) who may be on the property at any single point in time, whether indoors or outside.

PLANNING DIVISION

SAN LUIS OBISPO COUNTY
AIRPORT LAND USE COMMISSION

NOTICE OF AIRPORT LAND USE COMMISSION ACTION

JUNE 27, 2007

ALUC 2007-003

HEARING DATE: JUNE 20, 2007

RECOMMENDATION TO: **CITY OF Paso Robles (Susan DeCarli, Planner)**

SUBJECT: **Applicant: Mundee / RV Park mandatory General Plan Amendment project referral**

On June 20, 2007, the Airport Land Use Commission determined the above referenced project consistent with the Paso Robles Municipal Airport Land Use Plan (ALUP) and is referred back to the City of Paso Robles with copies of the Airport Land Use Commission recommendations attached.

If you have any questions regarding this matter, please contact me at (805) 781-5708.

Sincerely,

Chris Macek, Secretary
Airport Land Use Commission

CITY OF PASO ROBLES – PLANNING DIVISION
INITIAL STUDY

1. GENERAL PROJECT INFORMATION

PROJECT TITLE:	**Mundee Motorcoach Resort (RZ06-005/GPA 06-003)**
LEAD AGENCY:	City of Paso Robles - 1000 Spring Street, Paso Robles, CA 93446
Contact:	Susan DeCarli, AICP, City Planner
Telephone:	(805) 237-3970
PROJECT LOCATION:	Golden Hill Road north of Highway 46 (APN 025-431-037, 038 and 039)
PROJECT PROPONENT:	Applicant**:** Paso 160, LLC- Ken and Bill Mundee P.O. Box 2552, Paso Robles, CA 93447 Representative: Larry Werner-North Coast Engineering
LEAD AGENCY CONTACT/ INITIAL STUDY PREPARED BY:	Susan DeCarli, AICP, City Planner
Telephone:	(805) 237-3970
Facsimile:	(805) 237-3904
E-Mail:	sdecarli@prcity.com
GENERAL PLAN DESIGNATION:	Agriculture (AG)/Airport Overlay Zone 4 and Zone 3C
ZONING:	Residential Agriculture Planned Development (RA PD)

2. PROJECT DESCRIPTION

The proposed project is located northeast of Highway 46 at Golden Hill Road, west of and adjacent to Huerhuero Creek. The proposed project is a request for a General Plan Amendment/Rezone to change the land use designation of a 160-acre site from Agriculture (Residential Agriculture/Planned Development)/Airport Overlay to Parks and Open Space/Airport Overlay, and rezone the property from Agriculture to Parks and Open Space/Airport overlay.

The site is not currently in active agricultural production. The property does not have prime soils. Historical use of the site was limited to grazing a small number of cattle on the property. Remnants of past agricultural use include a 12x5 foot concrete pad, watering trough, circular concrete pad for a water tank and a water pump. A large elongated pile of concrete squares is located in the south-central portion of the site. The site is otherwise undeveloped with site topography consisting of rolling hills densely vegetated with a mature blue oak forest. Valley oaks are also present near Huerhuero Creek. Over 2/3 of the 304 oak trees are dispersed throughout the property, and are in good to excellent condition, with the remaining trees ranging from fair to poor, and two standing dead. Surrounding land uses include light industrial uses to the south, Huerhuero Creek and agriculture to the north and east, and rural residential development to the west.

The applicant has provided supplemental assessments as requested by the City for biology, oak trees, cultural resources, and traffic circulation. The site contains blue oak woodland, riparian habitat associated with Huerhuero Creek, seasonal wetlands, and vernal pools that provide potential habitat for the federally listed endangered fairy shrimp. Nesting birds and sensitive plants occur on the site. Bats,

badgers, and western spadefoot toad may also occur on the site. The site is within the three to one habitat replacement ratio for San Joaquin Kit Fox. Golden eagles use the grasslands on the property for hunting and nest in oak trees on the property.

This initial study evaluates the potential environmental impacts of the proposed General Plan Amendment and Zone change. For consideration as appropriate in the initial study, the applicant has submitted a conceptual development plan and accompanying environmental studies (traffic impact study, arborist report, preliminary biological assessment, and cultural resources study). The conceptual development plan envisions a project that may include a 600-space luxury recreational vehicle vacation resort with health spa, tennis courts, swimming pool, jacuzzi, showers, and laundry facilities. A complete environmental review of potential impacts resulting from future development plans for the project site will occur upon request for entitlements from the City.

The site is within the Airport Overlay District and is subject to consistency with the Airport Land Use Plan (ALUP). The project site is required to include mitigation measures for consistency with the ALUP.

3. OTHER AGENCIES WHOSE APPROVAL MAY BE REQUIRED (For example, issuance of permits, financing approval, or participation agreement):

California Department of Fish and Game, US Fish and Wildlife Service, US Army Corps of Engineers, Regional Water Quality Control Board, and Caltrans.

4. EARLIER ENVIRONMENTAL ANALYSIS AND RELATED ENVIRONMENTAL DOCUMENTATION:

This Initial Study incorporates by reference the City of El Paso de Robles General Plan Environmental Impact Report (EIR) (SCH#2003011123).

5. CONTEXT OF ENVIRONMENTAL ANALYSIS FOR THE PROJECT:

This Initial Study relies on expert opinion supported by the facts, technical studies, and technical appendices of the City of El Paso de Robles General Plan EIR. These documents are incorporated herein by reference. They provide substantial evidence to document the basis upon which the City has arrived at its environmental determination regarding various resources.

6. PURPOSES OF AN INITIAL STUDY

The purposes of an Initial Study for a Development Project Application are:

A. To provide the City with sufficient information and analysis to use as the basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration for a site specific development project proposal;

B. To enable the Applicant of a site specific development project proposal or the City as the lead agency to modify a project, mitigating adverse impacts before an Environmental Impact Report is required to be prepared, thereby enabling the proposed Project to qualify for issuance of a Negative Declaration or a Mitigated Negative Declaration;

C. To facilitate environmental assessment early in the design of a project;

D. To eliminate unnecessary EIRs;

E. To explain the reasons for determining that potentially significant effects would not be significant;

F. To determine if a previously prepared EIR could be used for the project;

G. To assist in the preparation of an Environmental Impact Report if one is required; and

H. To provide documentation of the factual basis for the finding of no significant effect as set forth in a Negative Declaration or a Mitigated Negative Declaration prepared for the a project.

7. EXPLANATION OF ANSWERS FOUND ON THE ENVIRONMENTAL CHECKLIST FORM

A. Scope of Environmental Review

This Initial Study evaluates potential impacts identified in the following checklist.

B. Evaluation of Environmental Impacts

1. A brief explanation is required for all answers to the questions presented on the following Environmental Checklist Form, except where the answer is that the proposed project will have "No Impact." The "No Impact" answers are to be adequately supported by the information sources cited in the parentheses following each question or as otherwise explained in the introductory remarks. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project. A "No Impact" answer should be explained where it is based on project-specific factors and/or general standards. The basis for the "No Impact" answers on the following Environmental Checklist Form is explained in further detail in this Initial Study in Section 9 (Earlier Environmental Analysis and Related Environmental Documentation) and Section 10 (Context of Environmental Analysis for the Project).

2. All answers on the following Environmental Checklist Form must take into account the whole action involved with the project, including implementation. Answers should address 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. "Potentially Significant Impact" is appropriate, if an effect is significant or potentially significant, or if the lead agency lacks information to make a finding of insignificance. If there are one or more "Potentially Significant Impact" entries when the determination is made, preparation of an Environmental Impact Report is warranted.

4. Potentially Significant Impact Unless Mitigated" 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. Mitigation Measures from Section 9 (Earlier Environmental Analysis and Related Environmental Documentation) may be cross-referenced).

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). See Section 4 (Earlier Environmental Analysis and Related Environmental Documentation) and Section 11 (Earlier Analysis and Background Materials) of this Initial Study.

6. References to the information sources for potential impacts (e.g., general plans, zoning ordinances) have been incorporated into the Environmental Checklist Form. See Section 11 (Earlier Analysis and Related Environmental Documentation). Other sources used or individuals contacted are cited where appropriate.

7. The following Environmental Checklist Form generally is the same as the one contained in Title 14, California Code of Regulations, with some modifications to reflect the City's needs and requirements.

8. Standard Conditions of Approval: The City imposes standard conditions of approval on Projects. These conditions are considered to be components of and/or modifications to the Project and some reduce or minimize environmental impacts to a level of insignificance. Because they are considered part of the Project, they have not been identified as mitigation measures. For the readers' information, the standard conditions identified in this Initial Study are available for review at the Community Development Department.

9. Certification Statement: The statements made in this Initial Study and those made in the documents referenced herein present the data and information that are required to satisfy the provisions of the California Environmental Quality Act (CEQA) – Statutes and Guidelines, as well as the City's Procedures for Implementing CEQA. Further, the facts, statements, information, and analysis presented are true and correct in accordance with standard business practices of qualified professionals with expertise in the development review process, including building, planning, and engineering.

8. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The proposed project may potentially affect the environmental factors checked below, and may involve at least one impact that is a "Potentially Significant Impact" or is "Potentially Significant Unless Mitigated," if so indicated on the following Environmental Checklist Form (Pages 8 to.15)

☐ Land Use & Planning	☐ Transportation/Circulation	☐ Public Services
☐ Population & Housing	■ Biological Resources	☐ Utilities & Service Systems
☐ Geological Problems	☐ Energy & Mineral Resources	☐ Aesthetics
☐ Water	■ Hazards	☐ Cultural Resources
☐ Air Quality	☐ Noise	☐ Recreation
	☐ Mandatory Findings of Significance	

9. ENVIRONMENTAL DETERMINATION: On the basis of this initial evaluation: I find that:

The proposed project could not have a significant effect on the environment; and, therefore, a **NEGATIVE DECLARATION** will be prepared. ☐

Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. Therefore, a **MITIGATED NEGATIVE DECLARATION** will be prepared. ■

The proposed project may have a significant effect on the environment; and, therefore an **ENVIRONMENTAL IMPACT REPORT** is required. ☐

The proposed project may have a significant effect(s) on the environment, but one or more effects (1) have been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) have been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or is "potentially significant unless mitigated." ☐

Therefore, an **ENVIRONMENTAL IMPACT REPORT** is required, but it will analyze only the effect or effects that remain to be addressed.

Signature: Date:

July 13, 2007

Susan DeCarli, AICP, City Planner

10 Environmental Checklist Form

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

I. LAND USE AND PLANNING. Would the Proposal:

a) Conflict with general plan designation or zoning? (Sources: 1 & 8) ☐ ☐ ☐ ☑

Discussion: The proposed project includes a General Plan Amendment (GPA) and zoning change from Agriculture Planned Development (AG PD) to Park and Open Space (POS). The Park and Open Space Land Use Category is intended for open space and recreation uses on public or private properties, specifically, parks, lands along creeks and steep, wooded hillsides, hotels and motels in proximity to golf courses and commercial recreation. Recreational vehicle parks are a conditionally permitted use in the POS category. Concurrent amendments to both the General Plan Land Use designation and zoning will eliminate the potential for conflicts between these two documents.

The City's General Plan and Land Use Map include the subject property in the Airport Overlay Designation (Zone 3A and Zone 4), which requires review of proposed General Plan or Zoning Amendments by the Airport Land Use Commission (ALUC) for a determination of consistency with the Airport Land Use Plan (ALUP). The City submitted the project description to the ALUC for consideration at their June 20, 2007 meeting, and the ALUC made the requisite finding of consistency.

A conceptual development plan for future development of this property may include a 600-space luxury recreational vehicle vacation resort; however, the details of the proposed development for the site are speculative until formal submittal of a development plan to the City. The City will evaluate future land uses and development plans on the project site for consistency with the General Plan, Zoning Ordinance, and Airport Land Use Plan, if the property owner requests entitlements.

b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project? (Sources: 1 & 3) ☐ ☐ ☑ ☐

Discussion: As noted above, the project site includes an Airport Overlay (AP) and is therefore subject to special review by the Airport Land Use Commission for consistency with the Airport Land Use Plan (ALUP). The ALUC found the proposed GPA/RZ to be consistent with the ALUP on June 20, 2007.

Protection of biological resources including the Huerhuero Creek, vernal pools, wetlands, sensitive plants, and sensitive animals are discussed in Section VII - Biological Resources. The proposed project does not conflict with applicable environmental plans and policies.

This project does not include specific plans for development of the project site; future development may require consultation with several agencies including California Department of Fish and Game, US Fish and Wildlife Service, US Army Corps of Engineers and Regional Water Quality Control Board.

c) Be incompatible with existing land uses in the vicinity? (Sources: 1 & 3) ☐ ☐ ☑ ☐

Discussion: The surrounding land use designations are Park and Open Space to the southeast; Business Park to the south; Residential Agriculture Planned Development to the east and Public Facilities and Business Park to the north. Rural Residential development is located immediately west of the site in the jurisdiction of San Luis Obispo County. Existing uses adjacent to the project site include commercial/light industrial, low-density single-family homes, and open space/grazing.

Examples of permitted uses in Parks/Open Space zoning include agricultural uses and facilities, wholesale nurseries, wine-tasting rooms, convention centers, and public parks. Conditionally permitted uses in the POS zone include, but are not limited to, equestrian facilities, wineries, golf courses, ball fields, recreational vehicle parks, hotels, and motels. Conditionally permitted uses are uses that may be compatible and consistent with the specific zoning district but for which

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

potential impacts that may result from specific uses can be addressed through implementation of conditions of approval applied to development. Given the range of potential future land uses and the ability to exercise discretion in the review of future development projects, and the mix of surrounding land uses in the nearby vicinity, potential compatibility issues from future development projects, such as light, noise, and traffic, may be addressed through project specific mitigation measures and/or conditions of approval. Therefore, it is determined that designation and zoning of Parks and Open Space for the proposed General Plan amendment and rezoning will result in less than significant impacts to existing uses in the project vicinity.

d) Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible uses)?	☐	☐	☑	☐

Discussion: The General Plan EIR included an evaluation of the City's agricultural resources, which determined the underlying soil on this property is not prime, of statewide importance, or unique farmland. Historical and existing agricultural uses include cattle grazing on the project site and vineyards north of the property. The proposed land use and zoning change from Agriculture to Parks and Open Space would not affect the ability of existing or future agricultural activities to occur since horse, cattle, and sheep grazing and keeping and crop production are permitted uses in the POS zone. As described in Section A, the GPA/RZ does allow non-agricultural uses to be established and any future development plan for the project site would be evaluated for compatibility and potential impacts to agricultural resources.. Therefore, the proposed amendments will result in less than significant impacts to agricultural resources or operations.

e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: The project site is currently designated for agricultural production and located adjacent to other similar land use designations. The general plan amendment/rezone and will not disrupt or divide the established community. Future land uses and development would be required to address this issue on a case-by-case basis.

II. POPULATION AND HOUSING. Would the proposal:

a) Cumulatively exceed official regional or local population projections? (Sources: 1 & 3)	☐	☐	☑	☐

Discussion: The proposed project does not include a residential component nor is it large enough to result in creating a significant number of new jobs that could affect cumulative population projections. The proposed GPA/RZ will not cumulatively exceed local or regional population projections; therefore, the project will not result in significant impacts.

b) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)? (Sources: 1 & 3)	☐	☐	☑	☐

Discussion: The GPA/rezone would change the land use category from Agriculture to Parks and Open Space, in an area adjacent to light industrial and residential uses. Developed areas northeast of the site within the City's sphere of influence include business park and airport uses. Future non-agricultural uses associated with the proposed Parks and Open Space designation could require extension of City services to the project site including water lines, sewer service, and the extension of Golden Hill Road north to Dry Creek Road. The City's Circulation Element of the General Plan identified and projected the extension of Golden Hill Road and evaluated it as part of the General Plan EIR.

Future development of the project site would be limited to allowed uses in the POS Zone (refer to Land Use section D).

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Permitted uses include agriculture with associated residential facilities (although new residential uses are not permitted under the ALUP), and public park and open space uses, which are not anticipated to induce substantial growth directly or indirectly. Future development of conditionally permitted uses, such as hotels, recreational vehicle parks, and golf courses, would be evaluated for potential impacts to public services and growth on a case-by-case basis as part of the City's Conditional Use Permit process. The extension of services that may occur as a result of the proposed GPA/rezone is not anticipated to induce substantial growth.

c) Displace existing housing, especially affordable housing? (Sources: 1, 3, & 5) ☐ ☐ ☐ ☑

Discussion: There is no housing currently existing on the project site, thus the project will not displace any existing housing.

III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:

a) Fault rupture? (Sources: 1, 2, & 3) ☐ ☐ ☑ ☐

Discussion: The potential for and mitigation of impacts that may result from fault rupture in the project area are identified and addressed in the General Plan EIR, pg. 4.5-8. There are two known fault zones on either side of this valley. The Rinconada Fault system runs on the west side of the valley. The San Andreas Fault is on the east side of the valley and runs through the community of Parkfield east of Paso Robles. The City of Paso Robles recognizes these geologic influences in the application of the Uniform Building Code to all new development within the City. Review of available information and examinations indicate that neither of these faults is active with respect to ground rupture in Paso Robles. Soils reports and structural engineering in accordance with local seismic influences may be necessary in conjunction with future development proposals. Based on standard conditions of approval, the potential for fault rupture and exposure of persons or property to seismic hazards is not considered significant.

b) Seismic ground shaking? (Sources:1, 2, & 3) ☐ ☐ ☑ ☐

Discussion: The City is located within an active earthquake area that could experience seismic ground shaking from the Rinconada and San Andreas Faults. The General Plan EIR identified impacts resulting from ground shaking as less than significant and provided mitigation measures that will be incorporated into the design of future development projects including adequate structural design and not constructing over active or potentially active faults. Future structures will be constructed to current UBC codes.

c) Seismic ground failure, including liquefaction? (Sources: 1, 2 & 3) ☐ ☐ ☑ ☐

Discussion: Per the General Plan EIR, the project site is located in an area with soil conditions that have a low potential for liquefaction or other type of ground failure due to seismic events. No special considerations other than what would be required by ordinance or code are necessary.

d) Seiche, tsunami, or volcanic hazard? (Sources: 1, 2, & 3) ☐ ☐ ☐ ☑

e) Landslides or Mudflows? (Sources: 1, 2, & 3) ☐ ☐ ☐ ☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: d. and e. The project site is not located near oceanic bodies of water or volcanic hazards, nor is the site located in an area subject to landslides. A portion of Huerhuero Creek is located on the project site, and future development would be set back and constructed to allow for flows from large storm events. Future development plans would be designed in accordance with the Preliminary Biological Assessment (Althouse & Meade, November 2006) prepared for the project, which identifies a 100-foot buffer from the edge of riparian resources that would be required of future development (refer to Section VII Biological Resources). The proposed GPA/RZ is not anticipated to expose people to potential impacts from landslides or mudflows.

f) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? (Sources: 1, 2, 3, & 4)	☐	☐	☑	☐
g) Subsidence of the land? (Sources: 1, 2, & 3)	☐	☐	☐	☑
h) Expansive soils? (Sources: 4)	☐	☐	☑	☐
i) Unique geologic or physical features? (Sources:1 & 3)	☐	☐	☐	☑

Discussion: f-h. Per the General Plan EIR, the soil condition is not erosive or otherwise unstable. Expansive soils characteristics would be identified in association with future development proposals. No unique geologic or physical features are present that would be disturbed. As such, no significant impacts are anticipated. Standard erosion control measures and building code requirements would be adequate to reduce potential impacts of future development to less than significant and no mitigation measures are necessary.

IV. WATER. Would the proposal result in:

a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? (Sources:1, 3, & 7)	☐	☐	☐	☑
b) Exposure of people or property to water related hazards such as flooding? (Sources: 1, 3, & 7)	☐	☐	☐	☑
c) Discharge into surface waters or other alteration of surface water quality (e.g., temperature, dissolved oxygen or turbidity)? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Changes in the amount of surface water in any water body? (Sources: 1, 3, & 7)	☐	☐	☐	☑
e) Changes in currents, or the course or direction of water movement? (Sources: 1, 3, & 7)	☐	☐	☐	☑
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability? (Sources: 1,3, & 7)	☐	☐	☐	☑
g) Altered direction or rate of flow of groundwater? (Sources: 1, 3, & 7)	☐	☐	☐	☑
h) Impacts to groundwater quality? (Sources: 1, 3, & 7)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Substantial reduction in the amount of groundwater otherwise available for public water supplies? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: a – i: The proposed project does not include development. The proposed change in the land use and zoning from Agriculture to Park and Open Space will not result in a significant negative effect to water resources. Future development projects will be evaluated for specific impacts to existing surface and groundwater resources.

V. AIR QUALITY. Would the proposal:

a) Violate any air quality standard or contribute to an existing or projected air quality violation? (Sources: 1, 3, & 7)	☐	☐	☑	☐
b) Expose sensitive receptors to pollutants? (Sources: 1, 3, & 7)	☐	☐	☑	☐
c) Alter air movement, moisture, or temperature? (Sources: 1, 3, & 7)	☐	☐	☑	☐
d) Create objectionable odors?	☐	☐	☐	☑

Discussion a – d:

The project does not include development nor does it propose density exceeding what is designated and evaluated in the General Plan and General Plan EIR, thus impacts to air pollution related issues could not be affected by this project. Future development of this property would be evaluated for project specific impacts to air quality.

VI. TRANSPORTATION/CIRCULATION. Would the proposal result in:

a) Increased vehicle trips or traffic congestion? (Sources: 1, 3, & 7)	☐	☐	☑	☐

Discussion: The road network serving the project site includes a major highway, local arterial, and collector streets. State Route 46 is an east-west highway south of the project site and intersects with Golden Hill Road (signalized intersection). Primary access to the project site is via Golden Hill Road, an arterial road until its intersection with Wisteria Lane where it narrows to one-lane and then terminates at the southwest boundary of the project site. Dallons Road is an east-west roadway that connects with Golden Hill Road (unsignalized) and North River Road to the west. The City's Circulation Element identifies future improvements to the roadway network to serve projected buildout including expansion of SR 46E to a 6-lane arterial from US Hwy 101 to Union Road, the expansion of Golden Hill Road to a 4-lane arterial with an extension to Dry Creek Road.

Associated Transportation Engineers prepared a Traffic Study (July 2007) for the Mundee site that considers the proposed project (GPA/RZ) and a conceptual development plan for future development of a future recreation vehicle resort. The proposed project is limited to a General Plan Amendment and Rezoning from Agriculture to Parks and Open Space. A development plan is not part of this project and impacts resulting from future development will be evaluated upon submittal of entitlement requests from the City.

ATE's traffic study characterized the existing level of service for SR 46 between US Highway 101 and Golden Hill Road as "C" which is acceptable; however, the highway experiences high vehicle delays and congestion during weekends and holidays. CalTrans and the City have coordinated on planned improvements to the US Highway 101/State Route 46 East interchange and SR 46E corridor to reduce congestion. Existing weekday levels of service at key intersections serving the site

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

are "F" at the SR 46/Golden Hill Road intersection and "A" at the Golden Hill Rd/Dallons Rd intersection during am and pm peak hours.

The proposed land use designation and zoning change has the potential to increase the types and intensity of uses on the site and impact levels of services to adjacent; however, more intensive allowed uses, such as hotels, recreation vehicle resorts, lodges, golf courses, playgrounds and ball fields are conditional uses that would be evaluated for their potential transportation and circulation impacts upon submittal of a development plan to the City. The General Plan Update EIR characterizes generalized effects of development under the General Plan and provides appropriate policy level mitigation measures. Future development of the project site will be required to mitigate identified potential circulation and transportation impacts to less than significant levels.

Any development of the site will provide mitigation measures to traffic impacts including but not limited to participation in the improvement of the intersection of Golden Hill Road and Highway 46E, participation in improvements to the intersection of Airport Road and Highway 46E, participation in efforts to establish parallel routes to Highway 46E and payment of AB 1600 transportation impact fees.

b) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Sources: 1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: The proposed project is a GPA/RZ and does not include development and associated design features and will not result in safety hazards.

c) Inadequate emergency access or inadequate access to nearby uses? (Sources:1, 3, & 7) ☐ ☐ ☐ ☑

Discussion: The project site has limited access from local public roads; however, ingress and egress from the site to Golden Hill Road is adequate to serve emergency needs. The proposed project is a GPA/RZ and does not include development and no impact to emergency access is anticipated.

d) Insufficient parking capacity on-site or off-site? (Sources: 1, 3, 7, & 8) ☐ ☐ ☐ ☑

Discussion: The proposed project is a GPA/RZ and does not include development and no impact to parking on or offsite is anticipated.

e) Hazards or barriers for pedestrians or bicyclists? (Source: 7) ☐ ☐ ☐ ☑

Discussion: Discussion: The proposed project is a GPA/RZ and does not include development and no impacts to pedestrians or bicyclists are expected. Future development of the site would be required to assess potential for impacts and implement mitigation measures.

f) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Sources: 1 & 8) ☐ ☐ ☐ ☑

The proposed project is a GPA/RZ, does not include development, and does not conflict with adopted General Plan policies supporting alternative transportation. Future development of the site would be required to assess potential for impacts and

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
implement mitigation measures.				
g) Rail, waterborne or air traffic impacts?	☐	☐	☐	☑

Discussion: The project site is not adjacent to rail or waterway corridors and will have no impact. The project site is within the Paso Robles Airport Area though impacts to air traffic are not anticipated as a result of the proposed GPA/RZ. (Refer to Section IX Hazards for more discussion of potential airport impacts.)

VII. BIOLOGICAL RESOURCES. Would the proposal result in impacts to:

a) Endangered, threatened or rare species or their habitats (including but not limited to: plants, fish, insects, animals, and birds)?	☐	☑	☐	☐
b) Locally designated species (e.g., heritage trees)?	☐	☑	☐	☐
c) Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?	☐	☑	☐	☐
d) Wetland habitat (e.g., marsh, riparian and vernal pool)?	☐	☑	☐	☐
e) Wildlife dispersal or migration corridors?	☐	☑	☐	☐

*Discussion a - e: The project site has six designated habitat types including annual grassland, blue oak woodland, riparian, ephemeral drainage, vernal pool, and seasonal wetland. The California Natural Diversity Database (CNDDB) identified several sensitive species with the potential to occur within the project area. A Preliminary Biological Assessment (Althouse & Meade; November 2006) and floristic survey conducted from May through July 2006 (Althouse & Meade) identified 162 species of plants on the property including 110 native species, 52 introduced species, with one special-status plant (shinning navarretia [*Navarretia nigelliformis *ssp.* radians*]) mapped on the site. Other special-status botanical species with the potential to occur (but not identified) include: Salinas Valley goldfields (*Lasthenia leptalea), *round-leaved erodium (*Erodium macrophyllum), *Douglas' spineflower (*Chorizanthe douglasii) *Obispo Indian paintbrush (*Castilleja densiflora obispoensis), *and dwarf calycadenia (*Calycadenia villosa).

*More than 108 animal species, including 11 special status species, have the potential to occur on the project site. Site surveys in 2006 observed Golden eagle (*Aquila chrysaetos*) and documented active nesting onsite (2 adults and 1 juvenile). (Althouse & Meade). Zoological species with the potential to occur include pallid bat (*Antrozous pallidus), *burrowing owl (*Athene cunicularia), *vernal pool fairy shrimp (*Branchinecta lynchi)*,white-tailed kite (*Elanus leucurus), *loggerhead shrike (*Lanius ludovicianus), *California linderiella (*Linderiella occidentalis), *western spadefoot toad (*Spea hammondii), *American badger* (Taxidea taxus*), and San Joaquin Kit Fox (*Volpes macrotis mutica*).*

Oak woodland and grassland are the prominent vegetation types on the property. One special-status plant was mapped and an occupied eagle nest was identified in 2006. Vernal pools, a sensitive natural community of local concern, are present on the property and have the potential to harbor species of special concern. Future development has the potential to affect federally listed species and coordination with the U.S. Fish and Wildlife Service (USFWS) would be necessary. Nesting birds are protected via the Migratory Bird Treaty Act of 1918 as regulated by the USFWS and the California Department of Fish and Game (CDFG). Any work that affects Huerhuero Creek bed or bank of existing drainage, including culverts and bridges, are likely to require Army Corps, RWQCB, and CDFG consultation and authorizations.

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

A & T Arborists prepared an Arborist Report for the project site, which includes an inventory and survey of all trees (blue oaks and valley oaks) on the property. The inventory documented approximately 304 oak trees on the property. Development plans would be reviewed in consultation with this report to identify oak tree locations. Oak tree protection measures would need to be prepared concurrent with any development proposal to ensure these sensitive trees are adequately protected.

The biological reconnaissance on the project site thoroughly identified constraints and potential impacts that could occur in association with future development. Mitigation measures are necessary to reduce potentially significant impacts to biological resources to a less than significant level. These mitigations have been incorporated into the proposed GPA/rezone project to provide clear direction on what biological protection measures would be required for any development submittal on the project site (refer to Exhibit B).

VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:

a) Conflict with adopted energy conservation plans? (Sources: 1)	☐	☐	☐	☑

Discussion: The proposed project will not conflict with adopted energy conservation plans. Future development on the project site will be required to comply with California Energy Code.

b) Use non-renewable resources in a wasteful and inefficient manner? (Sources: 1)	☐	☐	☐	☑

Discussion: The project will not use or promote the use of non-renewable resource in a wasteful and inefficient manner.

c) Result in the loss of availability of a known mineral resource that would be of future value to the region and the residents of the State? (Sources: 1, 7)	☐	☐	☐	☑

Discussion: The project is not located in an area of known mineral resources that would be of future value to the region and the residents of the State.

IX. HAZARDS. Would the proposal involve:

a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?	☐	☐	☑	☐

Discussion: The proposed project does not include the use, transport, or storage of hazardous materials and will not result in a risk of accidental explosion or release of hazardous substances.

b) Possible interference with an emergency response plan or emergency evacuation plan? (Sources: 1 & 7)	☐	☐	☐	☑

Discussion: The proposed project will not interfere with an emergency response plan or emergency evacuation plan since it is not a designated emergency response location to be used for staging or other uses in an emergency.

c) The creation of any health hazard or potential hazards?	☐	☑	☐	☐

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Discussion: The proposed project is a General Plan Amendment and Rezone from Agriculture to Parks and Open Space. It does not include development; however, all projects in the Airport SubArea/Overlay, including policy and regulation modifications, must be consistent with the ALUP (Refer to ALUP Section 4.5). The majority of the site is located in Safety Zone 4 for outer approach and departure zones with a small portion of the site in Zone 3 for turning and sideline zones. Incorporation of mitigation measures identified in Appendix B will ensure compliance with the ALUP and reduce potentially significant effects of airport-related hazards to a less than significant level should the project site be developed in the future.

d) Increased fire hazard in areas with flammable brush, grass, or trees?	☐	☐	☑	☐

Discussion: The project site is not located in an area with the potential for increased fire hazards. The site will be required to be in compliance with City and County brush and grass clearance requirements.

X. NOISE. Would the proposal result in:

a) Increases in existing noise levels? (Sources: 1, 7, & 8)	☐	☐	☑	☐

Discussion: The project will not likely result in a significant increase in operational noise levels. Future development may result in short-term construction noise; however, construction noise will be limited to specific daytime hours per City regulations.

b) Exposure of people to severe noise levels? (Source: 3)	☐	☐	☑	☐

Discussion: The proposed project is not anticipated to expose people to severe noise levels. Uses associated with the proposed Parks and Open Space designation would be transient in nature and therefore not subject to special regulations regarding airport noise.

XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:

a) Fire protection? (Sources: 1, 3, 6, & 7)	☐	☐	☑	☐
b) Police Protection? (Sources: 1, 3, & 7)	☐	☐	☑	☐
c) Schools? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Maintenance of public facilities, including roads? (Sources: 1, 3, & 7)	☐	☐	☑	☐
e) Other governmental services? (Sources: 1,3, & 7)	☐	☐	☑	☐

Discussion: a.-e. The proposed project includes a General Plan Amendment (GPA) and zoning change from Agriculture to Park and Open Space (POS), and it does not include specific plans for development of the site. The proposed land use map change and rezoning is not expected to impact public services, such as fire and police protection, schools, maintenance of public facilities and other governmental services. Development proposed in the future will be evaluated for impacts to public services and will be required to mitigate impacts in the form of development impact fees as established by the city per AB

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1600.				
XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a) Power or natural gas? (Sources: 1, 3, & 7)	☐	☐	☐	☑
b) Communication systems? (Sources: 1, 3, & 7)	☐	☐	☐	☑
c) Local or regional water treatment or distribution facilities? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Sewer or septic tanks? (Sources: 1, 3, 7, & 8)	☐	☐	☐	☑
e) Storm water drainage? (Sources: 1, 3, & 7)	☐	☐	☐	☑
f) Solid waste disposal? (Sources: 1, 3, & 7)	☐	☐	☐	☑
g) Local or regional water supplies? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: a.-g. The proposed project includes a General Plan Amendment (GPA) and zoning change from Agriculture to Park and Open Space (POS), and it does not include specific plans for development of the site. The project will not result in the need for new systems or supplies, or result in substantial alterations to utilities and service systems. Development proposed in the future will be evaluated for impacts to utilities and service systems and will be required to mitigate impacts in the form of facilities or development impact fees.

XIII. AESTHETICS. Would the proposal:				
a) Affect a scenic vista or scenic highway? (Sources: 1, 3, & 7)	☐	☐	☐	☑
b) Have a demonstrable negative aesthetic effect? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion for a-b: This project does not include development thus it could not result in impacts related to aesthetics. Future development proposals on the site would be required to provide design details to ensure the project would not have a demonstrable negative aesthetic effect.

c) Create light or glare? (Sources: 1, 3, 7, & 8)	☐	☐	☐	☑

Discussion: This project does not include development thus it could not result in impacts related to light and glare. Elevated light levels may be experienced on site as a result from development on the project site in the future, but all light fixtures will be shielded and downcast as required per city regulations.

XIV. CULTURAL RESOURCES. Would the proposal:				
a) Disturb paleontological resources? (Sources: 1, 3, & 7)	☐	☐	☐	☑

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Disturb archaeological resources? (Sources: 1, 3, & 7)	☐	☐	☑	☐
c) Affect historical resources? (Sources: 1, 3, & 7)	☐	☐	☐	☑
d) Have the potential to cause a physical change which would affect unique ethnic cultural values? (Sources: 1, 3, & 7)	☐	☐	☐	☑
e) Restrict existing religious or sacred uses within the potential impact area? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: a. through e. No known paleontological resources are located in the vicinity. There are no known religious or sacred uses on or near the project site. The project is not proposed in a location where it could affect unique ethnic cultural values. The project site is located in the vicinity of known prehistoric and historic resources. A Phase I archaeological reconnaissance and a historical records search of the project site (Parker & Associates, May 14, 2006) did not identify the presence of significant prehistoric or intact historic resources. Evidence of historical agricultural uses included a foundation, wells, and irrigation materials. As potentially hidden or buried resources may be present, it is recommended that an archaeological monitor be present during initial grubbing/grading activities on the site. If buried remains or otherwise hidden resources are discovered during grading and excavation activities, additional standard mitigation measures would apply (Refer to Exhibit B).

XV.RECREATION. Would the proposal:

a) Increase the demand for neighborhood or regional parks or other recreational facilities? (Sources: 1, 3, & 7)	☐	☐	☐	☑

Discussion: The project is non-residential and will not affect the demand for parks and recreational facilities. The rezone would allow for potential future recreational facilities.

b) Affect existing recreational opportunities? (Sources 1, 3, & 7)	☐	☐	☑	☐

Discussion: The proposed project would change the zoning from Agriculture to Parks and Open Space. The City's Parks and Recreation element states that lands within the floodplain Huerhuero Creek are potential sites for development of public park and passive recreational uses. The proposed GPA/rezone would allow for the development potential of future recreational projects and would not affect existing recreational opportunities.

XVI.MANDATORY FINDINGS OF SIGNIFICANCE.

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (Sources: 1 & 3)	☐	☐	☑	☐

Discussion: The proposed project does not include site development and will not in itself degrade the quality of the environment or impact habitat or populations of listed plant animal species. Significant existing natural resources have been identified on the project site and mitigation measures are recommended to minimize potential impacts of future development activities to less than significant levels.

10 Environmental Checklist Form

ISSUES (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals? (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: The project will not likely have a potential to achieve short-term, to the disadvantage of long-term environmental goals.

c) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: The project will not result in significant cumulative impacts.

d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? (Sources: 1 & 3)	☐	☐	☐	☑

Discussion: The project will not result in substantial adverse environmental impacts on human beings, either directly or indirectly.

11. EARLIER ANALYSIS AND BACKGROUND MATERIALS

Earlier analyses may be used where, pursuant to tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). The earlier documents that have been used in this Initial Study are listed below.

Reference Number	Document Title	Available for Review At
1	City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
2	Seismic Safety Element for City of Paso Robles	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
3	Final Environmental Impact Report City of Paso Robles General Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
4	Soil Survey of San Luis Obispo County, California Paso Robles Area	USDA-NRCS, 65 Main Street-Suite 108 Templeton, CA 93465
5	Uniform Building Code	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
6	City of Paso Robles Standard Conditions of Approval For New Development	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
7	City of Paso Robles Zoning Code	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
8	City of Paso Robles, Water Master Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
9	City of Paso Robles, Sewer Master Plan	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446
10	Federal Emergency Management Agency Flood Insurance Rate Map	City of Paso Robles Community Development Department 1000 Spring Street, Paso Robles, CA 93446

12. Attachments:

Exhibit A – Vicinity Map
Exhibit B – Mitigation Summary Table
Exhibit C – Preliminary Biological Assessment
Exhibit D – Arborist Report
Exhibit E – Cultural Resource Investigation
Exhibit F - Traffic and Circulation Study

Exhibit A Vicinity Map

Mundee General Plan Amendment and Rezone
Golden Hill Rd, north of Highway 46
City of Paso Robles
RZ 06/005 GPA

Exhibit B Mitigation Summary Table

Biological Resources Mitigation Measures

BR-1: Prior to application for development permits on the site, a San Joaquin Kit Fox Habitat Evaluation shall be prepared to determine the mitigation ratio in coordination with the California Department of Fish and Game and the City.

BR-2: San Joaquin Kit Fox/Habitat Preservation:
Prior to the issuance of permits for grading/construction, the applicant shall submit evidence to the City of Paso Robles (City) that states that one or a combination of the following four San Joaquin kit fox mitigation measures has been implemented:

a. Provide for the protection in perpetuity, through acquisition of a fee or a conservation easement of suitable habitat in the kit fox corridor area (e.g. a land conservation bank), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Came (CDFG) and the City of Paso Robles (City). Mitigation alternative (a) requires that all aspects of this program must be in place before City permit issuance or initiation of any ground disturbing activities.

b. Deposit funds into an approved in-lieu fee program, which would provide for both the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County and a non-wasting endowment for management and monitoring of the property in perpetuity. Mitigation alternative (b) can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in an agreement between CDFG and TNC to preserve San Joaquin kit fox habitat and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with CEQA. A fee would be charged per acre. This fee must be paid after CDFG provides written notification about mitigation options but prior to City permit issuance and initiation of any ground disturbing activities.

c. Purchase the appropriate number of mitigation credits, as determined by the San Joaquin habitat evaluation form and reviewed by CDFG. The credits would be obtained from a CDFG-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity. At this time, there is an approved conservation bank in San Luis Obispo County, the Palo Prieto Conservation Bank. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

d. If none of the above measures (a, b, or c) are available, the applicant may enter into a Mitigation Agreement with CDFG, including depositing funds into an escrow account (or other means of securing funds acceptable to the CDFG) which would ensure the protection in perpetuity of the appropriate number of mitigation acres as determined by use of the San Joaquin kit fox habitat evaluation form and review by CDFG of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring in perpetuity. CDFG can provide a draft agreement to review; a signed Mitigation Agreement shall be submitted prior to City permit issuance and initiation of any ground disturbing activities.

BR-3: San Joaquin Kit Fox Protective Measures Before and During Construction**:**

a. Within 30 days prior to initiation of construction, the applicant shall hire a qualified biologist acceptable to the U.S. Fish and Wildlife Service, CA Fish & Game Department, and the Community Development Director or his designee, to conduct a pre-construction survey for active kit fox dens.

b. Before any grading or construction activities commence, all personnel associated with the project shall attend a worker education program regarding the sensitive biological resources potentially occurring in the project area (i.e., San Joaquin kit fox). This program is to include information on the kit fox, its life histories and careful review of the mitigation measures to be implemented in order to avoid or reduce impacts. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. The Community Development Department shall be notified of the time that the applicant intends to hold this meeting.

c. To prevent entrapment of the kit fox during the construction phase of the project, all excavation, steep-walled holes or trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

d. During the construction phase, any pipes, culverts, or similar structures with a diameter of four inches or greater that are stored at the project site for one or more overnight periods shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary will be moved only once to remove it from the path of activity, until the kit fox has escaped.

e. All food-related trash items such as wrappers, cans, bottles, and food scraps generated during the construction phase shall be disposed of in closed containers only and regularly removed from the site. Food items may attract kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

f. Use of pesticides shall be in compliance with all local, state and federal regulations. (This is necessary to prevent primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which kit foxes depend.)

g. Any contractor or employee that inadvertently kills or injures a kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to a supervisor overseeing the project. In the event that such observations are made of injured or dead kit fox, the applicant shall immediately notify the U.S. Fish and Wildlife Service and the CA Fish & Game Department by telephone. Formal notification shall also be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to the CA Fish & Game Department for care, analysis, or disposition.

h. So as not to attract red fox, coyotes, or domestic dogs to the area, all waste products shall be disposed of in a manner that would not attract these animals.

i. If any potential or known San Joaquin kit fox dens are subsequently observed during the required pre-construction survey, the following mitigation measures shall apply:

(i) Fenced exclusion zones shall be established by a qualified biologist around all kit fox dens that can be avoided but may be inadvertently impacted by project activities; exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:
- Potential kit fox den: 50 feet
- Known kit fox den: 100 feet
- Kit fox pupping den: 150 feet

(ii) Only essential vehicle operation on existing roads (if the exclusion zone intersects a road) and simple foot traffic shall be permitted within these exclusion zones. Otherwise, all project activities such as vehicle operation, materials storage, etc., shall be prohibited. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed. If specified exclusion zones cannot be observed for any reason, the U.S. Fish and Wildlife Service and CA Fish & Game Department shall be contacted for guidance prior to ground disturbing activities on or near the subject den or burrow.

(iii) If any known or potential San Joaquin kit fox dens are discovered within the designated project area which shall be unavoidably destroyed by the proposed project, excavation of kit fox dens shall not proceed without authorization from the U.S. Fish and Wildlife Service and CA Fish & Game Department. A copy of any such authorization received shall be provided to the City for its records.

BR-4: Prior to issuance of grading and/or construction permit(s), a biologist qualified shall conduct surveys for sensitive fairy shrimp species according to USFWS protocols shall conduct a fairy shrimp habitat assessment to determine the potential for fairy shrimp to occur on site. If potential habitat is present, a protocol survey shall be conducted. If vernal pool fairy shrimp (*Branchinecta lynchi*) are discovered, consultation with the USFWS must occur.

BR-5: If impacts to wetlands are proposed, the following steps shall be taken:

i. Permits must be obtained, as appropriate, from the California Department of Fish and Game (DFG Code 1603), the US Army Corps of Engineers (Section 404 of the Clean Water Act) the Regional Water Quality Control Board (Section 401 of the Clean Water Act)

ii. An on-site monitor will be required during construction activities in areas containing jurisdictional wetlands or waters.

iii. A mitigation, monitoring, and reporting plan will be prepared and approved by the city and other jurisdictional agencies, as appropriate (i.e., California Department of Fish and Game, US Army Corps of Engineers, and the Regional Water Quality Control Board). Wetland mitigation will increase the aerial extent of wetland habitat on site at a two-to-one ratio (created wetland area to impacted wetland area). Mitigation for disturbance to jurisdictional waters will include restoration and enhancement on site at a two to one ratio.

iv. Mitigation implementation and success will be monitored for a minimum of three years, depending on the jurisdictional agencies' requirements.

BR-6: Tree canopies and trunks within 50 feet of proposed disturbance zones should be mapped and numbered by a qualified biologist and a licensed land surveyor. Data for each tree should include date, species, number of stems, diameter at breast height (dbh) of each stem, critical root zone (CRZ) diameter, canopy diameter, tree height, health, habitat notes, and nests observed.

BR-7: An oak tree protection plan shall be prepared by the applicant for review and approval by the City of Paso Robles. The plan shall identify proposed removed and protected trees, protection fencing locations, and monitoring during disturbance within the critical root zone.

BR-8: Impacts to the oak canopy or critical root zone (CRZ) should be avoided where practicable. Impacts include pruning, any ground disturbance within the dripline or CRZ of the tree, and trunk damage. Landscape materials shall consist of non-plant materials or plants indigenous to the area. Paving within the CRZ of oak trees shall be minimized, with porous material to be used if necessary.

BR-9: Replacement oaks for removed trees must be equivalent to 25% of the diameter of the removed tree(s). For example, the replacement requirement for removal of two trees of 15 inches dbh (30 total diameter inches), would be 7.5 inches (30" removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5" trees, or three 2.5 inch trees, or any other combination totaling 7.5 inches. A minimum of two 24" box, 1.5" trees shall be required for each oak tree removed. The mitigation trees shall be incorporated to landscape plans or, subject to approval of the director, arrangements can be made to locate the replacement trees on public property.

BR-10: Replacement trees should be seasonally maintained (browse protection, weed reduction and irrigation, as needed) and monitored annually for at least 7 years. Replacement trees shall be of local origin, and of the same species as was impacted or removed.

BR-11: Within one week of ground disturbance or tree removal/trimming activities, if work occurs between March 1 and August 31, nesting bird surveys shall be conducted. To avoid impacts to nesting birds, grading and construction activities that affect trees and grasslands shall not be conducted during the breeding season from March 1 to August 31. If construction activities must be conducted during this period, nesting bird surveys shall take place within one week of habitat disturbance. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. Construction activities shall observe a 300-foot buffer for active raptor nests.

BR-12: Prior to submittal of development plans, the plans shall avoid shining navarretia populations located in two locations on open hillsides on the property and include protection plans for this sensitive habitat. In the event of unavoidable impacts, a mitigation monitoring plan would be required to outline appropriate salvage and restoration techniques.

BR-13: Prior to submittal of development plans, a floristic survey and mapping for Obispo Indian paintbrush shall be conducted during the peak of bloom (usually April). Following mapping, impact analysis shall be preformed to determine potential impacts and appropriate mitigation measures.

BR-14: Prior to removal of any trees over 20 inches dbh, a survey shall be conducted by a qualified biologist to determine if any of the trees proposed for removal or trimming harbor sensitive bat species or maternal bat colonies. Maternal bat colonies may not be disturbed.

BR-15: A pre-construction survey shall be conducted within thirty days of beginning work on the project to identify if badgers are using the site. The results of the survey shall be sent to the project manager, CDFG, and the City of Paso Robles.

If the pre-construction survey finds potential badger dens, they shall be inspected to determine whether they are occupied. The survey shall cover the entire property, and shall examine both old and new dens. If potential badger dens are too long to completely inspect from the entrance, a fiber optic scope shall be used to examine the den to the end. Inactive dens may be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers are found in dens on the property between February and July, nursing young may be present. To avoid disturbance and the possibility of direct take of adults and nursing young, and to prevent badgers from becoming trapped in burrows during construction activity, no grading shall occur within 100 feet of active badger dens between February and July. Between July 1 and February 1 all potential badger dens shall be inspected to determine if badgers are present. During the winter badgers do not truly hibernate, but are inactive an asleep in their dens for several days at a t time. Because the can be torpid during the winter, they are vulnerable to disturbances that my collapse their dens before they rouse and emerge. Therefore, surveys shall be conducted for badger dens throughout the year. If badger dens are found on the property during the pre-construction survey, the CDFG wildlife biologist for the area shall be contacted to review current allowable management practices.

BR-16: Prior to issuance of development permits, an appropriately timed survey shall be conducted for Western spadefoot toad to determine presence or absence on the property. If spadefoot toad is found, a mitigation plan to reduce impacts to a less than significant level, which may include avoidance, shall be developed in consultation with the CDFG.

BR-17: Prior to submittal of development plans, all proposed development shall be located outside the 100-foot buffer for riparian resources along Huerhuero Creek, and outside 50-foot setback for ephemeral drainages as established by the California Department of Fish and Game.

Hazard Mitigation Measures

H-1: Airport and Aircraft Safety: Development of any new land use on the project site shall not create an undue public safety risk from overflight of aircraft. The eastern portion of project site is in Airport Safety Zone 3 for turning and sideline zones and the western portion is Safety Zone 4 for outer approach and departure zones. All development plans, proposed uses, or subdivisions on the project site are subject to the nonresidential land use densities and open space requirements as provided in Chapter 4 of the Paso Robles ALUP, which are excerpted below (Table 9, ALUP, 2005).

Mundee Property Airport Safety Areas	Maximum Land Use Density (persons/acre)	Maximum Single Acre Land Use Density (persons/acre)	Maximum Percent Open Space (% gross area)
Safety Zone 3	60	120	25[1]
Safety Zone 4	40	120	20[1]

[1] When feasible, development should be planned in a manner that maintains maximum open space within 50 feet of any extended runway centerline.

H-2: Airspace Protection: No object or structure may be erected, and no plant allowed to grow, to penetrate any "imaginary surface" as defined in Federal Aviation Regulations Part 77. Any proposed feature approaching these surfaces will be referred to the airport manager for review and recommendation. Building within the height limits of this specific plan will not approach the FAA imaginary surfaces.

H-3: Operations Interference: No use shall be established which produces visually significant quantities of smoke.

H-4: Bird Attractants: No use shall be established and no activity conducted which attracts birds to the extent of creating a significant hazard of bird strikes. Examples are outdoor storage or disposal of food or grain, or large,

artificial water features. This provision is not intended to prevent enhancement or protection of existing wetlands, the mitigation of impacts to wetlands or construction of required detention basins.

H-5: Real Estate Disclosure: All owners, potential purchasers, occupants (whether as owners or renters), and potential occupants (whether as owners or renters) shall receive full and accurate disclosure concerning the noise, safety, or overflight impacts associated with airport operations prior to entering any contractual obligation to purchase, lease, rent, or otherwise occupy any property or properties within the airport area. The format of the disclosure shall be approved by the City of Paso Robles.

Cultural Resources Mitigation Measures

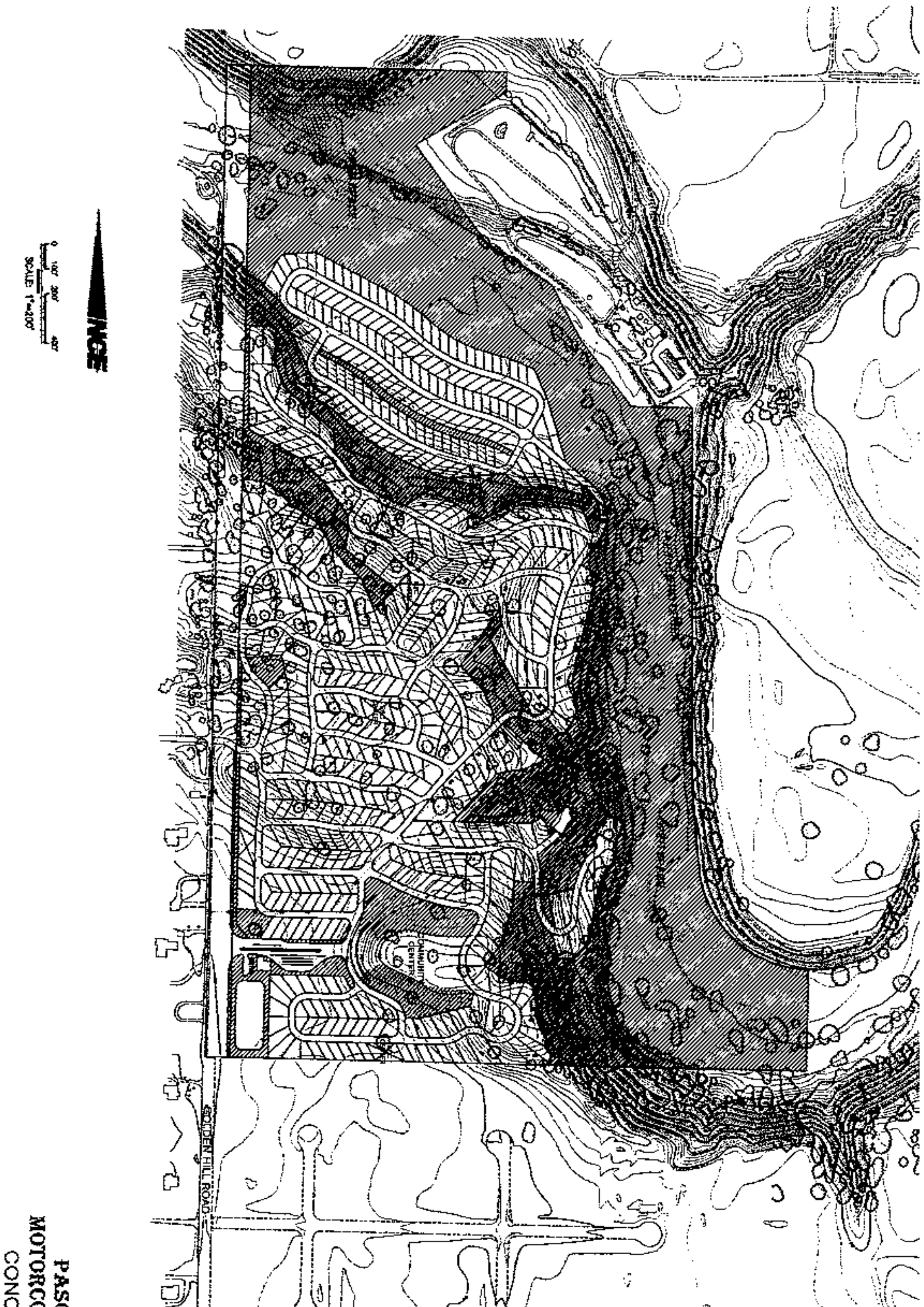
CR-1: Prior to issuance of development permits, the applicant shall retain a qualified historic archaeologist to monitor initial grubbing and grading on the site and to develop a recovery program if necessary. The monitor shall have the authority to stop work in the event potentially significant cultural resources are discovered.

CR-1: In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:

a. Construction activities shall cease, and the Community Development Director shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
b. In the event archaeological resources are found to include human remains, or in any other case where human remains are discovered during construction, the County Coroner is to be notified in addition to the Community Development Director so that proper disposition may be accomplished.

Transportation Mitigation Measures

TR-1: Any development of the site will provide mitigation measures to traffic impacts including but not limited to participation in the, participation in improvements to the intersection of Airport Road and Highway 46E, participation in efforts to establish parallel routes to Highway 46E and payment of AB 1600 transportation impact fees.



