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EL DORADO HILLS BUSINESS PARK

DRAFT ENVIRONMENTAL IMPACT REPORT

PLANNING
ANSWERS
1982

SCH # 82070503

ABOUT THIS DOCUMENT

This Draft EIR meets all of the requirements of the California Environmental Quality Act (C.E.Q.A.). However it is not divided into the distinct sections that the EIR Guidelines suggest. This document is organized into the following components:

Executive Summary

Setting - Impact - Mitigation

Alternatives

Technical Studies

Appendix

Cumulatively they satisfy all of the requirements of the California Environmental Quality Act. Table 1 shows where in this document each requirement is found.

This document was prepared for El Dorado County, The lead agency in this project. The County staff has examined this document, and have incorporated their comments.

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ALTERNATIVES

TECHNICAL STUDIES

APPENDIX

TABLE 1.

CEQA REQUIREMENTS	TABLE OF CONTENTS	BASIC PROJECT DATA	DESCRIPTION OF PROJECT	SUMMARY	LAND USE	SOILS	WILLIAMSON ACT CANCELLATION	CUMULATIVE IMPACTS OF CANCELLATIONS	EMPLOYMENT	POP-HOUSING SCHOOLS	WATER	SEWAGE	FIRE	TOXICS	GEOLOGY	ARCHEOLOGY	NOISE	TRAFFIC CIRCULATION	AIR QUALITY	IMPACTS NOT SIGNIFICANT	ALTERNATIVES	PERSONS CONTACTED
DESCRIPTION OF PROJECT		X	X																			
ENVIRONMENTAL SETTING		X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	
SIGNIFICANT EFFECTS				X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
UNAVOIDABLE IMPACTS				X	X		X		X	X	X	X	X	X	X		X	X	X			
MITIGATION MEASURES				X	X	X	X		X	X	X	X	X	X	X	X	X	X	X			
ALTERNATIVES																					X	
CUMULATIVE IMPACTS				X	X			X	X	X								X				
IRREVERSIBLE IMPACTS					X	X	X				X	X					X					
GROWTH INDUCING IMPACTS					X		X	X	X	X												
IMPACTS NOT SIGIFICANT																				X		
PERSONS CONTACTED																						X
WATER QUALITY											X	X								X		

BASIC PROJECT DATA

PROJECT NAME:	El Dorado Hills Business Park
LOCATION:	South of Highway 50 and White Rock Road. West of Latrobe Road in the unincorporated portion of El Dorado County (see Figure 1).
PROPOSED USE:	Applicants plan to develop a high technology industrial business park on a 909 acre site Typical facilities contemplated include assembly plants, research laboritories, warehouses and business offices and a 55 acre, nine hole golf course. Proposed zoning allows the development of up to 50% of the site.
GENERAL PLAN/ ZONING:	The General Plan designates the site as Industrial. The site is enrolled in the Williamson Act. The current zoning is Exclusive Agricultural.
DISCRETIONARY ACTIONS:	Cancellation of the Williamson Act Contract No. 124 (1070 acres) Lead agency: El Dorado County Rezone the entire 1070 acres from Exclusive Agriculture (AE) to Research and Development (R&D). Lead agency: El Dorado County. Deletion of the Exhibit in the Open Space Element. Lead agency: El Dorado County Annexation into fire and irrigation districts. Lead agencies: El Dorado Hills County Water District (Fire) and El Dorado Irrigation District (Sewer). First phase of the project involves the development of a 909 acre industrial and business park. Development of the remaining 161 acres may occur at a later date. Lead agency: El Dorado County,
APPLICANTS:	Williamson Act cancellation and rezoning: John and Robert Euer Annexations and ultimate project: Kimbur Resources Inc. Bill Cotten, President.

DESCRIPTION OF PROJECT

A. LOCATION

1. Regional

The project is located in the Western Corridor of El Dorado County, south of Highway 50, near the El Dorado County and Sacramento County boundary. The City of Sacramento is approximately 23 miles to the west of the site; the City of Placerville lies 18 miles to the east. Figure 1 illustrates the regional location.

2. Local

As shown on Figure 1, the project is located about three-eighths of one mile south of Highway 50, and directly south of White Rock Road. Latrobe Road, which provides the principle access, forms the easterly boundary of the project. The unincorporated community of El Dorado Hills lies directly north of the project on the northern side of Highway 50.