PASO ROBLES
MOTORCOACH RESORT
CONCEPT PLAN

NORTH COAST ENGINEERING INC

Preliminary Biological Assessment

for

APNs 025-431-037, -038, -039
Rezone 06-005/GPA 06-003

Golden Hill Road
City of El Paso de Robles
California

Prepared for

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531.01

Table of Contents

Synopsis

- This biological report examines a 160± acre property located northeast of Golden Hill Road and Circle B Road, in the City of El Paso de Robles, San Luis Obispo County, California.
- The applicant has requested that the City of Paso Robles rezone the property from Residential Agriculture (RA) to Parks & Open Space with an Airport Overlay (POS-AP). Future improvements to the property have not been formally proposed, and formal site plans were not available for review.
- The Paso Robles 160 LLC property consists of six general habitat types: annual grassland, blue oak woodland, riparian, ephemeral drainage, vernal pool, and seasonal wetland. These habitats form a mosaic on rolling hills on the east side of the City of Paso Robles. Floristic surveys conducted in the spring and summer of 2006 identified 162 species of plants on the property.
- Seasonal wetlands occur in isolated patches in upland grassland habitat on the property. A wetland delineation will be required to identify the extent of wetlands under the jurisdiction of the State of California and the U.S. Army Corps of Engineers that may be impacted by development on the property.
- Seven special status plants and eleven special status animals have the potential to occur on the property (Table 4). Field studies conducted in 2006 identified two special status plants and one special status animal on the property. A Biological Constraints Map is provided in Appendix A.
- Breeding birds occur in trees, shrubs and grasslands, and maternal bat colonies could occur in larger oak trees with natural cavities. Breeding birds and bats are protected by state and federal code, therefore activities with potential to impact these species must avoid the breeding season (March 1st through August 31st), or be preceded by a survey to locate and protect them.
- Two species of native oak trees occur on the property. All oak tree species are afforded protections by the City of Paso Robles. Blue oak trees form woodlands on rolling hills in two areas of the property. Valley oaks are interspersed with blue oak woodland on the lower slopes of hills along Huerhuero Creek.
- Biological resources that could be impacted by the proposed project include common habitat types, sensitive natural communities, oak trees, common plant and animal species, special status plant and animal species, and nesting birds.
- This document provides mitigation recommendations designed to reduce impacts to biological resources on the property to a less than significant level.

1.0 Introduction

This preliminary biological assessment provides information regarding botanical, zoological, and aquatic resources on a 160±-acre property in the City of Paso Robles, San Luis Obispo County, California. Results are reported for floristic and wildlife surveys of the property, a habitat inventory, and database and literature searches of rare species reports within five miles of the property. Natural communities on the site are identified, special status species that could occur on the property or be affected by development on the site are discussed, and lists of plant and animal species that were identified or are expected on the property are provided. This report provides agencies and decision makers with information regarding biological resources on the property and assesses the significance of these resources with respect to potential development on the site. General mitigation measures for potential impacts to sensitive biological resources are outlined. This report is considered preliminary because wet season surveys have not yet been conducted for the property.

1.1 Project Location and Description

The 160.48 acre property is located on the northeast side of Golden Hill Road and Circle B Road in the City of Paso Robles, San Luis Obispo County, California (Appendix B, Figure 1). The property is situated west of U.S. Highway 101, north of U.S. Highway 46 East, between Golden Hill Road and Airport Road, in the Paso Robles United States Geological Survey (USGS) 7.5 minute quadrangle (Figure 2). Approximate coordinates for the center of the property are N35° 39' 17" / W120° 38' 56". Elevation varies from 700 to 825 feet above sea level.

An application to request a rezone of the property and amend the General Plan Land Use Map is currently under review by the City of Paso Robles. The application requests a change in the zoning from Residential Agriculture (RA), and to re-designate the land use classification from Agriculture-Airport Overlay (AG-AP), to Parks and Open Space with an Airport Overlay (POS-AP). Project planning is in the conceptual stage, and a site plan was not available for review. The property is composed of three parcels: Parcel 1 (APN 025-431-037) is 36.01 acres, Parcel 2 (APN 025-431-038) is 79.85 acres, and Parcel 3 (APN 025-431-039) is 44.62 acres in size. The property is currently used as rangeland.

1.2 Responsible Parties

TABLE 1. RESPONSIBLE PARTIES. Contact information is provided for the applicant, agent, biological consultant, and lead agency.

Applicant Doug McCurdy Paso Robles 160, LLC c/o Ken Mundee P.O. Box 2552 Paso Robles, CA 93447 805-550-1360	**Engineer** North Coast Engineering 725 Creston Road, Suite B Paso Robles, CA 93446 805-239-3127
Biological Consultant Althouse and Meade, Inc. 1875 Wellsona Road Paso Robles, CA 93446 805-467-1041	**Lead Agency** City of Paso Robles 1000 Spring Street Paso Robles, CA 93446 805-227-7276

2.0 Methods

The subject property was surveyed for biological resources on May 4, 24, and 31, June 20, and July 14, 2006. Field work was conducted by biologists LynneDee Althouse, M.S., Daniel E. Meade, Ph.D., Jason Dart, and Meg Perry during daylight hours between 8:00 a.m. and 8:00 p.m. The site was surveyed on foot and photographed. Surveys were conducted throughout the property to compile species lists and search for rare plants and animals. All habitat types on the property were inspected, described, and catalogued. Special status species observed on the property were hand-plotted on an aerial photograph and site-specific topographic map of the site. Habitat types on the property were inspected, described, and mapped. All plant and animal species observed on the site were identified and recorded. Wildlife documentation included observations of animal presence, nests, tracks, and sign. Birds were identified by sight, using 10 power binoculars, or by vocalizations. Plants were identified through field observations and laboratory analysis of collected material. Some specimens collected during our site visits will be deposited in the Robert F. Hoover Herbarium, California Polytechnic State University.

We conducted a search of the California Natural Diversity Database (CNDDB October 3, 2006 data) and the California Native Plant Society (CNPS) On-line Inventory of Rare and Endangered Plants of California for special status species known to occur within five miles of the project site. The search area included the Paso Robles, Estrella, Templeton, and Creston quadrangles (7.5 minute USGS).

Additional special status species research consisted of reviewing previous biological reports for the area and searching on-line museum and herbarium specimen records for locality data within San Luis Obispo County. We reviewed online databases of specimen records maintained by the Museum of Vertebrate Zoology (MVZ) at the University of California, Berkeley, and the Consortium of California Herbaria. Additional special status species with potential to occur on or near the subject property were added to our special status species list.

Special status species lists produced by database and literature searches were cross-referenced with the known habitat types on the property to identify all potential special status species that could occur on or near the project site. Each special status species with a potential for occurrence on or near the project site is individually discussed. A report was made to the CNDDB if field surveys found special status species on the property.

Potential special status plant species were compared to herbarium specimens at the Robert F. Hoover Herbarium, California Polytechnic State University. Special status plant populations were mapped by hand on high resolution aerial photographs and site specific topographic maps of the property. Botanical nomenclature follows the Jepson Manual, unless otherwise noted.

3.0 Results

3.1 Existing Conditions

The subject property is an approximately 160-acre site composed of three parcels currently used as rangeland for cattle grazing. The majority of the property is situated on alluvial terraces and rolling hills in the northeastern corner of the City of Paso Robles. Huerhuero Creek is a seasonal stream that flows along the eastern boundary of the property and cuts through the northernmost portion of the property (see aerial photograph in Appendix B, Figure 4). An incised ephemeral drainage flows north down an embankment to connect with Huerhuero Creek, and is the only jurisdictional tributary on the property. Vegetation in the tributary drainage is composed of oak woodland canopy with a grassy understory; wetland conditions are not present in this drainage. An old earthen dam in the drainage once created a stockpond, but has long been in disrepair. Low-lying land adjacent to Huerhuero Creek forms a flood plain and low stream terrace. Riparian habitat along the creek varies from mature riparian woodland to mulefat scrub and wild rose thickets.

The subject property is dominated by annual grassland and blue oak woodland habitats. Although grasslands on site are dominated by Mediterranean annual species, some native perennial grasses are present on slopes that not over-grazed. Woodlands are composed of blue oak trees, with some valley oaks occurring in lowlands and along Huerhuero Creek. One special status plant, shining navarretia, occurs on open, grassy hillsides on the property (see Constraints Map in Appendix A).

Storage of used pavers and bricks is occurring in one location on the property. Piles of pavers, apparently from a demolition project, were placed in a line approximately 200 feet long on a terrace above the Huerhuero Creek flood plain. Other uses include deposition of truckloads of pressed grapes near the paver piles. No other non-agricultural uses were observed.

Vernal pools and seasonal wetlands are present in low, nearly flat grassland areas in the southwestern portion of the property. These pools provide habitat for several special status species, including spadefoot toads and federally listed fairy shrimp. Work was started on this assessment in May of 2006; after the appropriate time to conduct wet season surveys for fairy shrimp and spadefoot toad. Therefore, results regarding vernal pool and ephemeral pool species are preliminary.

3.2 Soils

The soils map in the United States Department of Agriculture (USDA) Soil Survey of San Luis Obispo County, California, Paso Robles Area (1984) delineates nine soil map units on the property (Appendix B, Figure 3): Arbuckle-Positas complex, 30 to 50 percent slopes (104), Arbuckle-Positas complex, 50 to 75 percent slopes (105), Elder loam, flooded, 0 to 5 percent slopes (140), Hanford and Greenfield gravelly sandy loams, 2 to 9 percent slopes (150), Metz loamy sand, 0 to 5 percent slopes (166), San Ysidro loam, 0 to 2 percent slopes (197), Sesame sandy loam, 9 to 30 percent slopes (200), Arbuckle fine sandy loam, 0 to 2 percent (100), and Xerofluvents-Riverwash association (212). Map units typically encompass one or two dominant soils, which cover more than

50 percent of the mapped area, and one to several included soils, which occur in small patches that are not differentiated in mapping.

Sesame sandy loam, 9 to 30 percent slopes (200) is the dominant soil map unit on the property, covering about 40 percent of the total site. This soil is a moderately deep, well-drained soil that formed in material weathered from granitic rocks. Permeability is moderate to moderately slow, available water capacity is low to moderate, and erosion hazard is high. The main limitation of this Sesame soil is the erosion hazard. Maintain plant residue on the soil surface to help control erosion. This Sesame soil has a land capability class rating of IVe-1 (15) irrigated and non-irrigated. This rating means this soil has severe limitations for field crops, or requires very careful management, or both (IV). These limitations are due to high erosion hazard (e) caused by steepness of slope (1).

Arbuckle-Positas complex, 30 to 50 percent slopes (104) and **Arbuckle-Positas complex, 50 to 75 percent slopes (105),** differ only in slope steepness. The Arbuckle-Positas complex (104) consists of steep soils found between flood plains and stream terraces on the property. This complex covers approximately 16 percent of the total property. The Arbuckle-Positas complex with 50 to 75 percent slopes occurs on terrace escarpments in the southeast portion of the property and covers about 4 percent of the total property. These Arbuckle-Positas complexes consist of approximately 40 percent Arbuckle fine sandy loam and 30 percent Positas coarse sandy loam, which are so intricately mixed or so small in area that it is not practical to separate them into separate map units. Arbuckle soil is a very deep, well drained soil that formed in alluvium derived from mixed rocks. Permeability is moderately slow and available water capacity is moderate to high. Surface runoff is rapid, and hazard of erosion is high. Positas soil is a very deep, well drained soil that formed in alluvium derived from mixed rocks. Its permeability is very slow and its available water capacity is moderate to high. Surface runoff is rapid, and hazard of erosion is high. Steep slopes and the high hazard of erosion are the main limitations of these soils. Erosion can be controlled by maintaining plant residue on the soil surface.

Elder loam, flooded, 0 to 5 percent slopes (140) is located on the flood plain of Huerhuero Creek and covers about 12 percent of the total property. This very deep, moderately permeable soil formed in mixed rock alluvium. Surface runoff is slow, and erosion hazard is slight. This soil has severe limitations for buildings and roads due to the flood hazard. Elder soils used for these purposes need to be protected from flooding. Elder loam has a land capability class rating of IIw-2 (14) irrigated, and IVw-2 (14) non-irrigated. This rating means this soil type has moderate to very severe limitations for field crops (II, IV). Water in or on the soil interferes with plant growth (w) because the soil is either poorly drained or periodically flooded (2).

San Ysidro loam, 0 to 2 percent slopes (197) occurs in the southwest corner of the property and covers approximately nine percent of the total property. This very deep, nearly level, moderately well drained soil formed in alluvium derived from mixed rocks. San Ysidro soil has very slow permeability and moderate to high available water capacity. Surface runoff is slow and hazard of erosion is slight. During periods of heavy rain, this soil is subject to ponding, and vernal pools may form in San Ysidro soils. The

subsoil has high shrink-swell potential. This soil has severe limitations for building sites, roads, and streets because of the high shrink-swell potential and low strength of the subsoil. Foundations and footings should be designed to prevent structural damage by shrinking and swelling of the subsoil. San Ysidro loam is in capability units IVs-3 (14) irrigated and non-irrigated. This rating means that this soil has severe limitations for field crops, or requires very careful management, or both (IV). These limitations can be the result of a shallow, droughty, or stony soil that has problems or limitations of slow or very slow permeability of the subsoil or substratum. The clayey subsoil of San Ysidro soils is semi-consolidated (3) and creates such a limitation.

Hanford and Greenfield gravelly sandy loams, 2 to 9 percent slopes (150) cover approximately four percent of the total property area and occur in the northern most portion of the property, across Huerhuero Creek. This complex consists of 40 percent Hanford gravelly sandy loam, 30 percent Greenfield gravelly sandy loam, 15 percent Arbuckle fine sandy loam, 10 percent San Ysidro loam, and 5 percent of small areas of Cropley clay, Metz loamy sand, Pico fine sandy loam, Rincon clay loam, and Tujunga fine sand. Both Hanford and Greenfield soils are derived from mixed rock alluvium, and are very deep and well drained soils. They both have a moderately rapid permeability, and a low to moderate available water capacity with a moderate erosion hazard. The gravelly nature of the surface layer limits the vegetation types that can occur on the property. This complex is placed in capability units IIe-4 (14) irrigated, and IVe-4 (14) non-irrigated. This rating means that this soil type has moderate to very severe limitations for field crops (II, IV). These limitations are due to high erosion hazard (e), and sandy or gravelly textures that have low available water-holding capacity (4).

Metz loamy sand, 0 to 5 percent slopes (166) covers approximately 4 percent of the total property area and is located on the flood plain between the Elder soil and the riverwash on the northern most portion of the property. This very deep, nearly level to gently sloping, somewhat excessively drained soil formed in alluvium derived from mixed rocks. Flooding can occur rarely, although this soil does not typically hold standing water for long periods. Permeability is moderately rapid and available water capacity is low to moderate. Surface runoff is slow and hazard of erosion is slight. This soil has severe limitations for building sites, septic tank absorption fields, and roads and streets because of flood hazard. The land capability units are IIIs-4 (14) irrigated, and IVs-4 (14) non-irrigated. This rating means this soil type has severe to very severe limitations for field crops (III, IV). These limitations are because shallow, droughty, and stony soils (s), such as Metz, tend to have low available water holding capacity (4). Included in this map unit are small areas of San Emigdio fine sandy loam, Hanford fine sandy loam, Tujunga fine sand, Elder loam, Pico fine sandy loam, and unnamed xerofluvents.

Arbuckle fine sandy loam, 0 to 2 percent (100) covers approximately one percent of the total property. This is a very deep, nearly level, well-drained soil formed in alluvium derived from mixed rocks. Permeability of Arbuckle soils is moderately slow, and available water capacity is moderate to high. Surface runoff is slow and hazard of erosion is slight due to the gentle slopes. This soil has no limitations or hazards for farming and to building sites, roads, and streets. A moderate shrink-swell potential and low strength are limitations for dwellings and buildings, but can be overcome by proper

design and installation procedures. This Arbuckle soil is in soil capability class is I (14) irrigated and IVc-1 (14) non-irrigated. When irrigated, this soil is considered prime agricultural land and has no limitations (I). When non-irrigated this soil has severe limitations for field crops (IV). These limitations are due to dry summer climate that cannot support crops without irrigation (c), and the potential for wind erosion of fine sandy loams (1). Included in this map unit are about five percent San Ysidro loam and five percent small areas of Cropley clay and Hanford fine sandy loam.

Xerofluvents-Riverwash association (212) covers approximately 10 percent of the property. The complex includes unnamed soils and barren areas on flood plains adjacent to Huerhuero Creek and consists of approximately 50 percent xerofluvents and 30 percent riverwash. Xerofluvents occur on the flood plains and generally flood twice every four years. Riverwash occurs in barren areas in and along stream channels, flooding annually. Permeability is variable and available water holding capacity is very low. Surface runoff is medium, and erosion hazard is very high. The land capability unit for this map unit is VIIIw (14), meaning these soils are not suited for crop production or building and are best left undisturbed. Included in this map unit are about 20 percent small areas of Elder loam, Metz loamy sand, and Tujunga fine sand.

3.3 Habitat Types

Six habitat types occur on the property: annual grassland, blue oak woodland, riparian, ephemeral drainage, vernal pool, and seasonal wetland.

3.3.1 Annual grassland

Much of the upland habitat on the subject property is a grazed annual grassland habitat with scattered valley oak trees (*Quercus lobata*) and blue oak trees (*Quercus douglasii*). Two grassland areas were specifically mapped on the property, each with a slightly different vegetation association. At the southwestern corner of the property is a flat grassland area dominated by Mediterranean annual grasses such as wild oats (*Avena barbata, A. fatua*), soft chest brome (*Bromus hordeaceus*), cheat grass (*Bromus tectorum*), annual fescue (*Vulpia myuros*), and ripgut brome (*Bromus diandrus*). Some oak trees are present, as are native forbs such as milkweed (*Asclepias eriocarpa*), lupines (*Lupinus bicolor, L. microcarpus*), California aster (*Lessingia filaginifolia*), and wine cups (*Clarkia purpurea*).

A flood terrace at the north end of the property supports an annual grassland habitat that is dominated by exotic grasses and forbs, with a few native wildflowers. The terrace is composed of gravelly soils, is periodically flooded, and shows signs of having been plowed in the past. Dominant grass species are similar to the previously described grassland, except that Italian ryegrass (*Lolium multiflorum*), medusa-head (*Taeniatherum caput-medusae*), and hood canary grass (*Phalaris paradoxa*) are common. Yellow starthistle (*Centaurea solstitialis*) is dominant in the summer when most annuals have dried up. Intensive cattle grazing is the primary reason for the depauperate diversity of native species in the grassland habitat on the property.

Grassland habitat on the subject property is suitable habitat for eight special status plant species. In spring 2006, Althouse and Meade, Inc. biologists mapped one special status plant, shining navarretia (*Navarretia nigelliformis* ssp. *radians*), on the property. Several special status animals, including San Joaquin kit fox (*Vulpes macrotis mutica*) and American badger (*Taxidea taxus*), could utilize grassland habitat on the property.

3.3.2 Blue oak woodland

Blue oak woodland habitat occurs in various density stands in upland habitat on the subject property. Moderately dense blue oak woodland occurs on hills adjacent to the western property boundary. The density of trees in this woodland becomes lower in the flat grassy area to the east, then becomes very dense on the northeast facing slope above Huerhuero Creek. At this location, occasional valley oaks are present in woodland still dominated by blue oaks. Understory vegetation in blue oak woodland habitat on the property is composed of annual grasses and forbs in most areas. The steep slopes adjacent to Huerhuero Creek contain some small shrubs and a higher diversity of native species. Some native grasses, such as one-sided bluegrass (*Poa secunda*), melic (*Melica* sp.), and needlegrass (*Nassella pulchra, N. lepida*) are common in the understory at these locations. This eastern stand of blue oak woodland transitions to riparian habitat at the lower slopes, where valley oaks, cottonwoods, and willows become prominent.

An occupied golden eagle nest was identified and mapped in a blue oak tree on the slope adjacent to Huerhuero Creek. A second, un-occupied golden eagle nest was located nearby (see Constraints Map in Appendix A). Roosting bats and other species of nesting birds are likely to use oak trees on the property. Special status plants are not likely to be found beneath blue oak woodland canopy.

3.3.3 Ephemeral drainage

One small ephemeral drainage on the subject property conveys storm water into Huerhuero Creek during the rainy season. Huerhuero Creek and its tributary drainages are section 404 jurisdictional waters of the United States (to be confirmed by the United States Army Corps of Engineers (USACE). These waters provide seasonal habitat for common aquatic wildlife species, including western toad (*Bufo boreas*), pacific chorus frog (*Pseudacris regilla*), and many species of invertebrates. The seasonal drainages do not support wetland vegetation. Oak trees on the banks create the canopy layer, and annual grasses and a variety of forbs make up the understory.

Other drainage ways are found in the oak woodland at the eastern boundary of the property. These drainages have formed as erosion features from drainage outfalls of other development off the property and are not likely to be considered jurisdictional water courses by the USACE..

3.3.4 Riparian

The riparian corridor on the property is restricted to Huerhuero Creek and its banks. Over 5000 linear feet of Huerhuero Creek is within the property boundaries, along the northern and eastern edges. The vegetation that makes up the riparian habitat is composed of tall tree canopy and five different shrub associations. The dominant trees in the riparian habitat are Fremont cottonwood (*Populus fremontii*) and red willow (*Salix*

laevigata), although valley oak trees (*Quercus lobata*) are occasionally present. Because this drainage system carries large amounts of sediment during storm events, very little vegetation is able to become permanently established in the bottom of the channel. Sandbars support patches of shrubby groundsel (*Senecio flaccidus* var. *douglasii*), California rose (*Rosa californica*), tarragon (*Artemisia dracunculus*), and mulefat (*Baccharis salicifolius*). Many herbaceous species grow in moist areas during the late winter and spring, including stream monkeyflower (*Mimulus guttatus*), mugwort (*Artemisia douglasiana*), rushes (*Juncus bufonius, J. mexicanus*), loosestrife (*Lythrum hyssopifolium*), and others.

The riparian corridor of Huerhuero Creek is a wildlife movement corridor that may provide a movement corridor for San Joaquin kit fox to access Camp Roberts from the Carizzo Plain. Western spadefoot toads are known from sandy soils in and adjacent to Huerhuero Creek in the vicinity. Special status plants are not expected to occur in the riparian habitat on site.

3.3.5 Vernal pool

Vernal pools are present in grassland habitat on the subject property. Surveys conducted on the property for this study began in May 2006 and were too late in the season to find vernal pools containing standing water. Intensive cattle grazing on site reduced some of the vegetation associated with the pools, however the presence of vernal pools was clearly discernable. The Constraints Map in Appendix A shows the approximate location of two vernal pools that were identified on site; other ephemeral pools may be present during the rainy season.

The dominant plant species identified in vernal pools on the property in early May included water starwort (*Callitriche* sp.), water pygmyweed (*Crassula aquatica*), dwarf popcornflower (*Plagiobothrys* sp.), and a small hydrophytic peppergrass (*Lepidium* sp.). By late May the dominant species identifiable in these pools was coyote thistle (*Eryngium vaseyi*), a plant which is indicative of vernally moist sites but was also found in mesic grassland areas that were not vernal pools. Vernal pools provide habitat for uniquely adapted native plants and animals that are able to tolerate rapidly transitioning water levels. Three special concern species, vernal pool fairy shrimp (Federally listed as Threatened), California linderiella (California Special Concern species), and Western spadefoot toad (California Special Concern species), require vernal pool habitat, and are known to occur in the vicinity of the subject property.

3.3.6 Seasonal Wetland

Isolated seasonal wetlands occur in the southwestern corner of the property. Wetland areas were identified by vegetation; soils analyses were not conducted as part of this study. Dominant plant species in the seasonal wetland during the late spring were coyote thistle (*Eryngium vaseyi*), popcorn flower (*Plagiobothrys* sp.), and annual grasses. The wetlands are not part of a drainage system and are not likely to be under the jurisdiction of the United States Army Corps of Engineers or the Regional Water Quality Control Board. If at least a few centimeters of standing water is present for three weeks or more during most winter seasons, the wetlands may be appropriate habitat for vernal pool species. The presence of federally listed vernal pool organisms in the vicinity would

place the seasonal wetlands under the jurisdiction of the United States Fish and Wildlife Service. Neither a formal wetland delineation nor a jurisdictional determination were conducted for potential wetlands on the property.

3.4 Plant List

A floristic survey conducted from May through July 2006 identified 162 species of plants on the property (Table 2). Plants identified on the subject property consist of 110 native species and 52 introduced species. One special status plant species was identified during floristic surveys conducted from May 4 through July 14, 2006.

TABLE 2. PLANT LIST. A floristic survey of the property identified 162 species of plants. One special status species was mapped on site.

Scientific Name	Special Status	Origin	Common Name
Ferns – 1 Species			
Pentagramma triangularis ssp. *triangularis*	None	Native	Gold-back fern
Trees – 4 Species			
Populus fremontii ssp. *fremontii*	None	Native	Fremont cottonwood
Quercus douglasii	None	Native	Blue oak
Quercus lobata	None	Native	Valley Oak
Salix laevigata	None	Native	Red willow
Shrubs – 11 Species			
Artemisia dracunculus	None	Native	Tarragon
Baccharis pilularis	None	Native	Coyote brush
Baccharis salicifolius	None	Native	Mule fat
Datura sp.	None	Native	Jimsonweed
Eriogonum elongatum	None	Native	Elongate buckwheat
Eriogonum fasciculatum	None	Native	California buckwheat
Rosa californica	None	Native	California Rose
Sambucus mexicana	None	Native	Blue elderberry
Senecio flaccidus var. *douglasii*	None	Native	Shrubby groundsel
Solanum umbelliferum	None	Native	Bluewitch
Toxicodendron diversilobum	None	Native	Poison oak
Herbs – 122 Species			
Achillea millefolium	None	Native	Yarrow

Scientific Name	Special Status	Origin	Common Name
Achyrachaena mollis	None	Native	Blow wives
Ambrosia psilostachya	None	Native	Western ragweed
Amsinckia menziesii var. *intermedia*	None	Native	Rancher's fireweed
Anagallis arvensis	None	Introduced	Scarlet pimpernel
Anthemis cotula	None	Introduced	Mayweed
Artemisia douglasiana	None	Native	Mugwort
Asclepias eriocarpa	None	Native	Indian milkweed
Asclepias fascicularis	None	Native	Narrow-leaved milkweed
Asclepias vestita	None	Native	Wooly milkweed
Astraglus sp.	None	Native	Milkvetch
Bloomeria crocea	None	Native	Golden stars
Brassica nigra	None	Introduced	Black mustard
Callitriche sp.	None	Native	Water starwort
Calystegia macrostegia	None	Native	Morning glory
Cardamine californica	None	Native	Milk maids
Carduus pycnocephalus	None	Introduced	Italian thistle
Castilleja exserta ssp. *exserta*	None	Native	Purple owl's clover
Castilleja sp.	None	Native	Owl's clover
Centaurea melitensis	None	Introduced	Tocolote
Centaurea solstitialis	None	Introduced	Yellow star thistle
Centaurium davyi	None	Native	Centaury
Centromadia fitchii	None	Native	Fitch's tarplant
Cerastium glomeratum	None	Introduced	Mouse-eared chickweed
Chaenactis glabriuscula	None	Native	Yellow pincushion
Chamomilla suaveolens	None	Introduced	Pineapple weed
Chenopodium californicum	None	Native	California goosefoot
Cirsium occidentale var. *occidentale*	None	Native	Cobwebby thistle
Cirsium vulgare	None	Introduced	Bull thistle
Clarkia purpurea ssp. *purpurea*	None	Native	Wine cups
Clarkia purpurea ssp. *quadrivulnera*	None	Native	Four spot
Clarkia speciosa ssp. *speciosa*	None	Native	Clarkia
Clarkia unguiculata	None	Native	Elegant clarkia
Claytonia perfoliata	None	Native	Miner's lettuce
Conium maculatum	None	Introduced	Poison hemlock
Convolvulus arvensis	None	Introduced	Bindweed

Scientific Name	Special Status	Origin	Common Name
Conyza bonariensis	None	Introduced	Asthmaweed
Cordylanthus rigidus	None	Native	Bird's beak
Crassula aquatica	None	Native	Water Pygmyweed
Crassula connata	None	Native	Pygmyweed
Dichelostemma capitatum	None	Native	Blue dicks
Eleocharis macrostachya	None	Native	Common spikerush
Epilobium brachycarpum	None	Native	Annual willow-herb
Eremocarpus setigerus	None	Native	Turkey-mullein, dove weed
Erigeron foliosus var. *foliosus*	None	Native	Leafy daisy
Eriogonum sp.	None	Native	Buckwheat
Eriogonum nudum var. *nudum*	None	Native	Naked buckwheat
Erodium botrys	None	Introduced	Storksbill filaree
Erodium cicutarium	None	Introduced	Redstem filaree
Erodium moschatum	None	Introduced	Greenstem filaree
Eryngium vaseyi var. *vaseyi*	None	Native	Coyote thistle
Eschscholzia californica	None	Native	California poppy
Filago gallica	None	Introduced	Herba impia
Galium andrewsii	None	Native	Phlox-leaved bedstraw
Galium aparine	None	Native	Goose grass
Gnaphalium californicum	None	Native	California everlasting
Gnaphalium luteo-album	None	Introduced	Cudweed
Heliotropium curassavicum	None	Native	Heliotrope
Hemizonia pentactis	None	Native	Salinas tarplant
Hemizonia pungens	None	Native	Common spikeweed
Heterotheca sessiliflora	None	Native	Goldenaster
Hirschfeldia incana	None	Introduced	Mustard
Hypochaeris glabra	None	Introduced	Smooth cat's-ear
Hypochaeris radicata	None	Introduced	Rough cat's-ear
Juncus bufonius	None	Native	Toadrush
Juncus mexicanus	None	Native	Mexican rush
Lactuca serriola	None	Introduced	Prickly lettuce
Lagophylla ramosissima ssp. *ramosissima*	None	Native	Slender hareleaf
Lepidium densiflorum	None	Native	Pepperwort
Lepidium sp.	None	Native	Peppergrass
Lessingia filaginifolia	None	Native	California aster

Scientific Name	Special Status	Origin	Common Name
Linanthus liniflorus	None	Native	Narrowflower flaxflower
Lotus humistratus	None	Native	Hill lotus
Lotus purshianus var. *purshianus*	None	Native	Spanish-clover
Lotus strigosus	None	Native	Bishop lotus
Lupinus bicolor	None	Native	Miniature lupine
Lupinus formosus	None	Native	Showy lupine
Lupinus microcarpus	None	Native	Chick lupine
Lupinus nanus	None	Native	Sky blue lupine
Lupinus succulentus	None	Native	Arroyo lupine
Lythrum hyssopifolium	None	Introduced	Loosestrife
Marrubium vulgare	None	Introduced	Horehound
Medicago polymorpha	None	Introduced	Common bur-clover
Melilotus indica	None	Introduced	Annual sweetclover
Micropus californicus	None	Native	Slender cottonweed
Mimulus guttatus	None	Native	Stream monkeyflower
Navarretia atractyloides	None	Native	Navarretia
Navarretia nigelliformis ssp. *radians*	List 1B.2[1]	Native	Shining navarretia
Navarretia pubescens	None	Native	Pubescent navarretia
Nicotiana acuminata var. *multiflora*	None	Introduced	Tobacco
Oenothera sp.	None	Native	Primrose
Phoradendron villosum	None	Native	Oak mistletoe
Phyla nodiflora	None	Native	Common lippia
Picris echioides	None	Introduced	Bristly ox-tongue
Plagiobothrys nothofulvus	None	Native	Popcorn flower
Plagiobothrys sp.	None	Native	Popcorn flower
Plantago erecta	None	Native	California plantain
Plantago lanceolata	None	Introduced	English plantain
Polygonum arenastrum	None	Introduced	Common knotweed
Pterostegia drymarioides	None	Native	Pterostegia
Ranunculus californicus	None	Native	California buttercup
Ranunculus hebecarpus	None	Native	Annual buttercup
Rumex crispus	None	Introduced	Curly dock
Rumex salicifolius	None	Native	Willow dock

[1] List 1B.2 species are considered fairly endangered in California (20-80% of occurrences threatened)

Scientific Name	Special Status	Origin	Common Name
Sanicula crassicaulis	None	Native	Sanicle
Silybum marianum	None	Introduced	Milk thistle
Sisymbrium irio	None	Introduced	London rocket
Sonchus asper	None	Introduced	Prickly sow-thistle
Spergularia rubra	None	Introduced	Sand spurrey
Stylocline gnaphalioides	None	Native	Everlasting nest straw
Thysanocarpus laciniatus	None	Native	Fringepod
Torilis nodosa	None	Introduced	Knotted hedge parsley
Trichostema lanceolatum	None	Native	Vinegar weed
Trifolium hirtum	None	Native	Rose clover
Trifolium microcephalum	None	Native	Miniature clover
Triteleia ixioides	None	Native	Golden brodiaea
Urtica urens	None	Native	Dwarf nettle
Verbena lasiostachys	None	Native	Verbena
Veronica anagallis-aquatica	None	Native	Water speedwell
Vicia villosa	None	Introduced	Winter vetch
Viola pedunculata	None	Native	Johnny jump-up
Yabea microcarpa	None	Native	Yabea
Grasses - 24 Species			
Avena barbata	None	Introduced	Slender wild oat
Avena fatua	None	Introduced	Wild oat
Bromus diandrus	None	Introduced	Ripgut brome
Bromus hordeaceus	None	Introduced	Soft chess brome
Bromus madritensis ssp. *rubens*	None	Introduced	Redtop brome
Bromus tectorum	None	Introduced	Cheat grass
Cynodon dactylon	None	Introduced	Bermuda grass
Distichlis spicata	None	Native	Salt grass
Elymus glaucus	None	Native	Blue wildrye
Gastridium ventricosum	None	Introduced	Nit grass
Hordeum marinum ssp. *gussoneanum*	None	Introduced	Mediterranean barley
Hordeum murinum	None	Introduced	Foxtail barley
Leymus triticoides	None	Native	Creeping wild rye
Lolium multiflorum	None	Introduced	Italian ryegrass
Melica imperfecta	None	Native	Melic grass
Nassella lepida	None	Native	Slender needlegrass

Scientific Name	Special Status	Origin	Common Name
Nassella pulchra	None	Native	Purple needlegrass
Phalaris paradoxa	None	Introduced	Hood canary grass
Poa annua	None	Introduced	Annual bluegrass
Poa secunda	None	Native	One-sided bluegrass
Polypogon monspeliensis	None	Introduced	Annual beard grass
Taeniatherum caput-medusae	None	Introduced	Medusa-head
Vulpia microstachys var. *ciliata*	None	Native	Vulpia
Vulpia myuros	None	Introduced	Annual fescue

3.5 Wildlife List

Many wildlife species commonly found in cismontane habitats of California's central coast are expected to occur on or near the project site. The grassland habitat provides foraging habitat for raptors and predators, including red-tail hawk, red-shouldered hawk, American kestrel, fox, coyote, badger, and bobcat. Reptiles and amphibians are present in all habitats on the property, and include gopher snake, king snake, Western fence lizard, Pacific chorus frog, and black-bellied slender salamander. Raccoon, opossum, and striped skunk are likely to forage in riparian and woodland areas, and mule deer tracks are abundant on roads and trails throughout the property.

Nesting birds occur in the oaks and grassland habitats on the property. Raptor nests were not observed; however the large oaks on the property are appropriate for future nesting sites. Nesting birds are protected from disturbance by The Migratory Bird Treaty Act of 1918, as regulated by the United States Fish and Wildlife Service.

More than 108 animal species have the potential to occur on the property. These include 5 crustaceans, 5 amphibians, 8 reptiles, 69 birds, and 22 mammals (Table 3). Several rodent species (e.g., California vole, harvest mouse, etc.) are expected to be residents on the property; however, no trapping was conducted as part of this study.

TABLE 3. WILDLIFE LIST. At least 109 animal species have the potential to occur on the property. The Status column indicates the listing status of the organism under the Federal Endangered Species Act, the State Endangered Species Act, or by the CDFG (see Appendix D for status definitions). Species observed on the property during our surveys are designated with a check mark (✓) in the fourth column.

Common Name	Scientific Name	Status	Found on the Property	Habitat Type
Crustaceans – 5 species				
Water Flea	*Daphnia* sp.	None		Seasonal pond
Seed Shrimp	Class Ostracoda	None		Seasonal pond
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT[2]		Vernal pools
California linderiella	*Linderiella californica*	None		Shallow seasonal pools
Clam shrimp	Order Conchostraca			Vernal pools, and puddles
Amphibians – 5 species				
Black-bellied Slender Salamander	*Batrachoseps nigriventris*	None		Oak woodlands, moist areas
California Toad	*Bufo boreas halophilus*	None	✓	Grassland, woodland
Monterey Ensatina	*Ensatina eschscholzi*	None		Moist habitats
Pacific Chorus Frog	*Pseudacris regilla*	None	✓	Many habitats near water
Western Spadefoot Toad	*Spea hammondii*	CSC[3]		Grasslands with ephemeral pools for breeding

[2] FT = Federally Threatened
[3] CSC = California Special Concern species

Common Name	Scientific Name	Status	Found on the Property	Habitat Type
Reptiles - 8 species				
Northern Pacific Rattlesnake	*Crotalus oreganus oreganus*	None		Dry, rocky habitats
Ringneck Snake	*Diadophis punctatus*	None		Woodlands, grasslands
California Alligator Lizard	*Elgaria multicarinata multicarinata*	None		Open grassland, woodland, chaparral
Western Skink	*Eumeces skiltonianus*	None		Woodland, grassland, chaparral
California Kingsnake	*Lampropeltis getula californiae*	None	✓	Woodland, grassland, streams
Gopher Snake	*Pituophis catenifer*	None		Woodland, grassland
Western Fence Lizard	*Sceloporus occidentalis*	None	✓	Wide range
Side-blotched Lizard	*Uta stansburiana*	None		Dry habitats
Birds - 69 species				
Cooper's Hawk	*Accipiter cooperii*	CSC		Oak and riparian woodlands
Sharp-shinned Hawk	*Accipiter striatus*	CSC		Oak, riparian woodland
Red-winged Blackbird	*Agelaius phoeniceus*	None	✓	Marshes, fields
Western Scrub Jay	*Aphelocoma californica*	None	✓	Oak and riparian woodlands
Golden Eagle	*Aquila chrysaetos*	CSC	✓	Open or mountainous areas
Great Egret	*Ardea alba*	None		Water habitats, grasslands
Great Blue Heron	*Ardea herodias*	None		Water habitats
Burrowing Owl	*Athene cunicularia*	CSC		Grasslands with ground squirrel burrows
Cedar Waxwing	*Bombycella cedrorum*	None		Open habit
Great Horned Owl	*Bubo virginianus*	None		Varied habitats
Red-tailed Hawk	*Buteo jamaicensis*	None	✓	Open, semi-open country
Red-shouldered Hawk	*Buteo lineatus*	None		Oak and riparian woodlands
California Quail	*Callipepla californica*	None	✓	Oak, riparian woodlands
Anna's Hummingbird	*Calypte anna*	None		Oak, riparian woodland, scrub
Lesser Goldfinch	*Carduelis psaltria*	None		Riparian, oak woodlands
American Goldfinch	*Carduelis tristis*	None		Weedy fields, woodlands
House Finch	*Carpodacus mexicanus*	None		Wide habitat range
Turkey Vulture	*Cathartes aura*	None	✓	Open country, oak woodlands
Killdeer	*Charadrius vociferous*	None		Mud flats, stream banks, fields
Lark Sparrow	*Chondestes grammacus*	None		Grasslands, edge habitats

Common Name	Scientific Name	Status	Found on the Property	Habitat Type
Red-shafted Flicker	*Colaptes auratus*	None	✓	Woodlands
Rock Dove	*Columba livia*	None	✓	Urban areas
Western Wood Pewee	*Contopus sordidulus*	None		Riparian woodlands
American Crow	*Corvus brachyrhynchos*	None		Open oak, riparian woodland,
Yellow-rumped Warbler	*Dendroica coronata*	None		Riparian, oak woodlands
Townsend's Warbler	*Dendroica townsendii*	None		Riparian, oak woodlands
White-tailed Kite	*Elanus leucurus*	CSC		Nests in dense live oaks
Pacific-slope Flycatcher	*Empidonax difficilis*	None	✓	Riparian, oak woodlands
Horned Lark	*Eremophila alpestris actia*	CSC		Grassland, oak savanna
Brewer's Blackbird	*Euphagus cyanocephalus*	None		Open habitats
American Kestrel	*Falco sparverius*	None	✓	Open, semi-open country
Barn Swallow	*Hirundo rustica*	None		Open country, farmyards
Dark-eyed Junco	*Junco hyemalis*	None		Oak woodlands
Loggerhead Shrike	*Lanius ludovicianus*	CSC		Nests in shrubs, trees near open areas
Acorn Woodpecker	*Melanerpes formicivorus*	None	✓	Oak woodlands
Lewis' Woodpecker	*Melanerpes lewis*	None		Oak savannah
Brown-headed Cowbird	*Molothrus ater*	None		Rural areas, ranches
Ash-throated Flycatcher	*Myiarchus cinerascens*	None	✓	Open areas near oaks
Western Screech Owl	*Otus kennicottii*	None		Oak woodlands
Oak Titmouse	*Parus inornatus*	None		Woodland, riparian, oak, conifer
Savannah Sparrow	*Passerculus sandwichensis*	None		Open habitats, marshes, grasslands
House Sparrow	*Passer domesticus*	None		Urban
Cliff Swallow	*Petrochelidon pyrrhonota*	None		Urban; open areas near water
Phainopepla	*Phainopepla nitens*	None		Oak, riparian, scrub
Black-headed Grosbeak	*Pheucticus melanocephalus*	None		Woodlands
Yellow-billed Magpie	*Pica nuttalli*	None	✓	Oak savannah
Nuttall's Woodpecker	*Picoides nuttallii*	None	✓	Oak woodland, savanna
Downy Woodpecker	*Picoides pubescens*	None		Riparian, oak woodlands
California Towhee	*Pipilo crissalis*	None		Brushy habitats
Bushtit	*Psaltriparus minimus*	None		Oak, riparian, chaparral, scrub
Ruby-crowned Kinglet	*Regulus calundula*	None		Oak and riparian woodlands

Common Name	Scientific Name	Status	Found on the Property	Habitat Type
Black Phoebe	*Sayornis nigricans*	None		Near water
Say's Phoebe	*Sayornis saya*	None		Open country, grassland
Western Bluebird	*Sialia mexicana*	None	✓	Riparian woodland, ranch land
White-breasted Nuthatch	*Sitta carolinensis*	None	✓	Oak savannah, woodland
Western Meadowlark	*Sturnella neglecta*	None	✓	Grasslands
European Starling	*Sturnus vulgaris*	None	✓	Agricultural, urban
Tree Swallow	*Tachycineta bicolor*	None		Wooded habitats, water
Violet-green Swallow	*Tachycineta thalassina*	None	✓	Woodland habitats
Bewick's Wren	*Thryomanes bewickii*	None		Shrubby areas
House Wren	*Troglodytes aedon*	None		Shrubby areas
American Robin	*Turdus migratorius*	None		Streamsides, woodlands
Western Kingbird	*Tyrannus verticalis*	None	✓	Open country with scattered trees, farms, roadsides
Barn Owl	*Tyto alba*	None		Agricultural, woodlands
Orange-crowned Warbler	*Vermivora celata*	None		Oak, riparian woodlands
Hutton's Vireo	*Vireo huttonii*	None		Oak, riparian woodlands
Wilson's Warbler	*Wilsonia pusilla*	None		Oak, riparian woodlands
Mourning Dove	*Zenaida macroura*	None		Open and semi-open area
Golden-crowned Sparrow	*Zonotrichia atricapilla*	None		Shrubby, weedy areas
White-crowned Sparrow	*Zonotrichia leucophrys*	None		Shrubby, weedy areas
Mammals - 22 species				
Pallid Bat	*Antrozous pallidus*	CSC		Riparian, woodland, urban
Coyote	*Canis latrans*	None		Open woodlands, brushy areas, wide ranging
Opossum	*Didelphis marsupialis*	None		Woodlands, streams
Feral Cat	*Felis catus*	None		Varied
Mountain Lion	*Felis concolor*	None		Mountains, woodlands, stream corridors
Black-tailed Jackrabbit	*Lepus californicus*	None		Grasslands
Bobcat	*Lynx rufus*	None		Chaparral and woodlands
Striped Skunk	*Mephitis mephitis*	None		Mixed woods, chaparral
California Vole	*Microtus californicus*	None		Grassland meadows
Long-tailed Weasel	*Mustela frenata*	None		Grasslands
California Myotis	*Myotis californicus*	None		Tunnels, hollow trees, crevices
Mule Deer	*Odocoileus hemionus*	None	✓	Many habitats

Common Name	Scientific Name	Status	Found on the Property	Habitat Type
Deer Mouse	*Peromyscus maniculatus*	None	✓	All dry land habitats
Raccoon	*Procyon lotor*	None		Streams, lakes, rock cliffs,
Western Harvest Mouse	*Reithodontomys megalotis*	None		Grassland, dense vegetation near water
California Ground Squirrel	*Spermophilus beecheyi*	None	✓	Grasslands
Desert Cottontail	*Sylvilagus audubonii*	None		Brushy areas
American Badger	*Taxidea taxus*	CSC		Open grasslands
Valley Pocket Gopher	*Thomomys bottae*	None	✓	Variety of habitats
Gray Fox	*Urocyon cinereoargenteus*	None		Chaparral, dry woodlands
Red Fox	*Vulpes fulva*	None		Forest and open country
San Joaquin Kit Fox	*Vulpes macrotis mutica*	FE[4]		Open grasslands, scrub

[4]FE = Federally Endangered

3.6 Special Status Plants and Animals

The CNDDB and the CNPS On-line Inventory of Rare and Endangered Plants of California contain records for 20 special status species within the designated search area. The search area included all USGS 7.5 minute quadrangles within five miles of the site: Paso Robles, Estrella, Templeton, and Creston quadrangles. Thirteen additional special status species were added to the list from our knowledge of the area (Table 4). These species are marked with an asterisk (*). Appropriate habitat and soil conditions are found on the property for 7 special status plants and 11 special status animals. No sensitive natural communities are listed for the area; however vernal pools are present on the property.

3.6.1 Introduction to CNPS lists

Plant species are considered rare when their distribution is confined to localized areas, when there is a threat to their habitat, when they are declining in abundance, or are threatened in a portion of their range. The listing categories range from species with a low threat (List 4) to species that are presumed extinct (List 1A). The 1043 plants of List 1B are rare throughout their range. All but a few species are endemic to California. All of them are judged to be vulnerable under present circumstances, or to have a high potential for becoming vulnerable. For an explanation of the CNPS listing scheme and CNDDB status codes, see Appendix D.

3.6.2 Introduction to CNDDB definitions

"Special plants" is a broad term used to refer to all the plant taxa inventoried by the CNDDB, regardless of their legal or protection status. Special plants include vascular plants and high priority bryophytes (mosses, liverworts, and hornworts).

"Special Animals" is a general term that refers to all of the animal taxa inventoried by the CNDDB, regardless of their legal or protection status. These taxa may be listed or proposed for listing under the State and/or Federal Endangered Species Acts, but they may also be species deemed biologically rare, restricted in range, declining in abundance, or otherwise vulnerable.

Animals listed as California Special Concern (CSC) species are not listed under State or Federal Endangered Species Acts, but are considered rare or declining in abundance. The Special Concern designation is intended to provide the Department of Fish and Game, consulting biologists, land planners and managers with lists of species that require special consideration during the planning process in order to avert continued population declines and potential costly listing under federal and state endangered species laws.

3.6.3 Special status species list

Table 5 lists all 33 special status species known to occur in quadrangles within five miles of the project site. Federal and state status, global and state rank, CNPS listing status (plants), and CDFG designation (animals) for each species are given. Typical blooming period, habitat preference, potential habitat on site, whether or not the species was observed on the property, and the effect of the proposed activity are also provided.

TABLE 4. SPECIAL STATUS SPECIES LIST. Thirty-three special status species were determined by our research to occur in the Paso Robles, Estrella, Templeton, and Creston quadrangles. Seven special status plants and eleven special status animals have the potential to occur on the subject property. One special status plant and one special status animal were documented on the property in 2006. Potential impacts are outlined in section 5.0, and mitigation recommendations are provided in section 6.0.

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
	Plants						
1.	**Dwarf Calycadenia** *Calycadenia villosa*	None/none G2/S2.1 List 1B.1	May - October	Dry, rocky hills, ridges, in chaparral, woodland, meadows and seeps; <1100 m. c&s SCoRO	Yes. Moderately appropriate habitat is present among blue oak savanna on hillsides.	No	Not Significant
2.	**Oval-leaved Snapdragon*** *Antirrhinum ovatum*	None/none G3/S3.2 List 4.2	May – November	Heavy, adobe-clay soils on gentle, open slopes, also disturbed areas; 200-1000 m. s SnJV, s SCoRI	No. Recorded on the Chandler Ranch in 1991, but not reported there since. Appropriate soils not found on site.	No	Not Significant
3.	**Salinas Milk-Vetch*** *Astragalus macrodon*	None/none G3/S3.3 List 4.3	April – July	Eroded pale shales or sandstone, or serpentine alluvium; 300-950 m. SCoR	No. Appropriate habitat and soil type not found on site.	No	Not Significant
4.	**Obispo Indian Paintbrush** *Castilleja densiflora* ssp. *obispoensis*	None/none G5T2/S2.2 List 1B.2	April	Coastal grassland, <100 m. Endemic to SLO County.	Yes. Appropriate grassland habitat is present on site.	Yes	Not Significant With Mitigation
5.	**Lemmon's Jewelflower** *Caulanthus coulteri* var. *lemmonii*	None/none G4T2/S2.2 List 1B.2	March – May	Dry, exposed slopes; 80-800 m. sw SnJV, se SnFrB, e SCoRO, SCoRI	No. Appropriate drying slopes not present on site.	No	Not Significant
6.	**Douglas' Spineflower*** *Chorizanthe douglasii*	None/none G3/S3.3 List 4.3	April - July	Foothill woodland, pine forest, chaparral, sandy or gravelly soils; 200-1600 m. e SCoRO, SCoRI	Yes. Appropriate soil and habitat types are present on site.	No	Not Significant
7.	**Yellow-flowered Eriastrum** *Eriastrum luteum*	None/none G2/S2.2 List 1B.2	May – June	Drying slopes; <1000 m. SCoR Monterey, SLO Counties	No. Appropriate habitat not present on site.	No	Not Significant

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
				Plants			
8.	**Round-leaved Filaree** *Erodium macrophyllum*	None/none G4/S2.1 List 2.1	March - May	Clay soils in cismontane woodland, valley and foothill grassland; 15-1200 m. ScV, n SnJV, CW, SCo, n ChI	Yes. Moderately appropriate habitat is present in oak woodland and patches of bunchgrass onsite.	No	Not Significant
9.	**Mesa Horkelia** *Horkelia cuneata* ssp. *puberula*	None/none G4T2/S2.1 List 1B.1	February - September	Dry, sandy coastal chaparral; gen 70-700 m. SCoRO, SCo.	No. Appropriate soil and habitat combination not present on site.	No	Not Significant
10.	**Kellogg's Horkelia** *Horkelia cuneata* ssp. *sericea*	None/none G4T1/S1.1 List 1B.1	April - September	Old dunes, coastal sand hills; <200 m. CCo	No. Appropriate dune soils not present on site.	No	Not Significant
11.	**Salinas Valley Goldfields*** *Lasthenia leptalea*	None/none G3/S3.3 List 4.3	April	Open areas in woods, valley and foothill grassland; <500 m. Monterey & SLO Counties	Yes. Moderately appropriate habitat is present on site.	No	Not Significant
12.	**Jared's Peppergrass** *Lepidium jaredii* ssp. *jaredii*	None/none G1T1/S1.2 List 1B.2	March - May	Alkali bottoms, slopes, washes, <500 m. SCoRI, SnJV	No. Appropriate soil and habitat type are not present on site.	No	Not Significant
13.	**Santa Lucia Bush Mallow** *Malacothamnus palmeri* var. *palmeri*	None/none G3T2Q/S2.2 List 1B.2	May - July	Chaparral, cismontane woodland, coastal scrub; 30-1100 m. s CCo, SCoRO	No. Appropriate habitat not present on site.	No	Not Significant
14.	**Paso Robles Navarretia*** *Navarretia jaredii*	None/none G3S3.3 List 4.3	April - July	Open, grassy areas, often in clay, limestone, or serpentine. 200-500 m. SCoRI, SW	Yes. Appropriate soil and grassland habitat are present onsite.	No	Not Significant
15.	**Shining Navarretia** *Navarretia nigelliformis* ssp. *radians*	None/none G4T1/S1.1 List 1B.2	May - July	Vernal pools, clay depressions, open areas in mesic grasslands; 100-1000 m.	Yes. This subspecies was mapped in two patches on site.	Yes	Not Significant With Mitigation
16.	**Rayless Ragwort*** *Senecio aphanactis*	None/none G3?/S1.2 List 2.2	January - April	Drying alkaline flats, chaparral, cismontane woodland, coastal scrub; <400 m. CW, SCo, Chi	No. Appropriate soils and habitat types not present.	No	Not Significant

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
	Plants						
17.	**San Bernardino Aster** *Symphyotrichum defoliatum*	None/none G3/S3.2 List 1B.2	July - November	Vernally mesic grasslands near ditches, streams, springs, or disturbed areas; 2-2040 m.	No. Collection record for "North of Creston" is not positively identified. Location possibly too far north.	No.	Not Significant

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
	Animals						
18.	**Pallid Bat*** *Antrozous pallidus*	None/none G5/S3 CSC	Spring – Summer	Rock crevices, caves, tree hollows, mines, old buildings, and bridges.	Yes. Appropriate roosting areas are found in oak trees on the property.	No	Not Significant With Mitigation
19.	**Golden Eagle*** *Aquila chrysaetos*	None/none G5/S3 CSC	March 1 through August 31	Nests in large, prominent trees in valley and foothill woodland. Requires adjacent food source.	Yes. Golden eagles were observed hunting on the property regularly. Active nest located on site.	Yes	Not Significant With Mitigation
20.	**Burrowing Owl*** *Athene cunicularia*	None/none G4/S2 CSC	March 1 through August 31	Burrows in squirrel holes in open habitats with low vegetation.	Yes. Appropriate grassland habitat is present on site.	No	Not Significant With Mitigation
21.	**Vernal Pool Fairy Shrimp** *Branchinecta lynchi*	Threatened/none G3/S2S3 None	Rainy Season	Clear water sandstone depression pools, grassed swale, earth slump, or basalt flow depression pools.	Yes. Vernal pool habitat is present on the subject site.	No	Not Significant With Mitigation; **Consultation with USFWS required**
22.	**Southwestern Pond Turtle** *Clemmys marmorata pallida*	None/none G3G4T2T3Q/S2 CSC	April - August	Permanent or semi-permanent streams, ponds, lakes.	No. Appropriate aquatic habitat not present.	No	Not Significant

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
				Animals			
23.	**White-tailed Kite*** *Elanus leucurus*	None/none G5/S3 None	March 1 through August 31	Nests in dense tree canopy near open foraging areas	Yes. Potential nesting and foraging habitat is present.	No	Not Significant with Mitigation
24.	**Horned Lark*** *Eremophila alpestris actia*	None/none G5T3/S3 CSC	March 31 to August 31	Nests on the ground in open habitats with short grass. More common in the interior.	Unlikely. Adults could occur on property but are unlikely to nest on site.	No	Not Significant
25.	**Loggerhead Shrike*** *Lanius ludovicianus*	None/none G4/S4 CSC	March 1 through August 31	Open areas with appropriate perches, near shrubby vegetation for nesting.	Yes. Moderately appropriate nesting habitat is found in riparian trees on site.	No	Not Significant With Mitigation
26.	**California Linderiella*** *Linderiella occidentalis*	None/none G2G3/S2S3 None	Rainy season	Seasonal pools in unplowed grasslands with alluvial soils.	Yes. Vernal pools on site provide adequate habitat.	No	Not Significant With Mitigation
27.	**San Joaquin Pocket Mouse** *Perognathus inornatus inornatus*	None/none G4T2T3/S2S3 None	n/a	Grasslands and blue oak savannahs with friable soil and occasional shrubs. Also chaparral.	Yes. Appropriate habitat is present in annual grassland and blue oak woodland on site.	No	Not Significant
28.	**Atascadero June Beetle** *Polyphylla nubila*	None/none G1/S1 None	n/a	Known only from sand dunes in Atascadero and San Luis Obispo, San Luis Obispo County.	No. Appropriate dune habitat not present.	No	Not Significant
29.	**California Red-legged Frog** *Rana aurora draytonii*	Threatened/none G4T2T3/S2S3 CSC	January – March	Lowlands and foothills in or near sources of deep water with dense, shrubby or emergent riparian vegetation.	No. Appropriate perennial aquatic habitat not present.	No	Not Significant
30.	**Western Spadefoot Toad** *Spea hammondii*	None/none G3?/S3? CSC	January – August	Vernal pools in grassland and woodland habitats	Yes. Appropriate breeding habitat is present in vernal pools on the subject site.	No	Not Significant With Mitigation

	Common and Scientific Names	Fed/State Status Global/State Rank CNPS List	Blooming Period	Habitat Preference	Potential Habitat?	Observed on Site?	Effect of Proposed Activity
	Animals						
31.	**American Badger** *Taxidea taxus*	None/none G5/S4 CSC	February – May	Needs friable soils in open ground with abundant food source such as California ground squirrels.	Yes. Appropriate habitat is present in annual grassland on site.	No	Not Significant With Mitigation
32.	**Lompoc Grasshopper** *Trimerotropis occulens*	None/none G1G2/S1S2 None	n/a	Unknown. Known only from Santa Barbara and San Luis Obispo Counties	Unlikely. Thought to be extirpated from the area. Only source of info is a 1909 collection.	No	Not Significant
33.	**San Joaquin Kit Fox** *Vulpes macrotis mutica*	Endangered/ Threatened G4T2T3/S2S3 None	December – July	Annual grasslands or grassy open stages with scattered shrubby vegetation. Needs loose textured sandy soil and prey base.	Yes. Appropriate denning and foraging habitat found on site.	No	Not Significant With Mitigation

Habitat characteristics are from the Jepson Manual and the CDNNB.
*not listed in the CNDDB or CNPS for the search area, but possible for the location.
Abbreviations:

CCo: Central Coast
SCo: South Coast
SCoR: South Coast Ranges
SCoRO: Outer South Coast Ranges
SCoRI: Inner South Coast Ranges
SnFrB: San Francisco Bay
TR: Transverse Ranges
WTR: Western Transverse Ranges
SnJV: San Joaquin Valley
SLO: San Luis Obispo
SN: Sierra Nevada
SnJt: San Jacinto Mtns
Teh: Tehachapi Mtn Area
CW: Central West
SW: South West

	Common Name	Status	Potential Habitat?	Effect of Proposed Activity
Sensitive Natural Communities				
1.	**Freshwater Vernal Pool**	No federal or state status. Habitat of local concern.	Yes. Vernal pools are present on the subject site. These pools provide potential habitat for an assemblage of unique plants and wildlife, including three special status species.	Not Significant With Mitigation

3.6.4 Special status plants that could or do occur on the property

This section provides an explanation of the potential for occurrence of seven special status plant species thought to be compatible with conditions on the subject property. We discuss each species and describe habitat, range restrictions, known occurrences, and survey results for the property. One special status plant, shining navarretia, was mapped on the property in 2006. A constraints map is provided in Appendix A for reference.

A. **Dwarf Calycadenia** (*Calycadenia villosa*) is on CNPS List 1B.1, the highest threat rank for plants before state or federal protections are sought. The species is known from dry, rocky hills and gravelly outwashes in Monterey, San Luis Obispo, Santa Barbara, Fresno and Kern Counties. The CNPS considers this species to be seriously endangered. Occurrences in the CNDDB for San Luis Obispo and Monterey Counties include the vicinity of Nacimiento and San Antonio Lakes, north to Jolon, with scattered occurrences in Parkfield to the east and in La Panza District, east of Santa Margarita. The closest reported occurrence to the project site is approximately eight miles west, near Bee Rock in the Adelaida quadrangle. Dwarf calycadenia was not found to be present on the property during site surveys in May and June 2006.

B. **Obispo Indian paintbrush** (*Castilleja densiflora* ssp. *obispoensis*) is a CNPS List 1B.2 subspecies known only from San Luis Obispo County. It is an annual wildflower that occurs in coastal grasslands in sandy or clay soils. It is not generally known from inland areas, however there are recent reports from the Paso Robles region (CNDDB Occurrences 36, 37, and 42). The closest reported occurrence is from approximately one mile northeast of the subject property near the intersection of Airport Road and Dry Creek Road (Occ. 42). A few small patches of this plant were identified on the property, at the end of the blooming period for this subspecies when it could not be accurately mapped. Appropriately timed surveys conducted at the peak of bloom for this plant will be necessary to determine the extent of Obispo Indian paintbrush on the subject property.

C. **Douglas' spineflower** (*Chorizanthe douglasii*) is a CNPS List 4.3 species known from San Benito, Monterey, and San Luis Obispo Counties. It is considered rare, but found in sufficient numbers and distributed widely enough within its known range that the threat of extinction is low at this time. This spineflower grows in gravelly or sandy substrates in the Santa Margarita area (Hoover #11352, Crampton #6978, etc.), Adelaida (Rose #36265), Nacimiento River (Hardham #4396), Bee Rock (Bacigalupi #7434), and other areas of San Luis Obispo County. Appropriate habitat is present on the subject property. Douglas' spineflower was not found on the property during floristic surveys in May and June 2006.

D. **Round-leaved Erodium** (*Erodium macrophyllum*) is a CNPS List 2.1 species known from sporadic occurrences throughout the interior region of California. It is found in clay soils in woodland and grassland habitats. In San Luis Obispo County this species is found from Pozo and eastern Santa Margarita through Creston, Atascadero, Templeton, and eastern Paso Robles. No recent records for this species have been reported to the CNDDB from the vicinity of the project

site. Round-leaved Erodium was not found on the property during site surveys in the spring of 2006.

E. **Salinas Valley goldfields** (*Lasthenia leptalea*) is a CNPS List 4.3 species endemic to Monterey, San Luis Obispo, and Kern Counties. *L. leptalea* is limited in distribution but abundant enough to be considered not very endangered by CNPS. This species is known from the vicinity of the subject property. Numerous collections from northern Atascadero, Adelaida, the Lake Nacimiento area, and the Creston area date back as far as 1947, with some collections as recent as 1998. A 1963 collection of Salinas Valley goldfields is from ranch land on Huerhuero Creek; locality data provided with this collection is not specific enough to determine proximity to the subject property. This species was not observed on the property, although spring surveys were begun in May, after the peak blooming period for this species.

F. **Paso Robles navarretia** (*Navarretia jaredii*) is a CNPS List 4.3 species endemic to Monterey and San Luis Obispo Counties. It grows in clay, gravelly loam, and calcareous soils in areas with little competition from annual grasses. The CNPS considers this species not to be very endangered in California. Appropriate grassland habitat is present on the subject site. Paso Robles navarretia was not found on the property during spring floristic surveys conducted in May and June 2006.

G. **Shining navarretia** (*Navarretia nigelliformis* ssp. *radians*) is a CNPS List 1B.2 subspecies known from vernal pools, valley and foothill grassland, and cismontane woodland habitats in Fresno, Merced, Monterey, San Benito, and San Luis Obispo Counties. Shining navarretia was identified on the Chandler Ranch in an EIR produced in 2000 by Douglas Wood and Associates, Inc., about 2.5 miles south of the subject property. This locality was verified by Althouse and Meade, Inc. botanists in 2005. Shining navarretia was found on the subject property during our initial floristic surveys in the fall of 2005. This rare subspecies was mapped on the Paso 160 LLC property on south and southwest facing slopes on the Arbuckle-Positas soil complex (see Appendix A).

3.6.5 Special status animals that could occur on the property

This section provides an explanation of the potential for occurrence of 11 special status animal species thought to be compatible with conditions on the subject property. We discuss each species and describe habitat, range restrictions, known occurrences, and survey results for the subject property. One special status animal, golden eagle, was observed on the property during biological investigations in 2006. We searched the property for mammal dens that would indicate use of the property by American badger or San Joaquin kit fox. Protocol surveys for listed vernal pool species was not conducted. Trapping for small mammals, such as San Joaquin pocket mouse, was not conducted as a part of this study. A constraints map is provided in Appendix A for reference.

A. **Pallid bat** *(Antrozous pallidus)* is a California Special Concern species. This is a large, long-eared bat occurring throughout the state from deserts to moist forests. *Antrozous pallidus* is primarily a crevice roosting species and selects roosts where they can retreat from view. They frequently occur in oak woodlands where they

roost in tree cavities. These roosts are generally day or night roosts for one or a few bats. Attics may be used as roosts and during hot days they may emerge from crevices and roost on open rafters. Communal wintering or maternity colonies are more common in rock crevices and caves. Appropriate roosting habitat is present in oak trees and rock crevices on the property. Pallid bat (*Antrozous pallidus*) is a California Special Concern species. Pallid bat is a large long-eared bat occurring throughout the state from deserts to moist forests. *A. pallidus* is primarily a crevice roosting species that selects roosts where it can retreat from view. Pallid bats frequently occur in oak woodlands where they roost in tree cavities and rock outcrops. Attics may be used as roosts. Appropriate habitat for this species is found in oak trees on the property.

B. **Golden eagle** (*Aquila chrysaetos*) is a California Special Concern species with no state or federal status. Golden eagles are a fully protected under federal law. They require large trees for nesting and open hunting grounds with abundant prey. Adult and juvenile golden eagles were observed on the property regularly in the spring of 2006. Grasslands on the property are used by golden eagles for hunting California ground squirrels and other prey items. Golden eagles nest on the subject property. An abandoned nest was observed in a tree along the edge of Huerhuero Creek. An occupied nest with at least one chick was observed in a blue oak tree on the property in 2006.

C. **Burrowing owl** (*Athene cunicularia*) is a rare owl that nests and lives in abandoned dens in the ground in open habitats, most notably those of California ground squirrel. It is a common resident in local areas of the interior, from Bitterwater Valley to the Carizzo Plain. Less frequent reports are from coastal grasslands. There are no reports in the CNDDB for burrowing owl in the immediate vicinity of the subject property, however appropriate habitat is present, and transient owls could use the property on occasion. Two wintering burrowing owls were observed by Althouse and Meade, Inc. biologists on the Chandler Ranch, approximately one mile south of the subject property, in October 2006. Burrowing owl was not observed on the subject property during our spring site surveys, but could winter on site.

D. **Vernal pool fairy shrimp** (*Branchinecta lynchi*) is a federally listed threatened species known from the vicinity of the subject property. Occurrence #287 and #380 in the CNDDB are from vernal pools less than half a mile southeast of the property. Two vernal pools occur on flat ground in the southwestern quarter of the property, adjacent to an existing unpaved agricultural road. These pools could support vernal pool fairy shrimp. Reconnaissance-level surveys of these pools were conducted in late May, 2006, when the pools were nearly dry. Appropriately timed protocol surveys would be required to determine whether vernal pool fairy shrimp are present in these vernal pools.

E. **White-tailed kite** (*Elanus leucurus*) is a California Special Concern species that nests in dense tree canopy near open fields for hunting throughout San Luis Obispo County. The CNDDB does not contain nesting records for this species in the vicinity of the subject property. However Althouse and Meade, Inc. biologists

observed a pair nesting in live oak trees on the south shore of Lake Nacimiento, and a second pair nesting in blue oak woodland in Vineyard Canyon (northeast of San Miguel) in 2006. Appropriate nesting and foraging areas are present on the subject property; however, kites were not observed on the property during our surveys of the site in 2006.

F. **Loggerhead shrike** (*Lanius ludovicianus*) is a California Special Concern species. It requires open areas with appropriate perches for hunting, and shrubby trees or bushes for nesting. Appropriate foraging habitat is present in grasslands on site. Some areas of riparian habitat support shrubby vegetation appropriate for nesting loggerhead shrikes. This species was not observed on the property during site surveys in 2006; however, loggerhead shrike could nest on site in the future.

G. **California linderiella** (*Linderiella occidentalis*) is an uncommon but wide ranging species of fairy shrimp about an inch in length that inhabits small vernal pools and seasonal ponds in sporadic occurrences throughout much of central California. No occurrences are listed in the CNDDB for the vicinity of the subject property; however, California linderiella could occur in vernal pools on the subject property. Reconnaissance-level surveys of these pools were conducted in late May, 2006, when the pools were nearly dry. Appropriately timed protocol surveys would be required to determine whether California linderiella are present in these vernal pools.

H. **San Joaquin pocket mouse** (*Perognathus inornatus inornatus*) is a California Special Concern subspecies known from the San Miguel area. The closest record is a 1918 collection approximately 5 miles northwest of the subject property (Dixon, J. MVZ #29012). A more recent collection from 1999 in the Estrella River wash is more than 10 miles from the subject site (CNDDB Occurrence #100). There are no recent records of San Joaquin pocket mouse in the vicinity of the project site. Small mammal trapping was not conducted as part of this study. The blue oak woodland and surrounding grasslands have suitable substrates for this species.

I. **Western spadefoot toad** (*Spea hammondii*) is a California Special Concern species that breeds in ephemeral pools in open grassland habitats across the interior region of San Luis Obispo County. Spadefoot toads remain underground for most of the year, emerging to breed in seasonal wetland pools during the rainy season. Development of the larvae from egg to metamorphosis can be very quick, when water temperatures are warm. Spadefoot toads are known to breed in seasonal pools in the vicinity of Highway 46 and Airport Road, east of Paso Robles. Appropriate breeding habitat for spadefoot toad is found in vernal pools on site. These pools were examined in late May 2006 when they were nearly dry. Neither Western spadefoot toad tadpoles nor adults were observed on the property; however the surveys could have been conducted too late in the breeding season to detect larvae. It is likely that spadefoot toad occurs on the property.

J. **American badger** (*Taxidea taxus*) is a California Special Concern species known from open grassland habitats throughout San Luis Obispo County and elsewhere

in California. Appropriate habitat for badger is found on the subject property. No dens or other sign of badgers were observed on the property during our preliminary site surveys.

K. **San Joaquin kit fox** (*Vulpes macrotis mutica*) is a federally listed endangered species and a state listed threatened species. They are known from the Carizzo Plain, Bitterwater Valley and Camp Roberts, with transient individuals known to move between the populations. Huerhuero Creek is considered to be one of the known movement corridors for kit fox. Huerhuero Creek crosses the northern portion of the subject property. The open grasslands on the property provide appropriate habitat for San Joaquin kit fox. Development on the property will permanently remove habitat for San Joaquin kit fox. This area is within the three to one mitigation ratio area (as per the San Luis Obispo County Standard Kit Fox Mitigation Ratios map, found at:

http://landarch.larc.calpoly.edu/slocounty/images/MapsPDF/KitFox.pdf).

3.6.6 Special status species not expected to occur on the property

The remaining 15 special status species known to occur in the Paso Robles, Estrella, Templeton, and Creston quadrangles are not expected to occur on the property due to the absence of required soil type, lack of appropriate habitat, or because the project site is substantially outside the known range of the species.

3.6.7 Sensitive natural communities

No habitats listed by the California Department of Fish and Game as Sensitive Natural Communities are present on the property. Vernal pools, a sensitive natural community of local concern, are present on the subject property. These pools have potential to harbor three species of special concern as well as numerous uniquely adapted native plant and wildlife species.

4.0 Discussion

4.1 General Discussion of Property Conditions

This 160-acre ranch has been grazed historically. At the time of our biological investigations, cattle were actively grazing the property. Other minor uses, such as material storage (concrete pavers) and disposal of pressed grapes has occurred on the property. Golden Hill Road ends at Circle B Road near the southwest corner of the property, providing access to the site. Oak woodland and grassland habitats are the prominent vegetation types on the property. One special status plant species was mapped on the property in 2006. An occupied golden eagle nest was mapped on the property in blue oak woodland habitat along Huerhuero Creek. Vernal pools and seasonal wetlands were identified on site, but were not adequately mapped due to the late season initiation of our site surveys.

4.2 Regulatory Framework

The California Environmental Quality Act (CEQA) requires the lead agency (in this case, San Luis Obispo County) to determine potential environmental effects of the project. The lead agency must also identify other involved agencies that become responsible or trustee agencies.

All of the plants constituting CNPS List 1B meet the definitions of Sec. 1901, Chapter 10 of the California Native Plant Protection Act (CNPPA) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA (CEQA section 15065).

Plants protected under the CNPPA must be fully considered under CEQA (CEQA sections 15380, 15386). Proposed impacts that affect more than 10 percent of a local breeding population generally require mitigation at a minimum 2:1 ratio.

The California Department of Fish and Game (CDFG) recognizes that Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing, and recommends they be addressed in CEQA projects. The CDFG should be consulted regarding measures employed to protect special status plants.

Special status plants and animals listed under the Federal Endangered Species Act (FESA) are protected. The United States Fish and Wildlife Service (USFWS) is the agency that regulates activities affecting federally listed species. To avoid take of federally listed species and subsequent penalties, the USFWS should be contacted for an opinion on projects with the potential to affect federally listed species. The Paso 160 LLC project could affect two federally listed species: San Joaquin kit fox and vernal pool fairly shrimp.

Nesting birds are protected from disturbance by The Migratory Bird Treaty Act of 1918, (as regulated by the United States Fish and Wildlife Service) and by sections 3503, 3503.5, and 3800 of the California Department of Fish and Game code.

Drainages on the property are under the permitting jurisdiction of the U.S. Army Corps of Engineers (section 404), the California Department of Fish and Game (code 1603), and the Regional Water Quality Control Board (section 401). The applicant should demonstrate to the lead agency that all applicable permits have been obtained for work affecting drainages. All work that affects the bed or banks of the drainages, including culverts and bridges, are likely to require USACE, RWQCB, and CDFG authorizations.

5.0 Potential Impacts

Development on the subject property could affect special status plant and animal species, grasslands, oak woodlands, riparian habitat, vernal pools, seasonal wetlands, ephemeral drainages, native oak trees and common plant and animal species. This biological assessment does not account for project-specific impacts. The following sections focus on biological constraints on the subject property, and potential impacts to biological resources that could result from development on the property.

Sections 5.1 through 5.4 address the distribution of biological resources on the 160-acre property and assess potential impacts to biological resources from potential development. We include in our analysis impacts to both common and special status species, as well as to habitats that are not sensitive. This consideration contributes to understanding cumulative impacts to the environment that may result from the loss of common species and habitat.

5.1 Potential Habitat Impacts

5.1.1 Annual grassland

Grassland habitat with scattered oak trees occurs on the subject property. Grassland habitat was mapped in the southwestern corner of the property and on a flood terrace at the north end of the property, although additional small grassland areas are present that are outside the oak woodland canopy. One special status plant species, shining navarretia, occurs in grassland habitat on site.

Development on site would result in a permanent loss of annual grassland habitat. Grasslands on the subject site provide potential habitat for three special status animals, San Joaquin kit fox, San Joaquin pocket mouse, and American badger, and seven special status plants, including shining navarretia. Impacts to annual grassland habitat that affect special status species can be mitigated to a less than significant level (see sections 5.4 and 6.4).

5.1.2 Blue oak woodland

Oak woodlands occupy approximately one-third of the subject site. Development on the property could result in impacts to oak woodland habitat. Impacts to oak woodland extend beyond loss of individual trees, and include loss of nesting and foraging habitat for wildlife and sheltered growing conditions for many native plants, including special status species. Golden eagles were documented nesting in oak woodland habitat on site. The loss of blue oak woodland habitat on-site could be a significant environmental impact.

5.1.3 Riparian

Huerhuero Creek flows along the northern and eastern edges of the property. Impacts to Huerhuero Creek from installation of culverts, bridges, and outfall structures are under the permitting jurisdiction of the United States Army Corps of Engineers (section 404), the Regional Water Quality Control Board (section 401), and the California Department of Fish and Game (DFG code 1603).

Alterations to the floodplain of Huerhuero Creek, within the 100-year flood line, could significantly impact riparian habitat, both on the property and elsewhere in the watershed, by changing the hydrology of the system.

Alteration or reduction of the riparian habitat on the property could reduce usable habitat for the federally listed San Joaquin kit fox. Riparian habitat impacts would not affect vernal pool fairy shrimp.

5.1.4 Ephemeral drainage

One small, incised ephemeral drainage occurs on the property that is under the permitting authority of the United States Army Corps of Engineers (section 404), the Regional Water Quality Control Board (section 401), and the California Department of Fish and Game (DFG code 1603). Impacts that require a permit include installation of culverts, bridges, and outfall structures, or grading activities that result in fill of this drainage.

5.1.5 Vernal pools

Vernal pools occur within grassland habitat on flat land in the southwest portion of the property. Development of this area could impact or remove vernal pool habitat on the property. Vernal pools are known to harbor federally listed fairy shrimp in the Paso Robles region, as well as other special status species. Degradation or removal of vernal pools would be a significant environmental impact.

5.1.6 Seasonal wetlands

A formal wetland delineation and a jurisdictional determination have not been conducted for the property. Seasonal wetlands at the southwest corner of the property could be affected by construction of access roads onto the site, or other development. Loss of state or federal wetlands would be a significant impact.

5.2 Potential Oak Tree Impacts

The City of Paso Robles requires impacts to oak trees with a diameter at breast height (dbh) of 5 inches or greater to be mitigated. Diameter at breast (dbh) is measured at 4.5 feet from the ground or, if the trunk is split below 4 feet, at the narrowest point below the split. Impacts include any ground disturbance within the critical root zone (CRZ), or any trimming of branches 4 inches in diameter or greater. The critical root zone (CRZ), as defined by the City of Paso Robles, is an area of root space that is within a circle circumscribed around the trunk of a tree using a radius of 1 foot per inch dbh, e.g., a 20-inch diameter tree has a CRZ with a radius of 20 feet as measured from the center of the tree (City of El Paso de Robles - Ordinance No. 835 N.S). This measurement often extends beyond the actual drip-line of the tree.

Development on the property could result in impacts or removal of native oak trees. Without a specific project plan, total impacts to oak trees cannot be quantified. Impacts to individual oak trees can be mitigated to a less than significant level (see section 6.2).

5.3 Potential Impacts to Common Wildlife

5.3.1 Nesting habitat

Impacts to or take of nesting birds could occur if grading or tree removal/trimming is conducted during nesting season (March 1 through August 31). Take of any nesting birds is prohibited by federal and state code. Impacts to or take of nesting birds can be avoided (see section 6.3.1).

5.3.2 Reduction of wildlife movement corridors

Development of the proposed project will alter common wildlife species' patterns of movement across the property. Movement corridors through drainages to and from nearby Huerhuero Creek will not be completely disrupted, but free movement across the property would be reduced. Impacts to San Joaquin kit fox movement corridors are discussed in section 5.5.3.

5.3.3 Displacement and/or take

Common wildlife species currently living on the property or using the property as transients will be displaced by development of the site. Take of common species may occur during construction activities. Displacement and/or take of common wildlife species is not a significant impact.

5.4 Potential Impacts to Special Status Plant Species

Seven special status plant species have the potential to occur on the property. Two special status plant subspecies, shining navarretia and Obispo Indian paintbrush, were identified on the property in 2006. Numerous additional special status plant species have the potential to occur on site. A Biological Constraints Map is provided in Appendix A for reference.

5.4.1 Navarretia nigelliformis ssp. *radians*

Shining navarretia (*Navarretia nigelliformis* ssp. *radians*) was mapped in two locations on the subject property in 2006. Approximately 100 plants were present in the smaller patch, and more than 500 plants were present in the second patch. Because this plant is an annual species, exact number of plants can vary substantially from year to year depending on precipitation patterns and other climactic factors.

Shining navarretia is on CNPS List 1B.2, which means it is considered fairly endangered in California with 20-80% of occurrences threatened. It occurs in very local patches on the property even though appropriate habitat appears to be present elsewhere. The permanent loss of shining navarretia populations on the property would be a significant environmental impact requiring mitigation.

5.4.2 Castilleja densiflora ssp. *obispoensis*

Obispo Indian paintbrush (*Castilleja densiflora* ssp. *obispoensis*) was identified in a few small patches on the property, at the end of its blooming season. This subspecies was identified on site too late in the season for accurate mapping. Potential impacts to this

CNPS List 1B.2 subspecies cannot be adequately evaluated until it is mapped on the property at the peak of bloom. Because this plant is an annual species, exact number of plants can vary substantially from year to year depending on precipitation patterns and other climactic factors.

5.5 Potential Impacts to Special Status Animal Species

Eleven special status animals have the potential to occur on the property. Three special status mammals, San Joaquin pocket mouse, San Joaquin kit fox, and American badger, are known to occur in regional grassland habitats. Pallid bat, a California Special Concern species, could occur in oak trees on the site. Four sensitive birds, golden eagle, white-tailed kite, burrowing owl, and loggerhead shrike, could nest on the property. Two special status crustaceans, vernal pool fair shrimp and California linderiella, and one special status amphibian, Western spadefoot toad, could be present in vernal pools on the property.

5.5.1 Special status birds

Burrowing owl could nest in grassland habitats on the property. Appropriate nesting habitat for loggerhead shrike is present in shrubby riparian habitat along Huerhuero Creek. White tailed kites could nest in blue oak woodland on the property. Golden eagles nested on the property in 2006. Disturbance and/or take could occur if any of these species nest in proposed project areas in the future. Potential impacts to special status birds can be mitigated to a less than significant level (see section 6.5.1).

5.5.2 Pallid bat

Removal of mature trees with trunk cavities or loose bark could impact roosting bats and/or maternal bat colonies. Potential impacts to roosting bats or maternal bat colonies can be mitigated to a less than significant level (see section 6.5.2).

5.5.3 San Joaquin pocket mouse

Small mammal trapping was not conducted as part of this study. San Joaquin pocket mouse could occur on site. Annual grasslands and dry blue oak woodlands on the property could provide potential habitat for San Joaquin pocket mice.

5.5.4 Western spadefoot toad

Appropriate breeding habitat for spadefoot toads is present in vernal pools and seasonal wetlands on site. Surveys of vernal pools on the property did not occur early enough in 2006 to determine whether spadefoot toads are present.

If spadefoot toads are determined to occur on site, grading operations conducted in grassland areas could result in take. Removal of vernal pools and seasonal wetlands on the property would reduce the potential for successful breeding of spadefoot toads on site.

5.5.5 Fairy shrimp

Potential habitat for listed fairy shrimp species may be present in vernal pools and seasonal wetlands on the property. Protocol surveys for these species were not conducted. If developments or subsequent activities disturb or remove vernal pools,

federally listed fairy shrimp species could be impacted. The Federal Endangered Species Act (FESA), as regulated by USFWS, protects federally listed species and their habitat.

5.5.6 San Joaquin kit fox

The project site is within known San Joaquin kit fox habitat. Removal of any grassland habitat on the property would result in a loss of kit fox habitat. Development on the property and subsequent use could discourage kit fox from utilizing remaining habitat and movement corridors along Huerhuero Creek. If walls or wooden fences are built around the property boundaries, the entire property could be removed from potential use by kit fox. Precise acreages cannot be calculated without a finalized project plan; however removal of any designated San Joaquin kit fox habitat would be a significant but mitigable impact (see section 6.5.6).

5.5.7 American badger

Annual grassland habitat usable by badgers occurs on the property and could be removed by development and subsequent use of the land. Indirect impacts to badgers include the loss of foraging and denning habitat. Direct impacts could occur if a badger takes up residence on the site. The loss of grassland habitat is not a significant impact, although the cumulative loss of habitat in the Paso Robles region has negatively affected badger populations in the area. Disturbance of denning badgers, if present, would be a significant but mitigable impact (see section 6.5.7).

6.0 Mitigation Recommendations

We recommend the following biological resource (BR) mitigation measures to reduce project impacts to a less than significant level.

6.1 Habitat Mitigations

6.1.1 Annual grassland

Annual grassland habitat in the Paso Robles region is considered potential habitat for the federally endangered San Joaquin kit fox. Loss or permanent degradation of grassland habitat in this area is a significant but mitigable impact. The subject property is within the three-to-one mitigation ratio area (acres replaced per acres impacted).

BR-1. Prior to issuance of grading and/or construction permit(s), the applicant shall submit evidence to the City of Paso Robles (City) that states that one or a combination of the following four San Joaquin kit fox mitigation measures has been implemented:

i. Provide for the protection in perpetuity, through acquisition of a fee or a conservation easement of suitable habitat in the kit fox corridor area (e.g. within the San Luis Obispo County kit fox habitat area, northwest of Highway 58), either on-site or off-site, and provide for a non-wasting endowment to provide for management and monitoring of the property in

perpetuity. Lands to be conserved shall be subject to the review and approval of the California Department of Fish and Game (CDFG) and the City of Paso Robles (City).

Mitigation alternative (i) requires that all aspects of this program must be in place before City permit issuance or initiation of any ground disturbing activities.

ii. Deposit funds into an approved in-lieu fee program, which would provide for both the protection in perpetuity of suitable habitat in the kit fox corridor area within San Luis Obispo County and a non-wasting endowment for management and monitoring of the property in perpetuity.

Mitigation alternative (ii) can be completed by providing funds to The Nature Conservancy (TNC) pursuant to the Voluntary Fee-Based Compensatory Mitigation Program (Program). The Program was established in an agreement between CDFG and TNC to preserve San Joaquin kit fox habitat and to provide a voluntary mitigation alternative to project proponents who must mitigate the impacts of projects in accordance with CEQA. A fee would be charged per acre. This fee must be paid after CDFG provides written notification about your mitigation options but prior to City permit issuance and initiation of any ground disturbing activities.

iii. Purchase the appropriate number of mitigation credits, as determined by the San Joaquin habitat evaluation form and reviewed by CDFG. The credits would be obtained from a CDFG-approved conservation bank, which would provide for the protection in perpetuity of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring of the property in perpetuity.

At this time, there is an approved conservation bank in San Luis Obispo County. The Palo Prieto Conservation Bank is expected to be operational in the near future. Purchase of credits must be completed prior to City permit issuance and initiation of any ground disturbing activities.

iv. If none of the above measures (i, ii, or iii) are available, the applicant may enter into a Mitigation Agreement with CDFG, including depositing funds into an escrow account (or other means of securing funds acceptable to the CDFG) which would ensure the protection in perpetuity of the appropriate number of mitigation acres as determined by use of the San Joaquin kit fox habitat evaluation form and review by CDFG of suitable habitat within the kit fox corridor area and provide for a non-wasting endowment for management and monitoring in perpetuity. CDFG can provide a draft agreement to review; a signed Mitigation Agreement shall be submitted prior to City permit issuance and initiation of any ground disturbing activities.

6.1.2 Blue oak woodland

Presently the City of Paso Robles does not require separate mitigation for the loss of oak woodland habitat. Impacts to individual oak trees do require mitigation (see section 6.2).

6.1.3 Riparian

The subject property includes over 5000 linear feet of riparian habitat in Huerhuero Creek. Indirect impacts to riparian habitat and water quality from surface run-off and storm drains should be limited through appropriate drainage plans. Drainage plans shall avoid direct outputs of surface run-off into Huerhuero Creek. Storm drains shall incorporate filters that would remove trash and hydrocarbons.

Any outfall structures that deposit run-off into Huerhuero Creek require certification by the Regional Water Quality Control Board (RWQCB), and may require authorization from the United States Army Corps of Engineers and a 1603 Streambed Alteration Agreement from the California Department of Fish and Game. Additional mitigations may be required by the RWQCB to protect water quality.

For projects along Huerhuero Creek in the Paso Robles area the CDFG recently has recommended a 100-foot riparian set-back from the outer edge of riparian vegetation, or the top of bank, whichever is greater. A 100-foot setback is appropriate for the subject property. Alteration of natural flood plains must be consistent with FEMA guidelines.

6.1.4 Ephemeral drainage

One ephemeral drainage occurs on the property as a tributary to Huerhuero Creek. Proposed impacts would be under the same permitting requirements as outlined above (section 6.1.3).

Proposed projects should provide for a 50-foot set-back from ephemeral drainages to protect water quality from increased run-off.

6.1.5 Vernal pools

Vernal pools are a sensitive natural community of special concern in the County of San Luis Obispo and elsewhere. These pools provide potential habitat for three special status wildlife species, including one federally listed species of fairy shrimp. Protocol surveys for these species were not conducted as part of this study. We recommend avoidance and protection of these pools.

If the project is expected to impact vernal pools on the property, surveys should be performed according to USFWS protocols in order to establish presence or absence of listed fairy shrimp on site.

BR-2. **Prior to issuance of grading and/or construction permit(s),** if work is expected to impact vernal pools or seasonal wetlands on site, a biologist qualified to conduct surveys for sensitive fairy shrimp species according to USFWS protocols shall conduct a fairy shrimp habitat assessment to determine the potential for fairy shrimp to occur on site. If potential habitat is present, a protocol survey shall be conducted. If vernal pool fairy shrimp (*Branchinecta lynchi*) are discovered, consultation with the USFWS must occur.

6.1.4 Seasonal wetlands

A formal wetland delineation shall be conducted on the property according to state and federal standards to determine the extent of Clean Water Act section 404 jurisdictional wetlands and waters of the United States on the property.

BR-3. If impacts to wetlands are proposed, the following steps shall be taken:

i. Permits must be obtained, as appropriate, from the California Department of Fish and Game (DFG Code 1603), the U.S. Army Corps of Engineers (Section 404 of the Clean Water Act), the Regional Water Quality Control Board (Section 401 of the Clean Water Act)

ii. An on-site monitor will be required during construction activities in areas containing jurisdictional wetlands or waters.

iii. A mitigation, monitoring, and reporting plan will be prepared and approved by the City and other jurisdictional agencies, as appropriate (i.e., California Department of Fish and Game, U.S. Army Corps of Engineers, and the Regional Water Quality Control Board). Wetland mitigation will increase the aerial extent of wetland habitat on site at a two-to-one ratio (created wetland area to impacted wetland area). Mitigation for disturbance to jurisdictional waters will include restoration and enhancement on site at a two to one ratio.

iv. Mitigation implementation and success will be monitored for a minimum of three years, depending on the jurisdictional agencies' requirements.

6.2 Oak Tree Mitigations

Oak tree impacts and mitigations shall be addressed by the project arborist. The following mitigation recommendations are modeled after guidelines set forth in the Paso Robles Tree Ordinance (City of El Paso de Robles - Ordinance No. 835 N.S).

BR-4. Tree canopies and trunks within 50 feet of proposed disturbance zones should be mapped and numbered by a qualified biologist and a licensed land surveyor. Data for each tree should include date, species, number of stems, diameter at breast height (dbh) of each stem, critical root zone (CRZ) diameter, canopy diameter, tree height, health, habitat notes, and nests observed.

BR-5. An oak tree protection plan shall be prepared and approved by the City of Paso Robles.

BR-6. Impacts to the oak canopy or critical root zone (CRZ) should be avoided where practicable. Impacts include pruning, any ground disturbance within the dripline or CRZ of the tree (whichever distance is greater), and trunk damage.

BR-7. Impacted oaks shall be mitigated for by planting one 24" boxed tree for impacts up to 25% of the root zone or canopy. Two 24" boxed trees shall be planted for trees with impacts up to 50% of the tree, and so on. The mitigation trees shall be incorporated into the landscape plan.

BR-8. Replacement oaks for removed trees must be equivalent to 25% of the diameter of the removed tree(s). For example, the replacement requirement for removal of two trees of 15 inches dbh (30 total diameter inches), would be 7.5 inches (30" removed x 0.25 replacement factor). This requirement could be satisfied by planting five 1.5" trees, or three 2.5 inch trees, or any other combination totaling 7.5 inches. A minimum of two 24" box, 1.5" trees shall be required for each oak tree removed.

BR-9. Replacement trees should be seasonally maintained (browse protection, weed reduction and irrigation, as needed) and monitored annually for at least 7 years. Replacement trees shall be of local origin, and of the same species as was impacted or removed.

6.3 Common Wildlife Mitigations

6.3.1 Nesting habitat

Migratory non-game native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory non-game birds (as listed under the Federal MBTA).

BR-10. Within one week of ground disturbance or tree removal/trimming activities, if work occurs between March 1 and August 31, nesting bird surveys shall be conducted. To avoid impacts to nesting birds, grading and construction activities that affect trees and grasslands shall not be conducted during the breeding season from March 1 to August 31. If construction activities must be conducted during this period, nesting bird surveys shall take place within one week of habitat disturbance. If surveys do not locate nesting birds, construction activities may be conducted. If nesting birds are located, no construction activities shall occur within 100 feet of nests until chicks are fledged. Construction activities shall observe a 300-foot buffer for active raptor nests.

6.3.2 Reduction of wildlife movement corridors

Development on the property could reduce the potential for San Joaquin kit fox to move through Huerhuero Creek. The loss of potential movement corridor habitat for the federally listed endangered San Joaquin kit fox can be mitigated (see BR-1).

6.3.3 Displacement and/or take

Wildlife expected to occur on the property includes common species such as gray fox, red fox, mule deer, coyote, bobcat, striped skunk, and several species of rodents. Mitigations for impacts to common wildlife species are usually not required.

6.4 Mitigations for Special Status Plant Species

6.4.1 Shining navarretia (Navarretia nigelliformis ssp. *radians)*

Two patches of shining navarretia were mapped during a spring 2006 floristic survey of the property. It was mapped in annual grassland only on open hillsides on the property, even though appropriate habitat appears to be present elsewhere. This species has very specific micro-habitat and soil requirements. We are not aware of any mitigation projects that have been conducted in San Luis Obispo County with this species. We recommend avoidance of shining navarretia and protection of its habitat on the property. Unavoidable impacts would require a mitigation monitoring plan to outline appropriate salvage and restoration techniques.

6.4.2 Obispo Indian paintbrush (Castilleja densiflora ssp. *obispoensis)*

Obispo Indian paintbrush (*Castilleja densiflora* ssp. *obispoensis*) was identified in a few small patches on the property, at the end of its blooming season. This subspecies was identified on site too late in the season for accurate mapping. Potential impacts to this CNPS List 1B.2 subspecies cannot be adequately evaluated until it is mapped by a qualified biologist at the peak of bloom (usually April). Following mapping, impact analysis can be performed to determine potential impacts and appropriate mitigation measures.

6.5 Mitigations for Special Status Animal Species

6.5.1 Special status birds

Pre-construction bird surveys are required within one week of ground disturbance or tree trimming or removal if conducted from March 1 through August 31 (see BR-10).

6.5.2 Pallid bat

Roosting bats and/or maternal bat colonies may be present in trees with appropriate cavities or loose bark.

BR-11. Prior to removal of any trees over 20 inches dbh, a survey shall be conducted by a qualified biologist to determine if any of the trees proposed for removal or trimming harbor sensitive bat species or maternal bat colonies. Maternal bat colonies may not be disturbed

6.5.3 San Joaquin kit fox

San Joaquin kit fox could occur in the project area. The project will result in a net loss of kit fox habitat (see BR-1). The following mitigation recommendations are designed to reduce the potential for direct impacts to kit fox to a less than significant level.

BR-12. Prior to issuance of grading and/or construction permits, the applicant shall provide evidence that they have retained a qualified biologist acceptable to the City. The retained biologist shall perform the following monitoring activities:

i. **Prior to issuance of grading and/or construction permits and within 30 days prior to initiation of site disturbance and/or construction,** the

biologist shall conduct a pre-activity (i.e. pre-construction) survey for known or potential kit fox dens and submit a letter to the City reporting the date the survey was conducted, the survey protocol, survey results, and what measures were necessary (and completed), as applicable, to address any kit fox activity within the project limits.

ii. **The qualified biologist shall conduct weekly site visits during site-disturbance activities** (i.e. grading, disking, excavation, stock piling of dirt or gravel, etc.) that proceed longer than 14 days, for the purpose of monitoring compliance with required Mitigation Measures BR-5 through BR-14. Site disturbance activities lasting up to 14 days do not require weekly monitoring by the biologist unless observations of kit fox or their dens are made on-site or the qualified biologist recommends monitoring for some other reason (see BR-5iii). When weekly monitoring is required, the biologist shall submit weekly monitoring reports to the City.

iii. **Prior to or during project activities,** if any observations are made of San Joaquin Kit fox, or any known or potential San Joaquin kit fox dens are discovered within the project limits, the qualified biologist shall re-assess the probability of incidental take (e.g. harm or death) to kit fox. At the time a den is discovered, the qualified biologist shall contact USFWS and the CDFG for guidance on possible additional kit fox protection measures to implement and whether or not a Federal and/or State incidental take permit is needed. If a potential den is encountered during construction, work shall stop until such time the USFWS determines it is appropriate to resume work.

If incidental take of kit fox during project activities is possible, **before project activities commence,** the applicant must consult with the USFWS. The results of this consultation may require the applicant to obtain a Federal and/or State permit for incidental take during project activities. The applicant should be aware that the presence of kit foxes or known or potential kit fox dens at the project site could result in further delays of project activities.

iv. **In addition,** the qualified biologist shall implement the following measures:

1. **Within 30 days prior to initiation of site disturbance and/or construction**, fenced exclusion zones shall be established around all known and potential kit fox dens. Exclusion zone fencing shall consist of either large flagged stakes connected by rope or cord, or survey laths or wooden stakes prominently flagged with survey ribbon. Each exclusion zone shall be roughly circular in configuration with a radius of the following distance measured outward from the den or burrow entrances:

   - Potential kit fox den: 50 feet
   - Known or active kit fox den: 100 feet
   - Kit fox pupping den: 150 feet

2. All foot and vehicle traffic, as well as all construction activities, including storage of supplies and equipment, shall remain outside of exclusion zones. Exclusion zones shall be maintained until all project-related disturbances have been terminated, and then shall be removed.
3. If kit foxes or known or potential kit fox dens are found on site, daily monitoring by a qualified biologist shall be required during ground disturbing activities.

Monitoring: Required prior to issuance of a grading and/or construction permit. Compliance will be verified by the City Planning Division.

BR-13. Prior to issuance of grading and/or construction permits, the applicant shall clearly delineate the following as a note on the project plans: "*Speed signs of 25 mph (or lower) shall be posted for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox*". Speed limit signs shall be installed on the project site **within 30 days prior to initiation of site disturbance and/or construction.**

BR-14. During the site disturbance and/or construction phase, grading and construction activities after dusk shall be prohibited unless coordinated through the City, during which additional kit fox mitigation measures may be required.

BR-15. Prior to issuance of grading and/or construction permit and within 30 days prior to initiation of site disturbance and/or construction, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (i.e. San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all mitigation measures specified by the City, as well as any related biological report(s) prepared for the project. The applicant shall notify the City shortly prior to this meeting. A kit fox fact sheet shall also be developed prior to the training program, and distributed at the training program to all contractors, employers and other personnel involved with the construction of the project.

BR-16. During the site-disturbance and/or construction phase, to prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes and trenches in excess of two feet in depth shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Trenches shall also be inspected for entrapped kit fox each morning prior to onset of field activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they shall be thoroughly inspected for entrapped kit fox. Any kit fox so discovered shall be allowed to escape before field activities

resume, or removed from the trench or hole by a qualified biologist and allowed to escape unimpeded.

BR-17. **During the site-disturbance and/or construction phase,** any pipes, culverts, or similar structures with a diameter of four inches or greater, stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved. If necessary, the pipe may be moved only once to remove it from the path of activity, until the kit fox has escaped.

BR-18. **During the site-disturbance and/or construction phase,** all food-related trash items such as wrappers, cans, bottles, and food scraps shall be disposed of only in closed containers. These containers shall be regularly removed from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

BR-19. **Prior to, during and after the site-disturbance and/or construction phase,** use of pesticides or herbicides shall be in compliance with all local, State and Federal regulations. This is necessary to minimize the probability of primary or secondary poisoning of endangered species utilizing adjacent habitats, and the depletion of prey upon which San Joaquin kit foxes depend.

BR-20. **During the site-disturbance and/or construction phase,** any contractor or employee that inadvertently kills or injures a San Joaquin kit fox or who finds any such animal either dead, injured, or entrapped shall be required to report the incident immediately to the applicant and City. In the event that any observations are made of injured or dead kit fox, the applicant shall immediately notify the USFWS and CDFG by telephone. In addition, formal notification shall be provided in writing within three working days of the finding of any such animal(s). Notification shall include the date, time, location and circumstances of the incident. Any threatened or endangered species found dead or injured shall be turned over immediately to CDFG for care, analysis, or disposition.

BR-21. **Prior to final inspection, or occupancy, whichever comes first,** should any long internal or perimeter fencing be proposed or installed, the applicant shall do the following to provide for kit fox passage:

i. If a wire strand/pole design is used, the lowest strand shall be no closer to the ground than 12 inches.
ii. If a more solid wire mesh fence is used, 8" x 12" openings near the ground shall be provided every 100 yards
iii. Upon fence installation, the applicant shall notify the City to verify proper installation. Any fencing constructed after issuance of a final permit shall follow the above guidelines

Monitoring (San Joaquin Kit Fox Measures BR-11 to BR-20): Compliance will be verified by the City of Paso Robles, Planning Division in consultation with the California Department of Fish and Game. As applicable, each of these measures shall be included on construction plans.

6.5.4 American badger

American badger could occur in the project areas. The project will result in a net loss of badger habitat. Mitigation is not required for loss of badger habitat. To ensure take of live badgers does not occur, the following mitigation recommendation shall be implemented:

BR-22. A pre-construction survey shall be conducted within thirty days of beginning work on the project to identify if badgers are using the site. The results of the survey shall be sent to the project manager, CDFG, and the City of Paso Robles.

If the pre-construction survey finds potential badger dens, they shall be inspected to determine whether they are occupied. The survey shall cover the entire property, and shall examine both old and new dens. If potential badger dens are too long to completely inspect from the entrance, a fiber optic scope shall be used to examine the den to the end. Inactive dens may be excavated by hand with a shovel to prevent re-use of dens during construction. If badgers are found in dens on the property between February and July, nursing young may be present. To avoid disturbance and the possibility of direct take of adults and nursing young, and to prevent badgers from becoming trapped in burrows during construction activity, no grading shall occur within 100 feet of active badger dens between February and July. Between July 1 and February 1 all potential badger dens shall be inspected to determine if badgers are present. During the winter badgers do not truly hibernate, but are inactive and asleep in their dens for several days at a time. Because they can be torpid during the winter, they are vulnerable to disturbances that may collapse their dens before they rouse and emerge. Therefore, surveys shall be conducted for badger dens throughout the year. If badger dens are found on the property during the pre-construction survey, the CDFG wildlife biologist for the area shall be contacted to review current allowable management practices.

6.5.5 San Joaquin pocket mouse

Salinas pocket mouse could occur on the property. Development on the property would result in a net loss of pocket mouse habitat. Mitigation is not required for loss of pocket mouse habitat.

Special status pocket mice are very unlikely to occur on the subject site, therefore, no mitigation measures are recommended. The Department of Fish and Game has not provided guidance regarding mitigation for potential impact to this species.

6.5.6 *Western spadefoot toad*

Spadefoot toads breed in ephemeral pools in the Paso Robles region. They are known to occur in the vicinity of the subject property. Our surveys of the property were conducted too late in the season to locate breeding spadefoot toads, however it is likely that they occur. Prior to development an appropriately timed survey shall be conducted to determine the presence or absence of spadefoot toad on the property. If spadefoot toad is found, a mitigation plan, which may include avoidance, will be developed in consultation with the CDFG. The goal of the mitigation plan would be to reduce impacts to this species to a less than significant level.

6.5.7 *Fairy shrimp*

Two sensitive species of fairy shrimp are known to occur in ephemeral pools in the Paso Robles region: vernal pool fairy shrimp (endangered) and California linderiella (no listing status). If the project is expected to impact vernal pools on the property, surveys should be performed according to USFWS protocols in order to establish presence or absence of listed fairy shrimp on site (see BR-1).

7.0 References

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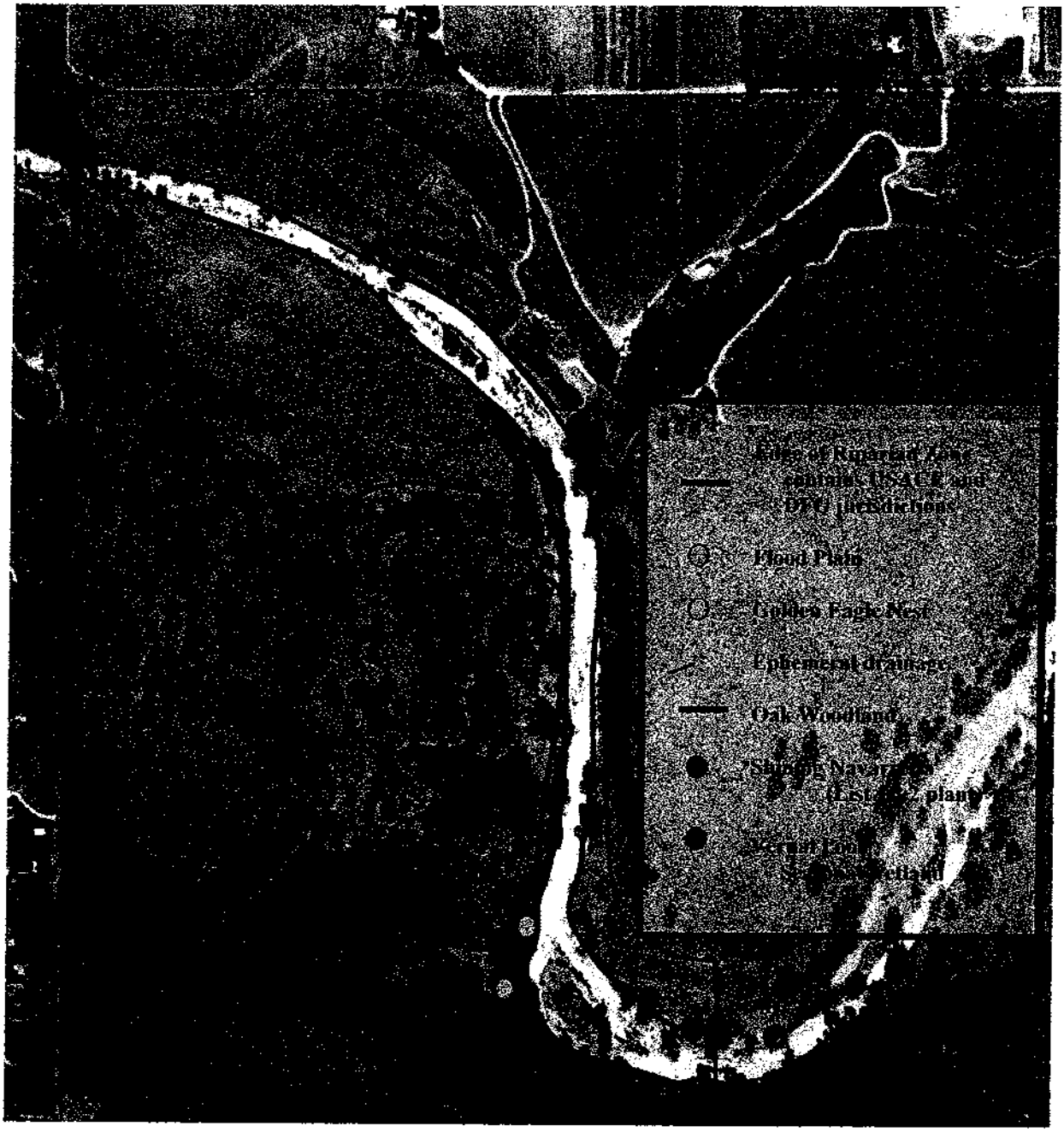
APPENDIX A – Maps

- **Preliminary Biological Constraints Map**
  (prepared by Althouse and Meade, Inc.)

Preliminary Biological Constraints Map



Golden State Aerial Surveys, Inc., GS 999-3-12,Photo date: 11/11/02
Preliminary Biological resources constraints map by Althouse and Meade, Inc. November 2006

APPENDIX B – Figures

- **Figure 1. Location Map**
- **Figure 2. USGS Topographic Map**
- **Figure 3. USDA Soils Map**
- **Figure 4. Aerial Photograph**
- **Figure 5. CNDDB GIS Map**

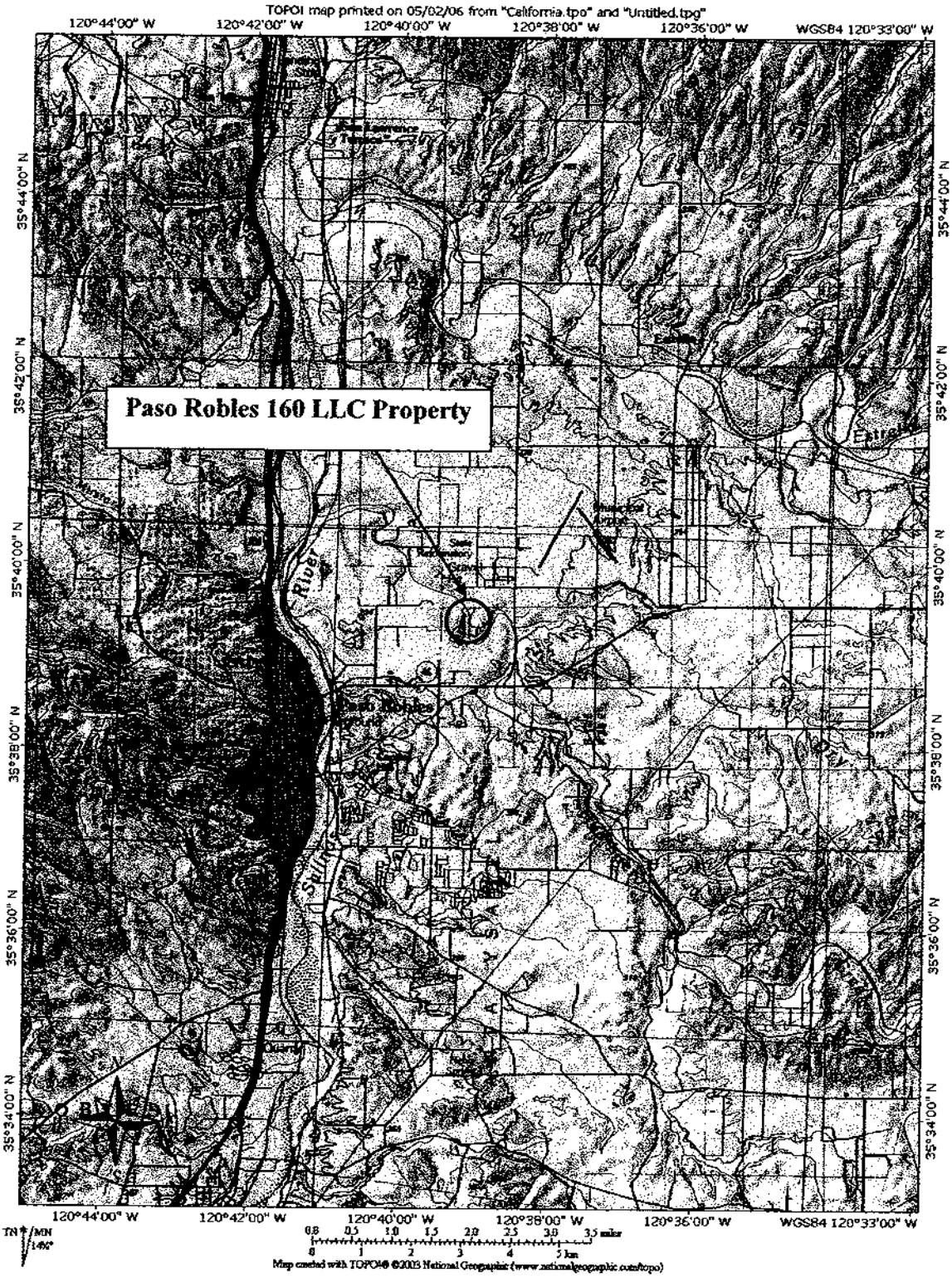


FIGURE 1. LOCATION MAP. The Paso Robles 160 LLC property is located in the northeastern corner of the City of Paso Robles, San Luis Obispo County, California. The property is within the Paso Robles USGS 7.5 minute quadrangle.

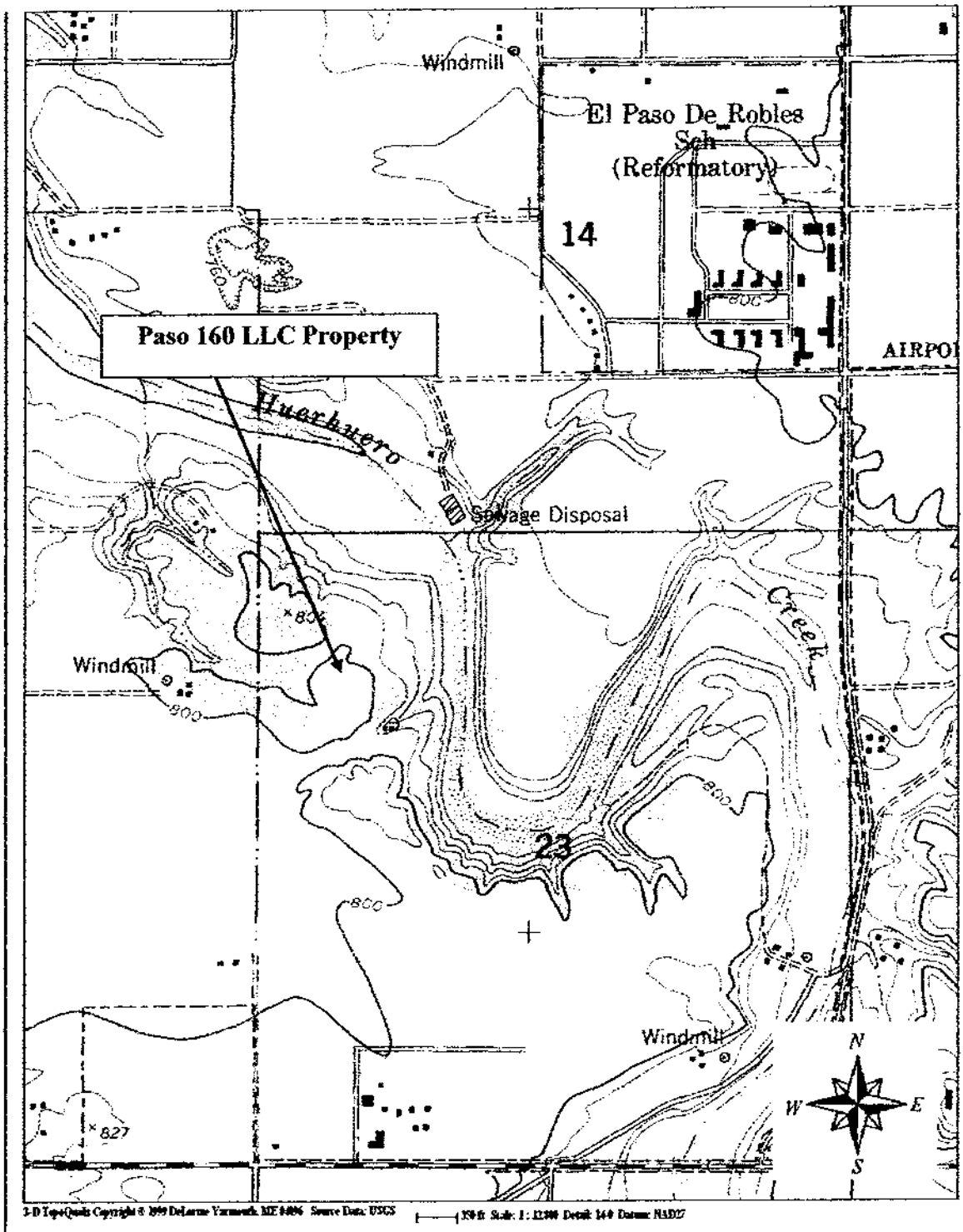


FIGURE 2. USGS TOPOGRAPHIC MAP. The Paso Robles 160 LLC property is situated on the west side of Airport Road, north of Highway 46 East.

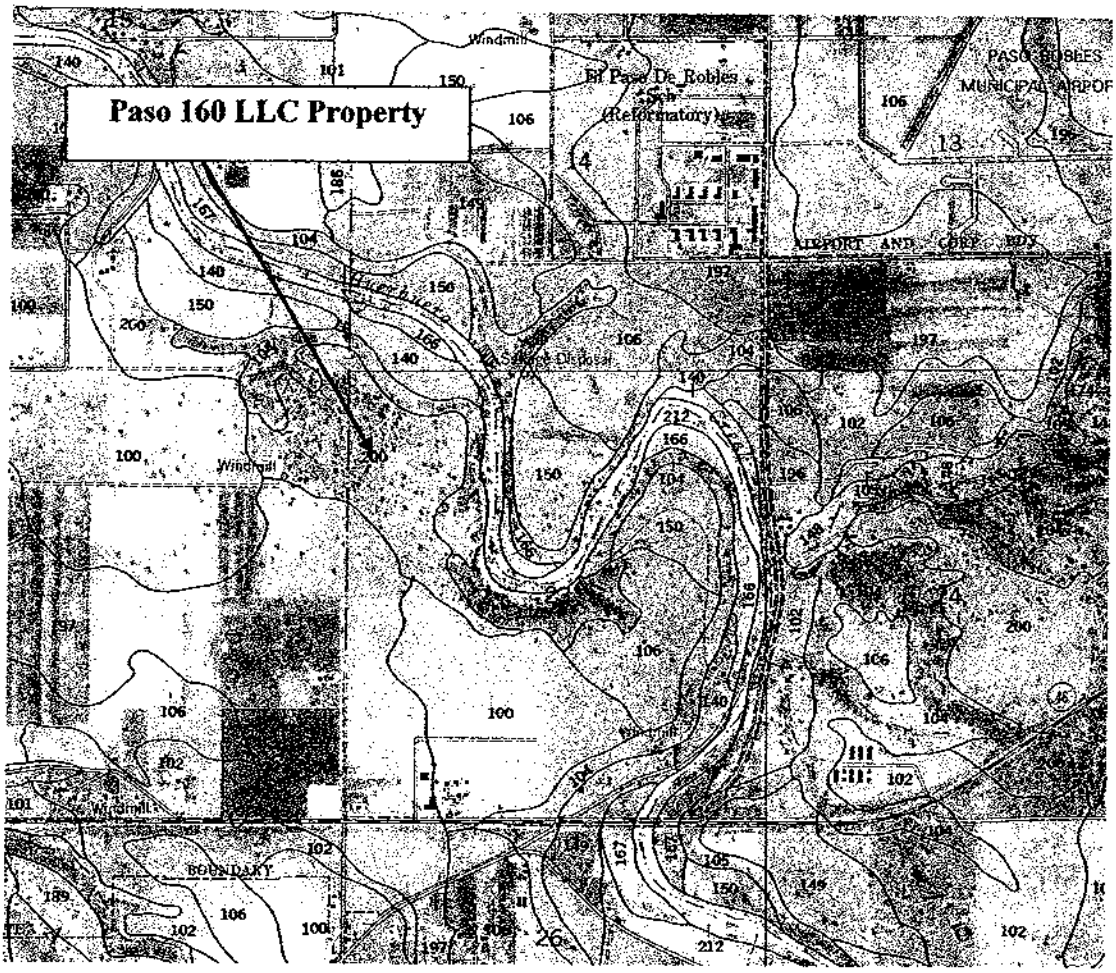


FIGURE 3. USDA SOILS MAP. The approximate location of the subject property is designated above on the USDA Soil Survey of San Luis Obispo County, California, Paso Robles Area (1984) map. Nine soil types occur on the property.

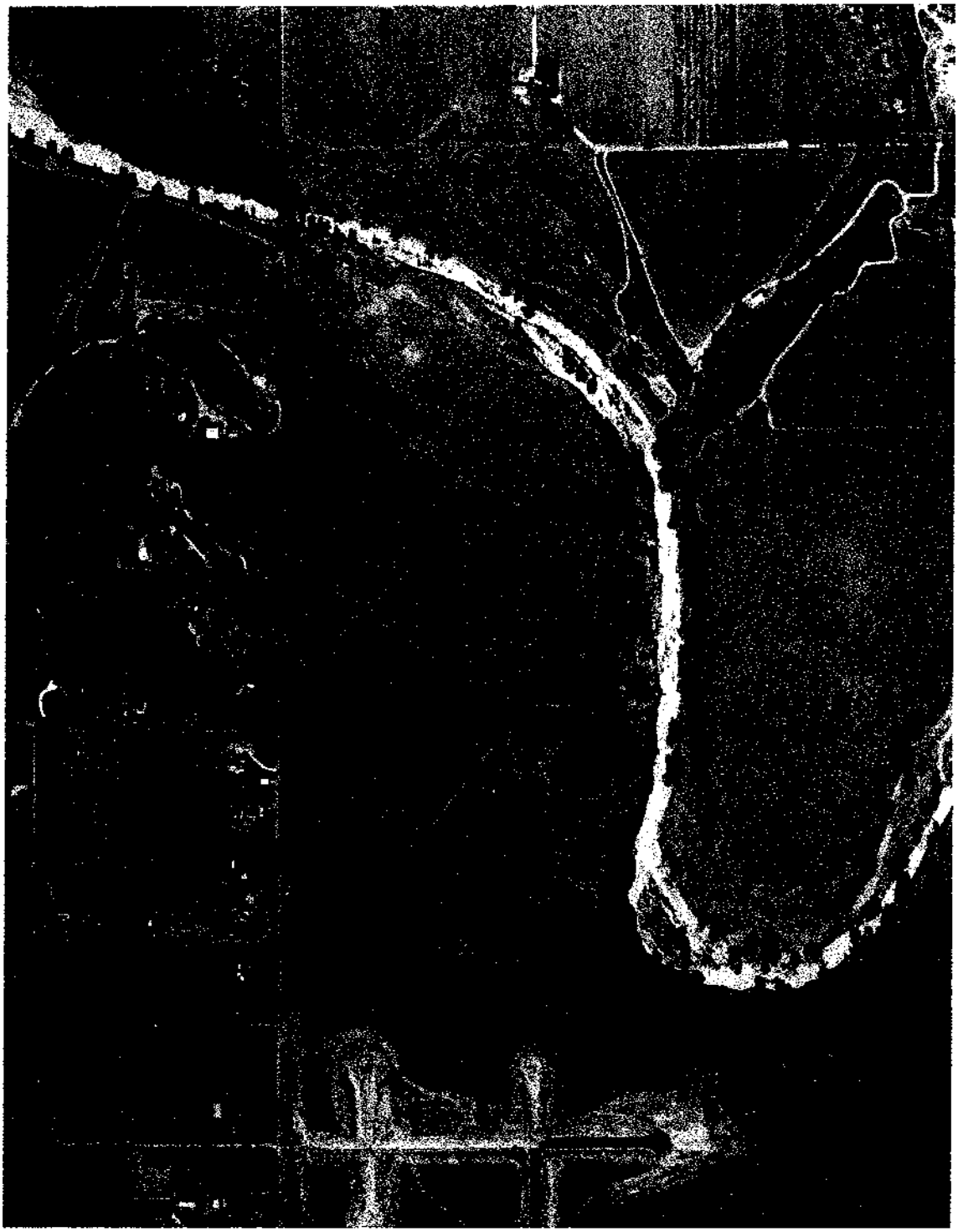


FIGURE 4. AERIAL PHOTOGRAPH. Aerial photograph provided by Golden State Aerials, Inc., dated 11/2/02.

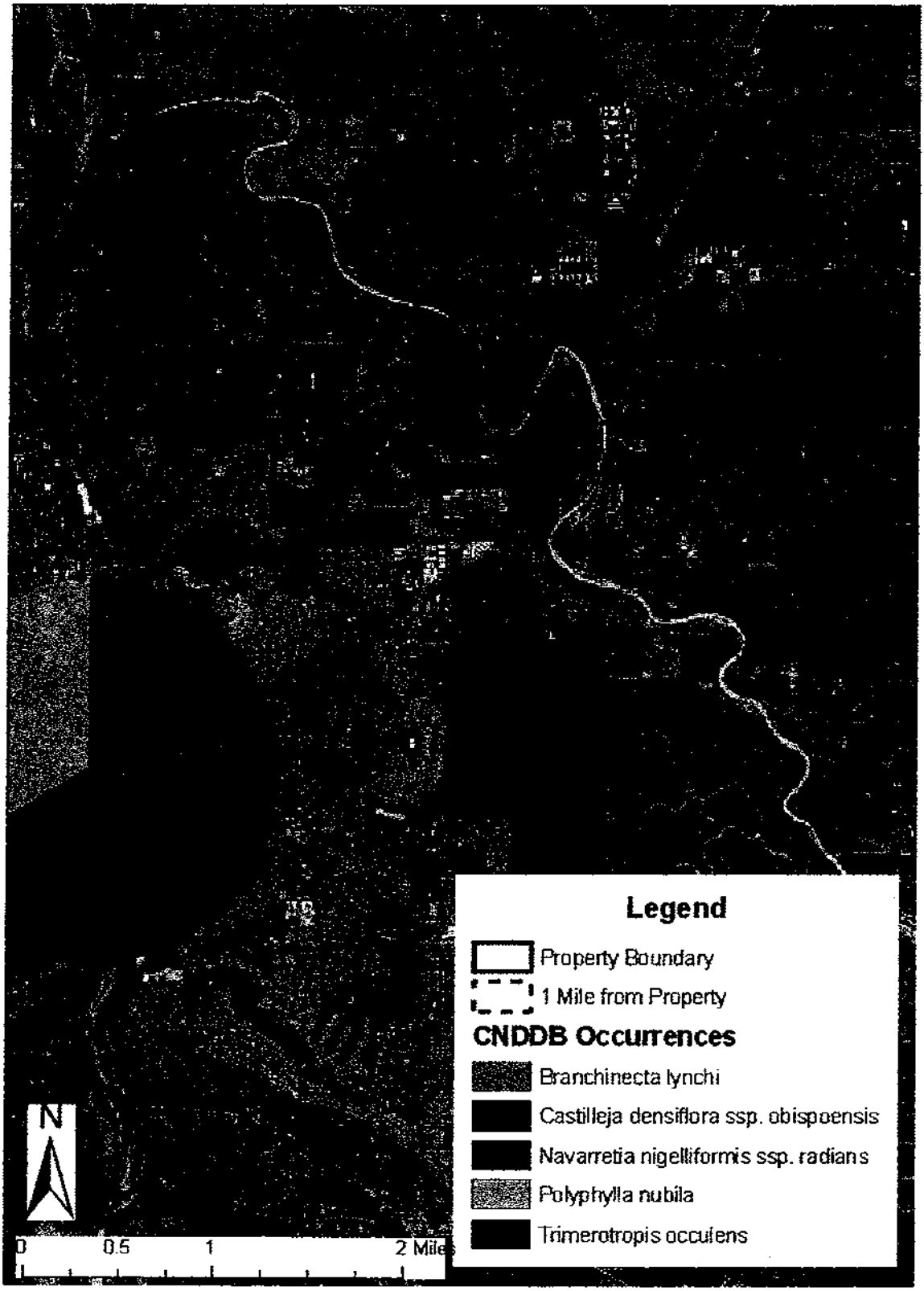


FIGURE 5. CNDDB GIS DATA. Polygons are shown for all special status species with locality data in the California Natural Diversity Database in the vicinity of the property.

APPENDIX C – Photographs

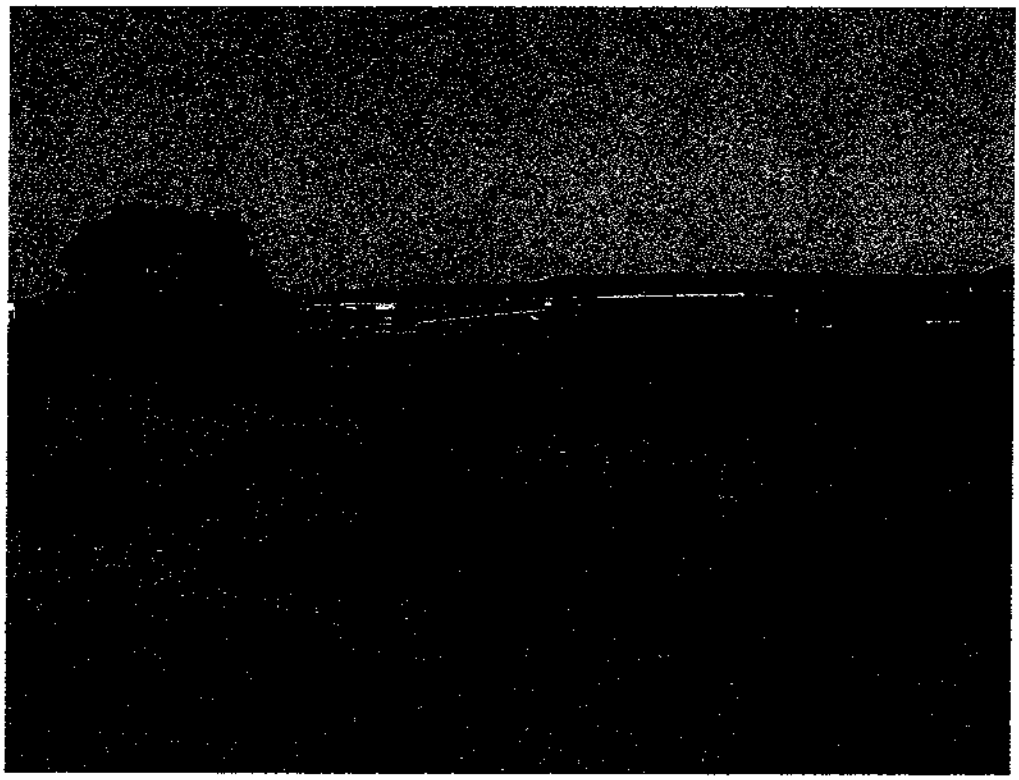


Photo 1. Grassland with occasional scattered oak trees occupies a large portion of the property. View southwest, May 2006.

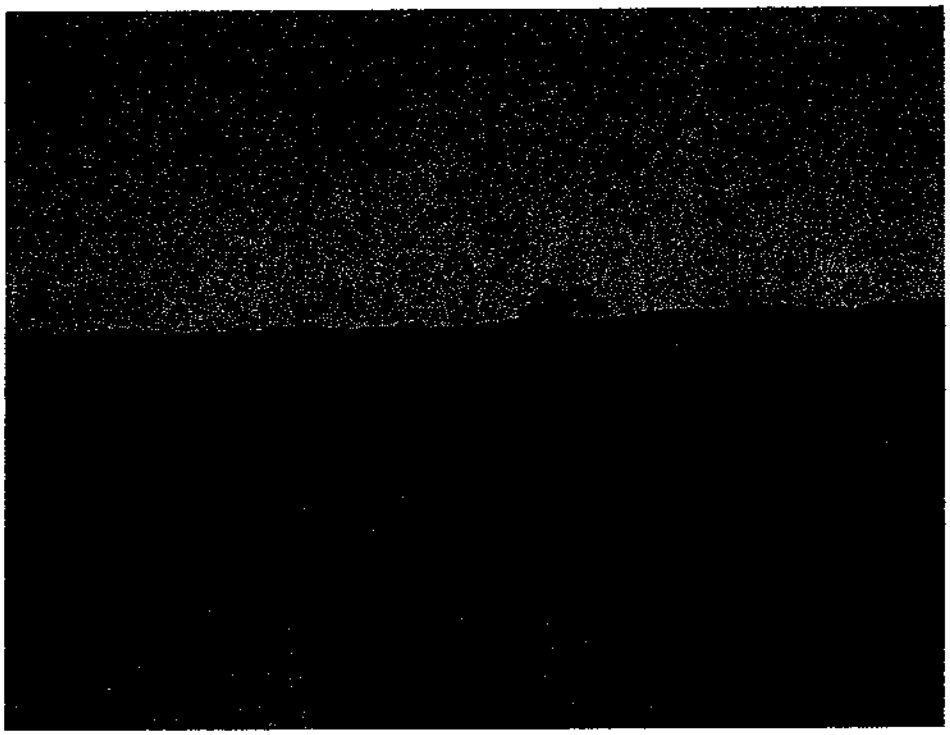


Photo 2. The property is currently grazed by cattle. Unpaved ranch roads are present on the property.

Photo 3. Grassland with scattered blue oaks, in the southwest corner of the property. A vernal pool occupies a depression within grassland on the subject site (marked above).

Photo 4. Close-up view of vernal pool. Photo taken May 4, 2006.

Photo 5. Isolated seasonal wetlands occupy small patches along the western property boundary. Photo taken May 24, 2006.

Photo 6. Many mature blue oaks and occasional valley oaks occur on the subject property in oak woodland and as scattered individuals. Oak woodland occurs in a wide swath across the middle of the property. . Photo taken May 4, 2006.

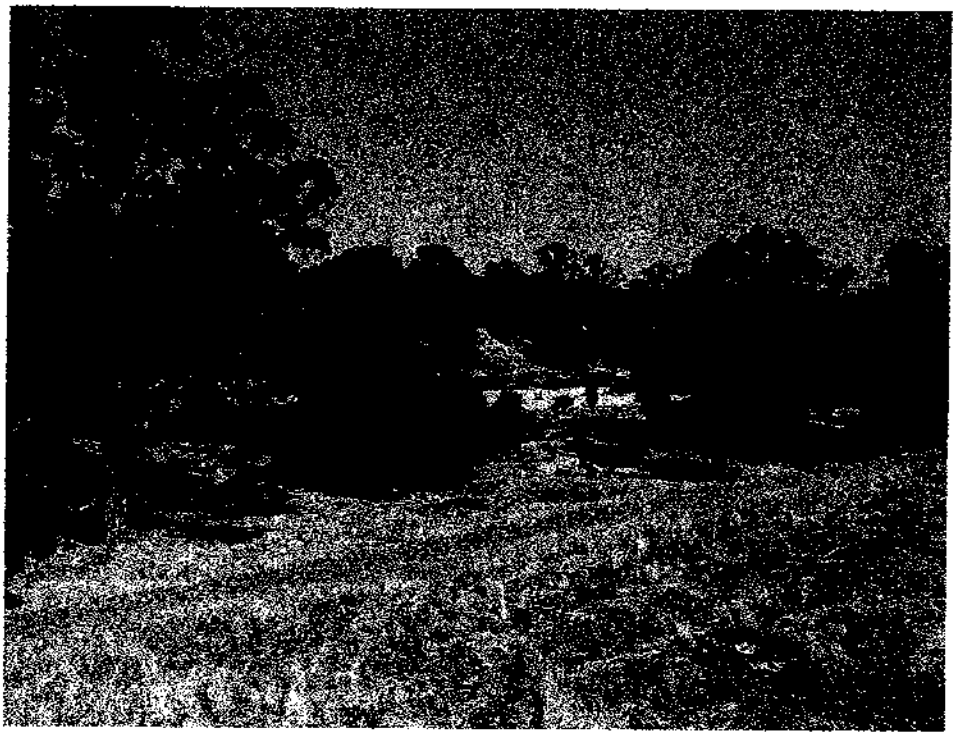


Photo 7. Riparian habitat along Huerhuero Creek includes a mixture of oak trees, riparian trees, riparian shrubs, and herbaceous vegetation.

Photo 8. California wild rose thickets occur in patches along the banks of Huerhuero Creek.

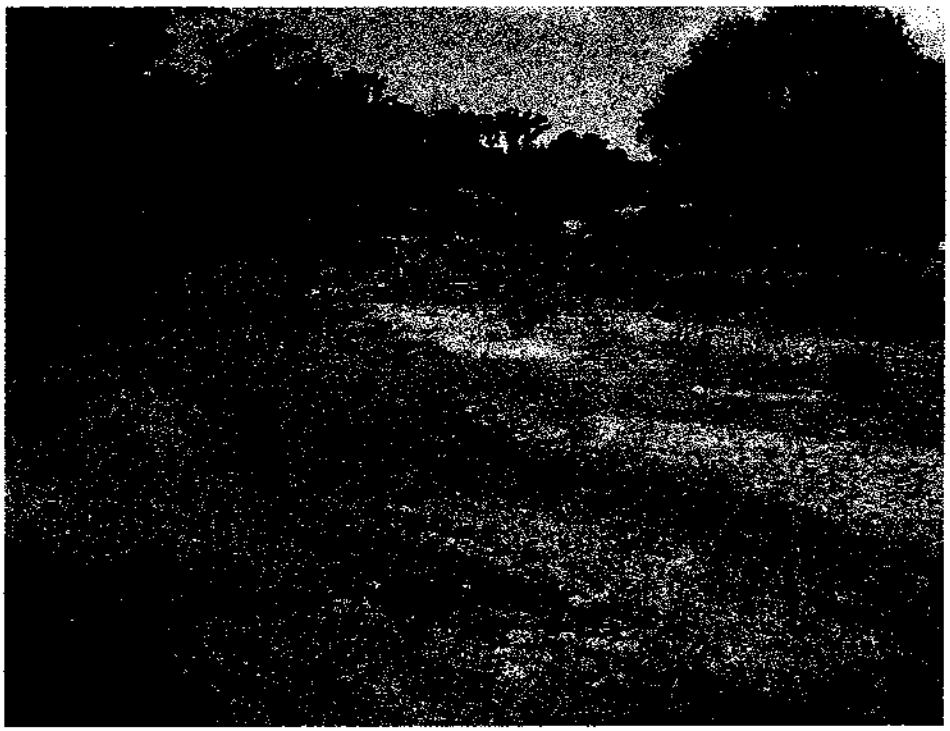


Photo 9. Some portions of the streambed support herbaceous vegetation. Smaller shrubs occur on sandbars, while large shrubs and trees are dominant on banks and stream terraces.

Photo 10. Wild tarragon, mulefat, and shrubby groundsel are common components of sandbar vegetation in Huerhuero Creek.

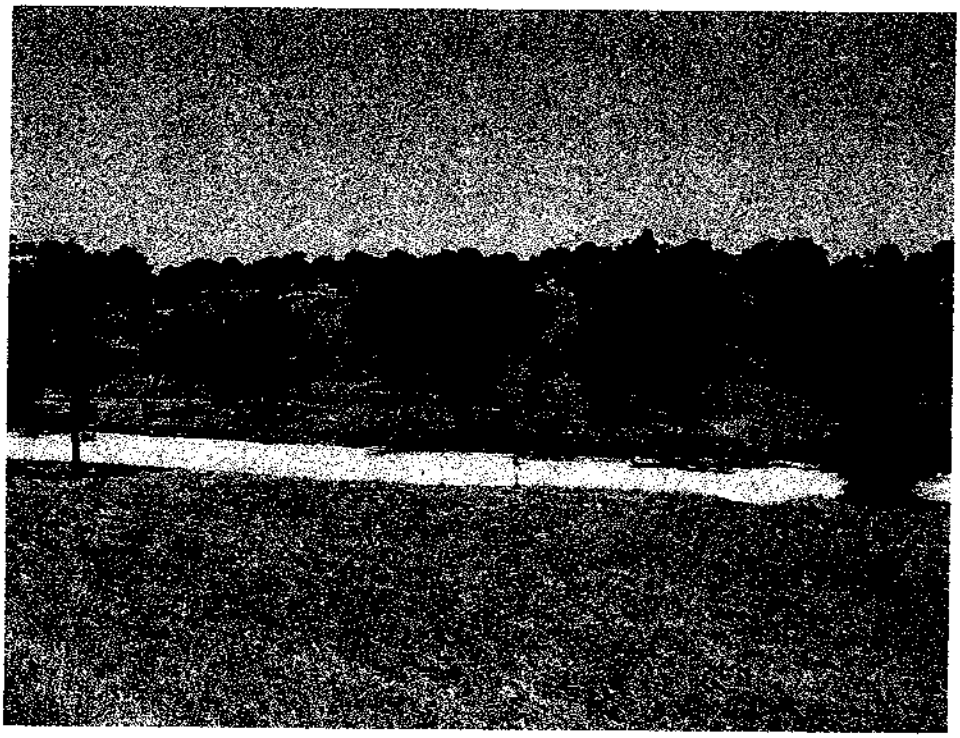


Photo 11. Scattered mature cottonwoods are present on the stream banks. Annual grasses dominate occasional open areas of the riparian corridor.

Photo 12. An ephemeral drainage conducts storm water off hillsides into Huerhuero Creek.

Photo 13. End of ephemeral drainage just before confluence with Huerhuero Creek.

Photo 14. Grassland on floodplain and low terraces adjacent to Huerhuero Creek. View northeast.

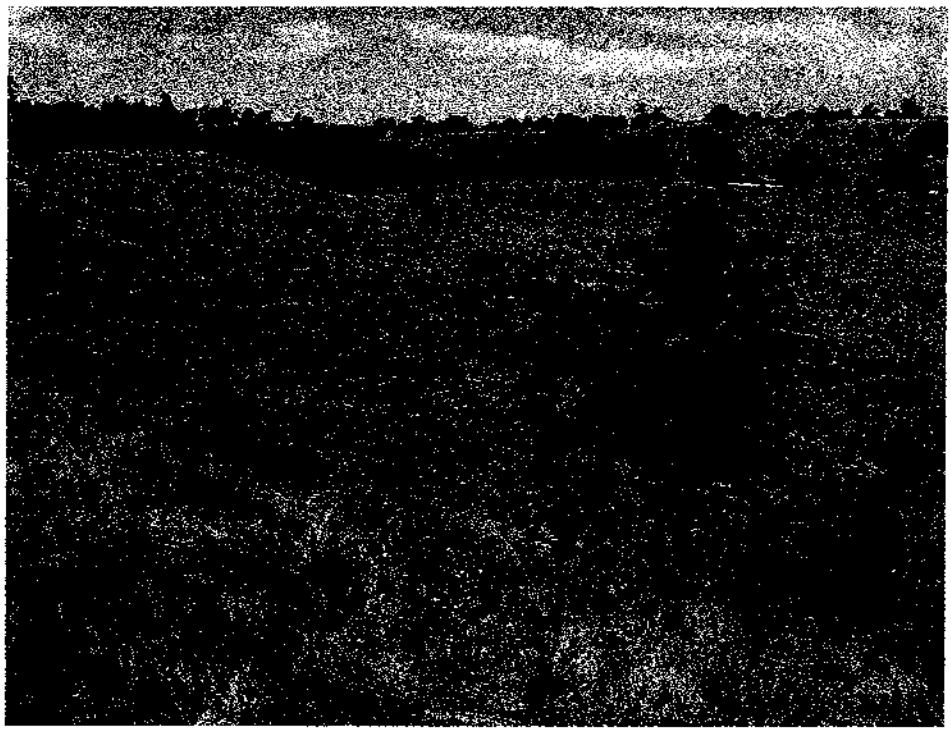


Photo 15. Huerhuero Creek curves around a wide, low floodplain at the north end of the property.

Photo 16. An occupied golden eagle nest was observed on the subject property in 2006.

Photo 17. Shining navarretia (*Navarretia nigelliformis* ssp. *radians*), a CNPS List 1B.2 species, was mapped in two locations on the property.

APPENDIX D – Status Codes

Status Codes

Element Ranking

NDDB Codes

Each plant or animal (element) is given a number based on its taxonomy and accession into the natural diversity database (NDDB).

Global Ranking

G1 = Less than 6 viable element occurrences (EO's), OR less than 1,000 individuals, OR less than 2,000 acres

G2 = 6-20 EO's OR 1,000-3,000 individuals OR 2,000-10,000 acres.

G3 = 21-100 EO's OR 3,000-10,000 individuals OR 10,000-50,000 acres.

G4 = Apparently secure. This rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.

G5= Population or stand demonstrably secure to ineradicable due to being commonly found in the world. NO THREAT RANK.

State Ranking

(Same as Global ranking, plus threat designation attached to the S-rank)

S1 = Less than 6 viable element occurrences (EO's), OR less than 1,000 individuals, OR less than 2,000 acres.

- S1.1 = very threatened
- S1.2 = threatened
- S1.3 = no current threats known

S2 = 6-20 EO's OR 1,000-3,000 individuals OR 2,000-10,000 acres.

- S2.1 = very threatened
- S2.2 = threatened
- S2.3 = no current threats known

S3 = 21-100 EO's OR 3,000-10,000 individuals OR 10,000-50,000 acres.

- S3.1 = very threatened
- S3.2 = threatened
- S3.3 = no current threats known

S4 = Apparently secure within California. This rank is clearly lower than S3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat. NO THREAT RANK.

S5= Population or stand demonstrably secure to ineradicable in California. NO THREAT RANK.

Note: By adding a question mark to the rank: e.g., S2? This represents more certainty than S2S3, but less than S2.

California Native Plant Society's (CNPS) Lists and R-E-D Code (Rarity, Endangerment, Distribution)

The CNPS Ranking Working Group was formed to review the ranking system in the CNPS *Inventory of Rare and Endangered Plants* (*Inventory*) and discuss needed modifications. This group decided to discontinue the use of the R-E-D (Rarity-Endangerment-Distribution) Code and to instead convey this information in a clearer way through modifying the CNPS List and including other information in the *Inventory*. This decision and the associated modifications were approved by the CNPS Board of Directors at their August 2005 meeting.

A new Threat Code extension has been added following the CNPS List (e.g. 1B.1, 2.2 etc.). This extension replaces the E (Endangerment) value from the R-E-D Code. The main difference is that the number coding is now reversed to reduce confusion and represent this information in parallel with the threat rankings that the California Natural Diversity Database (CNDDB) uses. Therefore the logic is reversed so that the lower the number, the higher the corresponding threat level.

CNPS Lists

1A = Presumed extinct in California.
1B = Rare or Endangered in California and elsewhere.
2 = Rare or Endangered in California, more common elsewhere.
3 = Plants for which we need more information (Review list).
4 = Plants of limited distribution (Watch list).

New Threat Code extensions and their meanings:

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 – Fairly endangered in California (20-80% of occurrences threatened)

.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

APPENDIX E – CNDDB Reports

- **Golden Eagle (*Aquila chrysaetos*)**
- **Shining Navarretia (*Navarretia nigelliformis* ssp. *radians*)**

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 5 (month (mm)) - 24 (date (dd)) - 2006 (year (yyyy))

Scientific Name: Aquila chrysaetos

Common Name: Golden Eagle

Species Found? ☑ yes ☐ no _____ If not, why?
Total No. Individuals _____ Subsequent Visit? ☑ yes ☐ no
Is this an existing NDDB occurrence? _____ ☑ no ☐ unk.
Yes, Occ. #
Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Jason Dart
Address: Althouse and Meade, Inc.
1875 Wellsona Road Paso Robles, CA 93446
Email Address: jason@althouseandmeade.com
Phone: (805) 467-1041

Plant Information
Phenology: _____ % vegetative _____ % flowering _____ % fruiting

Animal Information
Age Structure: 2 # adults 1 # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☑ nesting ☐ other

Location ***(please also attach or draw map on back)***
Huerhuero Creek, between Golden Hill Road and Airport Road, Paso Robles

County: San Luis Obispo County Landowner / Mgr.: Private
Quad Name: Paso Robles Elevation: 720'
T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____ T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____
UTM: Zone: _____ (10, 11) Datum: NAD27 (NAD83, NAD27, WGS84, other)
Source: USGS topo map program (GPS, map & type, etc.) Point Accuracy: _____ Meters
UTM Coordinates N35.65393 / W120.65149

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
An active golden eagle nest was located in a blue oak tree (Quercus douglasii) on an east facing oak woodland slope on the west bank of Huerhuero Creek in eastern Paso Robles. A single juvenile was in the nest. Adults were observed hunting ground squirrels in the vicinity. Grazed annual grassland and scattered oak trees and woodland slopes are in the vicinity. A second unoccupied nest was in a nearby oak.

Other rare species?

Site Information Overall site quality: ☐ Excellent ☑ Good ☐ Fair ☐ Poor
Current / surrounding land use: Grazing, residential
Visible disturbances / possible threats: The 160-acre parcel is conducting a feasibility study for development.
Comments: Locals report nesting by golden eagles in this vicinity for at least 15 years.

Determination: *(check one or more, and fill in blanks)*
☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)* Slide Print
Plant / animal ☐ ☑
Habitat ☐ ☑
Diagnostic feature ☐ ☐
May we obtain duplicates at our expense? ☑ yes ☐ no

FG/WHDAB/1747 Rev.1189

California Native Species Field Survey Form

Mail to:
Natural Diversity Database
California Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Date of Field Work: 5 (month (mm)) - 24 (date (dd)) - 2006 (year (yyyy))

Scientific Name: Navarretia nigelliformis ssp. radians

Common Name: Shining navarretia

Species Found? ☑ yes ☐ no _____ If not, why?
Total No. Individuals 1,000 Subsequent Visit? ☑ yes ☐ no
Is this an existing NDDB occurrence? _____ ☑ no ☐ unk.
Yes, Occ. #
Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Jason Dart
Address: Althouse and Meade, Inc.
1875 Wellsona Road Paso Robles, CA 93446
Email Address: jason@althouseandmeade.com
Phone: (805) 467-1041

Plant Information
Phenology: _____ % vegetative 100.00 % flowering _____ % fruiting

Animal Information
Age Structure: _____ # adults _____ # juveniles _____ # unknown
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☑ other

Location ***(please also attach or draw map on back)***
Huerhuero Creek, between Golden Hill Road and Airport Road, Paso Robles

County: San Luis Obispo County Landowner / Mgr.: Private
Quad Name: Paso Robles Elevation: 785'
T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____ T _____ R _____ _____ 1/4 of _____ 1/4 of Section _____
UTM: Zone: _____ (10, 11) Datum: NAD27 (NAD83, NAD27, WGS84, other)
Source: USGS topo map program (GPS, map & type, etc.) Point Accuracy: _____ Meters
UTM Coordinates N35.65415 / W120.65244

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope)*
An estimated 1000 shining navarretia were mapped in grazed annual grassland habitat on the west side of Huerhuero Creek in Paso Robles. USDA soil type is Arbuckle-Positas complex, 30-50 percent slopes (map unit 104). Associates include Navarretia pubescens, Centaureum davyi, Clarkia purpurea, Bromus hordeaceus, Filago gallica, Hemizonia pentactis.

Other rare species?

Site Information Overall site quality: ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Current / surrounding land use: Grazing, residential

Visible disturbances / possible threats: The 160-acre parcel is conducting a feasibility study for development. Unknown grazing effects.

Comments: Appears to be acres of suitable habitat, but plants very local in one small location. Plants still blooming on return visit June 20, 2006. This species in the Paso Robles region is erect, and does not occur in vernal pools

Determination: *(check one or more, and fill in blanks)*
☑ Keyed (cite reference): Jepson Manual
☑ Compared with specimen housed at: R.F. Hoover Herbarium, Cal Poly
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: Previous experience with the species.

Photographs: *(check one or more)* Slide Print
Plant / animal ☐ ☑
Habitat ☐ ☑
Diagnostic feature ☐ ☑

May we obtain duplicates at our expense? ☑ yes ☐ no

FG/WHDAB /1747 Rev.11/99

A & T ARBORISTS
P.O. BOX 1311 TEMPLETON, CA 93465 (805) 434-0131

10-10-06
Larry Werner
North Coast Engineering
725 Creston Road, Suite B
Paso Robles, CA 93446
Re: Golden Hill Road – APNs: 025-431-037,-038,-039
Oak Tree Review

Backround Information: This property is located near the north end of Golden Hill Road in Paso Robles, California. This land is currently used for grazing and appears to have been for many years. The native oaks on the property consist of blue oaks (*Quercus douglasii*) and valley oaks (*Quercus lobata*).

Assignment: Identify potential development impacts (positive and negative) to the native oak trees at the site. Discussion is to be general and not relative to a specific project. A formal tree protection plan will be required for the specific project impacts with a tree by tree analysis.

Observations: One of the negative impacts of cattle grazing is the reduction and elimination of seedlings. A natural forest will generally have many different age classes of trees. This grassland has mainly semi-mature, mature and over-mature trees and virtually no juveniles. It is virtually an aging forest. A & T Arborists rated all the oak trees in the probable development areas for condition (health) in addition to inventory data (size, spread, etc.). We found trees that were dead, dying, declining, stressed, hazardous as well as trees that were relatively healthy. Some of the trees on site are specimen quality by good fortune and growth habit. None of the trees appear to ever have had any pruning which has inadvertently caused some decline. Branches have become overly heavy, broken and decay has set in. The trees are well spaced in many areas with little to no competition and there is ample room in many areas for development.

Testing and Analysis: No physical testing was completed on any of the trees.

Conclusions: Some of the hazardous trees should be abated by removing them. Others shall require pruning if there is to be any use within the drip line areas. Any new development should be encouraged to re-plant young oak trees thereby returning the property to a sustainable forested area with multiple generations of trees.

Recommendations: Project design should strongly consider the condition ratings for individual trees. Cut/fill/road impacts should be limited to no more than 20% of any saved tree critical root zone. Road placement design shall include site visits to determine road clearance and scaffold limb impacts. No more than 25% of any canopy shall be removed. Utility trenching shall be planned outside of critical root zones or bored under

Exhibit D

trees for main lines. Small water lines, etc. can be airspaded thereby leaving all main roots intact. Retaining wall footings are very intrusive and any utilization within the critical root zones shall be limited to 15%. The above percentages are approximations and some slight variation may be allowable depending on the specific impact.

Chip Tamagni
Certified Arborist #WE 6436-A

Steven G. Alvarez
Certified Arborist #WE 0511-A

EIR 17
Consultant Reports.

A & T ARBORISTS

P.O. BOX 1311 TtempleTON, CA 93465 (805) 434-0131

8-06-06
Ken Mundee and Associates

The first phase of the tree inventory/arborist report has been completed. The vast majority of the trees on site are blue oaks (*Quercus douglasii*). There were about 25 valley oaks (*Quercus lobata*) inventoried with the vast majority located in the valley near Huer Huero Creek. Basically, all the trees are virgin in regard to trimming. We noticed countless past and present failures including whole trees on the ground. This natural succession weeds out the weaker and older trees. The included spreadsheets list all trees by the number selected by North Coast Engineering, species, diameter at breast height, condition, aesthetic value and individual tree notes. The comments entered for the vast majority of the trees reflect a visual assessment made in the field. We noted if trees had obvious cavities or nesting holes that could lead to future limb or whole tree failure, stressed trees with thin live crowns, excessive end weight on scaffold branches and other notes such as good structure for the healthier trees. The following chart reflects the condition rating on a sliding scale:

Tree Rating System

A rating system of 1-10 was used for visually establishing the general health and condition of each tree on the spreadsheet. The rating system is defined as follows:

Rating	Condition
0	Deceased
1	Evidence of massive past failures, extreme disease and is in severe decline.
2	May be saved with attention to class IV pruning, insect/pest eradication and future monitoring. Generally reflects trees in decline.
3	Some past failures, some pests or structural defects that may be mitigated by class IV pruning.
4	May have had minor past failures, excessive deadwood or minor structural defects that can be mitigated with class II pruning.
5	Relatively healthy tree with little visual, structural and/or pest defects and problems. Maintenance would some class I pruning.
6	Healthy tree that probably can be left in its natural state with some minor dead wood removal.
7-9	Has had proper arboricultural pruning and attention or have no apparent structural defects.

10 Specimen tree with perfect shape, structure and foliage in a protected setting (i.e. park, arboretum).

The aesthetic rating is also a visual assessment that reflects the individual tree's contribution to the landscape.

Aesthetic quality on the spreadsheet is defined as follows:

- **poor** - tree has little visual quality either due to severe suppression from other trees, past pruning practices, location or sparse foliage
- **fair** - visual quality has been jeopardized by utility pruning/obstructions or partial suppression and overall symmetry is average
- **good** - tree has good structure and symmetry either naturally or from prior pruning events and is located in an area that benefits from the trees position
- **excellent** - tree has great structure, symmetry and foliage and is located in a premier location. Tree is not over mature.

At this point in the planning and design stage it is important to be able to distinguish the difference between condition and aesthetic value. Basically, condition equals health and aesthetic value is just that. We inventoried many tees that rated excellent on aesthetics and two or three for condition. These trees may look fine from afar but closer inspection reveals possible structural problems. In an open landscape with no activity near them, these trees are fine to be left in their natural state. However, planning any use near the trees may be a liability and removing them (especially 2's and below) should be considered. For all trees rating a 3 or 4, most should be saved. The 3's will require an assessment of planned use and a determination by use whether trimming is an option. Most all trees rating a 4 will require some pruning with use under the tree. Trees rating a 5, 6 or some may only need some deadwood removal.

When deciding upon encroachment limitations, the maximum critical root zone (one foot radius/inch diameter) entry should be limited to 25%. This would include all paving, trenching or grading. Another factor to keep in mind is major scaffold limb heights. If encroachment is planned only 15% into a given CRZ but would require the removal of a 15" diameter limb that supports 30% of the crown, the plans need to be changed. 25% is the maximum live crown that can be removed at any one time.

Blue oaks tend to be the most sensitive of the common oak species of this area regarding construction impacts. The least amount of encroachment the better. All irrigation for landscaping including lawns, etc. should be planned outside of the CRZ

Chip Tamagni
Certified Arborist #WE 6436-A 

Steven Alvarez
Certified Arborist #WE 0511-A

TREE PROTECTION SPREAD SHEET GOLDEN HILL 1

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1046	VO	*Q. lobata*	36	2							good	nesting holes, deadwood	
1001	BO	*Q. doug.*	46	1							poor	massive failures	
1004	BO	*Q. doug.*	42	2							fair	past failures	
1005	BO	*Q. doug.*	28	7							excel.		
1006	BO	*Q. doug.*	36	2							fair	massive failures	
1008	BO	*Q. doug.*	38	3							fair	past failures, mistletoe	
1007	BO	*Q. doug.*	34	2							fair	new and old failures	
1033	BO	*Q. doug.*	34	4							good		
1032	BO	*Q. doug.*	6	3							fair	suppressed	
1031	BO	*Q. doug.*	13	6							good		
1030	BO	*Q. doug.*	26	4							good	decay at base	
1029	BO	*Q. doug.*	23	4							good	mistletoe, v crotch	
1028	BO	*Q. doug.*	17	3							good	bad crotch	
1027	BO	*Q. doug.*	15	5							good	mistletoe	
1026	BO	*Q. doug.*	15	4							fair	deadwood	
1025	BO	*Q. doug.*	6	5							good		
1023	BO	*Q. doug.*	8	2							poor	mistletoe	
1024	BO	*Q. doug.*	9	3							fair	mistletoe	
1022	BO	*Q. doug.*	16	4							good	deadwood	
1021	BO	*Q. doug.*	16	4							good		

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS: AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 2

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1020	BO	Q. doug.	14	6							good		
1019	BO	Q. doug.	12	5							good	canker on trunk	
1018	BO	Q. doug.	24	5							good	deadwood	
1015	BO	Q. doug.	4	2							poor	suppressed, mistletoe	
1016	BO	Q. doug.	9	1							poor	highly suppressed, mistl.	
1017	BO	Q. doug.	15	2							fair	mistletoe, bad crotch	
1014	BO	Q. doug.	14	3							fair	mistletoe	
1009	BO	Q. doug.	40	2							fair	cavities, failures	
1002	BO	Q. doug.	22	4							good	ground squirrels	
1003	BO	Q. doug.	24	3							good	stressed	
1010	BO	Q. doug.	32	2							excel.	massive failure, cavity	
1011	BO	Q. doug.	27	3							fair	dieback	
1013	BO	Q. doug.	28	3							good	cavities, failures	
1012	BO	Q. doug.	47	3							excel.	cavities, failures	
1034	BO	Q. doug.	33	4							excel.	past failures	
1035	BO	Q. doug.	27	5							excel.		
1036	BO	Q. doug.	40	2							good	conks, nesting holes	
1131	BO	Q. doug.	10	5							excel.		
1133	BO	Q. doug.	25	5							good		
1132	BO	Q. doug.	37	4							fair	mistletoe	

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS: AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 3

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1130	BO	Q. doug	37	4							good	cavity	
1129	BO	Q. doug	20	4							good	none	
1128	BO	Q. doug	12	4							fair	suppressed	
1039	BO	Q. doug	23	4							good	undermined roots	
1038	BO	Q. doug	12	2							poor	mostly suppressed	
1037	BO	Q. doug	23	3							excel.	cavity	
1044	BO	Q. doug	32	6							excel.	none	
1043	BO	Q. doug	35	4							excel.	40% lean south	
1042	BO	Q. doug	25	5							excel.	none	
1041	BO	Q. doug	20	3							good	major cavity	
1040	BO	Q. doug	21	5							good	small deadwood	
1063	BO	Q. doug	24	5							good	suppressed	
1064	BO	Q. doug	35	4							fair	past failures	
1065	BO	Q. doug	10	4							fair	major deadwood	
1066	BO	Q. doug	33	3							good	nesting holes past fails	
1068	BO	Q. doug	28	5							good	good structure	
1067	BO	Q. doug	33	3							fair	stressed appearance	
1062	BO	Q. doug	27	5							excel.	massive past failure	
1070	BO	Q. doug	30	2							fair	none	
1071	BO	Q. doug	30	3							good	past failures	

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS: AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING; CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 4

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1072	BO	*Q. doug.*	40	2							fair	past failure, cavity	
1073	BO	*Q. doug.*	19	4							fair		
1069	BO	*Q. doug.*	20	5							good		
1306	BO	*Q. doug.*	55	5							excel.	cavity	
1307	BO	*Q. doug.*	31	3							good	past failure	
1305	BO	*Q. doug.*	32	2							fair	past failure	
1331	BO	*Q. doug.*	36	4							good	nesting holes, cankers	
1308	BO	*Q. doug.*	26	5							good	v crotch	
1332	BO	*Q. doug.*	17	6							good		
1304	BO	*Q. doug.*	41	3							good	nesting holes	
1309	BO	*Q. doug.*	28	3							good	nesting holes	
1300	BO	*Q. doug.*	26	6							excel.		
1301	BO	*Q. doug.*	32	2							good	soon to fail, cavity	
1302	BO	*Q. doug.*	38	5							good		
1303	BO	*Q. doug.*	25	4							good	suppressed	
1310	BO	*Q. doug.*	36	5							good		
1311	BO	*Q. doug.*	14	3							fair	mistletoe	
1312	BO	*Q. doug.*	14	4							good	mistletoe	
1330	BO	*Q. doug.*	34	7							excel.		
1075	BO	*Q. doug.*	23	4							good	dieback	

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS: AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 5

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1074	BO	Q. doug	25	4							good	SUPPRESSED	
1076	BO	Q. doug	35	4							good	CAVITY, FAILURES	
1075	BO	Q. doug	24	4							excel.	PAST FAILURES	
1077	BO	Q. doug	47	6							excel.	HEAVY END WEIGHT	
1079	BO	Q. doug	34	2							fair	PAST FAILURES, CAVITY	
1080	BO	Q. doug	31	3							fair	PAST FAILURES, CAVITY	
1082	BO	Q. doug	28	2							fair	MAJ LIMB LOSS LEAN	
1081	BO	Q. doug	24	5							excel.	10% LEAN EAST	
1083	BO	Q. doug	34	2							fair	MAJ LIMB LOSS LEAN	
1084	BO	Q. doug	35	2							fair	MAJ LIMB LOSS LEAN	
1057	BO	Q. doug	42	1							poor	STAGE HEAD	
1056	BO	Q. doug	27	0							dead	DEAD TREE	
1055	BO	Q. doug	30	3							fair	TWIG DIE BACK	
1047	BO	Q. doug	22	4							good	HEAVY MIS. TOE	
1050	BO	Q. doug	24	3							fair	15% LEAN SOUTH	
1049	BO	Q. doug	28	4							fair	MIS. TOE M/L/L	
1048	BO	Q. doug	50	1							poor	MAJ CRACK @ TRUNK	
1045	BO	Q. doug	30	5							excel.	10% LEAN SOUTH	
1051	BO	Q. doug	35	2							poor	50% TREE BROKE OFF	
1053	BO	Q. doug	29	4							good	LARGE BEE.H IN CAVITY	

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7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/9/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 6

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1054	BO	Q. doug.	27	2							fair	nesting holes, cavity	
1052	BO	Q. doug.	29	3							fair	suppressed by 1053	
1060	BO	Q. doug.	40	2							poor	cavity at base, limb loss	
1061	BO	Q. doug.	28	4							fair	good structure	
1058	BO	Q. doug.	22	3							fair	mistletow, cavities	
1059	BO	Q. doug.	35	4							good	mistletoe, good structure	
1115	BO	Q. doug.	24	4							good	twig dieback	
1116	BO	Q. doug.	29	5							excel.	good structure	
1127	BO	Q. doug.	28	1							poor	major limb loss	
1126	BO	Q. doug.	26	1							poor	major limb loss	
1117	BO	Q. doug.	32	5							excel.	good structure	
1125	BO	Q. doug.	28	3							fair	utility pruned	
1124	BO	Q. doug.	22	3							fair	suppressed by 1124	
1123	BO	Q. doug.	27	4							good	mistletoe	
1122	BO	Q. doug.	24	4							good	wire at base	
1113	BO	Q. doug.	19	4							good	twig dieback	
1112	BO	Q. doug.	19	4							good	mistletoe	
1111	BO	Q. doug.	29	3							fair	major limb loss	
1110	BO	Q. doug.	26	3							fair	major limb loss	
1104	BO	Q. doug.	37	2							poor	major limb loss	

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8/9/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 7

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1090	BO	*Q. doug.*	27	4							fair	lean 10 deg. South	
1085	BO	*Q. doug.*	44	1							poor	major limb loss	
1086	BO	*Q. doug.*	20	2							fair	mistletoe, dieback	
1089	BO	*Q. doug.*	20	5							excel.	good structure	
1087	BO	*Q. doug.*	27	1							poor	major limb loss	
1118	BO	*Q. doug.*	25	4							good	twig dieback	
1114	BO	*Q. doug.*	20	2							fair	mistletoe, bad structure	
1119	BO	*Q. doug.*	29	5							excel.	good structure	
1147	BO	*Q. doug.*	29	5							excel.	healthy, good structure	
1121	BO	*Q. doug.*	14	5							excel.	road side	
1120	BO	*Q. doug.*	15	3							fair	wire @ base	
1146	BO	*Q. doug.*	15	3							fair	wire @ base	
1145	BO	*Q. doug.*	18	4							good	good structure	
1148	BO	*Q. doug.*	17	4							good	good structure	
1149	BO	*Q. doug.*	25	4							excel.	good structure	
1088	BO	*Q. doug.*	24	4							excel.	good structure	
1094	BO	*Q. doug.*	27	2							poor	nesting holes, bee hive	
1091	BO	*Q. doug.*	37	2							fair	bad structure	
1103	BO	*Q. doug.*	28	2							good	windswept north, cavity	
1102	BO	*Q. doug.*	32	4							good	good structure	

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8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 8

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1313	BO	*Q. doug.*	46	4							excel.	cavities, past failures	
1317	BO	*Q. doug.*	7	3							good	mistletoe	
1316	BO	*Q. doug.*	5	4							good		
1314	BO	*Q. doug.*	8	4							good		
1315	BO	*Q. doug.*	10	4							good	mistletoe	
1322	BO	*Q. doug.*	29	4							good	past failures	
1323	BO	*Q. doug.*	30	4							excel.	poor crotches	
1299	BO	*Q. doug.*	23	5							good	deadwood	
1105	BO	*Q. doug.*	39	5							excel.		
1106	BO	*Q. doug.*	31	5							excel.	deadwood	
1107	BO	*Q. doug.*	28	4							good	stressed	
1298	BO	*Q. doug.*	51	4							excel.	past failures	
1294	BO	*Q. doug.*	25	4							good		
1324	BO	*Q. doug.*	29	4							good	past failures	
1293	BO	*Q. doug.*	38	4							good	past failures	
1281	BO	*Q. doug.*	31	4							good	cavity, splits	
1280	BO	*Q. doug.*	34	5							good		
1282	BO	*Q. doug.*	25	5							good		
1284	BO	*Q. doug.*	31	4							good	past failures	
1325	BO	*Q. doug.*	11	6							good		

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8/9/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 9

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1321	BO	Q. doug.	15	6							good		
1320	BO	Q. doug.	46	3							good	deadwood	
1319	BO	Q. doug.	36	2							good	past failure, cavity	
1283	BO	Q. doug.	42	6							excel.		
1285	BO	Q. doug.	24	4							good	cavity	
1278	BO	Q. doug.	38	0							dead	dead stump	
1277	BO	Q. doug.	29	4							good	cavity	
1219	BO	Q. doug.	23	6							excel.		
1222	BO	Q. doug.	27	2							fair	massive cavity	
1223	BO	Q. doug.	25	6							excel.		
1221	BO	Q. doug.	30	4							fair	stressed	
1220	BO	Q. doug.	33	2							fair	cavity, nesting holes	
1165	BO	Q. doug.	24	2							fair	cavity, past failures	
1166	BO	Q. doug.	28	5							good		
1164	BO	Q. doug.	29	5							excel.	mistletoe	
1163	BO	Q. doug.	38	2							fair	past failure	
1279	BO	Q. doug.	37	2							poor	past failure	
1295	BO	Q. doug.	26	5							excel.		
1296	BO	Q. doug.	21	5							excel.		
1158	BO	Q. doug.	37	3							fair	past failure	

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8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 10

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1157	BO	*Q. doug.*	27	3							fair	failures, cavity	
1098	BO	*Q. doug.*	28	0							dead	dead	
1097	BO	*Q. doug.*	37	2							fair	cavity, nesting holes	
1100	BO	*Q. doug.*	16	3							fair	stressed	
1099	BO	*Q. doug.*	31	6							excel.		
1167	BO	*Q. doug.*	26	2							fair	cavity, past failures	
1168	BO	*Q. doug.*	30	3							good	cavity at base	
1169	BO	*Q. doug.*	20	4							good	stressed	
1177	BO	*Q. doug.*	22	4							good	mistletoe	
1171	BO	*Q. doug.*	28	2							fair	cavity, failures	
1172	BO	*Q. doug.*	25	3							fair	mistletoe, stressed	
1173	BO	*Q. doug.*	20	4							good		
1176	BO	*Q. doug.*	18	3							fair	stressed	
1175	BO	*Q. doug.*	28	4							fair	suppressed	
1174	BO	*Q. doug.*	21	3							good	nesting holes, cavity	
1213	BO	*Q. doug.*	18	6							good		
1226	BO	*Q. doug.*	33	5							excel.	mistletoe	
1224	BO	*Q. doug.*	34	5							excel.	excessive end weight	
1225	VO	*Q. lobata*	38	2							fair	massive failure	
1214	VO	*Q. lobata*	27	4							good		

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8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 11

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1215	BO	*Q. doug.*	25	2							good	soon to fail, cavity	
1216	BO	*Q. doug.*	33	3							excel.	decay, nesting holes	
1286	BO	*Q. doug.*	40	5							excel.		
1289	VO	*Q. lobata*	24	4							good	suppressed	
1288	VO	*Q. lobata*	27	4							good	suppressed	
1287	VO	*Q. lobata*	21	4							good	suppressed	
1290	VO	*Q. lobata*	21	4							good	suppressed	
1201	BO	*Q. doug.*	44	2							fair	past failure, stressed	
1206	BO	*Q. doug.*	15	1							poor	past failures, cracks	
1200	BO	*Q. doug.*	19	4							good	leaning	
1205	BO	*Q. doug.*	31	4							good	past failures	
1204	BO	*Q. doug.*	26	2							fair	cavity, pst failures	
1202	BO	*Q. doug.*	35	3							good	cavities, stressed	
1203	BO	*Q. doug.*	25	4							good	cavity	
1208	BO	*Q. doug.*	23	4							good	past failures	
1207	BO	*Q. doug.*	21	3							fair	past failures, cavity, mist.	
1194	BO	*Q. doug.*	28	4							good	cavity	
1195	BO	*Q. doug.*	11	5							good		
1192	BO	*Q. doug.*	18	5							good		
1193	BO	*Q. doug.*	37	4							excel.	nesting holes	

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8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 12

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1196	BO	*Q. doug.*	19	5							good	mistletoe	
1197	BO	*Q. doug.*	7	3							fair	suppressed	
1198	BO	*Q. doug.*	10	5							good		
1210	BO	*Q. doug.*	22	2							poor	caonks, past falure	
1209	BO	*Q. doug.*	19	2							poor	stressed	
1211	BO	*Q. doug.*	30	2							fair	past failure, cavity, mist.	
1212	BO	*Q. doug.*	14	5							good		
1189	BO	*Q. doug.*	16	4							good	mistletoe, suppressed	
1190	BO	*Q. doug.*	22	5							good		
1191	BO	*Q. doug.*	22	4							fair	cavity	
1188	BO	*Q. doug.*	19	3							fair	cavity	
1179	BO	*Q. doug.*	28	2							good	cavity at crotch	
1178	BO	*Q. doug.*	25	4							good	cavity, mistleote	
1180	BO	*Q. doug.*	26	6							excel.	mistletoe	
1181	BO	*Q. doug.*	23	5							excel.		
1183	BO	*Q. doug.*	19	5							excel.		
1184	BO	*Q. doug.*	5	3							poor	suppressed	
1185	BO	*Q. doug.*	18	4							good	suppressed	
1182	BO	*Q. doug.*	19	5							good		
1162	BO	*Q. doug.*	19	5							good		

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11 = PERSCRIBED PRUNING: CLASS 1-4

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8/9/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 13

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1186	BO	Q. doug.	18	2							poor	crown decay	
1187	BO	Q. doug.	27	5							excel.		
1170	BO	Q. doug.	22	5							excel.		
1161	BO	Q. doug.	7	5							excel.		
1160	BO	Q. doug.	22	3							fair	nesting holes, mistletoe	
1159	BO	Q. doug.	28	4							good	cavities	
1217	BO	Q. doug.	25	5							good	epicormic growth	
1156	BO	Q. doug.	23	6							excel.		
1154	BO	Q. doug.	27	3							good	nesting holes	
1153	BO	Q. doug.	32	3							good	cavity, past failures	
1218	BO	Q. doug.	22	0							dead	failed this year	
1151	BO	Q. doug.	26	6							excel.		
1297	BO	Q. doug.	41	5							excel.	excessive end weight	
1109	BO	Q. doug.	26	5							excel.		
1108	BO	Q. doug.	25	5							excel.	mistletoe	
1101	BO	Q. doug.	35	5							excel.	mistletoe	
1150	BO	Q. doug.	23	4							good	mistletoe	
1095	BO	Q. doug.	18	3							poor	very stressed	
1152	BO	Q. doug.	31	3							fair	mistletoe, past failure	
1135	BO	Q. doug.	21	4							fair	mistletoe, stressed	

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10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

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8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 14

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
												duplicate, deleted	
												duplicate, deleted	
												duplicate, deleted	
1155	BO	*Q. doug.*	21	4							fair	deadwood	
1329	BO	*Q. doug.*	32	2							poor	major limb loss, cavity	
1328	BO	*Q. doug.*	36	1							poor	major limb loss, cavity	
1320	BO	*Q. doug.*	46	3							fair	short tree	
1319	BO	*Q. doug.*	36	2							poor	major limb loss, cavity	
1318	BO	*Q. doug.*	32	1							poor	major limb loss, cavity	
1327	BO	*Q. doug.*	45	1							poor	cavities, previous failures	
1321	BO	*Q. doug.*	15	4							fair	small tree, good structure	
1093	BO	*Q. doug.*	30	4							fair	limb loss, stressed	
1092	BO	*Q. doug.*	30	4							good	good structure	
1134	BO	*Q. doug.*	23	4							good	good structure	
1096	BO	*Q. doug.*	23	3							fair	major limb loss	
1144	BO	*Q. doug.*	26	5							excel.	good structure	
1145	BO	*Q. doug.*	18	4							fair	twig dieback	
1143	BO	*Q. doug.*	12	3							fair	barbed wire @ base	
1136	BO	*Q. doug.*	23	5							excel.	good canopy	
1137	BO	*Q. doug.*	18	4							good	mistletoe	

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4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS; AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/9/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 15

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1138	BO	*Q. doug.*	25	3							fair	nesting holes,past failures	
1139	BO	*Q. doug.*	18	3							fair	mistletoe, suppressed	
1140	BO	*Q. doug.*	30	3							good	major past failure	
1141	BO	*Q. doug.*	22	3							fair	suppressed, wire@base	
1142	BO	*Q. doug.*	12	3							good	wire @base	
1153	BO	*Q. doug.*	22	5							excel.	good structure	
1333	VO	*Q. lobata*	37	4							good	v crotch	
1334	VO	*Q. lobata*	15	4							fair	very suppressed	
1335	VO	*Q. lobata*	10	3							fair	very suppressed	
1336	VO	*Q. lobata*	18	5							good	good structure	
1337	VO	*Q. lobata*	24	4							good	deadwood	
1338	VO	*Q. lobata*	9	4							fair	suppressed	
1339	VO	*Q. lobata*	19	4							good	deadwood	
1340	VO	*Q. lobata*	27	4							good	deadwood, some failures	
1341	VO	*Q. lobata*	12	3							fair	very suppressed	
1342	VO	*Q. lobata*	21	4							good	good structure	
1343	VO	*Q. lobata*	19	3							fair	stressed	
1344	VO	*Q. lobata*	13	3							fair	stressed	
1345	VO	*Q. lobata*	59	3							fair	past failures	
1346	VO	*Q. lobata*	22	5							good	deadwood	

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

5 = TREE CONDITION: 1 = POOR, 10 = EXCELLENT

6 = CONSTRUCTION STATUS: AVOIDED, IMPACTED, REMOVAL

7 = CRZ: PERCENT OF IMPACTED CRITICAL ROOT ZONE

8 = CONSTRUCTION IMPACT TYPE: GRADING, COMPACTION, TRENCHING

9 = MITIGATION REQUIREMENTS: FENCING, MONITORING, ROOTPRUNING,

10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

TREE PROTECTION SPREAD SHEET GOLDEN HILL 16

1	2	3	4	5	6	7	8	9	10	11	12	13	14
TREE #	TREE SPECIES	SCIENTIFIC NAME	TRUNK DBH	TREE CONDITION	CONST STATUS	CRZ % IMPACT	CONST IMPACT	MITIGATION PROPOSAL	MONT REQUIRED	PRUNING CLASS	AESTH. VALUE	FIELD NOTES	NS EW
1347	VO	*Q. lobata*	8	3							fair	very suppressed	
1348	VO	*Q. lobata*	24	4							good	deadwood	
1349	VO	*Q. lobata*	20	3							fair	major deadwood	
1350	VO	*Q. lobata*	28	4							good	deadwood	
1352	VO	*Q. lobata*	40	4							excel.	some failures	
1351	VO	*Q. lobata*	28	4							good	deadwood	
1320	VO	*Q. lobata*	21	5							good	deadwood	

1 = TREE #: MOSTLY CLOCKWISE FROM DUE NORTH

2 = TREE TYPE: COMMON NAME IE.W.O.= WHITE OAK

3= SCIENTIFIC NAME

4 = TRUNK DIAMETER @ 4'6"

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10 = ARBORIST MONITORING REQUIRED: YES/NO

11 = PERSCRIBED PRUNING: CLASS 1-4

12= AESTHETIC VALUE

12 = FIELD NOTES

13= NORTH SOUTH/ EAST WEST CANOPY SPREAD

8/4/2006

Exhibit E – Cultural Resource Investigation

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CULTURAL RESOURCE INVESTIGATION OF 160 ACRES IN PASO ROBLES NORTH END OF GOLDEN HILL ROAD APN'S 025-431-037, 038, 039

Prepared at the request of:
Dave McCurdy
PO Box 2552
Paso Robles, CA 93447

Prepared by:
John Parker, Ph.D., RPA

USGS Quads:
Paso Robles 7.5'

May 14, 2006

SUMMARY

On April 20th, Dave McCurdy requested that the author conduct a cultural resource investigation of a three parcels totaling 160 acres located at the north end of Golden Hill Road, Paso Robles. The purpose of the investigation was to locate, describe, and evaluate any archaeological or historical resources that may be present. In addition, the author was to assess the impact that might occur as a result of the subdivision and ultimate development of the parcels. This report describes both the field inventory and background records search dealing with the above referenced project.

The fieldwork took place April 30th through May 3rd, 2006. The background records check indicated a low to medium probability that historic and prehistoric cultural resources may exist on the parcel. The surface field inspection of the parcel did not turn up any evidence of significant historic or prehistoric cultural resources; however, dense grass prevented a complete inspection of the mineral soil. It is possible that unobserved or buried cultural resources exist within the project area. Therefore, it is recommended that the project be approved as planned with a provision that initial grubbing and grading be monitored by a qualified archaeologist.

INTRODUCTION AND BACKGROUND

The fieldwork carried out as part of this study was conducted by John and Cheyanne Parker. Dr. Parker holds a Ph.D. in Archaeology, and is a Registered Professional Archaeologist. Cheyanne Parker has 7 years of experience as an archaeological field and lab technician.

As the proposed undertaking will require a local discretionary permit, the California Environmental Quality Act (CEQA) applies to the project. This cultural resource evaluation was designed to comply with the requirements set forth in CEQA (sec. 21083.2). This report follows the outline for identification of cultural resources as presented in the "Archaeological Resource Management Reports (ARMR): Recommended Contents and Format" (State of California 1990).

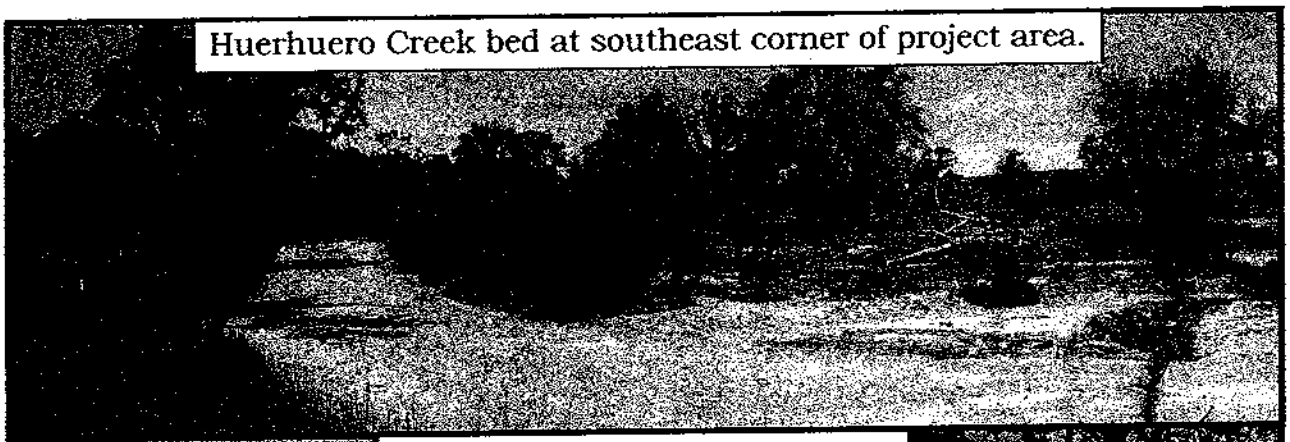
The area inspected covered ~160 acres of gently rolling terrain west of and adjacent to Huerhuero Creek. The property is depicted on the Paso Robles 7.5' USGS topographic map as existing in sections 14 and 23, T26S, R12E (see attached map for area inspected). The project area was bordered on the west by the northern-most extension of Golden Hill Road and on the north and east by Huerhuero Creek (although the project area included and extended beyond the creek in some areas).

The proposed project has not yet been completely defined so specific impacts cannot be addressed.

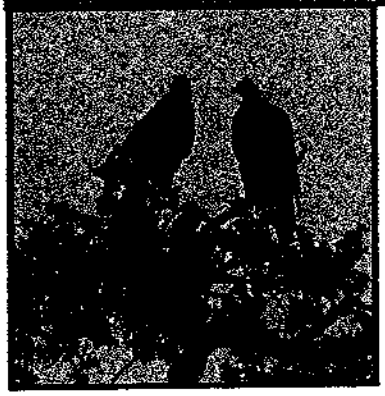
NATURAL SETTING

The rolling terraces along the Salinas River and Huerhuero Creek flood plains are made up of light to medium brown sandy soils with rounded gravels. Most of the sand appears to represent decomposed granite. The gravels include granite along with natural Monterey and Franciscan chert, basalt, quartzite, and other rocks. These soils most likely represent ancient streambed and overbank deposits from the Salinas and other rivers. The soils supported an oak grassland environment that has been significantly altered by more than 200 years of cattle grazing and farming.

The dry bed of Huerhuero Creek was made up of granite sands.



Huerhuero Creek bed at southeast corner of project area.



At the time of the field inspection, the project area was open and undeveloped, but covered with dense grasses and scattered oaks, some of which appeared to be 200 or more years old.

Wildlife observed in the field included a mated pair of golden eagles, a nesting pair of redtail hawks with fledglings, a young mountain lion, deer, ground squirrel and a host of birds including acorn woodpecker, flicker, western bluebird, tree swallows, etc. Unseen animals identified by tracks included coyote, bobcat, fox, and raccoon.

PREHISTORIC CULTURAL SETTING

Archaeological research has indicated that the Salinas River Valley has been home to prehistoric people for at least 9,000 years (Mikkelsen et al. 2000, Parker 2004). Studies of prehistoric sites have demonstrated continuous cultural use of the area until the time of European contact. The changing culture and technology of these people allowed them to successfully adapt to changes in their environment brought about by the end of the ice age and population growth (Parker 1996).

Ethnographic and historical research has indicated that the project area was most likely within the Southern Salinan or Migueleño Salinan territory, but very close to the boundary between the Salinan and Obispeño Chumash at the time of European contact (Gibson 1983). The various Salinan languages belong to the Hokan language family, which is considered the oldest language family in California and possibly in the New World (Shipley 1978). It is likely that Hokan speaking people have inhabited California for at least 12,000 to 14,000 years (Parker 1994).

The earliest European contact with Native Americans in the area came in the form of ocean expeditions along the California Coast. Pedro de Unamuno (1587) stopped along the coast and traveled inland as far as present-day San Luis Obispo. He apparently had a battle with native people in the Morro Bay vicinity. Sebastian Rodriguez Cermeño landed in 1595 followed by Sebastian Vizcaino in 1602-03 (Gibson 1983:39).

The first serious encounters between Europeans and the Native population occurred with the two land-based expeditions of Gaspar de Portolá in 1769 and 1770. The first contact with the Southern Salinan people occurred during these expeditions.

The establishment of Missions San Antonio and San Miguel signaled the end of traditional Native American village life in the area.

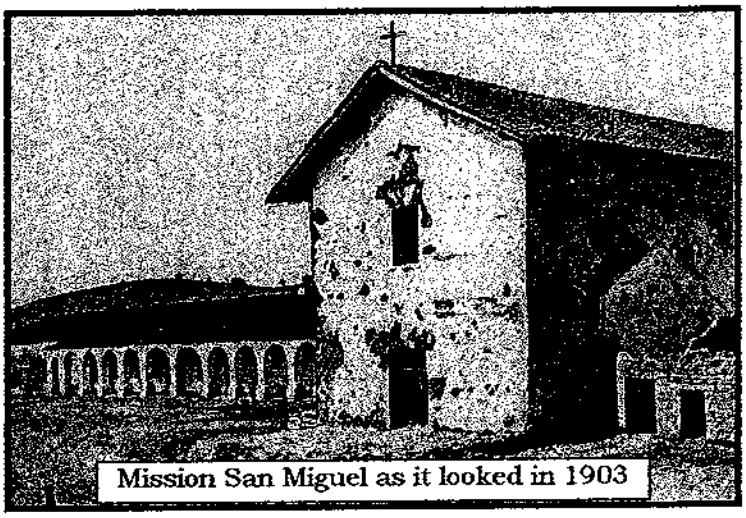
Very little is known about the Migueleño Salinan culture in San Luis Obispo County. This is mostly due to their demise by diseases brought by the Spanish and their later incarceration as slave labor in the missions (Heizer et. al. 1971). As an example of this treatment, the padre from Mission San Miguel traveled with a soldier to the Salinan village of Cholam and asked the chief to give him some children to baptize. The chief refused so the Commandant at the Mission sent 14 soldiers to Cholam to take the chief, his son and two other chieftains prisoner. In order to obtain freedom, the chief agreed to bring natives from his village to the mission (Rivers 2000:17).

Although the missionaries did record some basic information as part of the baptismal process, these newly colonizing Europeans were not concerned

with recording the traditional culture of the native peoples. By the time Anthropologists took an interest in their lifestyle, there were no people left who could remember the traditional lifeways.

HISTORIC CULTURAL SETTING

The Mission Period (1797-1834)


Mission San Miguel as it looked in 1903

The project area is within the property that was once under the ownership of Mission San Miguel.

Mission San Miguel was founded in 1797 by Father Francisco de Lasuen who took over as *Presidente* of the Missions from Father Junipero Serra. San Miguel was the 16th of the 21 missions established in California by the Spanish Government (Ohles 1997).

In 1806, 27 huts were constructed for the Indians. Construction continued at the Mission and at the height of activity (1814), the mission had a native population of 1,076. By 1832, the population had dropped to 658 and construction at Mission San Miguel ended. San Miguel's property extended 18 miles north of the main church, 21 miles south of the church, 66 miles inland to the east, and 35 miles westward to the Pacific coast.

In addition to the small vineyard, Mission San Miguel had crops of barley, wheat, and cotton. An 1827 list of livestock included 2,130 cattle, 120 oxen, 7,904 sheep, and 62 pigs.


Perfecta Encinales, last Salinan mission Indian. Photo taken 1906 when she was 115 years old.

There is some mention that Mission Indians used the land east of the Salinas River to raise their own crops. This was also an area where Mission sheep herds were kept (Ohles 1997:104).

The Spanish government had hoped that each of the missions would secularize 10 years after establishment. The mission lands and town lots would then be parceled out to the Christianized Indians with the newly created towns governed by native officials trained for that purpose. The

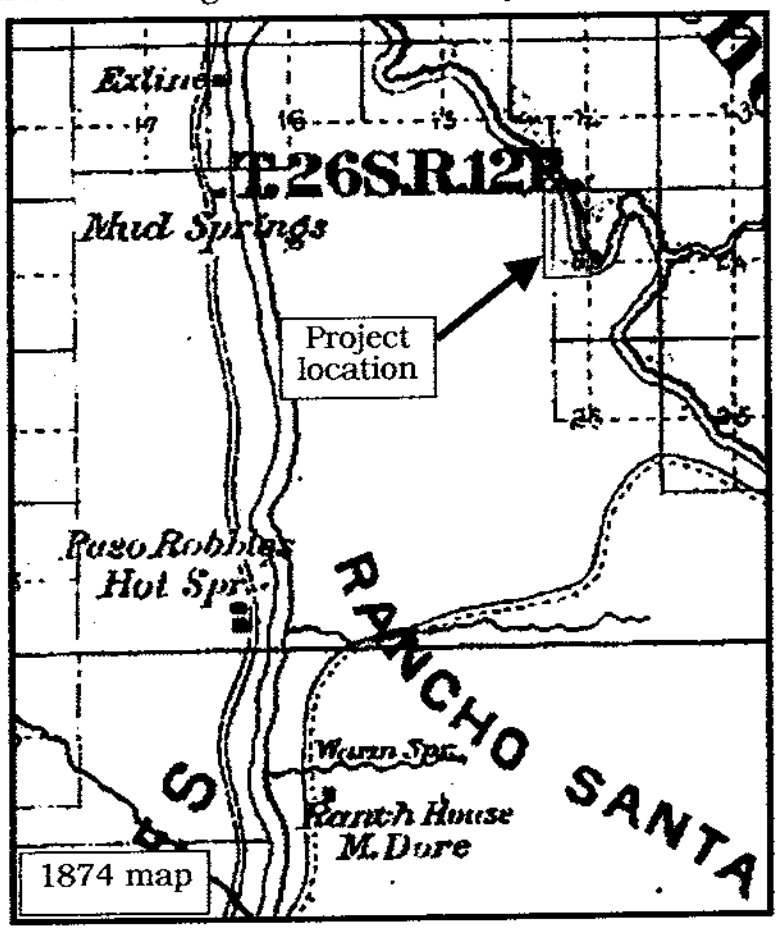
missionaries were then to move on to another location expanding the frontier.

In reality, the secularization decree of 1834 did provide for the distribution of a portion of each mission's land and goods to the Christianized natives. All of San Miguel's natives asked to keep land within the western part of the mission's holdings. However, by 1845, all of San Miguel's lands had been granted to Mexican citizens except for the Estrella Rancho. This rancho was granted to the "people of San Miguel" in 1844. Unfortunately their claim was rejected by the U.S. courts (Ohles 1997, Rivers 2000).

The Rancho Period (1834-1850)

The project area is situated immediately adjacent to the northeast boundary of the Santa Ysabel Land Grant. Santa Ysabel was granted to Francisco Arce in 1844.

Arce was born in Baja California in 1819 and moved to Monterey in 1833. He served as Lieutenant under Mariano Vallejo and Secretary to Jose Castro. The Mexican Governor of California (Pio Pico) wanted to move the capitol of California from Monterey. He planned to bring a force to Monterey to initiate the move. Jose Castro and others refused to move the capitol and enlisted the support of Vallejo. Vallejo agreed to provide 200 horses for the militia at Monterey. Arce was called up to drive the horses from Vallejo's Sonoma Rancho to Monterey. On June 10, 1846, members of the Bear Flag Revolt overtook Arce, confiscated the horses, and took Arce and eventually Vallejo into custody. This was the first action of the revolt that eventually took over Mexican owned California.



In 1853, Francisco Arce sold 1/8 of Rancho Santa Ysabel to Jeremiah Clark for $3. In 1855, Arce sold the rancho to Manuel Castro for $4,000. In 1857, a U.S. District Court

finally conferred the Rancho to Francisco Arce. In 1859, he sold the rancho again to Teodoro Gonzalez for $3,000. In 1874, Arce sold the rancho again to Maurice Dore for $5 in gold (Ohles 1997:109).

The Dore family ran 30,000 sheep on the rancho. Their house is depicted on the 1874 map above.

RESEARCH DESIGN AND FIELD METHODS

This project was conducted to provide an inventory of any historic or prehistoric cultural resources that may exist within the project area. In this geographic region the majority of prehistoric and historic cultural resources can be visually discovered and identified based on surface materials.

Prehistoric sites and features are evidenced by the presence of chipped and ground stone tools, bone and shell dietary refuse, rock alignments, pictographs, petroglyphs, and other alterations to the natural environment. Due to the dynamic geological and hydrological history of California, it is impossible to predict the location of prehistoric sites based on proximity to natural water sources, resource areas, or geologic features. Therefore all ground surface locations must be inspected.

Historic sites and features are evidenced by the presence of metal, glass, ceramics, bone, shell, structural remains, or altered landscapes such as ditches, roadbeds, etc.

(CHRIS) Prior to the field inspection, the author conducted a record search at the Regional California Historical Resources Information Center (Dept. of Anthropology, U.C. Santa Barbara). This record review turned up no evidence of any previously recorded historic or prehistoric sites within 1 mile of the project area.

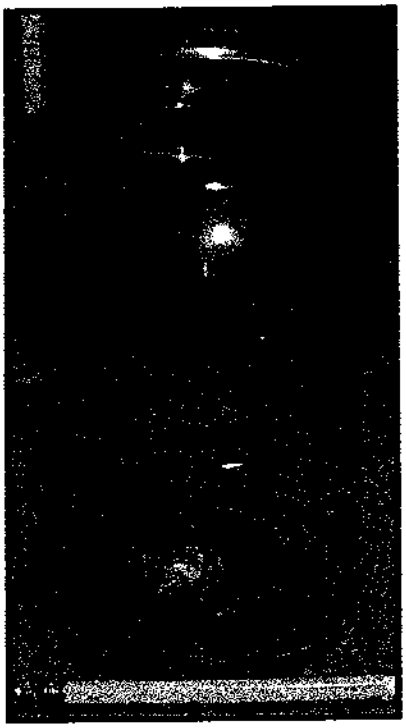
The fieldwork consisted of an intensive surface examination of all portions of the project area. This inspection was conducted by walking transects across the property at 5 to 10 meter intervals. All areas were examined for evidence of both historic and prehistoric cultural activity.

Thick grass covered 90% of the project area, effectively preventing a complete inspection of the mineral soil. Throughout the area, rodent dirt mounds were examined, as were all erosion banks along small drainages as well as Huerhuero Creek.

It is likely that isolated artifacts and small prehistoric campsites would have been missed due to the dense grass cover; however, large prehistoric sites would have been observed and recorded.

REPORT OF FINDINGS

No prehistoric materials were observed. No chipped or ground stone or dietary refuse such as shell or bone were observed.

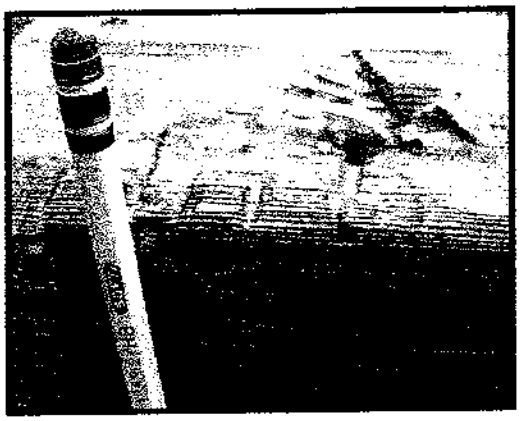


Artifacts

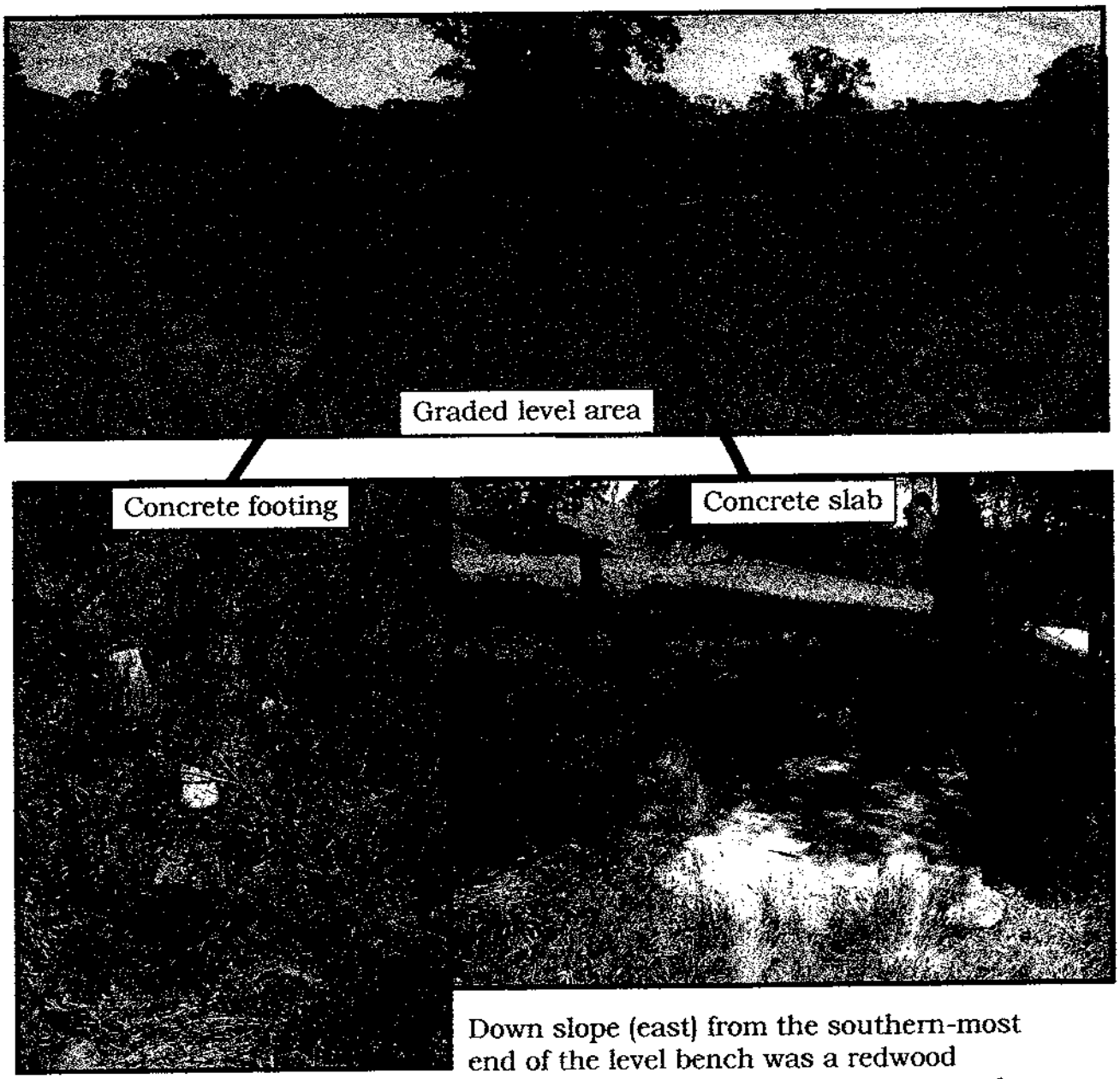
Historic materials encountered consisted of isolated artifacts and features representing general ranching activity during the past 50 to 100 years. These included an Atlas E-Z Seal jar discovered in the Huerhuero Creek sands at the north end of the project area. This jar was likely transported downstream during winter runoff from a historic trash deposit somewhere upstream of the project area. The Atlas jar was manufactured by the Hazel-Atlas Glass Co. The "E-Z SEAL" logo was in use from 1896 to 1964 (Toulouse 1971:241).

Features

Historic features encountered were all located in the southern ½ of the project area. These included a blown out earthen dam with welded and riveted iron pipe that both supplied water to the reservoir and acted as a spillway. Near the southern end of the dam were several pieces of milled lumber, some of which contained square nails.



A graded flat area on a natural bench overlooking Huerhuero Creek was discovered. Within the leveled area were a concrete slab, what appeared to be the end of a concrete footing and various small pieces of milled wood and metal. The slab was ~12 x 5 feet in size and oriented north-south. It was situated at UTM coordinate 712490E/3948106N. The footing was also oriented north-south and was located at UTM 712483E/3948123N. It is likely that the footing once supported a small barn.



Down slope (east) from the southern-most end of the level bench was a redwood watering trough. The trough was ~10 feet in diameter, ~3.5 feet deep, and situated just above the bed of Huerhuero Creek (at UTM 712502E/3947991N).

More recent features included a circular concrete footing for a water tank located on a hill within the southern portion of the project area. Just north of this was a wellhead with pump and power supply. The southwestern corner of the project area had evidence of recent farming (most likely grain production).

A large elongated pile of concrete squares was discovered in the north-central portion of the project area. This appeared to be recently dumped.

At the time of the field inspection, the project area was used for cattle grazing and several pregnant cows and young calves were observed.

See the accompanying map for specific

locations of the above listed features.

CONCLUSIONS AND INTERPRETATION

Although no physical remains of prehistoric archaeological resources were discovered during the field inspection, the historical research suggests that such resources may exist within the project area.

The 1874 map on page 5 shows the project area in relation to known historic features. The project area is well away from any mapped historic features of that period, however, historical documentation suggests that this general area was used for sheep herding by both the Mission and later Mexican Rancho and early California periods. Sheep herding camps were generally small and only inhabited for a few months of the year. This use left few permanent structural remains. It is likely that the leveled area with concrete features in the southern portion of the project area represent the remains of such a camp. Materials observed suggest that it would have been in use since the 1930's.

The rest of the features (reservoir/stock pond, well, watering trough, etc.) appear to be related to recent past and contemporary ranching use of the property.

All isolated artifacts and features are typical of recent historic ranching activities. Although they all represent general ranching activities within the project area, none of these features can be considered historically significant based on style, use, or age of manufacture. None of these features was found to meet the criteria for significance as outlined by the Calif. Pub. Res. Code (5024.1, Title 14 CCR, Sect. 4852)

The documentation and mapping of these features within this report serves to mitigate any impacts that might occur to them as a result of project construction and use. Should the owner wish to preserve any of the features as a present-day reminder or example of historical uses, the well and watering trough would provide the most obvious and interesting features.

RECOMMENDATIONS

It is recommended that the proposed project be approved as planned with the stipulation that a qualified historic archaeologist be retained to monitor initial grubbing and grading. This monitoring should be conducted as a precaution to insure that prehistoric or historic artifacts or features that may have been obscured by the dense grass cover are not accidentally disturbed or destroyed.

In the event that prehistoric or historic materials or features are encountered, work should be redirected away from the immediate vicinity of the find until the archaeologist can determine the significance of the resource. In the case of a single isolated historic artifact, the find can be mapped, collected, and construction work proceed normally. If a historic feature is discovered and found to meet the criteria for significance as outlined by the Calif. Pub. Res. Code (5024.1, Title 14 CCR, Sect. 4852), then the monitoring archaeologist will make recommendations for the treatment of the resource. Once the project applicant and county have agreed on the proper treatment of the resource, then work within that area can proceed.

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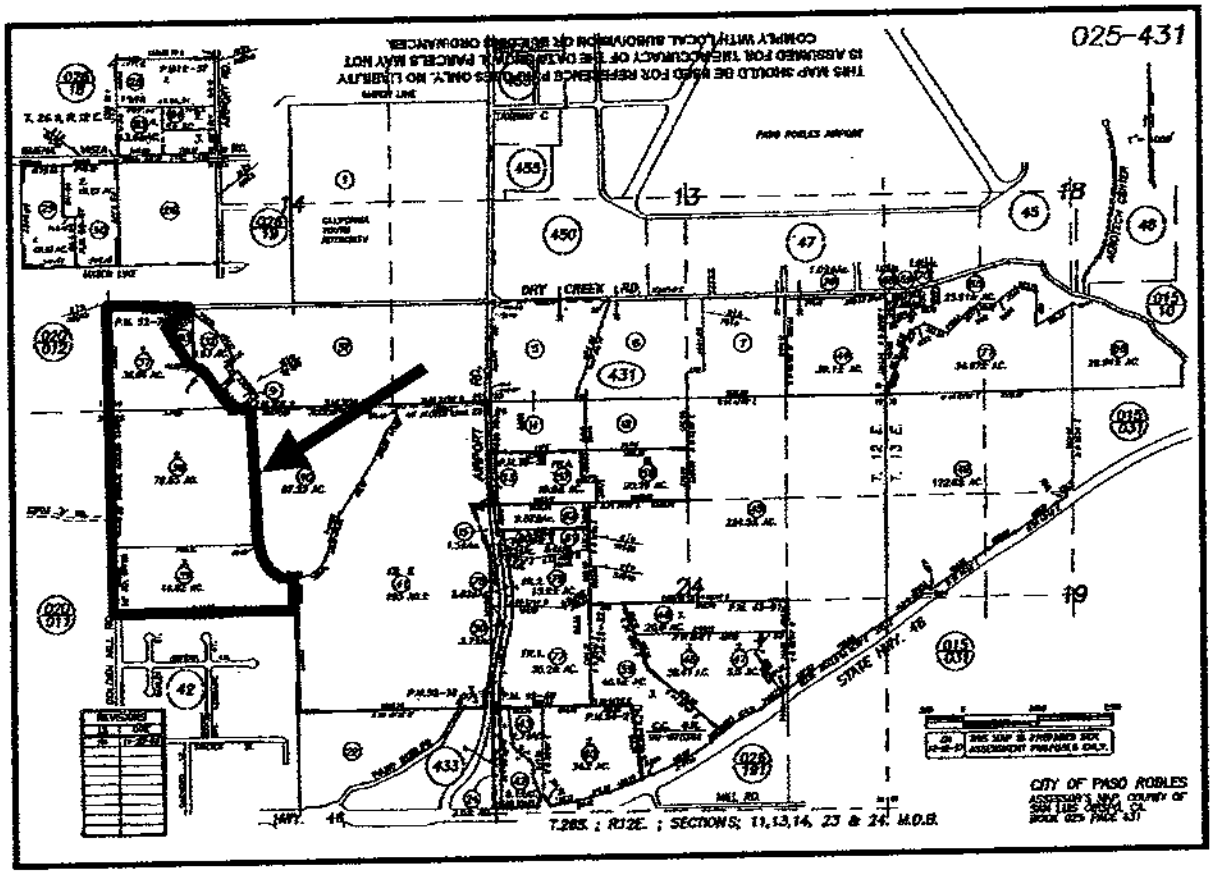
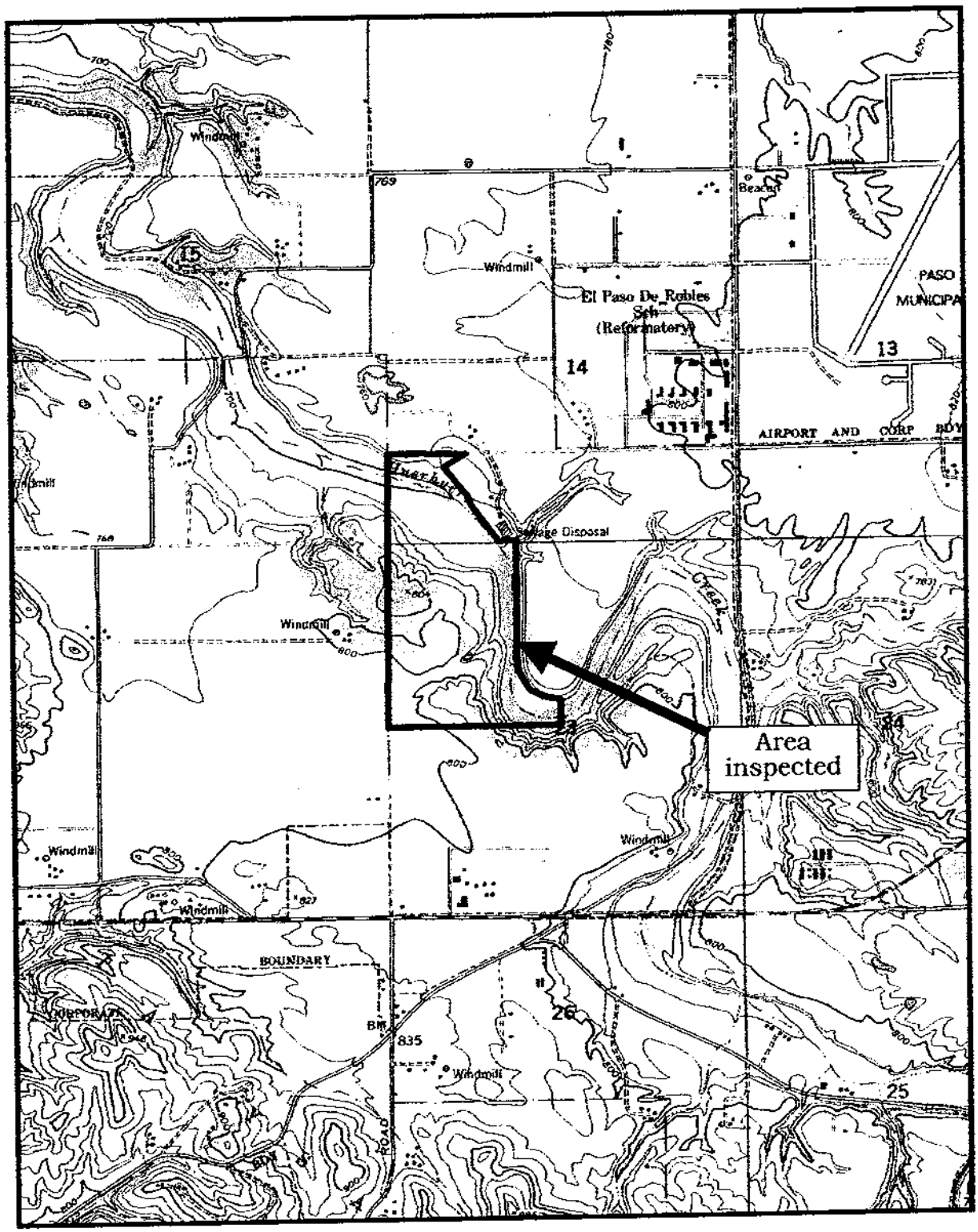
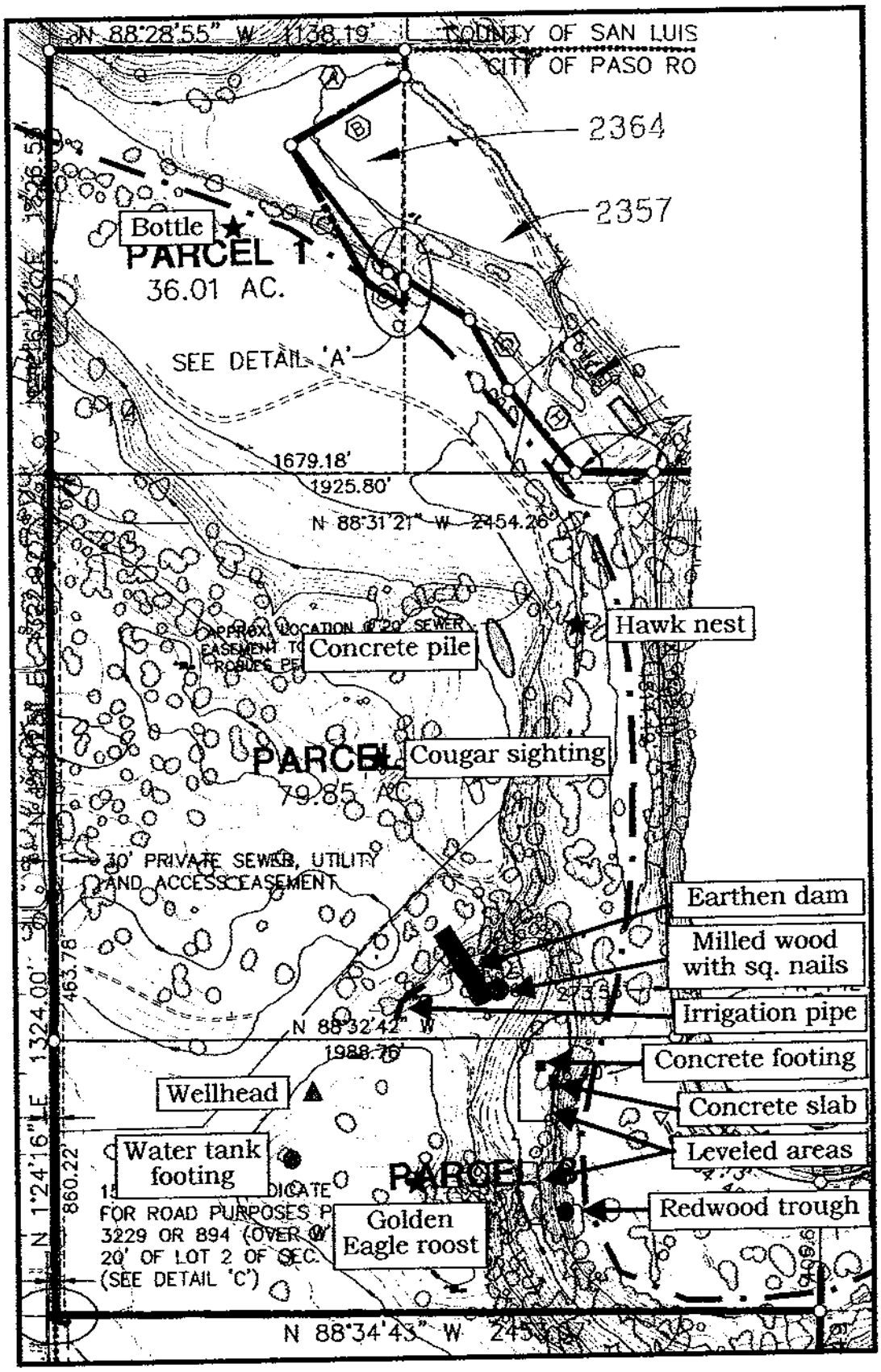
PARCELS INSPECTED



GENERAL PROJECT LOCATION
PASO ROBLES USGS QUAD SCALE 1:24,000



LOCATIONS OF CULTURAL FEATURES



AERIAL OF PROJECT AREA

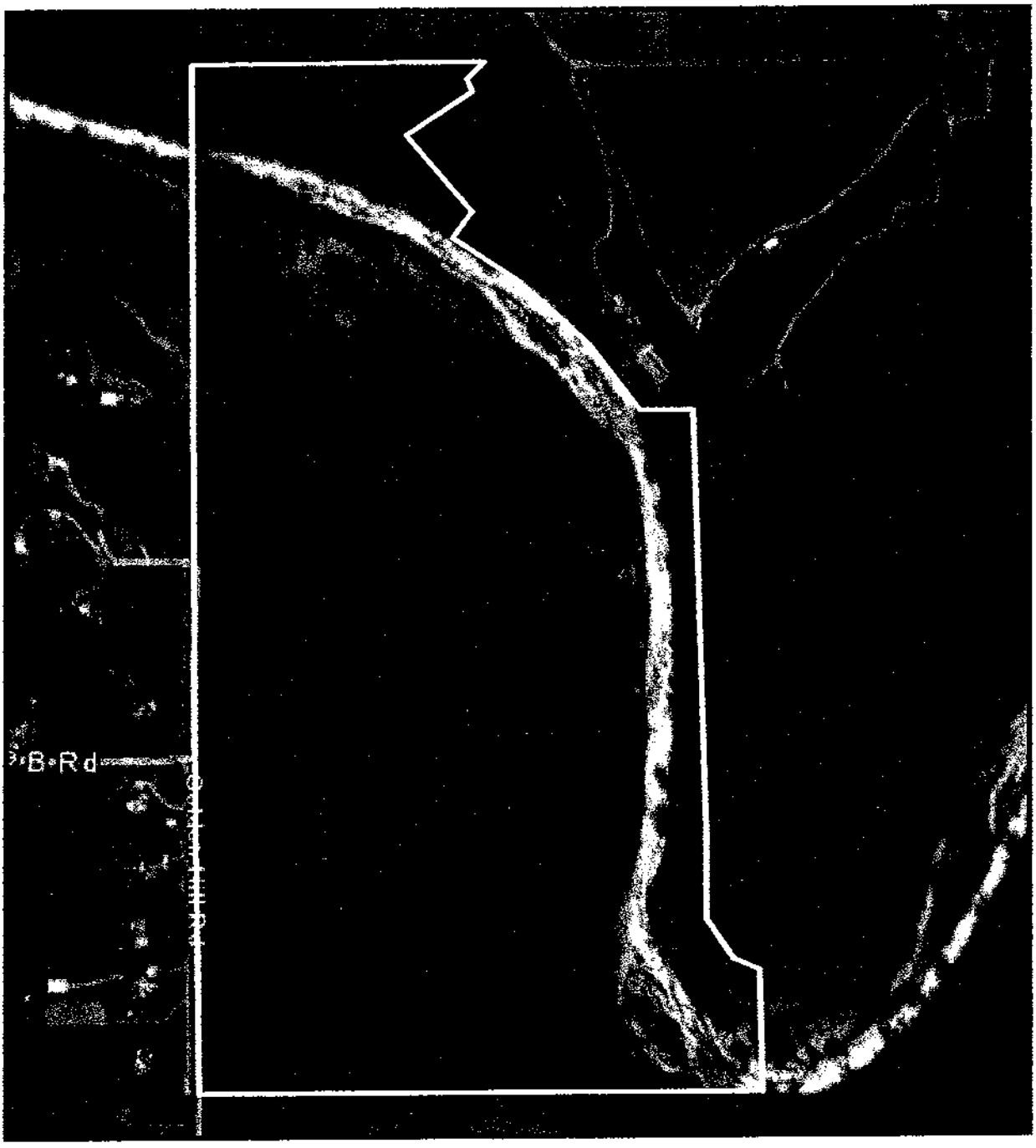
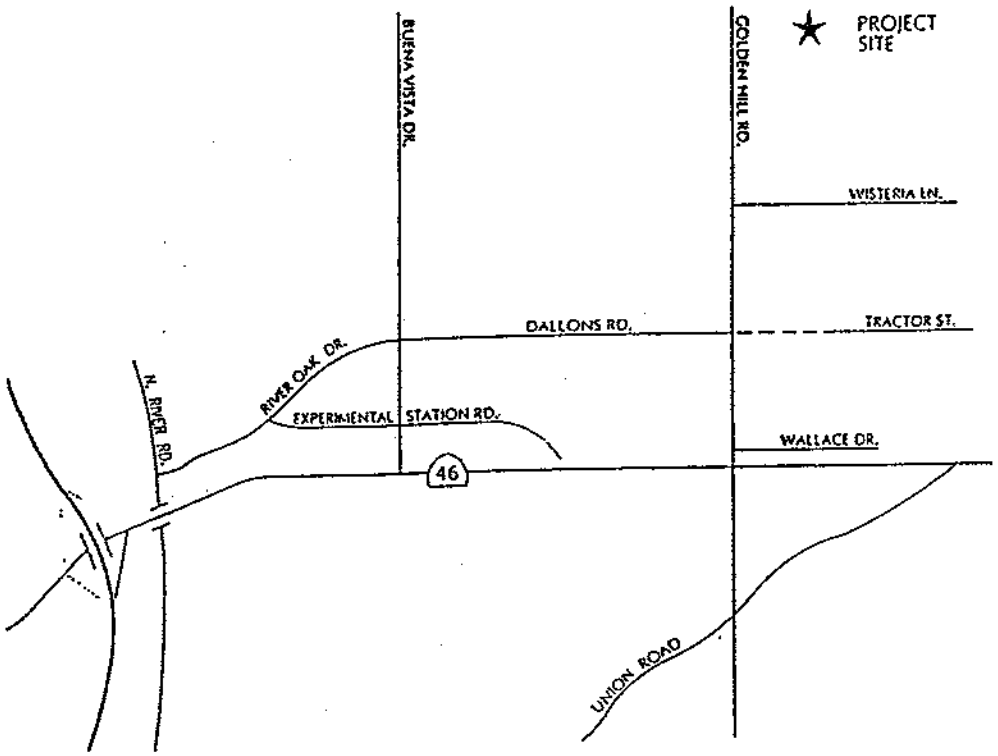


Exhibit F - Traffic and Circulation Study

PASO ROBLES MOTORCOACH RESORT
CITY OF PASO ROBLES, CALIFORNIA

GENERAL PLAN AMENDMENT TRAFFIC STUDY



July 13, 2007

ATE Project #06093

Prepared For:
Ken Mundee
2500 Airport Road
Paso Robles, CA 93446

Prepared By:
Darryl F. Nelson
Under the Direction of:
Richard L. Pool, P.E.

REGISTERED PROFESSIONAL ENGINEER
RICHARD L. POOL
No. 18,030
Expires 6/30/09
CIVIL
STATE OF CALIFORNIA

ASSOCIATED TRANSPORTATION ENGINEERS
100 North Hope Avenue, Suite 4, Santa Barbara, CA 93110-1686 • (805) 687-4418 • FAX (805) 682-8509

ASSOCIATED TRANSPORTATION ENGINEERS

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Richard L. Pool, P.E.
Scott A. Schell, AICP

July 13, 2007

06093R05rpt

Ken Mundee
2500 Airport Road
Paso Robles, CA 93446

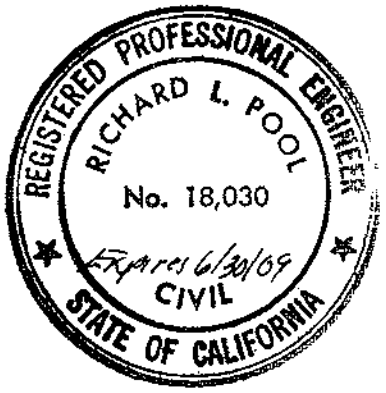
TRAFFIC STUDY FOR THE PASO ROBLES MOTORCOACH RESORT, GENERAL PLAN AMENDMENT PASO ROBLES, CALIFORNIA

Associated Transportation Engineers is submitting this revised traffic study for the General Plan and Zone Change application to allow the Paso Robles Motorcoach Resort, located on the Golden Hill Road north of State Route 46 in the City of Paso Robles, California. Initial review of the July 11, 2007 report noted the geometry for Golden Hill Road as improved was not correct. Please discard the July 11, 2007 report.

We appreciate the opportunity to assist you with this project.

Associated Transportation Engineers

By: Richard L. Pool, P.E.
President



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INTRODUCTION

The following traffic and circulation study contains an analysis of the affect of the General Plan Amendment (GPA) on the current General Plan Circulation Plan's capacity to accommodate the change in projected traffic volume and the ability of the community to implement the elements of the Circulation Plan. The Paso Robles business community and the City have the vision to make the Paso Robles environs a destination area by encouraging activities and events that attract visitors. The Mid-State Fair is the centerpiece of the activities and events. The requested change in land use is from Agricultural to Park Open Space with Resort Overlay which allows some types of visitor serving uses.

GENERAL PLAN AMENDMENT APPLICATION

The requested action is for the subject parcel's current land use designation of Agriculture to be designated as Park Open Space with Resort Overlay along with the related zoning. The project area is located within Airport Zone 5, thus must comply with the applicable restrictions in addition to complying with the General Plan land use designation and zoning ordinance. A recreational vehicle (RV) park is consistent with the requirements. An RV park provides service and facilities that will accommodate visitors to Paso Robles area and perhaps will encourage them to remain in the area longer.

POTENTIAL LAND USE DESCRIPTION

The evaluation of a GPA requires the development of the trip generation and distribution of a potential use for the requested land use designation. A project that could be considered is the Paso Robles Motorcoach Resort development. Such a development could consist of 600 RV spaces, a main clubhouse, registration building, a guarded gated entry, six sub-clubhouses each with pool/shower/laundry facilities. Each RV space will come equipped with water, sewer, power, gas and TV service. An illustrative site plan is shown in Figure 1. The access would be from Golden Hill Road.

STUDY AREA

The study-area roadways analyzed include State Route 46E, Golden Hill Road and Dallons Road. The facilities analyzed are summarized on Table 1.

Table 1
Study-Area Transportation Facilities

Roadways	Intersection
State Route 46E Golden Hill Road Dallons Road	State Route 46E/Golden Hill Road Golden Hill Road/Dallons Road

PROJECT SITE PLAN

FIGURE 1

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EXISTING CONDITIONS

Street Network

The project site is served by a network of major highways, arterial streets and collector streets, as illustrated in Figure 2. The following text provides a brief discussion of major components of the study-area street network.

State Route 46E, located south of the project site, is an east-west state highway. Within the Paso Robles area, State Route 46E extends as a four-lane divided highway from U.S. Highway 101 to east of Airport Road. State Route 46E narrows to two-lanes east of Airport Road and continues easterly to the San Joaquin Valley.

Golden Hill Road, located adjacent to the project site to the west, is a north-south road with a signalized intersection at State Route 46. Golden Hill Road north of State Route 46 is a two-lane paved arterial road, the portion north of Wisteria Lane is paved and used for local property access to serve residents in the County area. Golden Hill Road continues south across Union Road and terminates at Creston Road.

Dallons Road, located south of the project site, is an east west roadway from Golden Hill Road to North River Road to the west. Dallons Road is STOP–sign controlled at the Golden Hill Road intersection.

Wisteria Lane, located south of the project site, is an east west roadway from Golden Hill Road to the east. Wisteria Lane serves the industrial subdivision east of Golden Hill Road.

Roadway Operations

Existing (2005) average daily traffic (ADT) volumes for State Route 46E were obtained from Caltrans[1]. Figure 3 shows Existing Average Daily Traffic volumes.

In evaluating roadway operating conditions, "Level of Service" (LOS) "A" through "F" are applied, with LOS "A" indicating very good operating conditions and LOS "F" indicating poor conditions (more complete definitions of level of service are contained in the Technical Appendix for reference). The City of Paso Robles has adopted LOS "D" as their minimum acceptable operational level.

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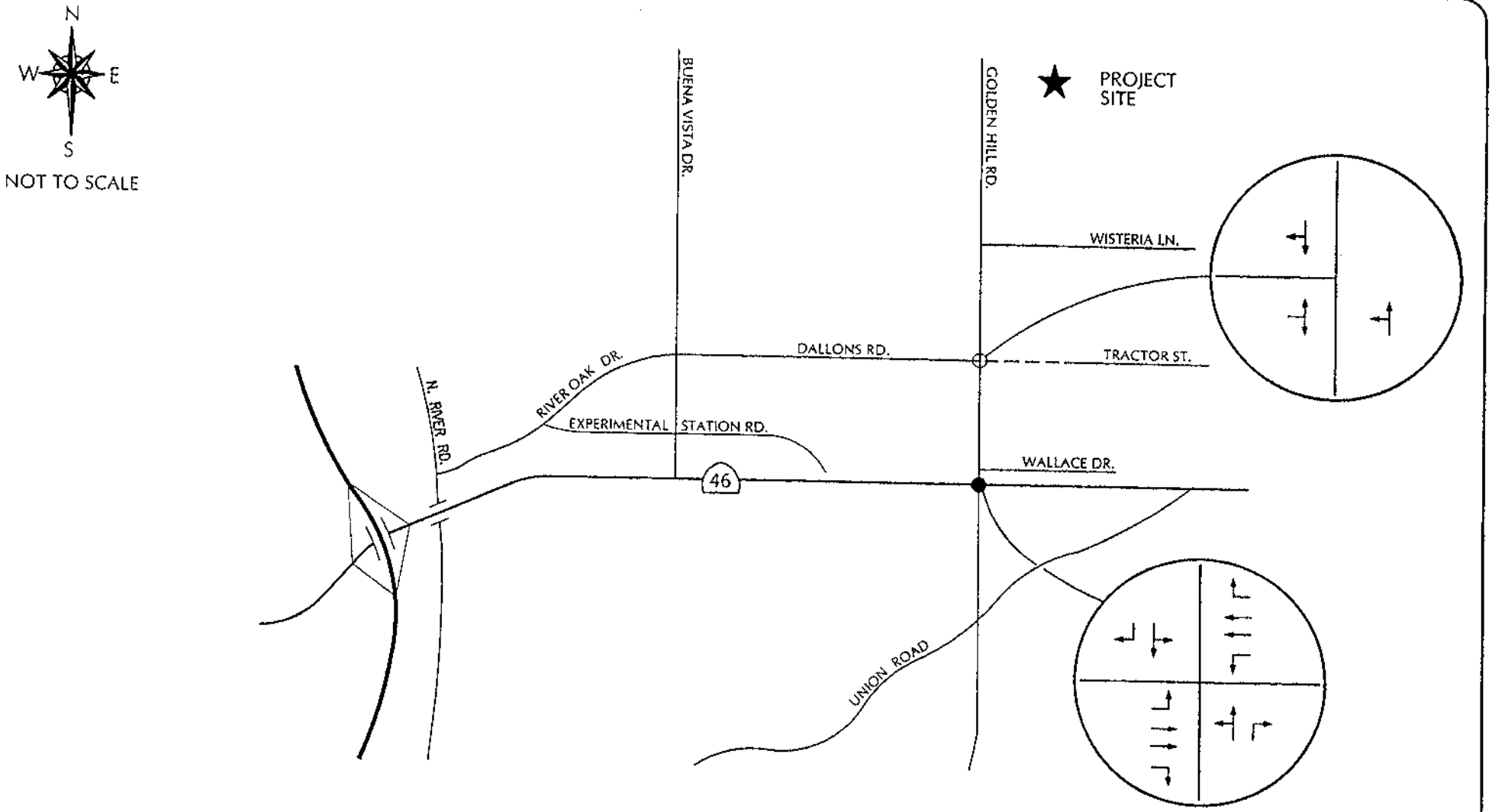
[1] 2005 Traffic Volumes on California State Highways, California Department of Transportation, June 2006.



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EXISTING STREET NETWORK

FIGURE 2

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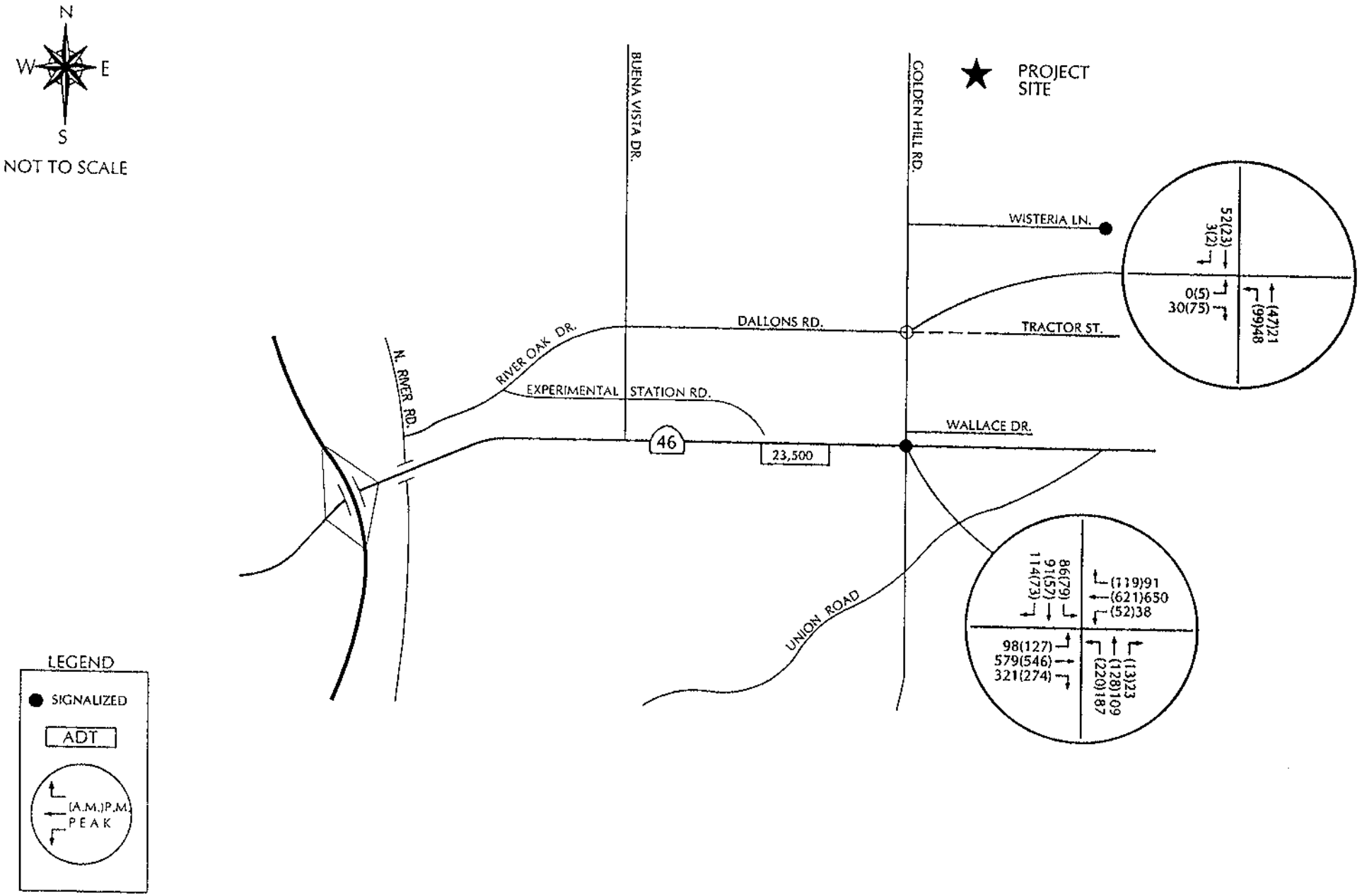

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EXISTING TRAFFIC VOLUMES

FIGURE 3

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Levels of service for the segments of State Route 46E were determined based on the City of Paso Robles roadway engineering design capacities, which are included in the Technical Appendix. The results show that the segment of State Route 46E between U.S. Highway 101 and Golden Hill Road operates in the LOS "C" range. State Route 46E experiences periods of high vehicle delays and congestion during weekends and holidays when traffic from the Central Valley travels to and from points along the California Central Coast. It is recognized that planned improvements to the U.S. Highway 101/State Route 46E interchange and to the State Route 46E corridor will help reduce some of the delays experienced during the high travel periods.

Intersection Operations

Traffic flow on roadway networks is most constrained at intersections, therefore a detailed traffic flow analysis must examine the operating conditions of critical intersections during peak travel periods. Figure 3 shows the existing (2006) A.M. and P.M. peak hour traffic volumes at the study-area intersections. Existing A.M. and P.M. peak hour traffic volumes for the study-area intersections were counted by ATE in September of 2006 and in June 2007. The June 2007 counts were gathered to determine if the September volumes were representative. The data shows both time periods to have similar volumes thus validating the volumes for use in this analysis. The existing levels of service for State Route 46E/Golden Hill Road and Golden Hill Road/Dallons Road are shown in Table 2 (worksheets are contained in the Technical Appendix).

The level of service definitions discussed previously for roadway segments also apply to the study-area intersections operation. Levels of service for the study-area intersections were calculated using the operations signalized and unsignalized methodologies outlined in the Highway Capacity Manual. The computer program "Synchro" was used to analyze the operation of the study-area intersections. The level of service calculation worksheets, along with a brief discussion of the calculation procedures used, are contained in the Technical Appendix.

Table 2
Existing Weekday Intersection Levels of Service

Intersection	A.M. Peak Hour	P.M. Peak Hour
State Route 46/Golden Hill Rd. (S)	31.7 sec./LOS C	29.5 sec./LOS C
Golden Hill Rd./Dallons Rd. (U)	5.9 sec./LOS A	4.3 sec./LOS A

(S) = Signalized intersection;
(U) = Unsignalized intersection;
LOS based on average delay per vehicle in seconds.

Table 2 shows that the study-area intersections currently operate in the LOS "A" - "C" range on weekdays for both the A.M. and P.M. peak hour periods. The above roadway and intersection analyses show that the existing street system works well on weekdays and has reserve capacity available.

ROADWAY IMPROVEMENTS GENERAL PLAN BUILDOUT

The Circulation Master Plan is illustrated on Figure CE-1 in the Circulation Element of the Paso Robles General. The planned number of lanes on the roadway segments for the General Plan area are shown on Table CE-3 and the projected roadway improvements required for the General Plan Buildout are shown on Table CE-4. The analysis for the General Plan for the intersections along State Route 46E were based upon a six lane arterial from U.S. Highway 101 to Union Road and a four lane arterial from Union Road to Dry Creek-Jardine Road. There is a mention of freeway sections depending on the outcome/conclusion from the State Route 46E Corridor Study.

On Figure CE-1, Golden Hill Road is shown as a four lane arterial from State Route 46E to Dry Creek Road with Dry Creek Road being extended from Airport Road to Golden Hill Road and then on to Buena Vista Road. Dallons Road is shown as a collector from Golden Hill Road to North River Road. The Borkey Specific Plan has Tractor Street connecting to Golden Hill Road and providing access to the industrial area east of Golden Hill. South of State Route 46E, Golden Hill Road is shown as a four lane arterial extending to Creston Road.

GENERAL PLAN BUILDOUT TRAFFIC ANALYSIS

General Plan Amendment-Generated Traffic Volumes

For the purpose of estimating the number of new trips which would be generated by the land uses proposed by the Paso Robles Motorcoach, the Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition was used. Average daily, A.M. and P.M. peak hour trip generation was developed for the proposed land use. Table 3 summarizes the new average daily, A.M. and P.M. peak hour trip generation by the proposed Paso Robles Motorcoach Resort.

Table 3
Paso Robles Motorcoach Trip Generation

Land Use	Size	ADT	A.M. Peak Hour			P.M. Peak Hour		
			Enter	Exit	Total	Enter	Exit	Total
RV Resort	600 RV Spaces	2,220	48	72	120	156	66	222
Less "Pass-by" and "Diverted" Trips from State Route 46E:		-666	-18	-18	-36	-33	-33	-66
Total New Primary Trips:		1,554	30	54	84	123	33	156

ADT = Average Daily Trips

Trip Distribution and Assignment

The net "new" and "pass-by" average daily, A.M. and P.M. peak hour trips for the Paso Robles Motorcoach were distributed onto the adjacent study-area roadway system. These percentages were developed based on the existing traffic volumes collected in the study-area,

knowledge of the traffic and land use pattern present in the Paso Robles area, and the characteristics of the proposed development. The Paso Robles Motorcoach is a highway serving land use and as such much of the traffic is expected to be regional (i.e. pass-by trips) in nature (using State Route 46). All "pass-by" trips are accounted for at the Paso Robles Motorcoach driveways and the study-area intersections. Employee and service trips will be made in the Paso Robles area. Trips generated by the Paso Robles Motorcoach are illustrated on Figure 4.

Table 4
Paso Robles Motorcoach Primary Trip Distribution

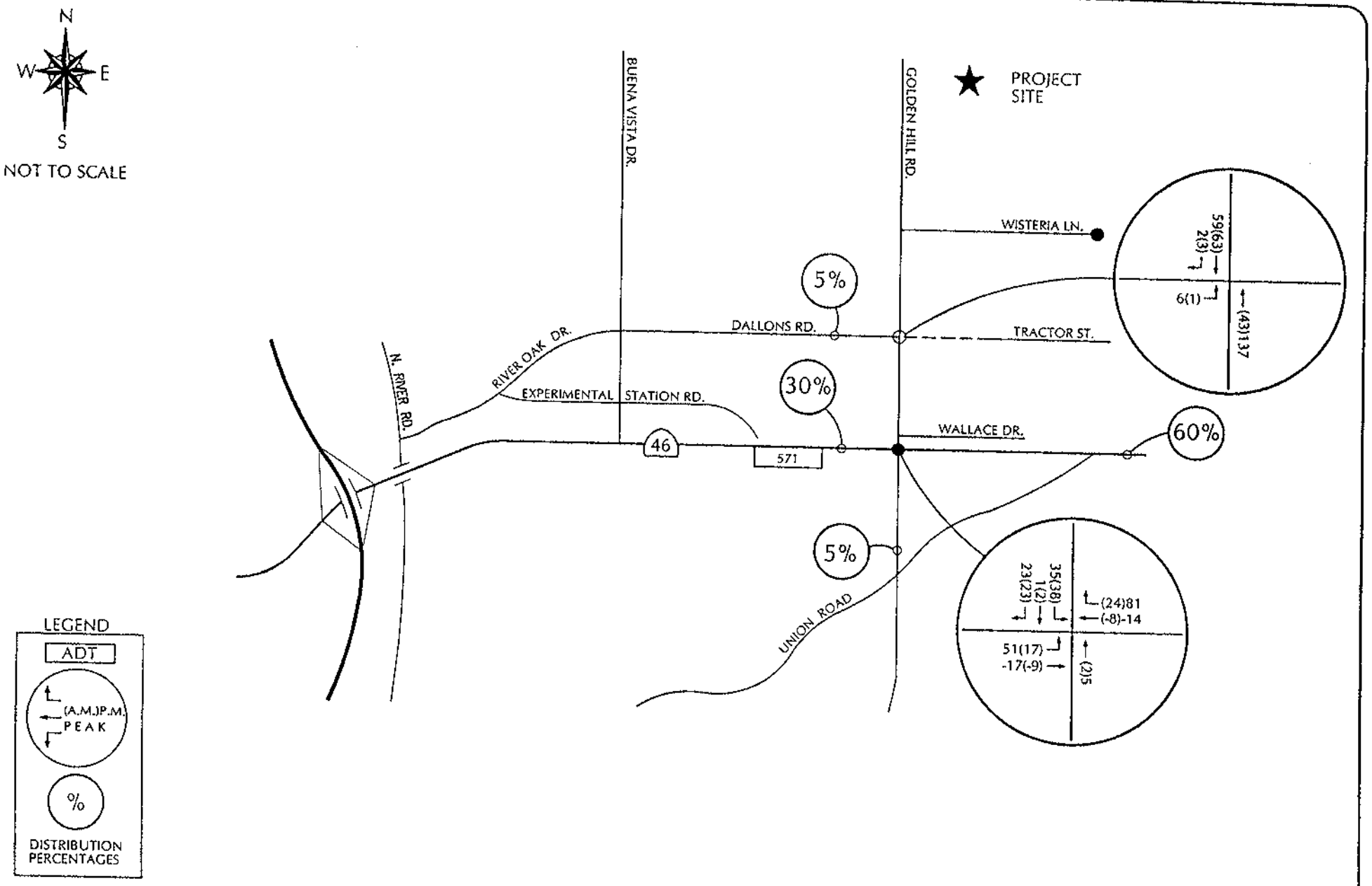
Route	Origin/Destination	Percent
State Route 46	East	60%
State Route 46	West	30%
Golden Hill Road	South	5%
Dallons Road	Local Area West of Site	5%
Total		100%

Traffic forecasts presented in the traffic analyses for the Chandler Ranch Area Specific Plan (CRASP), the Golden Hill Retail Center for General Plan Buildout traffic conditions were used to assess potential traffic impacts associated with the General Plan Amendment. Figures 5 and 6 illustrate the General Plan Buildout traffic volumes without and with the proposed amendment and zone change. Table 5 presents the trip generation comparison of the approved land-uses which could be developed on the site without a GPA or zone change and with the proposed land-use. Increasing the land use density would increase the overall site trip generation.

Table 5
Buildout Trip Generation Comparison

Land Use	ADT	A.M. Peak Hour	P.M. Peak Hour
Approved General Plan Land Uses:			
General Agricultural - 80	160	2	2
Winery - 80 acres	63	10	16
Proposed General Plan Amendment Land Use:			
600 RV Spaces	2,220	120	222

The City's General Plan Buildout provides an infrastructure to accommodate a population of 44,000. A State Route 46 East Corridor Study is being performed under the direction of the San Luis Obispo Council of Governments, (SLOCOG) that will evaluate alternatives for State Route 46E corridor improvements. This study is exploring both future status of the highway, expressway or freeway as well as alternative parallel facilities.



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PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

FIGURE 4

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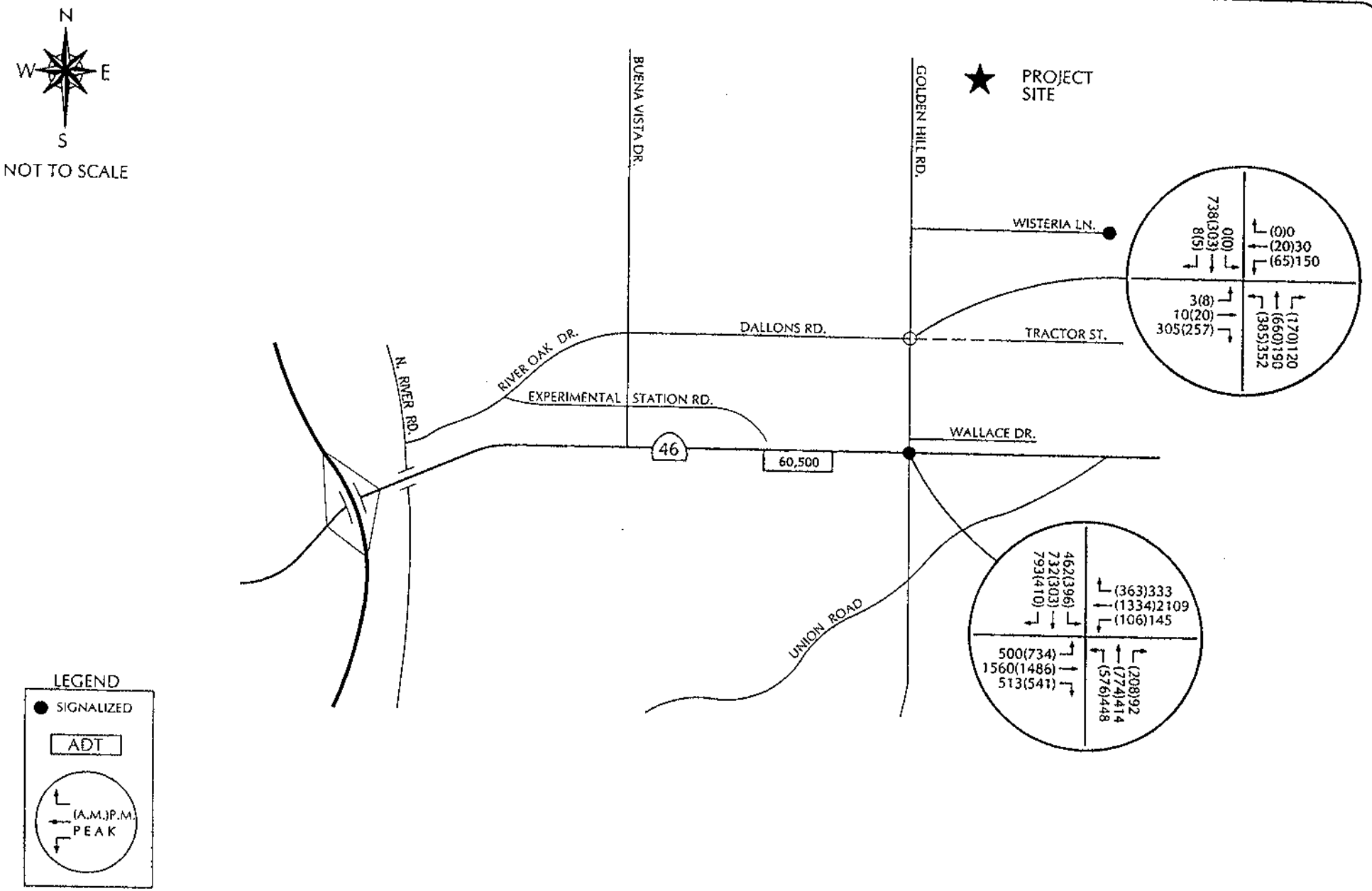

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GENERAL PLAN BUILDOUT TRAFFIC VOLUMES

FIGURE 5

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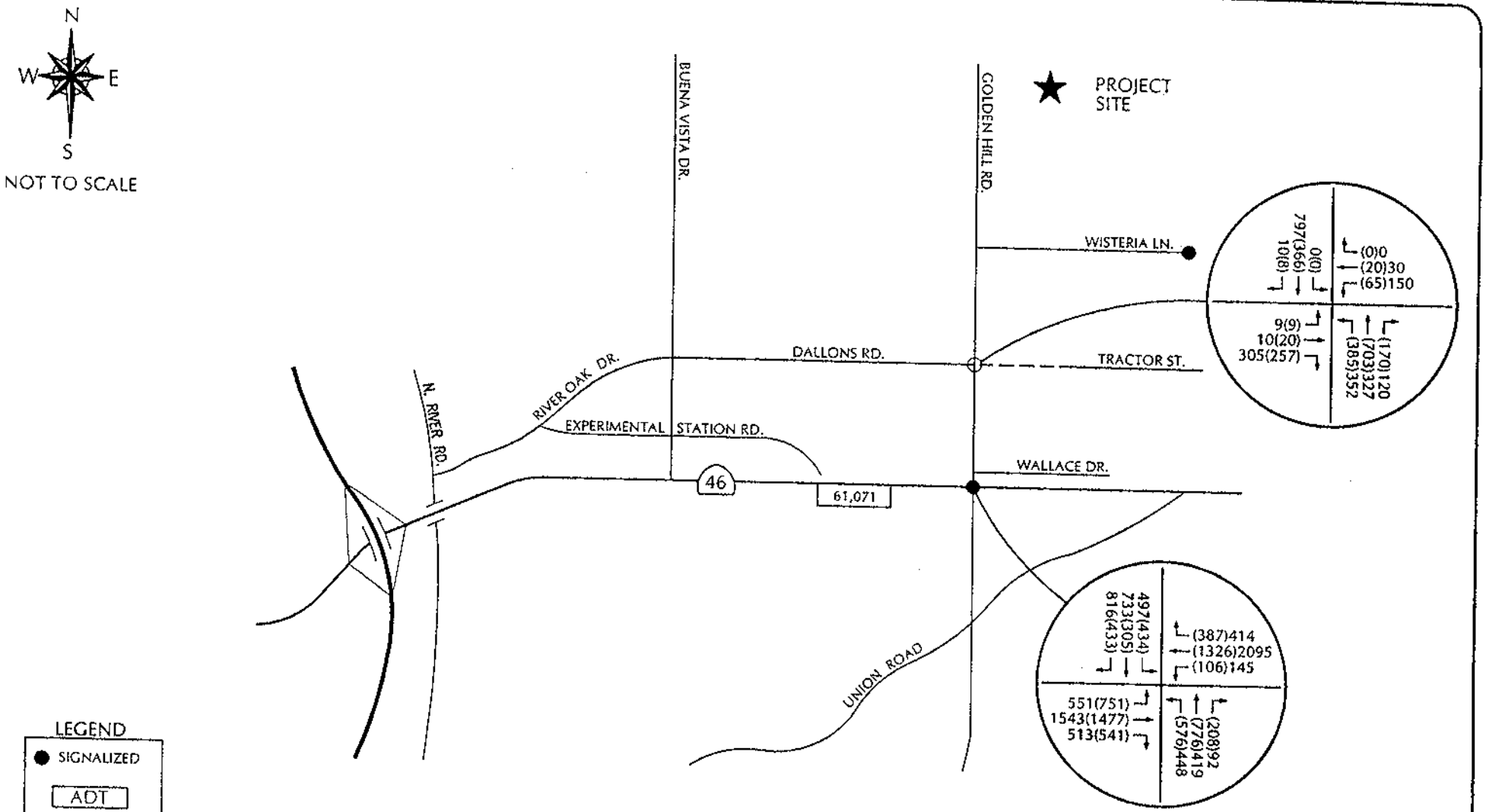

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GENERAL PLAN BUILDOUT + GENERAL PLAN AMENDMENT
TRAFFIC VOLUMES

FIGURE 6

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General Plan Roadways

State Route 46 E. Between Route 101 and Golden Hill Road as a 6-lane facility is forecast to operate in the LOS "D" range.

Surface Streets. The remaining surface streets that could be potentially affected by the project are forecast to operate at LOS "C" or better with General Plan Buildout volumes.

Intersections

Table 6 shows the General Plan Buildout + General Plan Amendment levels of service for the study-area intersections.

Table 6
General Plan Buildout + General Plan Amendment Intersection Levels of Service

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	G. P. Buildout	G. P. Buildout + GPA	G. P. Buildout	G. P. Buildout + GPA
State Route 46E/Golden Hill Rd.	53.8 sec./LOS D	55.5 sec./LOS E	107.6 sec./LOS F	110.9 sec./LOS F
Golden Hill Rd./Dallons Rd.	17.2 sec./LOS B	17.5 sec./LOS B	29.7 sec./LOS C	29.0 sec./LOS C

LOS based on average delay per vehicle in seconds.

As an at-grade intersection the State Route 46E/Golden Hill Road intersection is forecast to operate in the LOS "D"-"F" range with General Plan Buildout volumes during the A.M. and P.M. peak hour periods. The State Route 46E/Golden Hill Road intersection would continue to operate in the LOS "D" -"F" range with the traffic added by the proposed General Plan Amendment.

Table 6 shows that with the addition of General Plan Amendment traffic to the Golden Hill Road/Dallons Road intersection it will continue to operate at an acceptable level of service.

In the City of Paso Robles Circulation Element and other environmental studies, a grade-separated interchange at the State Route 46E/Golden Hill Road intersection has been discussed. At this time there is no conceptual design, funding or construction schedule for an interchange at the location. When projects are applied for in the General Plan Amendment area, project specific traffic reports will be prepared. These reports will identify the projects percent traffic contribution to the intersection.

Recommendation

The General Plan Buildout analysis shows that Route 46E/Golden Hill Road intersection is forecast to exceed the City's threshold. The development of a street system north of and parallel to Route 46E will provide an alternate route for the development in that area. The Circulation Element Figure CE-1 illustrates a connection of Golden Hill Road to Dry Creek Road. This would provide a street system parallel to Route 46E from Jardine Road to Golden

Hill Road and via Dallons Road to North River Road. The GPA area is along a portion of Golden Hill Road and projects within the GPA area will be required to offer for dedication applicable right of way and participate in the construction of the street. To facilitate the development of the parallel system , the General Plan Amendment should include a provision that a route study be undertaken by 2008. Developments within the GPA area and also those within the area to be served by the parallel route should be required to participate in funding the route study.

PROJECT-SPECIFIC IMPACTS

Assuming a 600 space recreational vehicle park land use as proposed by the Paso Robles Motorcoach (PRMC) project, the following project-specific analysis was prepared to determine the impacts in the existing and short-term cumulative scenarios.

Roadways

On weekdays State Route 46E would continue to operate in the LOS "C" range with the addition of PRMC traffic. Thus, the highway has sufficient reserve capacity to accommodate project traffic. The purpose of the project is to serve the transient visitor and highway travelers passing through the area.

Intersections

Existing + PRMC levels of service and existing levels of service are shown in Table 7. Existing + PRMC traffic volumes are illustrated on Figure 7.

Table 7
Existing + PRMC Intersection Levels of Service

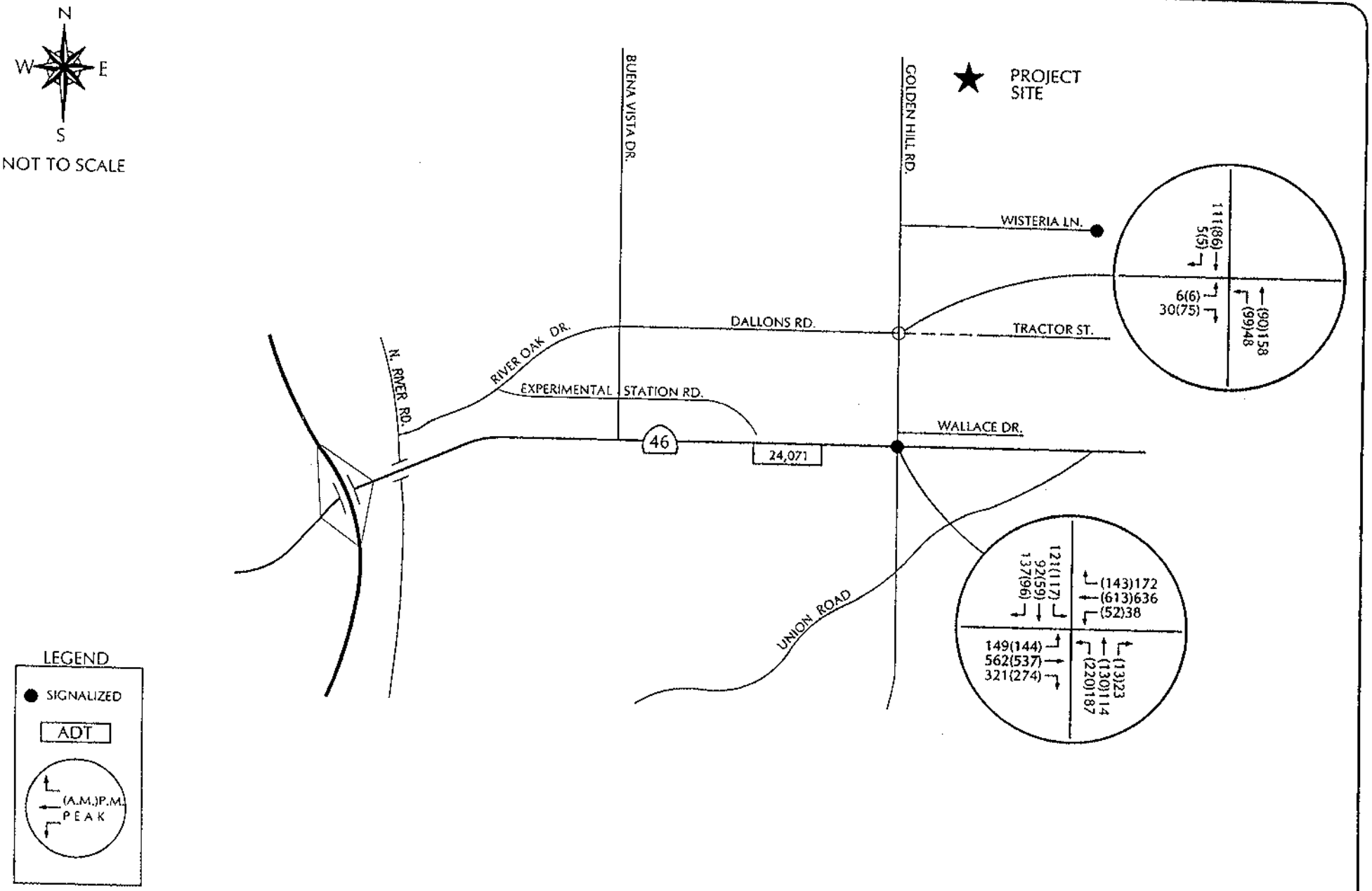
Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Existing	Existing + PSM	Existing	Existing + PSM
State Route 46E/Golden Hill Rd.	31.7 sec./LOS C	33.1 sec./LOS C	29.5 sec./LOS C	31.6 sec./LOS C
Golden Hill Rd./Dallons Rd.	5.9 sec./LOS A	4.3 sec./LOS A	4.0 sec/LOS A	2.1 sec/LOS A

LOS based on average delay per vehicle in seconds.

The PRMC's addition to peak hour traffic would have only a minor affect on the study-area intersections, as illustrated in Table 7. The study-area intersections remain in the LOS "A" - "C" range with the addition of traffic from the PRMC. It should be noted that due to the distribution of PRMC traffic to the minor street approaches of the unsignalized intersection, the intersection delay is reduced slightly. The addition of PRMC traffic at the current Golden Hill Road/Dallons Road intersection will not have a significant impact on the intersection. The level of service at the intersection would not change as a result of the proposed development. Thus additional intersection improvements are not necessary.

CUMULATIVE ANALYSIS

The following analysis discusses Short-Term (5-10 year period) conditions using information and data contained in traffic studies and environmental documents completed for other development projects in this area of Paso Robles. The circulation improvements identified for State Route 46E/Golden Hill Road and Golden Hill Road/Dallons Road intersections in the traffic studies and environmental documents were assumed to be in place for this analysis. This includes dual left-turn lanes on all approaches at State Route 46E/Golden Hill Road intersection and signalization of the Golden Hill Road/Dallons Road-Tractor Street intersection.



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EXISTING + PASO ROBLES MOTORCOACH TRAFFIC VOLUMES

FIGURE 7

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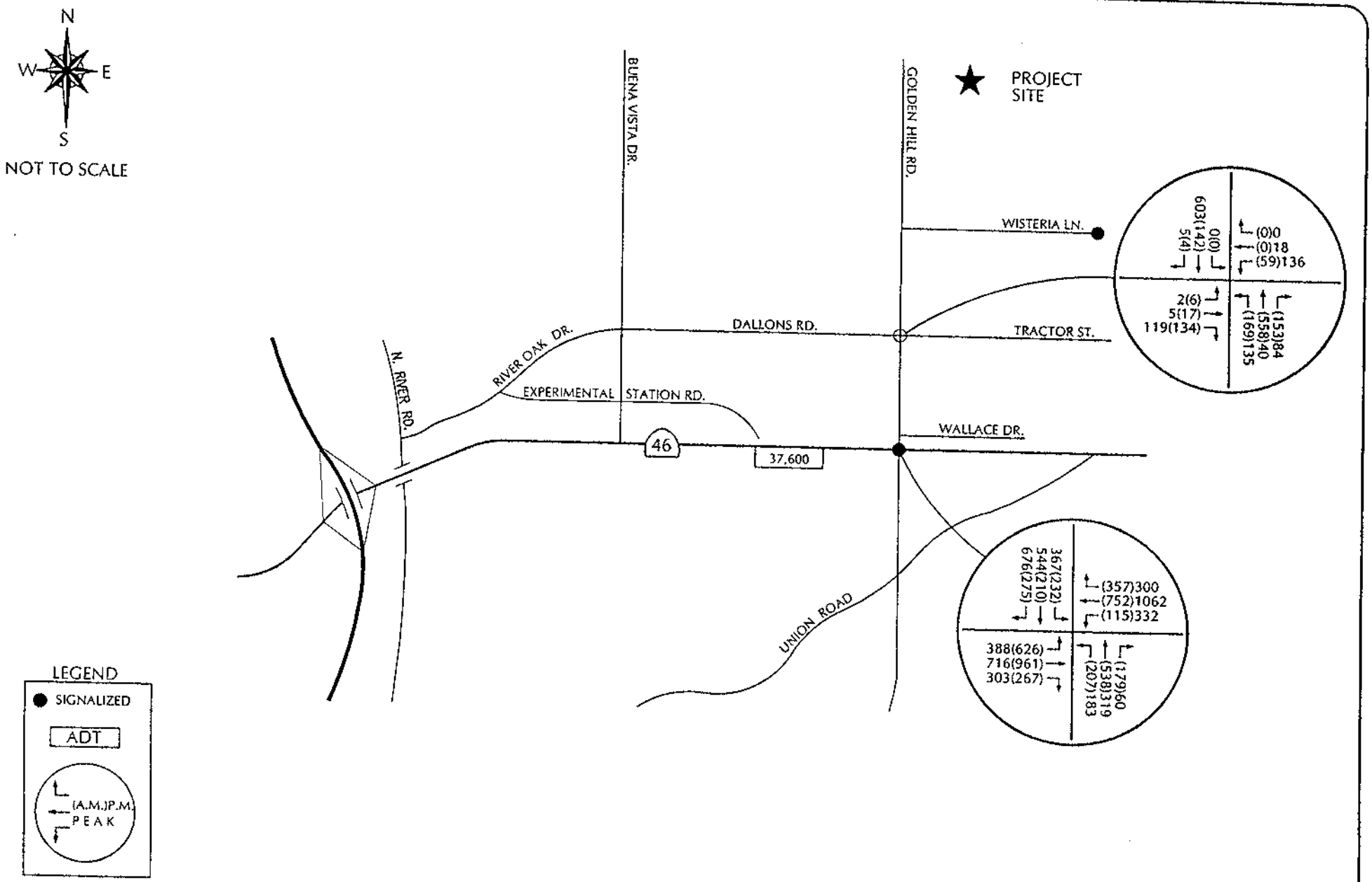
This discussion focuses on how PRMC's traffic would affect the circulation system defined to serve Short-Term conditions. As a preface, it is again noted that the above analysis found that the amount of traffic which would be generated by the PRMC would not have significant impacts on the study-area intersections. Figures 8 and 9 illustrate the Short-Term and Short-Term + PRMC traffic volumes respectively.

Short-Term Cumulative

The Short-Term traffic projections for the area are based on the trip generation resulting from the development of 20 projects that will have an impact on the study-area roadways and intersections.

Table 8
Short-Term Cumulative Projections

Project	Size
IQMS	28,700 sq.ft.
Wheelton Partnership	24,200 sq.ft.
Coastal Crop Care	5,000 sq.ft.
McKenzie Valley Investments	27,000 sq.ft.
Anthony Sheplay	19,000 sq.ft.
Airflow Research Heads	94,000 sq.ft.
JRW Group	23,900 sq.ft.
Lowes Shopping Center	290,732 sq.ft.
Golden Hill Business Park	365,500 sq.ft.
Colin Weyrick	14.44 acres
Robert Shannon (Tract 2594)	17.46 acres
Ole Viborg/Don Thiessen	27,500 sq.ft.
Nanometer Technologies	56,100 sq.ft.
Paso Robles Ford	36,335 sq.ft.
Airport/Dry Creek Business Park	39 acres
Block Graphics	73,000 sq.ft.
Nunno LLC	100,000 sq.ft.
Santa Cruz Biotechnology	98,000 sq.ft.
Jankris Winery Crush Facility	191,148 sq.ft.
Links Industrial/Office	154,000 sq.ft.



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SHORT-TERM CUMULATIVE TRAFFIC VOLUMES

FIGURE 8

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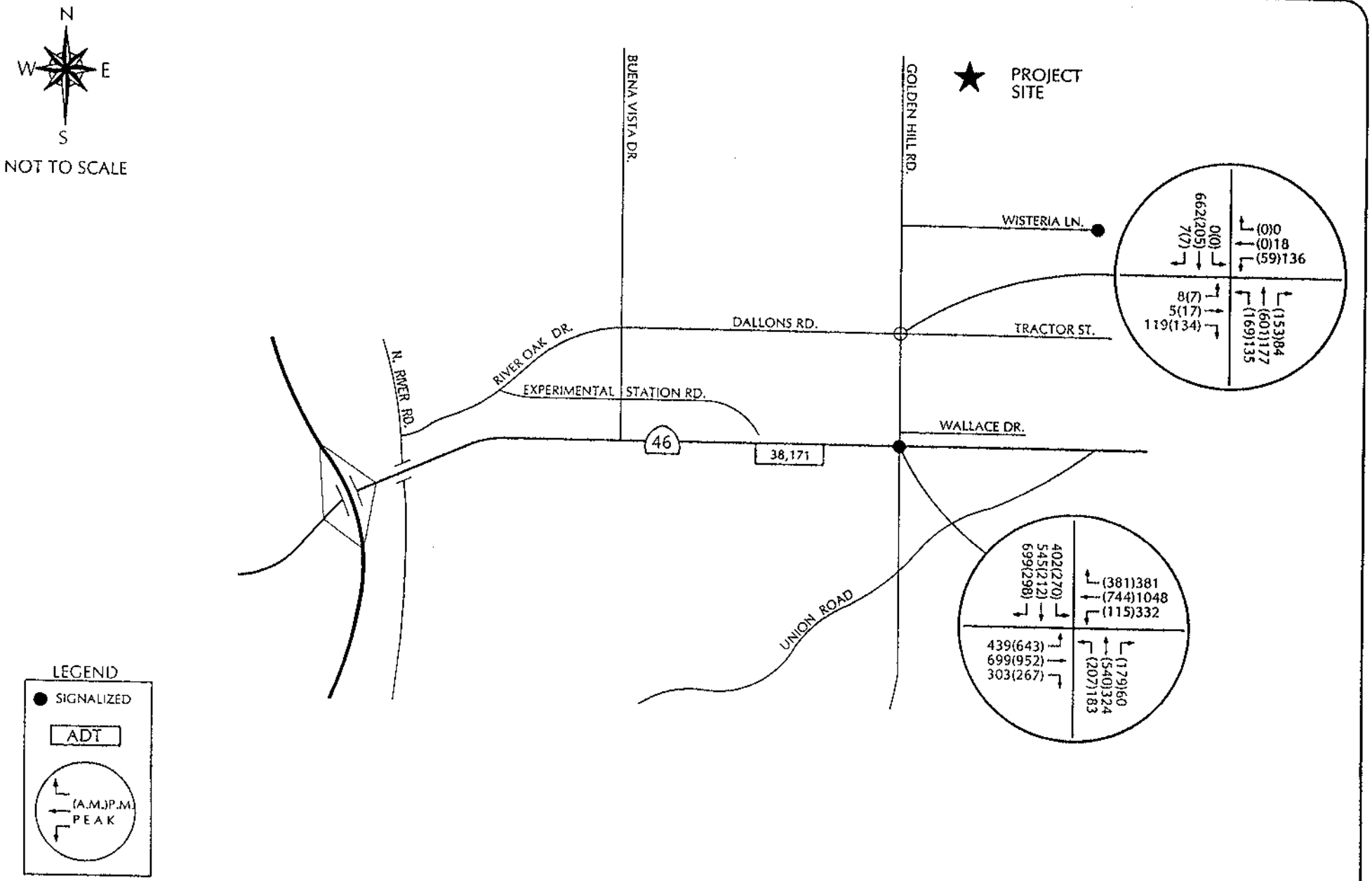

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SHORT-TERM CUMULATIVE + PASO ROBLES MOTORCOACH
TRAFFIC VOLUMES

FIGURE 9

DH #06093

Roadways

State Route 46E. Between Route 101 and Golden Hill Road as a 4-lane arterial is forecast to operate in the LOS "E" range.

Surface Streets. The remaining surface streets that could be potentially affected by the project are forecast to operate at LOS "C" or better with Short-Term cumulative volumes.

Intersections

Table 9 shows the Short-Term cumulative levels of service for the study-area intersections.

Table 9
Short-Term Cumulative Intersection Levels of Service

Intersection	A.M. Peak Hour		P.M. Peak Hour	
	Short-Term	Short-Term + PSM	Short-Term	Short-Term + PSM
State Route 46E/Golden Hill Rd.	36.2 sec./LOS D	37.2 sec./LOS D	51.7 sec./LOS D	53.3 sec./LOS D
Golden Hill Rd./Dallons Rd.	11.7 sec./LOS B	11.7 sec./LOS B	20.5 sec./LOS C	20.5 sec./LOS C

LOS based on average delay per vehicle in seconds.

The State Route 46E/Golden Hill Road intersection is forecast to operate in the LOS "D" range with Short-Term cumulative volumes during the A.M. and P.M. peak hour periods. The State Route 46E/Golden Hill Road intersection would continue to operate in the LOS "D" range with the additional traffic added by the proposed development. Table 9 shows that the addition of project traffic at the Golden Hill Road/Dallons Road intersection will continue to have an insignificant impact on the intersection. The operation of the intersection would not change as a result of the proposed development's added trips to the intersection.

Recommended Improvements

In order to achieve the City's desired LOS "D" or better at the State Route 46/Golden Hill Road intersection under cumulative conditions, the following improvements consistent with the Golden Hill Retail Center Traffic Analysis would be required:

> Provide dual left-turns on the northbound, southbound, eastbound and westbound approaches of the State Route 46/Golden Hill Road intersection.

The City of Paso Roble has a traffic fee program to address future traffic and circulation needs. The project would be required to contribute to the fee program to mitigate its' incremental impact.

Other City Streets and Intersections

The project's incremental effects on City surface streets and intersections that are beyond the immediate study-area will be offset by contributing to the City's traffic fee program.

■ ■ ■

STUDY PARTICIPANTS AND REFERENCES

Associated Transportation Engineers

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Persons Contacted

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John Falkenstein, City of Paso Robles
Ken Mundee, Wine Country RV Resort

References

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Traffic and Circulation Study for Tentative Tract 2594, ATE, October 2004.

Traffic and Circulation Study for Eagle Energy @ State Route 46/Golden Hill Road , ATE, February 2004.

Traffic Analysis for Chandler Ranch Area Specific Plan, Omni-Means LTD, November 2005.

Airport Road Business Park Traffic Analysis Report, Higgins Associates, June 2005.

TECHNICAL APPENDIX

CONTENTS

ATE TRAFFIC COUNT DATA

ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & SR 46'06
Site Code : 00091201
Start Date : 9/13/2006
Page No : 1

Groups Printed- Unshifted

	GOLDEN HILL RD From North				SR 46 From East				GOLDEN HILL RD From South				SR 46 From West				
Start Time	Right	RTOR	Thru	Left	Right	RTOR	Thru	Left	Right	RTOR	Thru	Left	Right	RTOR	Thru	Left	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	9	15	8	19	11	11	111	9	2	0	16	25	27	3	102	32	400
07:15 AM	15	6	15	14	11	12	102	5	3	0	18	46	38	4	109	12	410
07:30 AM	7	9	8	14	14	16	157	23	2	0	29	34	51	2	120	24	510
07:45 AM	11	5	19	20	14	15	190	10	2	0	30	59	69	11	146	47	648
Total	42	35	50	67	50	54	560	47	9	0	93	164	185	20	477	115	1968
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08:15 AM	7	12	17	18	12	14	131	11	7	0	25	45	49	15	125	22	510
08:30 AM	10	13	12	21	14	12	112	3	3	0	21	35	26	8	92	15	397
08:45 AM	8	11	17	14	2	9	129	6	7	0	28	46	29	32	124	33	495
Total	30	53	59	80	43	54	515	28	19	0	118	208	168	68	496	104	2043
*** BREAK ***																	
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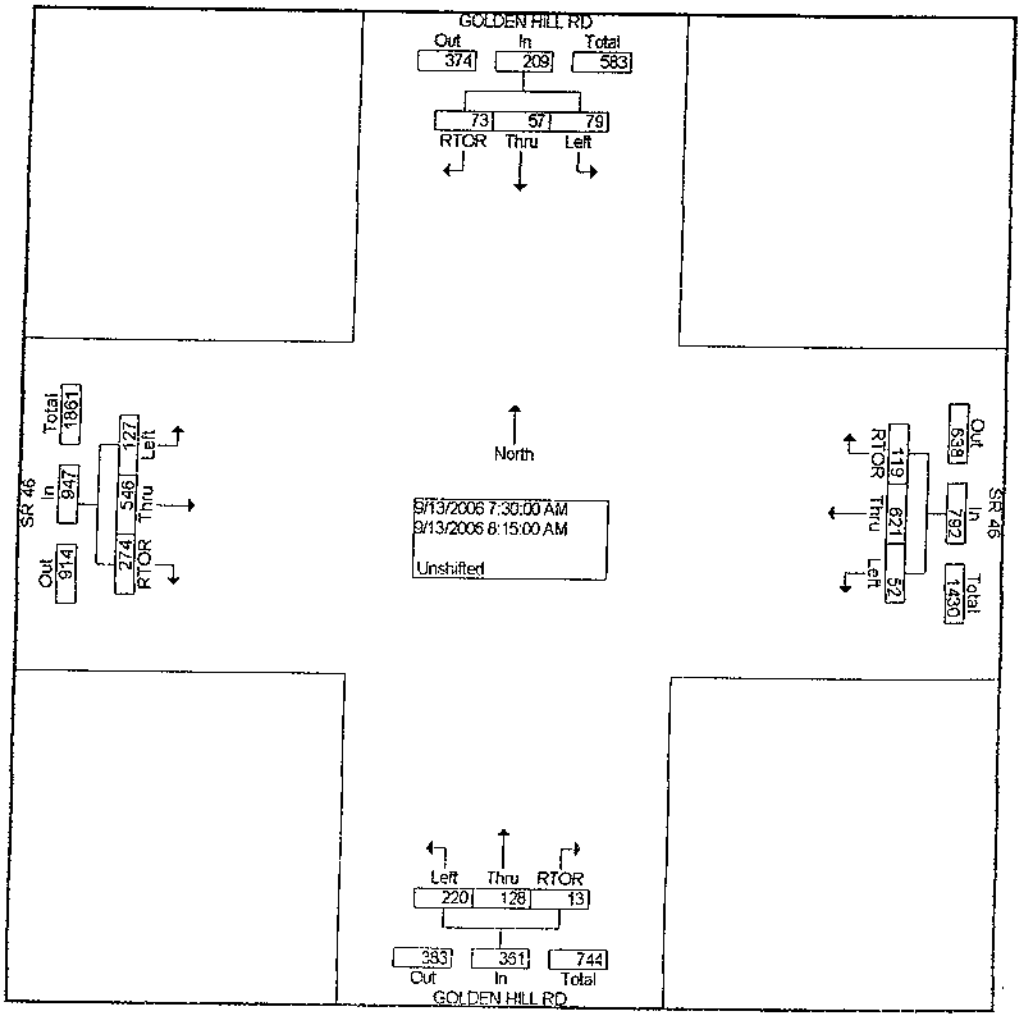
04:30 PM	10	14	15	15	22	4	185	15	5	0	21	36	70	9	166	13	600
04:45 PM	10	17	25	27	12	11	160	6	6	0	31	46	67	0	151	31	600
Total	39	71	74	80	46	38	638	38	17	0	108	167	244	23	565	75	2223
05:00 PM	12	29	26	17	8	13	157	8	6	2	36	63	83	6	116	20	602
05:15 PM	14	8	25	27	13	8	148	9	3	1	21	42	85	1	146	34	585
05:30 PM	7	15	20	21	6	13	133	8	6	0	34	66	82	3	135	10	559
05:45 PM	4	13	15	26	13	4	103	8	1	0	31	54	106	0	181	19	578
Total	37	65	86	91	40	38	541	33	16	3	122	225	356	10	578	83	2324
Grand Total	148	224	269	318	179	184	2254	146	61	3	441	764	953	121	2116	377	8558
Apprch %	15.4	23.4	28.1	33.2	6.5	6.7	81.6	5.3	4.8	0.2	34.8	60.2	26.7	3.4	59.3	10.6	
Total %	1.7	2.6	3.1	3.7	2.1	2.2	26.3	1.7	0.7	0.0	5.2	8.9	11.1	1.4	24.7	4.4	

ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & SR 46'06
Site Code : 00091201
Start Date : 9/13/2006
Page No : 2

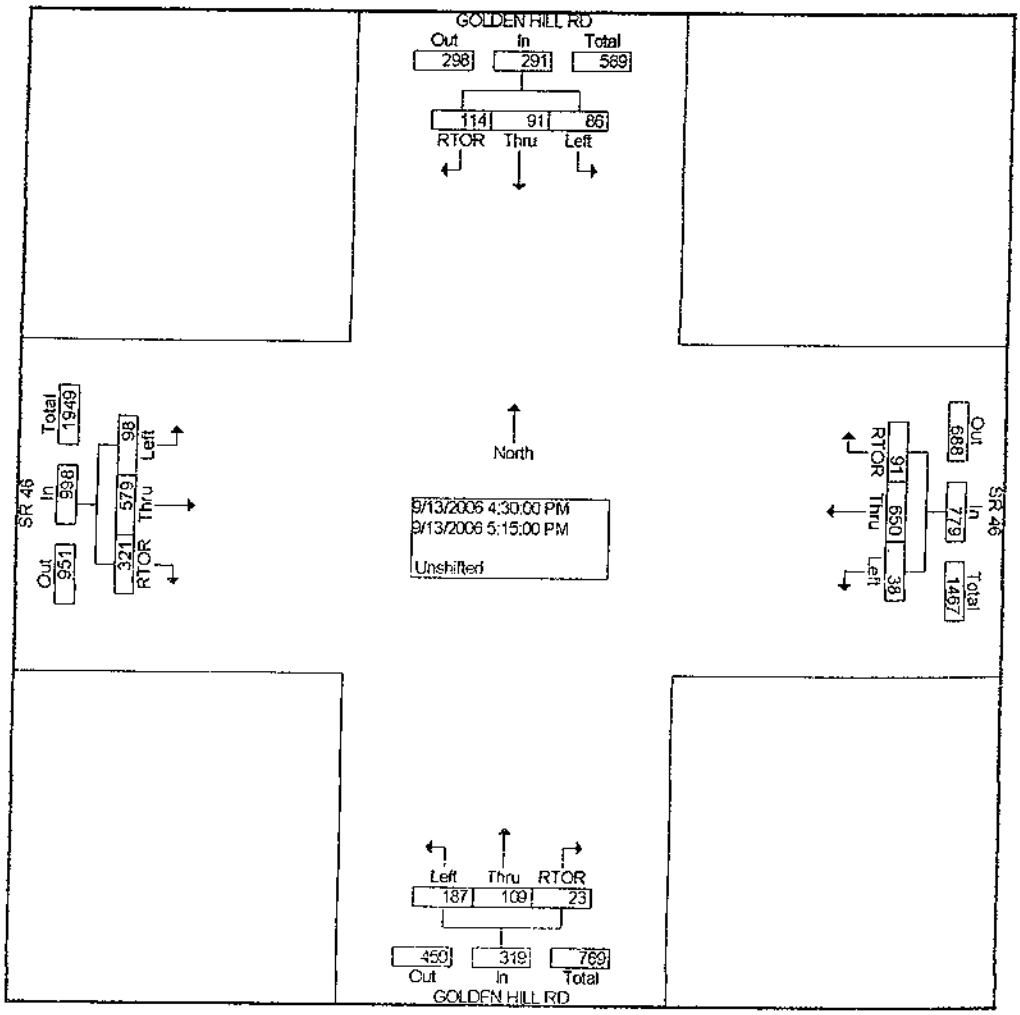
	GOLDEN HILL RD From North					SR 46 From East					GOLDEN HILL RD From South					SR 46 From West					
Start Time	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Int. Total
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Intersection 07:30 AM																					
Volume	30	43	57	79	209	55	64	621	52	792	13	0	128	220	361	233	41	546	127	947	2309
Percent	14.4	20.6	27.3	37.8		6.9	8.1	78.4	6.6		3.6	0.0	35.5	60.9		24.6	4.3	57.7	13.4		
07:45 Volume	11	5	19	20	55	14	15	190	10	229	2	0	30	59	91	69	11	146	47	273	648
Peak Factor																					0.891
High Int.	08:00 AM					07:45 AM					08:00 AM					07:45 AM					
Volume	5	17	13	27	62	14	15	190	10	229	2	0	44	82	128	69	11	146	47	273	
Peak Factor					0.843					0.865					0.705					0.867	



ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & SR 46'06
Site Code : 00091201
Start Date : 9/13/2006

	GOLDEN HILL RD From North					SR 46 From East					GOLDEN HILL RD From South					SR 46 From West					
Start Time	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Right	RTO R	Thru	Left	App. Total	Int. Total
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	46	68	91	86	291	55	36	650	38	779	20	3	109	187	319	305	16	579	98	998	2387
Percent	15.8	23.4	31.3	29.6		7.1	4.6	83.4	4.9		6.3	0.9	34.2	58.6		30.6	1.6	58.0	9.8		
05:00 Volume	12	29	26	17	84	8	13	157	8	186	6	2	36	63	107	83	6	116	20	225	602
Peak Factor																					0.991
High Int.	05:00 PM					04:30 PM					05:00 PM					05:15 PM					
Volume	12	29	26	17	84	22	4	185	15	226	6	2	36	63	107	85	1	146	34	266	
Peak Factor					0.866					0.862					0.745					0.938	



4

ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & DALLONS
Site Code : 09120602
Start Date : 9/12/2006
Page No : 1

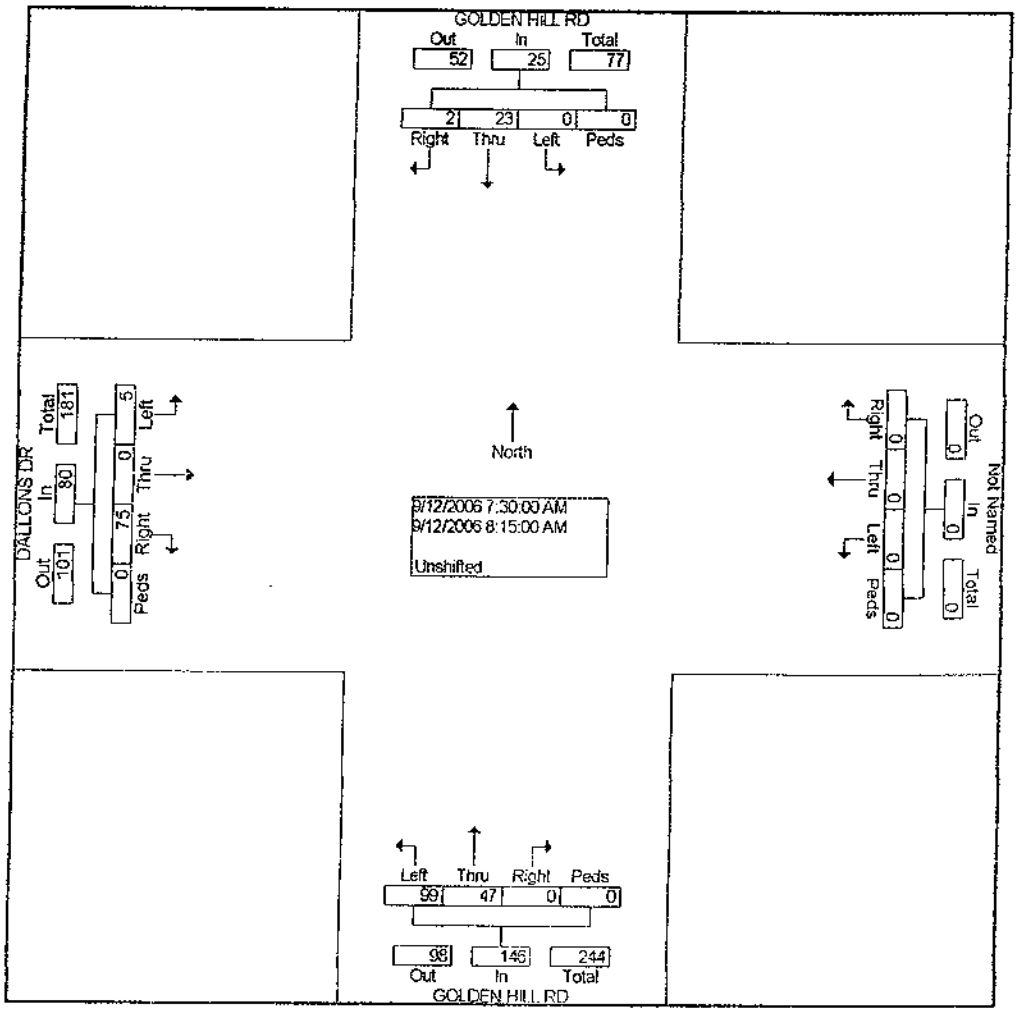
Groups Printed- Unshifted

	GOLDEN HILL RD From North				From East				GOLDEN HILL RD From South				DALLONS DR From West				
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
07:00 AM	0	7	0	0	0	0	0	0	0	8	3	0	2	0	3	0	23
07:15 AM	0	2	0	0	0	0	0	0	0	13	11	0	5	0	1	0	32
07:30 AM	0	7	0	0	0	0	0	0	0	7	16	0	10	0	1	0	41
07:45 AM	2	7	0	0	0	0	0	0	0	24	31	0	13	0	3	0	80
Total	2	23	0	0	0	0	0	0	0	52	61	0	30	0	8	0	176
08:00 AM	0	2	0	0	0	0	0	0	0	10	33	0	25	0	1	0	71
08:15 AM	0	7	0	0	0	0	0	0	0	6	19	0	27	0	0	0	59
08:30 AM	0	7	0	0	0	0	0	0	0	6	11	0	5	0	0	0	29
08:45 AM	0	4	0	0	0	0	0	0	0	11	15	0	9	0	1	0	40
Total	0	20	0	0	0	0	0	0	0	33	78	0	66	0	2	0	199
*** BREAK ***																	
04:00 PM	0	15	0	0	0	0	0	0	0	8	16	0	8	0	0	0	47
04:15 PM	0	2	0	0	0	0	0	0	0	4	15	0	9	0	0	0	30
04:30 PM	2	7	0	0	0	0	0	0	0	7	10	0	5	0	0	0	31
04:45 PM	0	15	0	0	0	0	0	0	0	2	16	0	5	0	0	0	38
Total	2	39	0	0	0	0	0	0	0	21	57	0	27	0	0	0	146
05:00 PM	1	21	0	0	0	0	0	0	0	8	10	0	13	0	0	0	53
05:15 PM	0	9	0	0	0	0	0	0	0	4	12	0	7	0	0	0	32
05:30 PM	0	7	0	0	0	0	0	0	0	7	8	0	3	0	0	0	25
05:45 PM	0	5	0	0	0	0	0	0	0	2	17	0	13	0	0	0	37
Total	1	42	0	0	0	0	0	0	0	21	47	0	36	0	0	0	147
Grand Total	5	124	0	0	0	0	0	0	0	127	243	0	159	0	10	0	668
Apprch %	3.9	96.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.3	65.7	0.0	94.1	0.0	5.9	0.0	
Total %	0.7	18.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	36.4	0.0	23.8	0.0	1.5	0.0	

ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & DALLONS
Site Code : 09120602
Start Date : 9/12/2006
Page No : 2

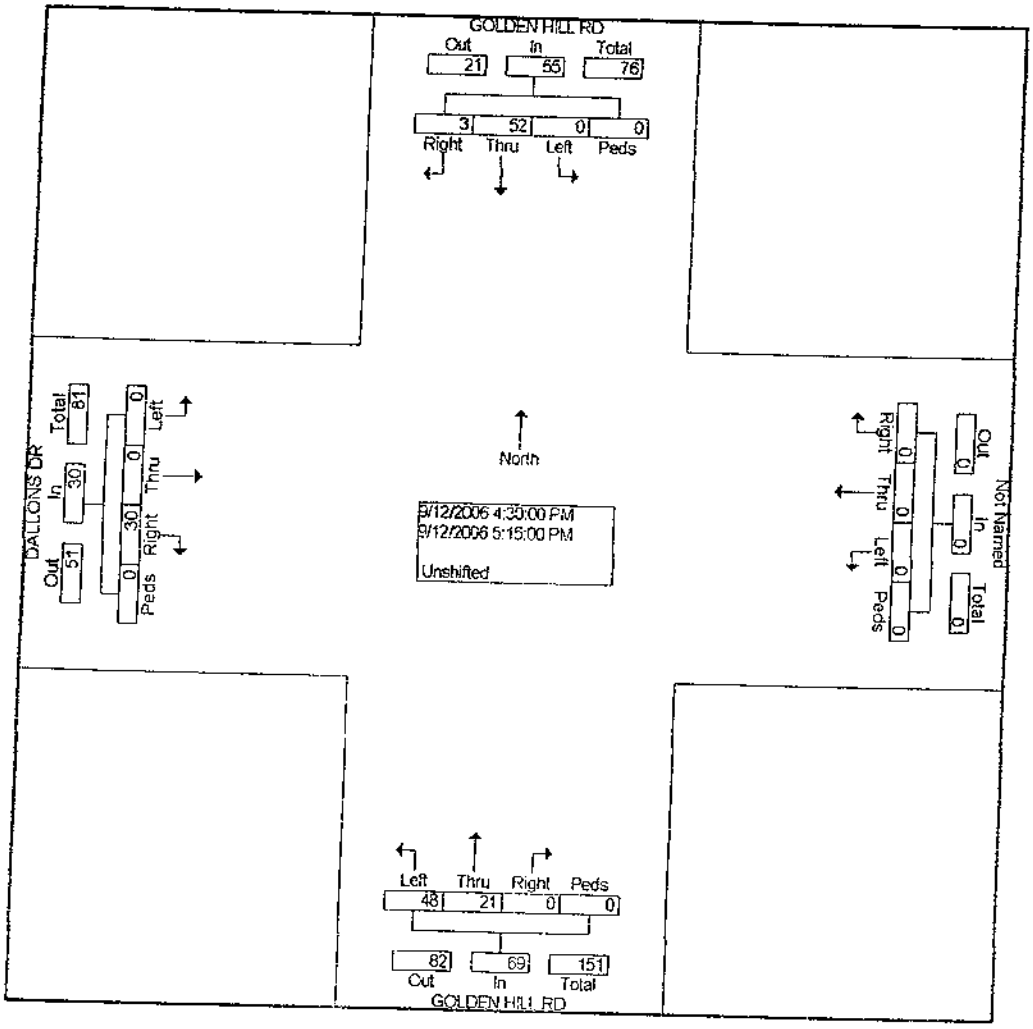
	GOLDEN HILL RD From North					From East					GOLDEN HILL RD From South					DALLONS DR From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	2	23	0	0	25	0	0	0	0	0	0	47	99	0	146	75	0	5	0	80	251
Percent	8.0	92.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	32.2	67.8	0.0		93.8	0.0	6.3	0.0		
07:45 Volume	2	7	0	0	9	0	0	0	0	0	0	24	31	0	55	13	0	3	0	16	80
Peak Factor																					0.784
High Int.	07:45 AM					6:45:00 AM					07:45 AM					08:15 AM					
Volume	2	7	0	0	9	0	0	0	0	0	0	24	31	0	55	27	0	0	0	27	
Peak Factor					0.694										0.664					0.741	



ALL TRAFFIC RESOURCES
42232 WOODSTONE LN
QUARTZ HILL, CA 93536
(661) 718-8226 (661) 303-1564

File Name : GOLDEN HILL & DALLONS
Site Code : 09120602
Start Date : 9/12/2006

	GOLDEN HILL RD From North					From East					GOLDEN HILL RD From South					DALLONS DR From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection 04:30 PM																					
Volume	3	52	0	0	55	0	0	0	0	0	0	21	48	0	69	30	0	0	0	30	154
Percent	5.5	94.5	0.0	0.0		0.0	0.0	0.0	0.0		0.0	30.4	69.6	0.0		100.0	0.0	0.0	0.0		
05:00 Volume	1	21	0	0	22	0	0	0	0	0	0	8	10	0	18	13	0	0	0	13	53
Peak Factor																					0.726
High Int. 05:00 PM											04:45 PM					05:00 PM					
Volume	1	21	0	0	22	0	0	0	0	0	0	2	16	0	18	13	0	0	0	13	
Peak Factor					0.625										0.958					0.577	



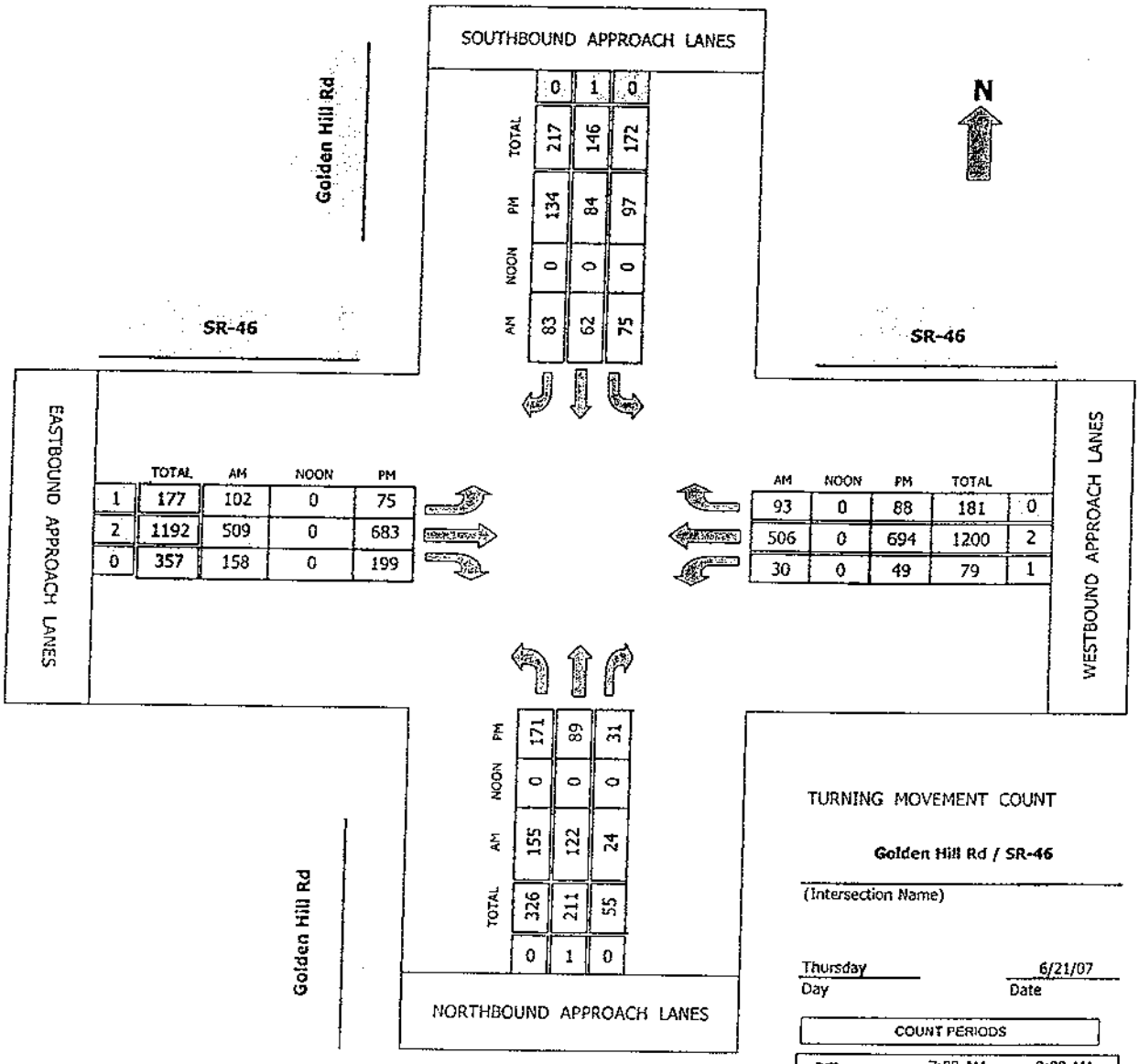
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Golden Hill Rd/SR-46

Project #: 07-8125-001



TURNING MOVEMENT COUNT

Golden Hill Rd / SR-46

(Intersection Name)

Thursday (Day) 6/21/07 (Date)

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

Intersection Turning Movement

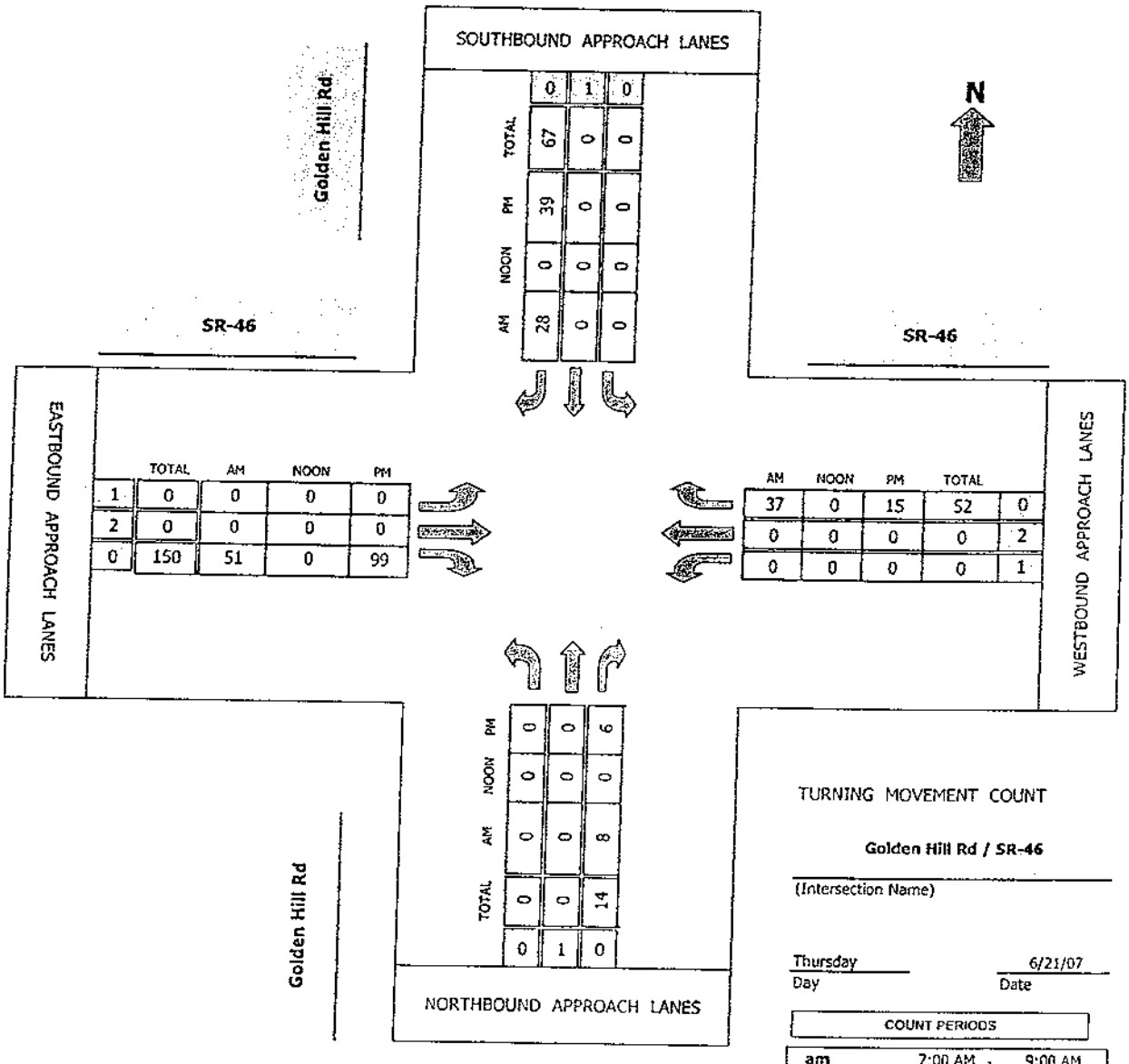
Prepared by:

National Data & Surveying Services

TMC Summary of Golden Hill Rd/SR-46

RTOR

Project #: 07-8125-001



TURNING MOVEMENT COUNT

Golden Hill Rd / SR-46

(Intersection Name)

Thursday (Day) 6/21/07 (Date)

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	715 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	445 PM

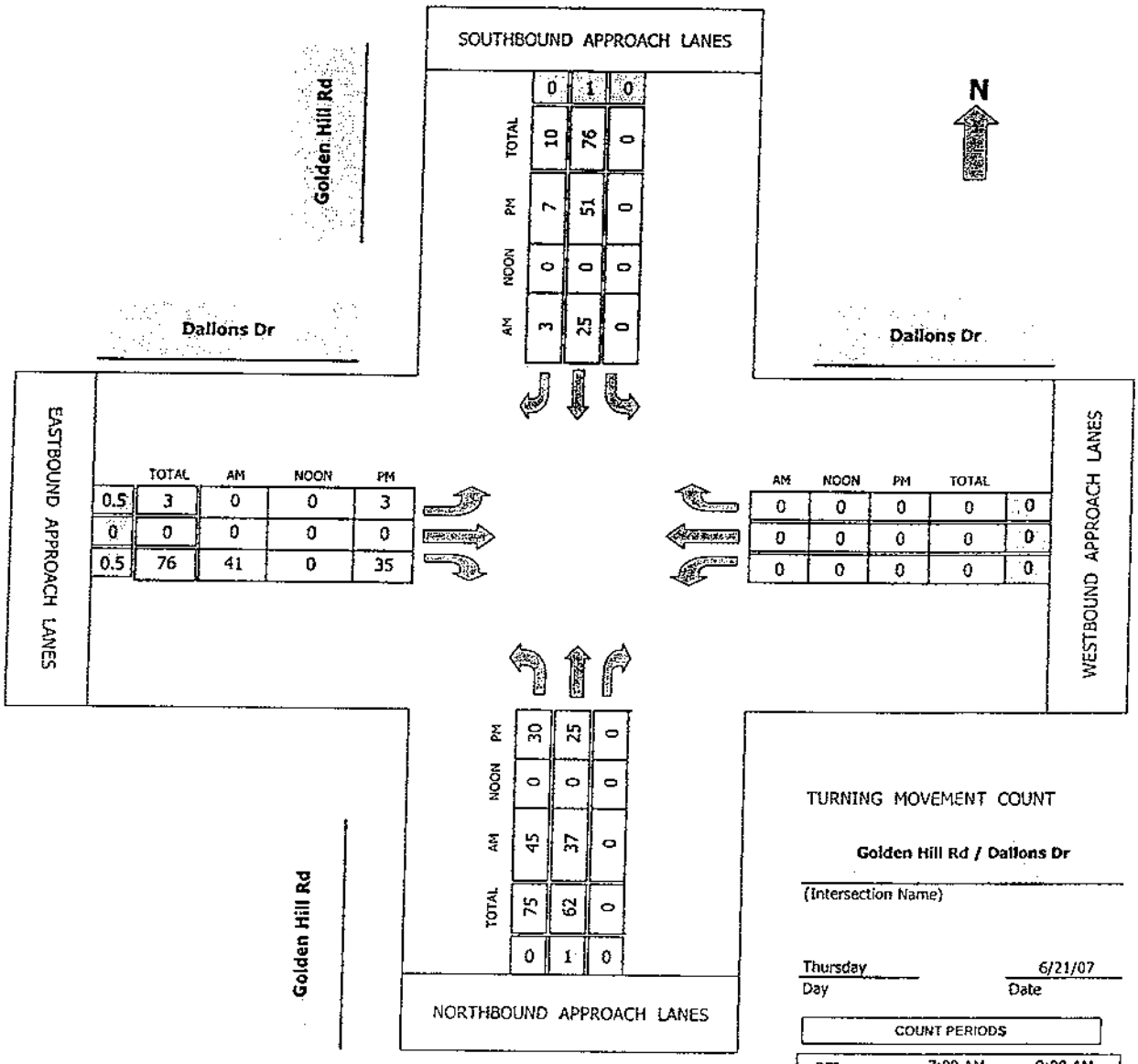
Intersection Turning Movement

Prepared by:

National Data & Surveying Services

TMC Summary of Golden Hill Rd/Dallons Dr

Project #: 07-8125-003



TURNING MOVEMENT COUNT

Golden Hill Rd / Dallons Dr

(Intersection Name)

Thursday (Day) 6/21/07 (Date)

COUNT PERIODS		
am	7:00 AM -	9:00 AM
noon	11:00 AM -	1:00 PM
pm	4:00 PM -	6:00 PM

AM PEAK HOUR	745 AM
NOON PEAK HOUR	0 AM
PM PEAK HOUR	430 PM

CITY OF PASO ROBLES
ROADWAY ENGINEERING DESIGN CAPACITIES

TABLE 3
LEVEL OF SERVICE THRESHOLD VOLUMES
FOR URBAN/SUBURBAN ROADWAY TYPES

Roadway Type	Total Daily Vehicles in Both Directions (ADT)				
	Level of Service A	Level of Service B	Level of Service C	Level of Service D	Level of Service E
4-Lane Divided Freeway	28,000	43,200	61,600	74,400	80,000
6-Lane Divided Arterial (with left-turn lane)	32,000	38,000	43,000	49,000	54,000
4-Lane Divided Arterial (with left-turn lane)	22,000	25,000	29,000	32,500	36,000
4-Lane Undivided Arterial (no left-turn lane)	18,000	21,000	24,000	27,000	30,000
2-Lane Collector (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
2-Lane Collector (no left-turn lane)	8,000	9,500	10,500	12,000	13,500

ADT = Average Daily Traffic
Note:
1. Based on "Highway Capacity Manual", Transportation Research Board, 1997.
2. All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each Level of Service listed above may vary depending on a number of factors including curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross traffic and pedestrians, driveway spacing, etc.

The existing roadway traffic operations are summarized in Table 4.

TRAVEL SURVEY

In addition to obtaining the daily and peak hour traffic counts throughout the City, a travel survey was conducted in downtown and at four local commercial centers. On Wednesday and Thursday, March 24 and 25, 2000, a six question travel survey, as shown on Figure 5, was asked of local shoppers in downtown Paso Robles and at the following shopping centers:

- Von's Center on Creston Road
- Woodland Plaza I (Albertson's) on Niblick Road
- Woodland Plaza II (Walmart) on Niblick Road
- Target Center on Theater Drive

At each of these locations, approximately fifty (50) sample travel surveys were conducted by interviewing willing shoppers. The interviews were conducted on a mid-weekday and although the information is not statistically significant, nonetheless, it presented findings that were informative and helpful in understanding local travel patterns for the calibration of the traffic model.

LEVEL OF SERVICE DEFINITION

Signalized Intersection Level of Service Definitions

LOS	Delay[a]	V/C Ratio	Definition
A	< 10.0	< 0.60	Progression is extremely favorable. Most vehicles arrive during the green phase. Many vehicles do not stop at all.
B	10.1 - 20.0	0.61 - 0.70	Good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20.1 - 35.0	0.71 - 0.80	Only fair progression, longer cycle lengths, or both, result in higher cycle lengths. Cycle lengths may fail to serve queued vehicles, and overflow occurs. Number of vehicles stopped is significant, though many still pass through intersection without stopping.
D	35.1 - 55.0	0.81 - 0.90	Congestion becomes more noticeable. Unfavorable progression, long cycle lengths and high v/c ratios result in longer delays. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55.1 - 80.0	0.91 - 1.00	High delay values indicate poor progression, long cycle lengths and high v/c ratios. Individual cycle failures are frequent
F	> 80.0	> 1.00	Considered unacceptable for most drivers, this level occurs when arrival flow rates exceed the capacity of lane groups, resulting in many individual cycle failures. Poor progression and long cycle lengths may also contribute to high delay levels.

[a] Average control delay per vehicle in seconds.

Unsignalized Intersection Level of Service Definitions

The HCM[1] uses *control delay* to determine the level of service at unsignalized intersections. Control delay is the difference between the travel time actually experienced at the control device and the travel time that would occur in the absence of the traffic control device. Control delay includes deceleration from free flow speed, queue move-up time, stopped delay and acceleration back to free flow speed.

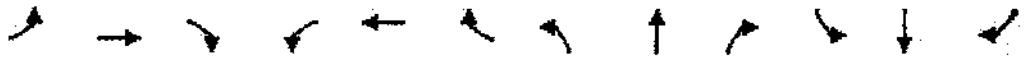
LOS	Control Delay Seconds per Vehicle
A	< 10.0
B	10.1 - 15.0
C	15.1 - 25.0
D	25.1 - 35.0
E	35.1 - 50.0
F	> 50.0

1 Highway Capacity Manual, National Research Board, 2000

INTERSECTION LEVEL SERVICE CALCULATION WORKSHEETS

Reference 1 - State Route 46/Golden Hill Road
Reference 2 - Golden Hill Road/Dallons Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.969			0.972	
Satd. Flow (prot)	1719	3008	1538	1719	3008	1538	0	1753	1538	0	1759	1538
Flt Permitted	0.950			0.950				0.969			0.972	
Satd. Flow (perm)	1719	3008	1538	1719	3008	1538	0	1753	1538	0	1759	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274			119			13			73
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	127	546	274	52	621	119	220	128	13	79	57	73
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	127	546	274	52	621	119	220	128	13	79	57	73
Lane Group Flow (vph)	127	546	274	52	621	119	0	348	13	0	136	73
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	2	2	2	6	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	14.0	30.0	30.0	11.0	27.0	27.0	29.0	29.0	29.0	20.0	20.0	20.0
Total Split (%)	15.6%	33.3%	33.3%	12.2%	30.0%	30.0%	32.2%	32.2%	32.2%	22.2%	22.2%	22.2%
Maximum Green (s)	10.0	26.0	26.0	7.0	23.0	23.0	25.0	25.0	25.0	16.0	16.0	16.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	10.5	29.1	29.1	7.2	21.9	21.9		29.8	29.8		11.9	11.9
Actuated g/C Ratio	0.12	0.32	0.32	0.08	0.24	0.24		0.33	0.33		0.13	0.13
v/c Ratio	0.63	0.56	0.40	0.38	0.85	0.26		0.60	0.03		0.59	0.27
Control Delay	53.1	28.4	5.2	47.2	44.7	6.8		32.4	12.2		46.4	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	53.1	28.4	5.2	47.2	44.7	6.8		32.4	12.2		46.4	11.1
LOS	D	C	A	D	D	A		C	B		D	B
Approach Delay		25.0			39.2			31.7			34.1	

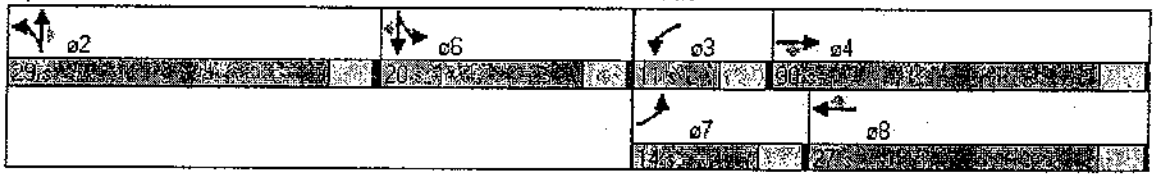


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			C			C	

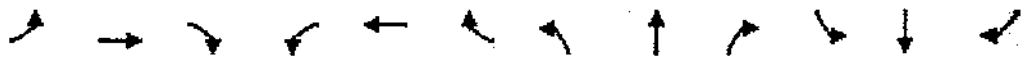
Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 31.7 Intersection LOS: C
Intersection Capacity Utilization 63.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: State Route 46 & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.978			0.976	
Satd. Flow (prot)	1719	3008	1538	1719	3008	1538	0	1770	1538	0	1766	1538
Flt Permitted	0.950			0.950				0.978			0.976	
Satd. Flow (perm)	1719	3008	1538	1719	3008	1538	0	1770	1538	0	1766	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			321			91			23			114
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	98	579	321	38	650	91	87	109	23	86	91	114
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	98	579	321	38	650	91	87	109	23	86	91	114
Lane Group Flow (vph)	98	579	321	38	650	91	0	196	23	0	177	114
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	2	2	2	6	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	14.0	36.0	36.0	10.0	32.0	32.0	24.0	24.0	24.0	20.0	20.0	20.0
Total Split (%)	15.6%	40.0%	40.0%	11.1%	35.6%	35.6%	26.7%	26.7%	26.7%	22.2%	22.2%	22.2%
Maximum Green (s)	10.0	32.0	32.0	6.0	28.0	28.0	20.0	20.0	20.0	16.0	16.0	16.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	9.0	28.4	28.4	6.2	23.7	23.7		30.0	30.0		13.3	13.3
Actuated g/C Ratio	0.10	0.32	0.32	0.07	0.26	0.26		0.33	0.33		0.15	0.15
v/c Ratio	0.57	0.61	0.46	0.32	0.82	0.19		0.33	0.04		0.68	0.35
Control Delay	51.6	28.7	4.8	47.5	40.2	6.3		28.6	11.7		49.2	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	51.6	28.7	4.8	47.5	40.2	6.3		28.6	11.7		49.2	9.8
LOS	D	C	A	D	D	A		C	B		D	A
Approach Delay		23.2			36.6			26.8			33.7	

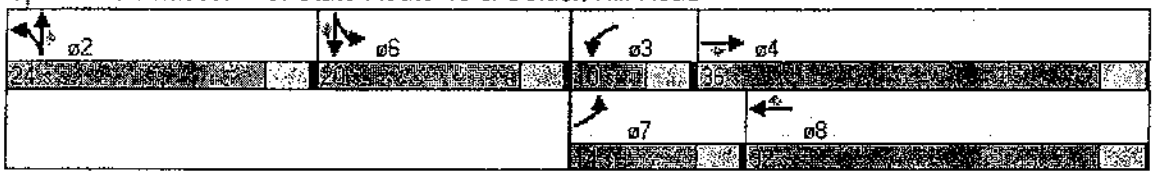


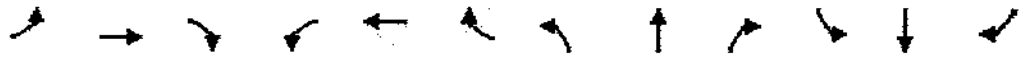
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 29.5 Intersection LOS: C
Intersection Capacity Utilization 50.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 3: State Route 46 & Golden Hill Road





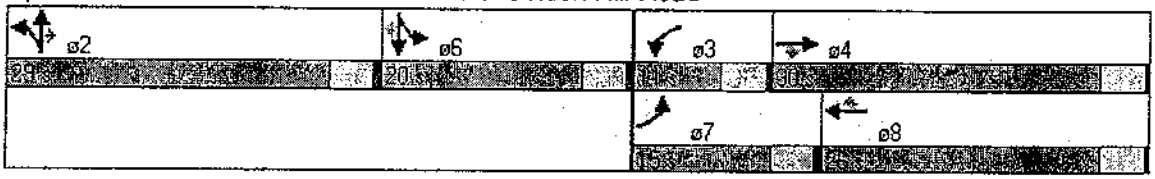
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.970			0.968	
Satd. Flow (prot)	1719	3008	1538	1719	3008	1538	0	1755	1538	0	1752	1538
Flt Permitted	0.950			0.950				0.970			0.968	
Satd. Flow (perm)	1719	3008	1538	1719	3008	1538	0	1755	1538	0	1752	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274			143			13			96
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	144	537	274	52	613	143	220	130	13	117	59	96
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	144	537	274	52	613	143	220	130	13	117	59	96
Lane Group Flow (vph)	144	537	274	52	613	143	0	350	13	0	176	96
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	2	2	2	6	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	15.0	30.0	30.0	11.0	26.0	26.0	29.0	29.0	29.0	20.0	20.0	20.0
Total Split (%)	16.7%	33.3%	33.3%	12.2%	28.9%	28.9%	32.2%	32.2%	32.2%	22.2%	22.2%	22.2%
Maximum Green (s)	11.0	26.0	26.0	7.0	22.0	22.0	25.0	25.0	25.0	16.0	16.0	16.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	10.9	29.0	29.0	6.8	21.0	21.0		28.8	28.8		13.3	13.3
Actuated g/C Ratio	0.12	0.32	0.32	0.08	0.23	0.23		0.32	0.32		0.15	0.15
v/c Ratio	0.70	0.55	0.40	0.40	0.87	0.31		0.62	0.03		0.68	0.31
Control Delay	56.5	28.5	5.2	49.0	47.9	6.9		33.5	12.2		49.4	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	56.5	28.5	5.2	49.0	47.9	6.9		33.5	12.2		49.4	10.0
LOS	E	C	A	D	D	A		C	B		D	B
Approach Delay		26.0			40.7			32.8			35.5	

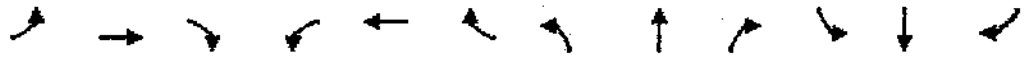
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 33.1 Intersection LOS: C
Intersection Capacity Utilization 66.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: State Route 46 & Golden Hill Road





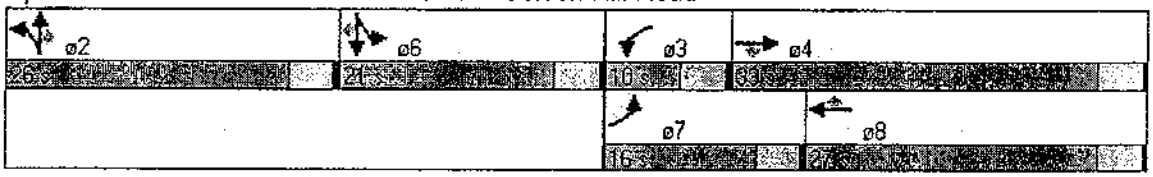
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950				0.970			0.972	
Satd. Flow (prot)	1719	3008	1538	1719	3008	1538	0	1755	1538	0	1759	1538
Flt Permitted	0.950			0.950				0.970			0.972	
Satd. Flow (perm)	1719	3008	1538	1719	3008	1538	0	1755	1538	0	1759	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			321			172			23			137
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	149	562	321	38	636	172	187	114	23	121	92	137
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	149	562	321	38	636	172	187	114	23	121	92	137
Lane Group Flow (vph)	149	562	321	38	636	172	0	301	23	0	213	137
Turn Type	Prot		Perm	Prot		Perm	Split		Perm	Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	2	2	2	6	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	16.0	33.0	33.0	10.0	27.0	27.0	26.0	26.0	26.0	21.0	21.0	21.0
Total Split (%)	17.8%	36.7%	36.7%	11.1%	30.0%	30.0%	28.9%	28.9%	28.9%	23.3%	23.3%	23.3%
Maximum Green (s)	12.0	29.0	29.0	6.0	23.0	23.0	22.0	22.0	22.0	17.0	17.0	17.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag						
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	C-Max	Min	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0	0	0	0	0	0	0
Act Effct Green (s)	11.3	30.8	30.8	6.1	21.8	21.8		26.3	26.3		14.6	14.6
Actuated g/C Ratio	0.13	0.34	0.34	0.07	0.24	0.24		0.29	0.29		0.16	0.16
v/c Ratio	0.69	0.55	0.43	0.32	0.87	0.34		0.59	0.05		0.74	0.38
Control Delay	55.1	26.7	4.8	47.7	47.0	6.5		34.7	11.2		51.8	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay	55.1	26.7	4.8	47.7	47.0	6.5		34.7	11.2		51.8	9.1
LOS	E	C	A	D	D	A		C	B		D	A
Approach Delay		24.0			38.8			33.1			35.1	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			C			D	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 31.6 Intersection LOS: C
Intersection Capacity Utilization 58.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: State Route 46 & Golden Hill Road



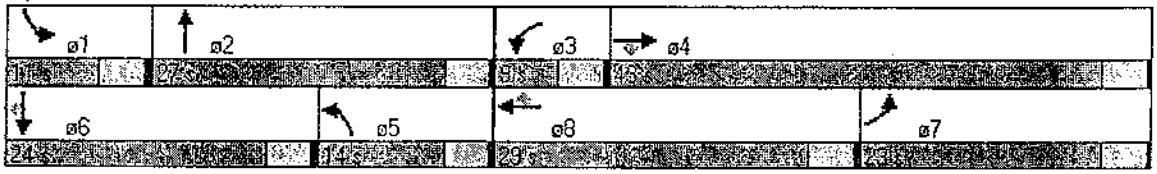
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00
Frt			0.850			0.850		0.963				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	3008	1538	3335	3008	1538	3335	3311	0	3335	1810	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	3008	1538	3335	3008	1538	3335	3311	0	3335	1810	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			267			205		49				275
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	626	961	267	115	752	357	207	538	179	232	210	275
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	626	961	267	115	752	357	207	538	179	232	210	275
Lane Group Flow (vph)	626	961	267	115	752	357	207	717	0	232	210	275
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phases	7	4	4	3	8	8	5	2		1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	28.0	43.0	43.0	9.0	29.0	29.0	14.0	27.0	0.0	11.0	24.0	24.0
Total Split (%)	25.6%	47.8%	47.8%	10.0%	32.2%	32.2%	15.6%	30.0%	0.0%	12.2%	26.7%	26.7%
Maximum Green (s)	19.0	39.0	39.0	5.0	25.0	25.0	10.0	23.0		7.0	20.0	20.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	18.7	38.2	38.2	5.0	24.5	24.5	14.9	28.3		7.5	15.9	15.9
Actuated g/C Ratio	0.21	0.42	0.42	0.06	0.27	0.27	0.17	0.26		0.08	0.18	0.18
v/c Ratio	0.90	0.75	0.33	0.62	0.92	0.63	0.37	0.80		0.83	0.66	0.55
Control Delay	53.0	26.3	3.3	57.1	49.4	17.3	37.0	37.3		67.1	44.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	53.0	26.3	3.3	57.1	49.4	17.3	37.0	37.3		67.1	44.5	8.6
LOS	D	C	A	E	D	B	D	D		E	D	A
Approach Delay		32.0			40.8			37.3			38.0	

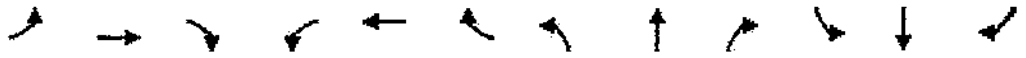
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	179	232	0	33	216	70	54	188		69	113	0
Queue Length 95th (ft)	#274	306	43	#68	#324	165	94	#263		#136	176	62
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	704	1303	818	185	836	575	553	892		278	402	556
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.89	0.74	0.33	0.62	0.90	0.62	0.37	0.80		0.83	0.52	0.49

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 36.2 Intersection LOS: D
Intersection Capacity Utilization 79.2% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00
Frt			0.850			0.850		0.976				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	3008	1538	3335	3008	1538	3335	3356	0	3335	1810	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	3008	1538	3335	3008	1538	3335	3356	0	3335	1810	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216			300		19				280
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	388	716	303	332	1062	300	183	319	60	367	544	676
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	388	716	303	332	1062	300	183	319	60	367	544	676
Lane Group Flow (vph)	388	716	303	332	1062	300	183	379	0	367	544	676
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phases	7	4	4	3	8	8	5	2		1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	16.0	39.0	39.0	16.0	39.0	39.0	10.0	24.0	0.0	21.0	35.0	35.0
Total Split (%)	16.0%	39.0%	39.0%	16.0%	39.0%	39.0%	10.0%	24.0%	0.0%	21.0%	35.0%	35.0%
Maximum Green (s)	12.0	35.0	35.0	12.0	35.0	35.0	6.0	20.0		17.0	31.0	31.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	12.0	35.1	35.1	11.9	35.0	35.0	6.0	21.8		15.2	31.0	31.0
Actuated g/C Ratio	0.12	0.35	0.35	0.12	0.35	0.35	0.06	0.22		0.15	0.31	0.31
v/c Ratio	0.97	0.68	0.45	0.84	1.01	0.41	0.92	0.51		0.73	0.97	1.01
Control Delay	83.1	31.6	9.8	62.3	63.2	4.6	92.9	35.8		49.1	66.6	58.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	83.1	31.6	9.8	62.3	63.2	4.6	92.9	35.8		49.1	66.6	58.7
LOS	F	C	A	E	E	A	F	D		D	E	E
Approach Delay		41.1			52.6			54.4			59.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			D			D			E	
Queue Length 50th (ft)	128	202	38	108	~359	0	60	107		114	341	~297
Queue Length 95th (ft)	#222	268	108	#179	#505	55	#127	157		162	#556	#544
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	400	1055	680	400	1053	733	200	748		567	561	670
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.97	0.68	0.45	0.83	1.01	0.41	0.92	0.51		0.65	0.97	1.01

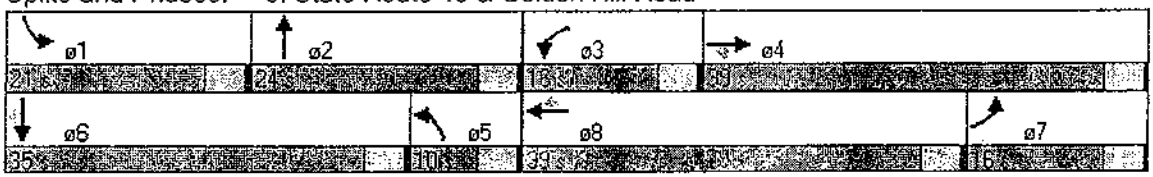
Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 51.7 Intersection LOS: D
Intersection Capacity Utilization 87.6% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road



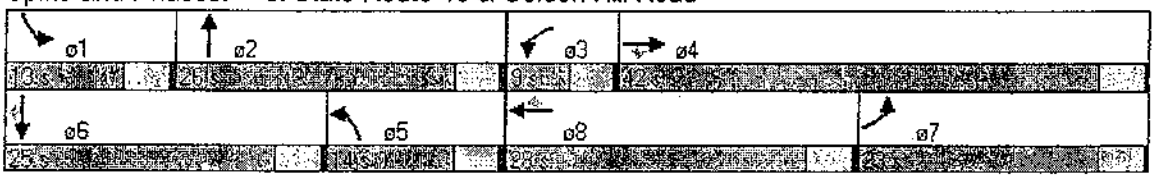
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00
Frt			0.850			0.850			0.963			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	3008	1538	3335	3008	1538	3335	3311	0	3335	1810	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	3008	1538	3335	3008	1538	3335	3311	0	3335	1810	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			267			243			48			298
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	643	952	267	115	744	381	207	540	179	270	212	298
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	648	952	267	115	744	381	207	540	179	270	212	298
Lane Group Flow (vph)	643	952	267	115	744	381	207	719	0	270	212	298
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phases	7	4	4	3	8	8	5	2		1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	23.0	42.0	42.0	9.0	28.0	28.0	14.0	26.0	0.0	13.0	25.0	25.0
Total Split (%)	25.6%	46.7%	46.7%	10.0%	31.1%	31.1%	15.6%	28.9%	0.0%	14.4%	27.8%	27.8%
Maximum Green (s)	19.0	38.0	38.0	5.0	24.0	24.0	10.0	22.0		9.0	21.0	21.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	18.9	37.7	37.7	5.0	23.9	23.9	15.5	22.1		9.1	15.7	15.7
Actuated g/C Ratio	0.21	0.42	0.42	0.06	0.27	0.27	0.17	0.25		0.10	0.17	0.17
v/c Ratio	0.92	0.75	0.38	0.62	0.93	0.65	0.36	0.84		0.80	0.67	0.58
Control Delay	55.2	26.8	3.4	57.1	52.5	16.4	36.5	41.0		58.3	44.8	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	55.2	26.8	3.4	57.1	52.5	16.4	36.5	41.0		58.3	44.8	8.6
LOS	E	C	A	E	D	B	D	D		E	D	A
Approach Delay		33.3			41.8			40.0			35.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	185	234	0	33	216	63	54	193		78	115	0
Queue Length 95th (ft)	#286	311	44	#68	#329	164	94	#287		#141	175	63
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	704	1270	804	185	802	588	575	851		338	422	587
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.91	0.75	0.33	0.62	0.93	0.65	0.36	0.84		0.80	0.50	0.51

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 37.2 Intersection LOS: D
Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50		50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.95	0.97	1.00	1.00
Frt			0.850			0.850		0.977				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	3008	1538	3335	3008	1538	3335	3359	0	3335	1810	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	3008	1538	3335	3008	1538	3335	3359	0	3335	1810	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216			381		19				301
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	439	699	303	332	1048	381	183	324	60	402	545	699
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	439	699	303	332	1048	381	183	324	60	402	545	699
Lane Group Flow (vph)	439	699	303	332	1048	381	183	384	0	402	545	699
Turn Type	Prot		Perm	Prot		Perm	Prot			Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8						6
Detector Phases	7	4	4	3	8	8	5	2		1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0		8.0	20.0	20.0
Total Split (s)	17.0	39.0	39.0	16.0	38.0	38.0	10.0	23.0	0.0	22.0	35.0	35.0
Total Split (%)	17.0%	39.0%	39.0%	16.0%	38.0%	38.0%	10.0%	23.0%	0.0%	22.0%	35.0%	35.0%
Maximum Green (s)	13.0	35.0	35.0	12.0	34.0	34.0	6.0	19.0		18.0	31.0	31.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max		None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0			5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effct Green (s)	13.0	35.1	35.1	11.9	34.0	34.0	6.0	20.9		16.1	31.0	31.0
Actuated g/C Ratio	0.13	0.35	0.35	0.12	0.34	0.34	0.06	0.21		0.16	0.31	0.31
v/c Ratio	1.01	0.66	0.45	0.84	1.02	0.49	0.92	0.54		0.75	0.97	1.02
Control Delay	90.5	31.2	9.8	62.3	68.1	4.9	92.9	37.1		49.1	67.0	61.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	90.5	31.2	9.8	62.3	68.1	4.9	92.9	37.1		49.1	67.0	61.1
LOS	F	C	A	E	E	A	F	D		D	E	E
Approach Delay		44.7			53.4			55.1			60.1	

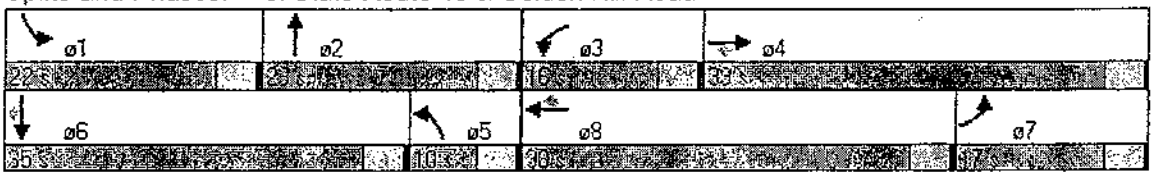
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			D			E			E	
Queue Length 50th (ft)	~148	196	38	108	~376	0	60	111		125	341	~332
Queue Length 95th (ft)	#250	#261	108	#179	#505	62	#127	16		175	#557	#557
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	434	1055	680	400	1023	774	200	717		600	561	684
Starvation Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0		0	0	0
Reduced v/c Ratio	1.01	0.66	0.45	0.83	1.02	0.49	0.92	0.54		0.67	0.97	1.02

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 53.3 Intersection LOS: D
Intersection Capacity Utilization 88.7% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			476			263			130			382
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	754	1477	541	106	1326	387	576	776	208	434	305	433
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	754	1477	541	106	1326	387	576	776	208	434	305	433
Lane Group Flow (vph)	754	1477	541	106	1326	387	576	776	208	434	305	433
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	5	2	2	1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	30.0	58.0	58.0	12.0	40.0	40.0	25.0	31.0	31.0	19.0	25.0	25.0
Total Split (%)	25.0%	48.3%	48.3%	10.0%	33.3%	33.3%	20.8%	25.8%	25.8%	15.8%	20.8%	20.8%
Maximum Green (s)	26.0	54.0	54.0	8.0	36.0	36.0	21.0	27.0	27.0	15.0	21.0	21.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	26.0	54.3	54.3	7.7	36.0	36.0	25.5	27.0	27.0	15.0	16.5	16.5
Actuated g/C Ratio	0.22	0.45	0.45	0.06	0.30	0.30	0.21	0.22	0.22	0.12	0.14	0.14
v/c Ratio	1.04	0.76	0.57	0.50	1.02	0.60	0.81	1.00	0.47	1.04	0.64	0.80
Control Delay	90.9	30.5	5.8	62.4	72.4	15.4	55.8	79.6	19.2	107.0	52.4	19.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	90.9	30.5	5.8	62.4	72.4	15.4	55.8	79.6	19.2	107.0	52.4	19.9
LOS	F	C	A	E	E	B	E	E	B	F	D	B
Approach Delay		42.1			59.7			62.8			60.6	

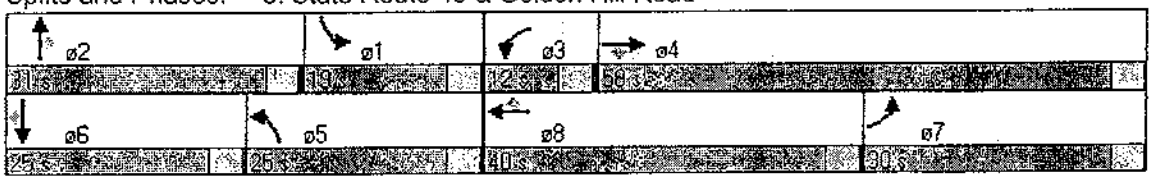
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			E			E			E	
Queue Length 50th (ft)	~326	342	28	41	~400	75	220	~320	50	~190	110	39
Queue Length 95th (ft)	#448	#403	114	71	#496	182	#350	#455	124	#297	161	113
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	723	1955	956	222	1297	646	708	774	447	417	602	584
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.76	0.57	0.48	1.02	0.60	0.81	1.00	0.47	1.04	0.51	0.74

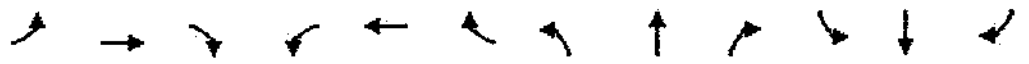
Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 53.8 Intersection LOS: D
Intersection Capacity Utilization 94.3% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	4822	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			300			183			92			227
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			65			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	500	1560	513	145	2109	333	448	414	92	462	732	793
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	500	1560	513	145	2109	333	448	414	92	462	732	793
Lane Group Flow (vph)	500	1560	513	145	2109	333	448	414	92	462	732	793
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	5	2	2	1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	22.0	70.0	70.0	13.0	61.0	61.0	20.0	34.0	34.0	33.0	47.0	47.0
Total Split (%)	14.7%	46.7%	46.7%	8.7%	40.7%	40.7%	13.3%	22.7%	22.7%	22.0%	31.3%	31.3%
Maximum Green (s)	18.0	66.0	66.0	9.0	57.0	57.0	16.0	30.0	30.0	29.0	43.0	43.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	18.0	66.1	66.1	8.9	57.0	57.0	16.0	34.0	34.0	25.0	43.0	43.0
Actuated g/C Ratio	0.12	0.44	0.44	0.06	0.38	0.38	0.11	0.23	0.23	0.17	0.29	0.29
v/c Ratio	1.25	0.82	0.61	0.73	1.28	0.48	1.26	0.53	0.22	0.83	0.74	1.32
Control Delay	183.4	41.2	15.6	90.2	171.3	17.5	189.1	54.7	10.3	73.7	53.9	183.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.4	41.2	15.6	90.2	171.3	17.5	189.1	54.7	10.3	73.7	53.9	183.5
LOS	F	D	B	F	F	B	F	D	B	E	D	F
Approach Delay		63.7			146.9			113.5			110.3	

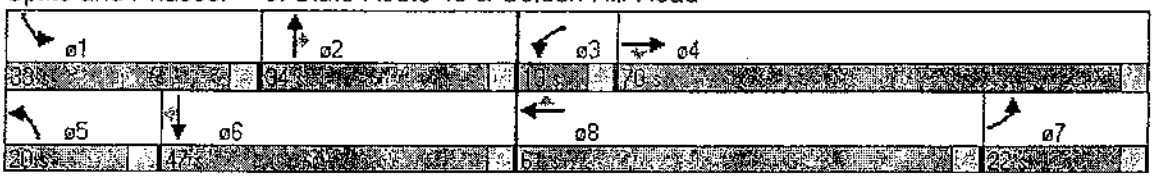
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		E			F			F			F	F
Queue Length 50th (ft)	~313	484	154	73	~956	106	~282	190	0	227	343	~834
Queue Length 95th (ft)	#430	550	277	#123	#1047	199	#396	255	49	284	420	#1091
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	400	1904	845	200	1642	698	356	780	420	645	986	603
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.25	0.82	0.61	0.73	1.28	0.48	1.26	0.53	0.22	0.72	0.74	1.32

Intersection Summary

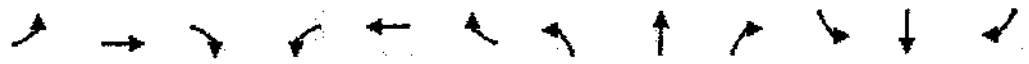
Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.32
Intersection Signal Delay: 107.6 Intersection LOS: F
Intersection Capacity Utilization 112.6% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			541			263			130			363
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	751	1477	541	106	1326	387	576	776	208	434	305	433
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	751	1477	541	106	1326	387	576	776	208	434	305	433
Lane Group Flow (vph)	751	1477	541	106	1326	387	576	776	208	434	305	433
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	5	2	2	1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	30.0	58.0	58.0	12.0	40.0	40.0	25.0	31.0	31.0	19.0	25.0	25.0
Total Split (%)	25.0%	48.3%	48.3%	10.0%	33.3%	33.3%	20.8%	25.8%	25.8%	15.8%	20.8%	20.8%
Maximum Green (s)	26.0	54.0	54.0	8.0	36.0	36.0	21.0	27.0	27.0	15.0	21.0	21.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	26.0	54.3	54.3	7.7	36.0	36.0	21.0	27.0	27.0	15.0	21.0	21.0
Actuated g/C Ratio	0.22	0.45	0.45	0.06	0.30	0.30	0.18	0.22	0.22	0.12	0.18	0.18
v/c Ratio	1.04	0.76	0.55	0.50	1.02	0.60	0.99	1.00	0.47	1.04	0.51	0.76
Control Delay	89.8	30.5	3.9	62.4	72.4	15.4	83.6	79.6	19.2	105.9	48.2	18.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	89.8	30.5	3.9	62.4	72.4	15.4	83.6	79.6	19.2	105.9	48.2	18.6
LOS	F	C	A	E	E	B	F	E	B	F	D	B
Approach Delay		41.4			59.7			73.1			58.6	



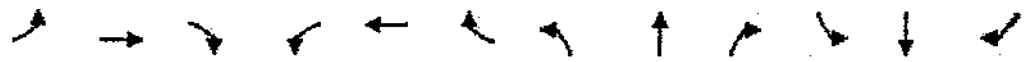
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		D			E			E			B	
Queue Length 50th (ft)	~323	342	0	41	~400	75	231	~320	50	~187	113	47
Queue Length 95th (ft)	#445	403	62	71	#496	182	#350	#455	124	#292	161	174
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	723	1955	992	222	1297	646	584	774	447	417	602	569
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.76	0.55	0.48	1.02	0.60	0.99	1.00	0.47	1.04	0.51	0.76

Intersection Summary

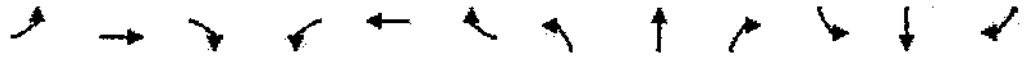
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 55.5 Intersection LOS: E
Intersection Capacity Utilization 94.2% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	50	50	50	50	50	50	50	50	50	50
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3335	4322	1538	3335	4322	1538	3335	3438	1538	3335	3438	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			300			227			92			239
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		30			55			30			30	
Link Distance (ft)		4312			4808			3024			2702	
Travel Time (s)		98.0			59.6			68.7			61.4	
Volume (vph)	551	1543	513	145	2095	414	448	419	92	497	733	816
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	5%	20%	5%	5%	20%	5%	5%	5%	5%	5%	5%	5%
Adj. Flow (vph)	551	1543	513	145	2095	414	448	419	92	497	733	816
Lane Group Flow (vph)	551	1543	513	145	2095	414	448	419	92	497	733	816
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phases	7	4	4	3	8	8	5	2	2	1	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0	8.0	20.0	20.0
Total Split (s)	23.0	70.0	70.0	13.0	60.0	60.0	20.0	32.0	32.0	35.0	47.0	47.0
Total Split (%)	15.3%	46.7%	46.7%	8.7%	40.0%	40.0%	13.3%	21.3%	21.3%	23.3%	31.3%	31.3%
Maximum Green (s)	19.0	66.0	66.0	9.0	56.0	56.0	16.0	28.0	28.0	31.0	43.0	43.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	Min	Min
Walk Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	19.0	66.1	66.1	8.9	56.0	56.0	16.0	32.4	32.4	26.6	43.0	43.0
Actuated g/C Ratio	0.13	0.44	0.44	0.06	0.37	0.37	0.11	0.22	0.22	0.18	0.29	0.29
v/c Ratio	1.31	0.81	0.61	0.73	1.30	0.58	1.26	0.56	0.23	0.84	0.74	1.34
Control Delay	202.9	40.8	15.6	90.2	177.3	19.6	189.1	56.8	10.7	72.8	54.0	191.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	202.9	40.8	15.6	90.2	177.3	19.6	189.1	56.8	10.7	72.8	54.0	191.5
LOS	F	D	B	F	F	B	F	E	B	E	D	F
Approach Delay		70.1			147.9			114.2			113.4	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach LOS		E			F			F			F	
Queue Length 50th (ft)	~355	476	154	73	~957	144	~282	195	0	244	343	~863
Queue Length 95th (ft)	#475	542	277	#123	#1048	256	#396	#263	50	301	#420	#1120
Internal Link Dist (ft)		4232			4728			2944			2622	
Turn Bay Length (ft)												
Base Capacity (vph)	422	1904	845	200	1614	716	356	743	404	689	986	611
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.81	0.61	0.73	1.30	0.58	1.26	0.56	0.23	0.72	0.74	1.34

Intersection Summary

Area Type: Other
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 110.9 Intersection LOS: F
Intersection Capacity Utilization 113.8% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: State Route 46 & Golden Hill Road

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	5	75	99	47	23	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	82	108	51	25	2
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	292	26	27			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	292	26	27			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	92	93			
cM capacity (veh/h)	651	1050	1587			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	87	159	27
Volume Left	5	108	0
Volume Right	82	0	2
cSH	1011	1587	1700
Volume to Capacity	0.09	0.07	0.02
Queue Length 95th (ft)	7	5	0
Control Delay (s)	8.9	5.2	0.0
Lane LOS	A	A	
Approach Delay (s)	8.9	5.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	5.9		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	30	48	21	52	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	33	52	23	57	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	185	58	60			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	185	58	60			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	97	97			
cM capacity (veh/h)	777	1008	1544			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	33	75	60
Volume Left	0	52	0
Volume Right	33	0	3
cSH	1008	1544	1700
Volume to Capacity	0.03	0.03	0.04
Queue Length 95th (ft)	3	3	0
Control Delay (s)	8.7	5.2	0.0
Lane LOS	A	A	
Approach Delay (s)	8.7	5.2	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.0		
Intersection Capacity Utilization	20.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	6	75	99	90	86	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	82	108	98	93	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	409	96	99			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	409	96	99			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	92	93			
cM capacity (veh/h)	555	960	1494			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	88	205	99
Volume Left	7	108	0
Volume Right	82	0	5
cSH	911	1494	1700
Volume to Capacity	0.10	0.07	0.06
Queue Length 95th (ft)	8	6	0
Control Delay (s)	9.4	4.3	0.0
Lane LOS	A	A	
Approach Delay (s)	9.4	4.3	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	6	30	48	4158	111	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	33	52	3172	121	5
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	399	123	126			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	399	123	126			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	96	96			
cM capacity (veh/h)	585	927	1460			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	39	224	126
Volume Left	7	52	0
Volume Right	33	0	5
cSH	845	1460	1700
Volume to Capacity	0.05	0.04	0.07
Queue Length 95th (ft)	4	3	0
Control Delay (s)	9.5	2.0	0.0
Lane LOS	A	A	
Approach Delay (s)	9.5	2.0	0.0
Approach LOS	A		

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	27.6%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.866						0.968			0.996	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1613	0	1770	1863	0	1770	3426	0	1863	3525	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1613	0	1770	1863	0	1770	3426	0	1863	3525	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		146						62			4	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			522			2702			674	
Travel Time (s)		55.7			11.9			61.4			15.3	
Volume (vph)	6	17	134	59	0	0	169	558	153	0	142	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	18	146	64	0	0	184	607	166	0	154	4
Lane Group Flow (vph)	7	164	0	64	0	0	184	773	0	0	158	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	8.0	20.0	0.0	12.0	24.0	0.0	8.0	20.0	0.0
Total Split (%)	13.3%	33.3%	0.0%	13.3%	33.3%	0.0%	20.0%	40.0%	0.0%	13.3%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		8.0	20.0		4.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	7.9	7.2		5.2			11.9	42.3			25.5	
Actuated g/C Ratio	0.13	0.12		0.09			0.20	0.70			0.42	
v/c Ratio	0.03	0.51		0.42			0.52	0.32			0.11	
Control Delay	19.7	12.2		37.5			26.7	5.3			14.4	
Queue Delay	0.0	0.0		0.0			0.0	0.0			0.0	
Total Delay	19.7	12.2		37.5			26.7	5.3			14.4	
LOS	B	B		D			C	A			B	
Approach Delay		12.5						9.4			14.4	
Approach LOS		B						A			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	2	6		22			59	60			20	
Queue Length 95th (ft)	9	49		#70			111	101			42	
Internal Link Dist (ft)		2780			442			2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	282	537		153			352	2432			1503	
Starvation Cap Reductn	0	0		0			0	0			0	
Spillback Cap Reductn	0	0		0			0	0			0	
Storage Cap Reductn	0	0		0			0	0			0	
Reduced v/c Ratio	0.03	0.31		0.42			0.52	0.32			0.11	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 49.5% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road

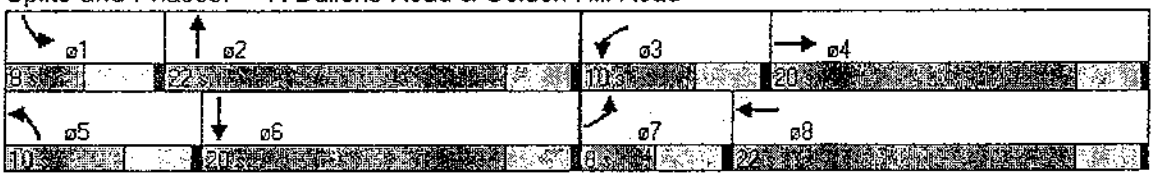
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.856						0.952			0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1595	0	1770	1863	0	1770	3369	0	1863	3532	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1595	0	1770	1863	0	1770	3369	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		129						91			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			458			2702			674	
Travel Time (s)		55.7			10.4			61.4			15.3	
Volume (vph)	8	5	119	136	18	0	135	177	84	0	662	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	5	129	148	20	0	147	192	91	0	720	8
Lane Group Flow (vph)	9	134	0	148	20	0	147	283	0	0	728	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	10.0	22.0	0.0	10.0	22.0	0.0	8.0	20.0	0.0
Total Split (%)	13.3%	33.3%	0.0%	16.7%	36.7%	0.0%	16.7%	36.7%	0.0%	13.3%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		6.0	18.0		6.0	18.0		4.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	4.3	6.8		6.4	13.6		11.0	36.8			21.7	
Actuated g/C Ratio	0.07	0.11		0.11	0.23		0.18	0.61			0.36	
v/c Ratio	0.07	0.46		0.79	0.05		0.45	0.13			0.57	
Control Delay	27.6	11.1		59.3	18.2		26.1	4.2			19.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	27.6	11.1		59.3	18.2		26.1	4.2			19.5	
LOS	C	B		E	B		C	A			B	
Approach Delay		12.2			54.4			11.7			19.5	
Approach LOS		B			D			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	2	54	5			47	13			112	
Queue Length 95th (ft)	15	42	#144	21			93	31			#191	
Internal Link Dist (ft)		2780		378			2622				#894	
Turn Bay Length (ft)												
Base Capacity (vph)	127	520	188	559			1326	2101			1281	
Starvation Cap Reductn	0	0	0	0			0	0			0	
Spillback Cap Reductn	0	0	0	0			0	0			0	
Storage Cap Reductn	0	0	0	0			0	0			0	
Reduced v/c Ratio	0.07	0.26	0.79	0.04			0.45	0.18			0.57	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 8 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 20.5 Intersection LOS: C
Intersection Capacity Utilization 54.5% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.866						0.970			0.995	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1613	0	1770	1863	0	1770	3433	0	1863	3522	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1613	0	1770	1863	0	1770	3433	0	1863	3522	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		146						56			6	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			464			2702			674	
Travel Time (s)		55.7			10.5			61.4			15.3	
Volume (vph)	7	17	134	59	0	0	169	601	153	0	205	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	18	146	64	0	0	184	653	166	0	223	8
Lane Group Flow (vph)	8	164	0	64	0	0	184	819	0	0	231	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	8.0	20.0	0.0	12.0	24.0	0.0	8.0	20.0	0.0
Total Split (%)	13.3%	33.3%	0.0%	13.3%	33.3%	0.0%	20.0%	40.0%	0.0%	13.3%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		8.0	20.0		4.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	7.8	7.2		5.0			11.9	42.5			25.8	
Actuated g/C Ratio	0.13	0.12		0.08			0.20	0.71			0.43	
v/c Ratio	0.03	0.51		0.44			0.52	0.33			0.15	
Control Delay	19.9	12.2		38.7			26.7	5.3			14.1	
Queue Delay	0.0	0.0		0.0			0.0	0.0			0.0	
Total Delay	19.9	12.2		38.7			26.7	5.3			14.1	
LOS	B	B		D			C	A			B	
Approach Delay		12.6						9.3			14.1	
Approach LOS		B						A			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	6		23			59	61			80	
Queue Length 95th (ft)	10	49		#70			111	109			58	
Internal Link Dist (ft)		2780			384			2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	229	537		147			352	2448			1516	
Starvation Cap Reductn	0	0		0			0	0			0	
Spillback Cap Reductn	0	0		0			0	0			0	
Storage Cap Reductn	0	0		0			0	0			0	
Reduced v/c Ratio	0.03	0.31		0.44			0.52	0.33			0.15	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.52
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 50.7% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road

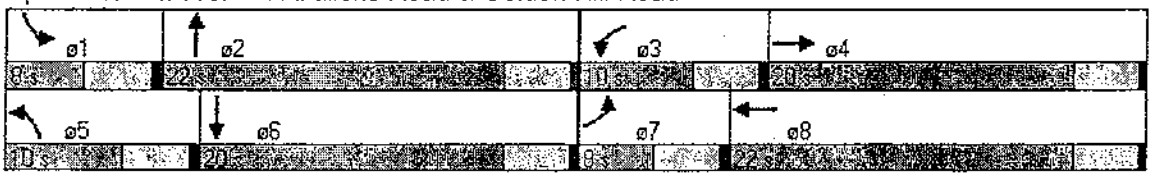
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.856						0.952			0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1595	0	1770	1863	0	1770	3369	0	1863	3532	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1595	0	1770	1863	0	1770	3369	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		129						91			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			458			2702			674	
Travel Time (s)		55.7			10.4			61.4			15.3	
Volume (vph)	8	5	119	136	18	0	135	177	84	0	662	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	5	129	148	20	0	147	192	91	0	720	8
Lane Group Flow (vph)	9	134	0	148	20	0	147	283	0	0	728	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	10.0	22.0	0.0	10.0	22.0	0.0	8.0	20.0	0.0
Total Split (%)	13.3%	33.3%	0.0%	16.7%	36.7%	0.0%	16.7%	36.7%	0.0%	13.3%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		6.0	18.0		6.0	18.0		4.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	4.3	6.8		6.4	13.6		11.0	36.8			21.7	
Actuated g/C Ratio	0.07	0.11		0.11	0.23		0.18	0.61			0.36	
v/c Ratio	0.07	0.46		0.79	0.05		0.45	0.13			0.57	
Control Delay	27.6	11.1		59.3	18.2		26.1	4.2			19.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	27.6	11.1		59.3	18.2		26.1	4.2			19.5	
LOS	C	B		E	B		C	A			B	
Approach Delay		12.2			54.4			11.7			19.5	
Approach LOS		B			D			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	2		54	25		47	13			112	
Queue Length 95th (ft)	15	42		#144	21		93	31			#191	
Internal Link Dist (ft)		2780			378			2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	127	520		188	559		326	2101			1281	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.07	0.26		0.79	0.04		0.45	0.13			0.57	

Intersection Summary

Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 8 (13%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 20.5 Intersection LOS: C
Intersection Capacity Utilization 54.5% ICU Level of Service A
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.861						0.969			0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1604	0	1770	1863	0	1770	3430	0	1863	3532	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1604	0	1770	1863	0	1770	3430	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		279						57			2	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			522			2702			674	
Travel Time (s)		55.7			11.9			61.4			15.3	
Volume (vph)	8	20	257	65	20	0	385	660	170	0	303	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	22	279	71	22	0	418	717	185	0	329	5
Lane Group Flow (vph)	9	301	0	71	22	0	418	902	0	0	334	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	8.0	20.0	0.0	12.0	24.0	0.0	8.0	20.0	0.0
Total Split (%)	13.3%	33.3%	0.0%	13.3%	33.3%	0.0%	20.0%	40.0%	0.0%	13.3%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		8.0	20.0		4.0	16.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	4.6	8.0		4.7	13.1		18.7	37.3			14.5	
Actuated g/C Ratio	0.08	0.13		0.08	0.22		0.31	0.62			0.24	
v/c Ratio	0.07	0.66		0.51	0.05		0.76	0.42			0.39	
Control Delay	27.5	11.9		43.4	17.8		35.9	7.1			19.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	27.5	11.9		43.4	17.8		35.9	7.1			19.9	
LOS	C	B		D	B		D	A			B	
Approach Delay		12.3			37.4			16.2			19.9	
Approach LOS		B			D			B			B	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	3	7		26	6		138	66			51	
Queue Length 95th (ft)	15	61		#79	22		#354	140			82	
Internal Link Dist (ft)		2780			442			2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	136	632		139	504		553	2151			943	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.07	0.48		0.51	0.04		0.76	0.42			0.35	

Intersection Summary
Area Type: Other
Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 17.2 Intersection LOS: B
Intersection Capacity Utilization 63.7% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road

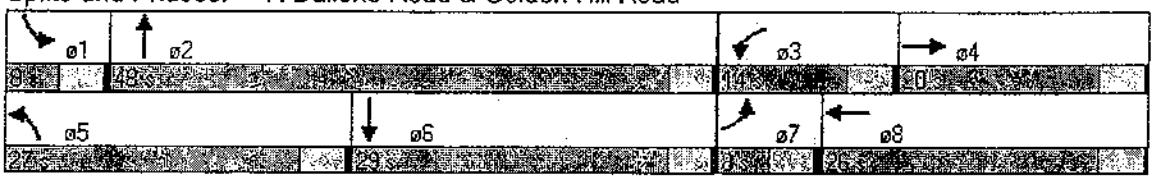
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.855						0.942			0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1593	0	1770	1863	0	1770	3334	0	1863	3532	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1593	0	1770	1863	0	1770	3334	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		332						130			1	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			522			2702			674	
Travel Time (s)		55.7			11.9			61.4			15.3	
Volume (vph)	3	10	305	150	30	0	352	190	120	0	738	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	11	332	163	33	0	383	207	130	0	802	9
Lane Group Flow (vph)	3	343	0	163	33	0	383	337	0	0	811	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	14.0	26.0	0.0	27.0	48.0	0.0	8.0	29.0	0.0
Total Split (%)	8.9%	22.2%	0.0%	15.6%	28.9%	0.0%	30.0%	53.3%	0.0%	8.9%	32.2%	0.0%
Maximum Green (s)	4.0	16.0		10.0	22.0		23.0	44.0		4.0	25.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	4.5	8.7		10.1	21.2		23.6	59.2			31.5	
Actuated g/C Ratio	0.05	0.10		0.11	0.24		0.26	0.66			0.35	
v/c Ratio	0.03	0.76		0.82	0.08		0.82	0.15			0.66	
Control Delay	42.0	16.2		71.0	26.7		47.2	4.2			29.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	42.0	16.2		71.0	26.7		47.2	4.2			29.4	
LOS	D	B		E	C		D	A			C	
Approach Delay		16.5			63.5			27.1			29.4	
Approach LOS		B			E			C			C	

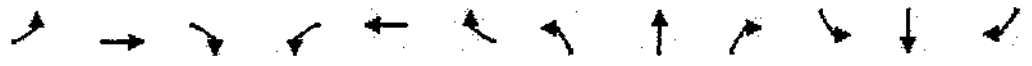
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	2	6		92	15		195	17			202	
Queue Length 95th (ft)	11	82		#200	38		#361	44			#305	
Internal Link Dist (ft)		2780			442			2622			3594	
Turn Bay Length (ft)												
Base Capacity (vph)	88	556		200	465		488	2287			1238	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.03	0.62		0.82	0.07		0.78	0.15			0.66	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 29.7 Intersection LOS: C
Intersection Capacity Utilization 81.2% ICU Level of Service D
Analysis Period (min) 15
#: 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.861						0.971			0.997	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1604	0	1770	1863	0	1770	3437	0	1863	3529	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1604	0	1770	1863	0	1770	3437	0	1863	3529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		279						53			3	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			522			2702			674	
Travel Time (s)		55.7			11.9			61.4			15.3	
Volume (vph)	9	20	257	65	20	0	385	703	170	0	366	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	22	279	71	22	0	418	764	185	0	398	9
Lane Group Flow (vph)	10	301	0	71	22	0	418	949	0	0	407	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	8.0	20.0	0.0	21.0	34.0	0.0	8.0	21.0	0.0
Total Split (%)	11.4%	28.6%	0.0%	11.4%	28.6%	0.0%	30.0%	48.6%	0.0%	11.4%	30.0%	0.0%
Maximum Green (s)	4.0	16.0		4.0	16.0		17.0	30.0		4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	5.3	8.3		6.5	15.2		22.6	45.2			18.6	
Actuated g/C Ratio	0.08	0.12		0.09	0.22		0.32	0.65			0.27	
v/c Ratio	0.07	0.69		0.43	0.05		0.73	0.42			0.43	
Control Delay	31.9	13.7		42.3	20.8		31.7	7.3			24.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	31.9	13.7		42.3	20.8		31.7	7.3			24.5	
LOS	C	B		D	C		C	A			C	
Approach Delay		14.3			37.2			14.8			24.5	
Approach LOS		B			D			B			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	4	9		29	7		143	91			85	
Queue Length 95th (ft)	18	69		#94	25		#328	151			118	
Internal Link Dist (ft)		2780			442			2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	134	582		165	470		570	2236			1014	
Starvation Cap Reductn	0	0		0	0		0	0			0	
Spillback Cap Reductn	0	0		0	0		0	0			0	
Storage Cap Reductn	0	0		0	0		0	0			0	
Reduced v/c Ratio	0.07	0.52		0.43	0.05		0.73	0.42			0.40	

Intersection Summary
Area Type: Other
Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 17.5 Intersection LOS: B
Intersection Capacity Utilization 65.6% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

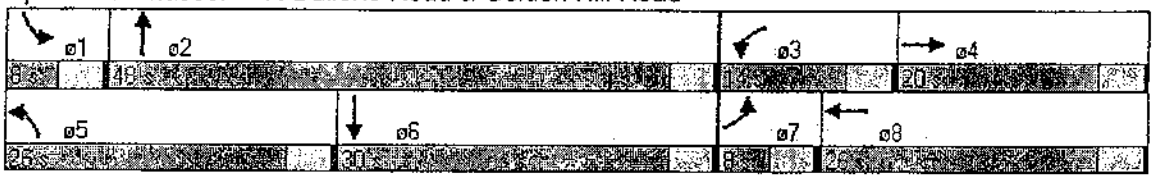
Splits and Phases: 7: Dallons Road & Golden Hill Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50		50	50		50	50	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Turning Speed (mph)	15		9	15		9	15		9	15		9
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.855						0.960			0.998	
Flt Protected	0.950			0.950			0.950					
Satd. Flow (prot)	1770	1593	0	1770	1863	0	1770	3398	0	1863	3532	0
Flt Permitted	0.950			0.950			0.950					
Satd. Flow (perm)	1770	1593	0	1770	1863	0	1770	3398	0	1863	3532	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		332						81			1	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Link Speed (mph)		35			30			30			30	
Link Distance (ft)		2860			522			2702			674	
Travel Time (s)		55.7			11.9			61.4			15.3	
Volume (vph)	9	10	305	150	30	0	352	327	120	0	797	10
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	10	11	332	163	33	0	383	355	130	0	866	11
Lane Group Flow (vph)	10	343	0	163	33	0	383	485	0	0	877	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Detector Phases	7	4		3	8		5	2		1	6	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	8.0	20.0		8.0	20.0		8.0	20.0		8.0	20.0	
Total Split (s)	8.0	20.0	0.0	14.0	26.0	0.0	26.0	48.0	0.0	8.0	30.0	0.0
Total Split (%)	8.9%	22.2%	0.0%	15.6%	28.9%	0.0%	28.9%	53.3%	0.0%	8.9%	33.3%	0.0%
Maximum Green (s)	4.0	16.0		10.0	22.0		22.0	44.0		4.0	26.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	C-Min		None	C-Min	
Walk Time (s)		5.0			5.0			5.0			5.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effct Green (s)	4.3	8.7		9.9	21.0		23.8	59.4			31.6	
Actuated g/C Ratio	0.05	0.10		0.11	0.23		0.26	0.66			0.35	
v/c Ratio	0.12	0.76		0.83	0.08		0.82	0.21			0.71	
Control Delay	44.4	16.2		73.3	26.7		46.9	5.8			30.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	44.4	16.2		73.3	26.7		46.9	5.8			30.6	
LOS	D	B		E	C		D	A			C	
Approach Delay		17.0			65.5			23.9			30.6	
Approach LOS		B			E			C			C	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Length 50th (ft)	6	6	92	15			192	37			228	
Queue Length 95th (ft)	22	82	#200	38			#372	78			#350	
Internal Link Dist (ft)		2780		442				2622			594	
Turn Bay Length (ft)												
Base Capacity (vph)	85	556	197	465			483	2269			1240	
Starvation Cap Reductn	0	0	0	0			0	0			0	
Spillback Cap Reductn	0	0	0	0			0	0			0	
Storage Cap Reductn	0	0	0	0			0	0			0	
Reduced v/c Ratio	0.12	0.62	0.83	0.07			0.79	0.24			0.71	

Intersection Summary
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 29.0 Intersection LOS: C
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 7: Dallons Road & Golden Hill Road



Attachment 5
Correspondence

Circle B Springs Homeowners Association

Attn: Frank Mecham
Susan DiCarli
City of Paso Robles
1000 Spring Street
Paso Robles, Ca 93446

Dear Mr. Mecham,

Thank you for agreeing to meet with the residents of Circle B Springs and members of the Circle B Springs Homeowners Association. Here is a tentative proposal of our agenda. Please inform us if there are any subjects you would like to include in our meeting.

Sincerely,

Dennis Spoolstra 239-8426
Victoria Berg 239-7888
Lydia McCowin 226-9171
Fax 226-9170

Meeting: August 8
3:00 pm

1. Zoning change
2. Environmental Impact Report
3. Access
4. Traffic Study
5. Neighborhood concerns

Joseph A. McCowin, MD
3635 Golden Hill Rd.
Paso Robles, CA 93446
Ph. 805-226-9171 Fax. 805-226-9170

August 5, 2007

City of Paso Robles
Attn: Susan DiCarli
1000 Spring Street
Paso Robles, CA 93446

Dear Ms. DiCarli,

I would like to thank you for taking the time to review the proposed zoning change with me for the Mundee project across the street from our property. I've had time to process what you told me and do some research on my own.

The City of Paso Robles is considering changing the zoning on that parcel (on Golden Hill) by the request of the Mundees for an RV Resort. The Initial Study therefore should reflect what that particular projects impact would have on the surrounding area **before** a zoning change occurs. And it should be a full EIR.

The current Initial Study done by The City of Paso Robles is incomplete and shows no impact at all of the existing neighborhoods. The City is planning on a mitigated negative declaration on that study. According to CEQA all of the resource categories should have been considered and studied, they were not. That would include Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Mineral Resources, Noise, Population and housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems. Attached are those pages from the CEQA Deskbook. The owners of that property knew there was an existing residential neighborhood when they purchased that property, if they actually wanted to be good neighbors they would have gotten a full EIR to start with.

Comparing to what it is currently zoned from RA to POS on your zoning matrix the majority of uses are the same. The one thing that is being proposed to go there is probably the only thing that would be strongly opposed by our association and

surrounding neighborhoods. When you see that some rural property is going to be zoned to "Parks and Open Space" one thinks of hiking, nature trails and bike paths for the residents of Paso Robles. Not an RV Resort. Also on your web site it shows that there has been another proposal for another RV park on Airport Road. How many RV Resorts do we really need???

Please include this letter in you administrative record.

Sincerely,

Agatha McCowan

cc:
Ron Whisenand Community Development Director
Tom Flynn
Margaret Holstine
Ron Johnson
Mike Menath
Ed Steinbeck
Chuck Treatch
Christine Waters

Figure 2-8. Environmental Effects That May Be Considered Significant

This table lists effects that may be considered significant under CEQA. See the model Initial Study Checklist, Appendix G of the CEQA Guidelines, for a complete listing.

Resource Category	Type of Activity A project may be considered to have a significant environmental effect if it will:
Aesthetics	• Adversely affect a scenic vista • Damage scenic resources • Degrade existing visual character • Create a new source of light or glare
Agricultural Resources	• Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance • Conflict with existing zoning for agricultural use or Williamson Act contracts • Cause other impacts on or conversions of Farmland
Air Quality	• Conflict with or obstruct implementation of air quality plan • Violate air quality standards • Contribute a cumulatively considerable net increase of a criteria pollutant in a non-attainment area • Expose sensitive receptors to substantial pollutant concentrations • Create objectionable odors affecting a substantial number of people
Biological Resources	• Adversely affect endangered, threatened, or rare species • Adversely affect habitat of such species • Adversely affect wetlands under jurisdiction of Section 404 of the Clean Water Act • Interfere with movement of native resident or migratory species • Conflict with policies or ordinances protecting biological resources • Conflict with an adopted Habitat Conservation Plan or other type of approved biological habitat management plan
Cultural Resources	• Adversely affect the significance of a historical resource (defined by Guidelines sec. 15064.5) • Adversely affect the significance of an archaeological resource (defined by Guidelines sec. 15064.5) • Destroy a unique paleontological resource or geologic feature • Disturb any human remains
Geology and Soils	• Expose people or structures to risk of loss, injury, or death from (1) earthquake, (2) strong seismic groundshaking, (3) seismic-related ground failure, including liquefaction, or (4) landslides • Result in substantial soil erosion or loss of topsoil • Be located on unstable soil • Be located on expansive soil • Have soils incapable of supporting proposed septic system use
Hazards and Hazardous Materials	• Create a public hazard through transport, use, or disposal of hazardous materials • Create a public hazard through upset or accident involving release of hazardous materials • Emit hazardous emissions or involve handling hazardous materials within one-quarter mile of an existing or proposed school • Be located on a site that is listed as hazardous by CAL-EPA • Result in safety hazards near a public or public-use airport or private airstrip • Impair implementation of an adopted emergency response or evacuation plan • Expose people or structures to risk of loss, injury, or death involving wildland fires
Hydrology and Water Quality	• Violate water quality standards or waste discharge requirements • Substantially deplete groundwater supplies or interfere with groundwater recharge • Substantially alter existing drainage patterns, resulting in substantial increase in erosion or surface runoff and causing flooding • Create or contribute to runoff that exceeds drainage system capacity • Otherwise substantially degrade water quality • Place housing within a 100-year flood hazard area • Impede or redirect flood flows within a 100-year flood hazard area • Expose people or structures to significant risk of loss, injury, or death from flooding • Contribute to inundation by seiche, tsunami, or mudflow

(continued next page)

Resource Category	Type of Activity A project may be considered to have a significant environmental effect if it will:
Land Use Planning	• Physically divide an established community • Conflict with land use plans, policies, or regulations • Conflict with Habitat Conservation Plans or other type of approved biological habitat management plan
Mineral Resources	• Result in loss of a known valuable mineral resource • Result in the loss of availability of a locally important mineral resource identified in an approved land use plan
Noise	• Expose persons to noise levels exceeding established standards • Expose persons to excessive groundborne vibration • Substantially increase ambient noise (temporary, periodic, or permanent) • Expose people to excessive noise near a public-use airport or private airstrip
Population and Housing	• Induce substantial population growth • Displace a substantial number of existing housing units or people, necessitating construction of replacement housing
Public Services	• Result in substantial adverse physical effects from construction of new or altered governmental facilities needed to maintain acceptable service ratios, response times, or other performance objectives for (1) fire protection, (2) police protection, (3) schools, (4) parks, or (5) other public services
Recreation	• Increase the use of existing neighborhood and regional parks, resulting in physical deterioration • Result in substantial adverse physical effects from construction of new or altered recreational facilities
Transportation and Traffic	• Substantially increase traffic relative to existing load and capacity • Exceed an established level-of-service standard • Result in a change in air traffic patterns • Substantially increase hazards due to design or incompatible uses • Result in inadequate emergency access • Result in inadequate parking capacity • Conflict with adopted alternative transportation policies, plans, or programs
Utilities and Service Systems	• Fail to comply with wastewater treatment requirements of Regional Water Quality Control Board • Require or result in the construction of new or expanded water or wastewater treatment facilities • Require or result in the construction of new or expanded stormwater drainage facilities • Exceed existing water supplies • Exceed existing wastewater capacity • Exceed existing landfill capacity • Conflict with federal, state, and local statutes and regulations related to solid waste

less than cumulatively considerable through mitigation, the Initial Study must briefly indicate and explain how the contribution has been mitigated. Guidelines sec. 15064(i)(2).

A Lead Agency may determine that a project's contribution to a cumulative impact is not "cumulatively considerable" if the project will comply with the requirements in a previously approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process. Examples of this concept include project-specific compliance with mitigation measures in a water quality control plan, air quality plan, or integrated waste management plan. Guidelines sec. 15064(i)(3).

Paso Robles Main Street Association

835 12th St. Suite D, Paso Robles, CA 93446 805-238-4103 Fax 805-238-4029

July 31, 2007

RECEIVED
CITY MANAGER
AUG 03 2007
CITY OF PASO ROBLES

Mayor Frank Mecham
and members of the City Council
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446

RE: Paso Robles Motorcoach Resort - Ken Mundee

Dear Honorable Mayor Mecham and Members of the City Council:

Ken Mundee has proposed a much-needed motorcoach resort development for the north end of Golden Hill Road. The Downtown Paso Robles Main Street merchants support this development as an asset to our growing tourist-friendly economy. As the "Baby Boomers" retire, these luxury motorcoaches are becoming a very popular way to tour the country, and this development would be specifically tailored to the needs of motorcoaches.

The downtown would greatly benefit from a development of this sort as tourists explore our historic downtown for shopping, dining and wine-tasting experiences. Please favorably consider Mr. Mundee's proposal as an asset to our growing tourist-related economy.

For Better Downtowns Everywhere. . .

Norma Moye
Executive Director

NM:sca

cc: Ken Mundee

7-24-07

City Council: City of El Paso De Robles, 1000 Spring St. Paso Robles, Ca. 93446

Subject : Problems with the General Plan Amendment 06-003/Rezone – Golden Hill Road.

It is requested that a full Environmental Impact Declaration be completed before the project is rezoned. The reasons are specified below.

The rezoning of the area (currently Agricultural/Airport Overlay) into Parks and Open Space/Airport Overlay) actually sounds good. When one thinks of parks/open spaces, one thinks of a city park, golf course or another place where people can go to enjoy themselves. However, this is not the case in the present situation. Make no mistake the rezoning is solely for the benefit of a couple of developers, certainly not a large number of people. I t is a euphemism for a park that includes over 600 cement R/V Spaces which in that area in reality amounts to a giant parking lot.

On the face of it this is very inconsistent with the idea of Parks and Open Spaces. This is a Kit Fox area, a winter Migratory path for deer and Eagle Habitat. Only a few people will benefit. An R/V Park of this magnitude seems inconsistent with this and how are these issues going to be addressed?

There are several other problems. Drainage is one. Next to and south of this development is a light industrial complex. This development is not even ten percent filled and already there are drainage problems. It was supposed to be one hundred percent drained to Huera Huera Creek but only two thirds is currently being drained. One third has yet to be connected to any drainage facilities. Additional drainage problems

exist along Dallons Rd. and Golden Hill Road. Nearly every year flooding occurs on several county parcels on Golden Hill Road, Wisteria and Circle B Springs Rd. At times the flooding has become so serious that a couple of years ago the county filed a complaint with the city to deal with the problem. Nothing has been done and the complaint is still outstanding. Meanwhile the flooding just gets worse every year except in a year of very little rain like last year.

Another problem is the tremendous changes going on in the area causing an already unacceptable traffic problem at Highway 46 and Golden Hill Rd. It is doubtful that simply adding a couple of traffic lanes on Golden Hill Rd. will deal with the problem. As mentioned, the light industrial area adjacent to the proposed development is only 10 percent filled. Paso Robles Ford recently moved into the area. The full impact of this has yet to be determined. West of Paso Robles Ford is another Industrial Park in which the Roads, Lots and Utilities are completed but has yet to have any building . Imagine what additional traffic and other environmental problems this will create when buildings and people are added and this is only the beginning. A huge Lowe's center is in the works for a large area West of Golden Hill Rd. and north of Highway 46. While this is not being opposed it will cause a tremendous amount of additional traffic and other environmental problems. Imagine the addition of 600 R/V spaces that not only include the Huge R/V but usually have a car attached to them.

The large number of R/V's will create additional noise, headlights and pollution which is incompatible with our current development.

Additionally there is a problem to the entrance to the RV Parking lot itself. The current entrance is inadequate. In order to remedy this problem, the developers are

suggesting that the city take county property (my property) which would give them additional space for an entrance. To the west of the proposed project is a private 5 acre agricultural gated community that is an association (Circle B Springs association) . They suggest that the gate can be moved outside my property and to the property north of the existing gate and the rest of the people can only enter, not exit the new gate. Evidently, exiting the gate will interfere with their proposed development and therefore will not be permitted. They propose the city take over a county dedicated road which is in the city master plan and extends all the way to Dry creek road. Currently, the road is used privately and is gated. Obviously, the plan is to destroy "Circle B Springs" as an association. We all know that development will eventually require the city to take over the road but to do so now for the benefit of a couple of developers seems very irresponsible. For the benefit of all it would seem that if the project is seriously considered, an alternative entrance would be required. Progress is one thing, Socially Responsible Progress is quite another.

Sincerely,

Dennis Spoolstra

Dennis Spoolstra, Vineyard Owner

3615 Golden Hill Rd., Paso Robles

c/c Planning Commission

John Falkenstein, City Engineer

Susan De Carli, City Planner

Attorney Belsher

cc: Ron W., Pl, CC, Mundee
John F.

Ms. Susan K. De Carli, AICP
City Planner, Community Development Dept.
City of El Paso de Robles
1000 Spring Street
Paso Robles CA 93446

July 24, 2007

Dear Ms. De Carli:

Thank you for meeting with us this afternoon in regard to the proposed zoning change for the Mundee Motorcoach Resort Project. We now have a better idea of the approval process and how we should be participating at this stage.

As we stated, the property for the proposed development is directly across the street from us. We are concerned with a myriad of factors associated with the project, including:

1.) Zoning change from agricultural use to open space and recreation use.
2.) Potential traffic, pollution and noise effects from simultaneous new projects, when existing changes to Golden Hill Rd. and Highway 46 from prior projects have not been addressed (i.e. gas stations, Water Park).
3.) Incompatibility of a motorcoach resort with the existing residential neighborhood.
4.) Drastic negative impact on property values and lifestyle changes associated with close proximity to an RV resort.
5.) Noise, headlights, and pollution from RV traffic.
6.) Impact on wildlife, including eagles, foxes, deer and other animal species .
7.) Altering the location of the Circle B Homeowner's Association gates and roads in ways that negatively affect existing residents.
8.) Compounding existing city drainage issues that already impact our association at the south gate.

When we purchased our property, we checked into the zoning of the property across the road, and found it to be zoned agricultural. Because our association and surrounding homes abut the property, we never dreamed an inappropriate "recreational vehicle" use for this property would be a remote consideration.

The homes located across the street from this zoning change are all million dollar "ranchette" type properties. The RV proposal will do serious damage to the value of our properties and retirement prospects, from financial to environmental impacts.

Sincerely,

Scott and Victoria Berg

Scott and Victoria Berg
3649 Golden Hill Rd.
Paso Robles CA

Circle B Homeowners Association

Golden Hill Road, Paso Robles. California 93446

July 2,2007

Mr. Ken Mundee
Paso Robles Motorcoach Resort
1495 Creston Road, #148
Paso Robles, CA 93446

Dear Mr. Mundee:

Thank you for the invitation to a presentation of your proposed Motorcoach Resort on your property adjacent to the Circle B Home Owners Association. However, we are unalterably opposed to such an inappropriate and destructive usage for that agriculturally-zoned acreage, and so are uninterested in attending such a presentation.

Thank you.

Circle B Home Owners

Scott and Victoria Berg
Jim and Mabel Bond
Mathew and Lauren Bryant
Jeffrey and Jennifer Carey
Frank and Melissa Cueva
Joe and Lydia McCowin

Conrad and Sharon Penn
Chester Simon
Dennis and Maria Spoolstra
Brian Thorndyke
Don and Julie Whitmore

Cc: Ron Whisenand, Planning and Community Development Director
John Falkenstein, City Engineer
Mayor Frank Mecham
City Council Members John Hamon, Gary Nemeth, Duane Picanco, Fred Strong

Jeff Carey 3927 Golden Hill Road Paso Robles, CA 93446 805-226-9485

July 2, 2007

Mr. Ken Mundee
1495 Creston Road #148
Paso Robles, CA 93446

Dear Mr. Mundee:

We received notice of your meeting to review your proposed development of the property contiguous to Circle B Ranch. We will not attend, as we are opposed to the proposed use.

We are opposed to having a RV Resort for many reasons:

1. We and our neighbors, who will speak for themselves when and if the time is necessary, moved to a low density, gated community for the peace and quiet it offered. With a limit to one single-family unit per five acres, we seemed assured of the density we desired.
2. As a retired Sr. VP and District Mgr. of Grubb & Ellis Commercial Real Estate, I was often called on to voice my opinion about "highest and best" use of land, and which uses are more compatible than others etc,
3. Your proposed use with its very high density does not complement or add to a harmonious mix of uses. In fact it will adversely affect the value of our land, which currently boasts of its peace and quiet.
4. Ag land will eventually disappear from this wine based economy and more cannot be manufactured. Napa is angry at itself for rezoning good grape land as they are running out of usable grape growing acreage.
5. Our opinion is that RVs are mobile homes. Take away the word mobile, and your proposed use is prohibited in the Airport Restricted Use policy.
6. We don't appreciate the fact that you are attempting to use a "technicality" to skirt the intention of the ordinance. We don't appreciate the fact that you cut roads without a permit.
7. Your use coincides with ours for busy times like the weekend and Holidays. A use such as Light Industrial is an example of a compatible neighbor for our use, as their employees are not often present on weekends and Holidays, giving us peace and quiet, at our higher use time frame.
8. There are many issues such as noise, light, congestion, etc. that can become arguments against your use and they will surface in the appropriate time frame.

I have participated in land use issues many times and, with council, am prepared to counter your proposal.

Sincerely,

Copies to: Frank Mecham, Mayor
John Hamon, Gary Nemeth, Duane Picano and Fred Strong, City Council
Ron Whisenand, Planning Director
John Falkenstein, City Engineer
Circle B Ranch Homeowners Association

June 10,2007

Mr.Ron Whisenand, Community Development Director
The Paso Robles City Planning Department
1000 Spring Street
Paso Robles, Ca. 93446

Dear Mr. Whisenand:

Re: The City Plot 435 Golden Hill Rd.

I wrote to you back in October about our concern over the development of an RV Park next to us. I understand that as a property owner within 300 feet of the subject property that we were to be notified before any permit was issued. I came home last week; and to my surprise their were survey stakes all over the property and new roads were cut in.

Please inform us on what is happening with this property as soon as possible.

Sincerely,

Sharon Penn

Sharon Penn
3915 Golden Hill Rd.
Paso Robles, Ca. 93446
e-mail–Penn@ tcsn.net

June 10, 2007

Mayor Frank Mecham
City of Paso Robles
1000 Spring Street
Paso Robles, CA 93446

Dear Mayor Mecham:

As residents of Golden Hill Road, Circle B Estates, we am very concerned about, and opposed to, the proposed RV Park being considered on the property across the street. This property is between Golden Hill Road and Airport Road and known as the Mundee property or project..

Last week a grader was cutting a few roads in the property and we are not aware that a permit has been issued for this. We have been told, but have not seen ourselves, that a number of oak trees have been tagged - for possible removal?

Some of the issues that greatly disturb us are:

1. Population density in the Airport corridor. If the development of well spaced homes was denied in the past, why would 600 RV spots be acceptable?

2. Our quiet residential area would be negatively impacted by the constant noise of RV's coming and going at all times of the day and night. The noise of the RV people, their music, parties, pollution, the street lights along the roads, headlights and traffic all would make it prohibitive to live in the Circle B Springs Estates. Property values would plummet.

3. The intersection of Golden Hill Road and Hwy. 46 East, which would be the road to the entrance, is already a congested, unsafe area. Truck traffic is heavy, cars dash in and out of the gas stations and there are times it is necessary to wait through a light to the next light to cross Hwy.46 East.

4. There is already a problem with water runoff from properties near Hwy.46 East.. Because of the grading of the new Business Park on Golden Hill Road north of Hwy. 46 East, the rain runoff has been exacerbated and completely encircles the home of one of our neighbors. Heavy equipment is already moving soil on the Mundee property and more grading has the potential to make this problem worse.

5. What will this development do to the water supply? It is my understanding that city water comes from the same aquifer those of us on wells draw from. Last year water was low and the city was encouraging residents to cut back on usage. This has been another dry year and the extra usage from the Park would endanger the water levels even more. The static level of our water well has dropped over 135 feet in the past five years. Our water pump sits only 60 feet from the static level and only 10 feet above the bottom of our aquifer. With the addition of the proposed RV Park, the demand for their water would certainly lower our aquifer level to the point of requiring residents of Circle B Springs Estates to drill new water wells.

6. We also have concerns about how these added residents, even if transient, will impact the city emergency response services i.e. police, fire and medical. Then there is trash, can that be handled more than adequately?

7. A pair of Golden Eagles have nested on that property since we moved here eight years ago. At this time they have been chased away by the activity of the machinery and may never come back.

Please very carefully consider all the aspects of this RV Park. Needless to say, we am opposed to it and we don't want to see and hear any RV's on the property destroying the beauty of the area.

Sincerely,

Mabel Bond J. Bond

Mabel and Jim Bond
3725 Golden Hill Road
Paso Robles, CA 93446
805-237-8930
jbondvineyard@msn.com

cc The City Council: Gary Nemeth, John Harmon, Duane Picano and Fred Strong
The Planning Commission: Margaret Holstine, Tom Flynn, Ron Johnson, Mike Menath, Ed Steinbeck, Chuck Treatch and Christie Withers
The Community Development Director: Ron Whisenand
The Emergency Services Director: James L. App

Copies also received for Planning Commissioners.

Joseph McCowin, MD
Lydia McCowin
3635 Golden Hill Road
Paso Robles, Ca. 93446
Ph. 805-712-5881 Fax 805-226-917

May 30, 2007

Mr. Ron Whisenand, Community Development Director
The Paso Robles City Planning Department
1000 Spring Street
Paso Robles, CA 93446

Dear Mr. Whisenand:

We are writing in regards to the proposed zoning change and development of an RV Resort on City Plot 435. We want to inform you of the reasons why we oppose this proposed development.

We are concerned about the water usage, water run off, noise, lights, traffic, and the pollution that such a huge development would have on our community.

We attended a city meeting a few years ago regarding this property. At that time Woody Woodruff owned it and proposed building one home per twenty acres. The City Planners stated they didn't want that type of density in the airport flight path. Certainly the City should oppose the much higher density of 600 RV slots on this property.

We are particularly concerned that there has been a major amount of grading in progress on the property this week and according to the planning department no permit has been issued. This causes us to wonder what amount of development will occur on this property without the proper zoning changes or permits.

Sincerely,

Joseph McCowin MD, Lydia McCowin

Joseph McCowin MD, Lydia McCowin


SITE OF
FUTURE
CLUBHOUSE

PROOF OF PUBLICATION

LEGAL NEWSPAPER NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

Newspaper: Tribune

Date of Publication: July 13, 2007

Meeting Date: August 14, 2007 (Planning Commission)
September 18, 2007 (City Council)

Project: General Plan Amendment 06-003 and Rezone 06-005 (Mundee RV Park – Golden Hill Rd. no. of 46E)

I, Lonnie Dolan, employee of the Community Development Department, Planning Division, of the City of El Paso de Robles, do hereby certify that this notice is a true copy of a published legal newspaper notice for the above named project.

Signed: _____
Lonnie Dolan

forms\newsaffi.691

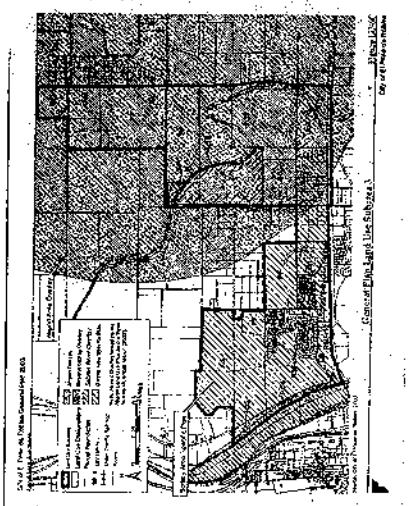
CITY OF EL PASO DE ROBLES

NOTICE OF PUBLIC HEARINGS

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION, GENERAL PLAN AMENDMENT 06-003 AND REZONE 06-005

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of El Paso de Robles will hold a Public Hearing on Tuesday, August 14, 2007, and the City Council will hold a Public Hearing on Tuesday, September 18, 2007. Both meetings will be held at 7:30 p.m. at the City of El Paso de Robles, 1000 Spring Street, Paso Robles, California, in the City Council Chambers, to consider a Mitigated Negative Declaration in accordance with the provisions of the California Environmental Quality Act (CEQA) for the following project:

General Plan Amendment and Rezone request to amend the land use designation and zoning for property located on Golden Hill Road north of Highway 46 from Agricultural/Airport Overlay to Parks and Open Space/Airport Overlay. (APNs 025-431-037 and -038. See attached Location Map.



The public review period for the Mitigated Negative Declaration (MND) is from July 13, 2007 through August 11, 2007. The proposed MND may be reviewed at the Community Development Department, 1000 Spring Street, Paso Robles, California. Copies may be purchased for the cost of reproduction.

Written comments on the proposed Amendments and corresponding MND may be mailed to the Community Development Department, 1000 Spring Street, Paso Robles, CA 93446, provided that the comments are received prior to the time of the public hearing. Oral comments may be made at the hearing. Should you have any questions regarding this application, please call Susan DeCarli at (805) 237-3970.

If you challenge this application in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission at or prior to the public hearing.

Susan DeCarli, AICP
City Planner
July 13, 2007

6610123

CITY OF EL PASO DE ROBLES

"The Pass of the Oaks"

AFFIDAVIT

OF MAIL NOTICES

PLANNING COMMISSION/CITY COUNCIL PROJECT NOTICING

I, Shaun Temple, employee of the City of El Paso de Robles, California, do hereby certify that the mail notices have been processed as required for GPA 06-003/RZ 06-005 on this 20th day of July 2007.

City of El Paso de Robles
Community Development Department
Planning Division

Signed: _____
Shaun Temple

forms\mailaffi.691