B. PROJECTS

1. Williamson Act "Window" Cancellation

The applicants propose to cancel Williamson Act Contract No. 124. This contract consists of six parcels totaling 1070 acres. A copy of the cancellation request is included in appendix A.

This cancellation is one of 19 requests totalling 7979 acres the County is processing under the procedures specified in AB 2074 (Chapter 1095, Statutes of 1981). This law creates a one time special "window" for cancelling contracts by changing the "findings" local governments must make.

2. Rezoning from Exclusive Agriculture to Research and Development

The applicants are proposing to rezone the entire 1070 acres to the Research and Development Zone. This zoning district provides

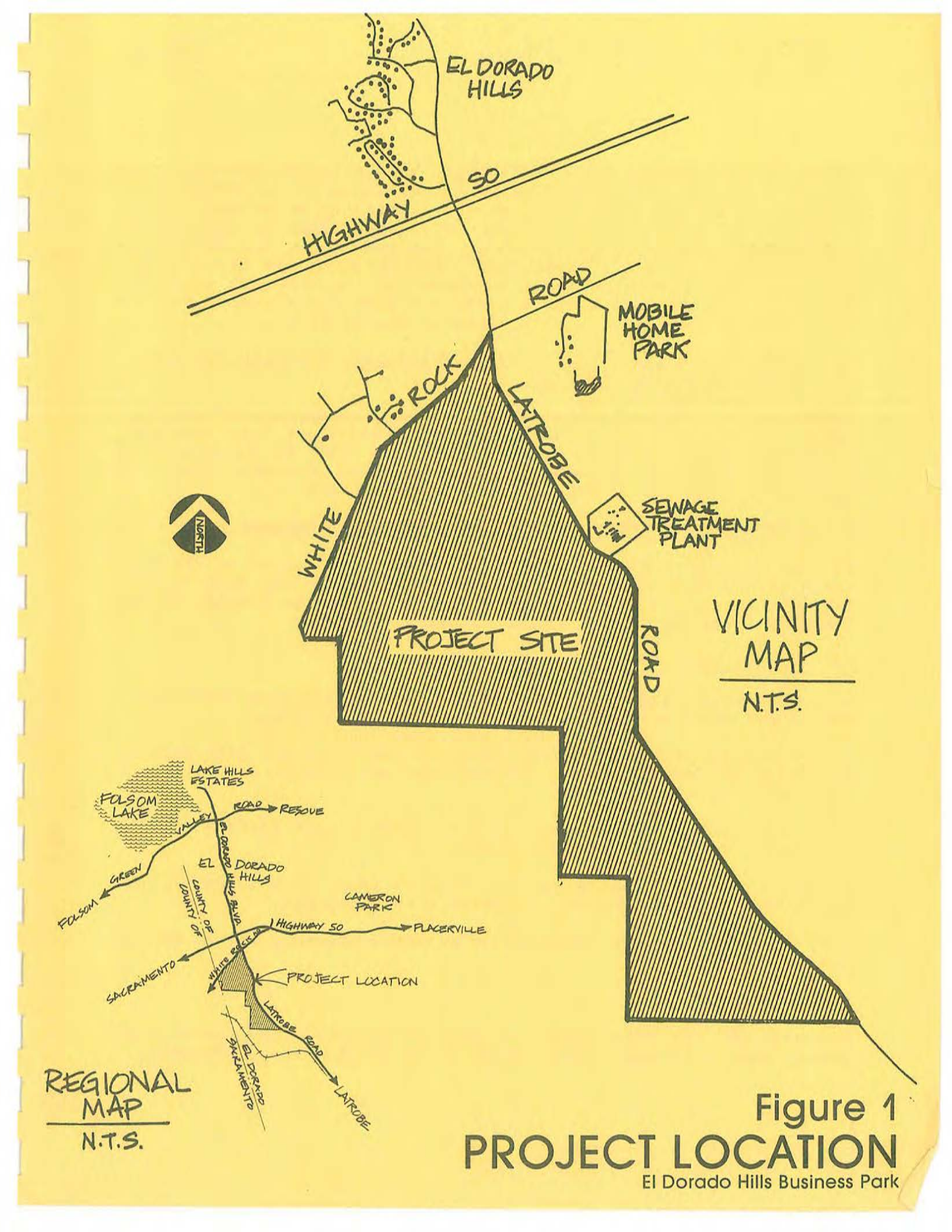

Figure 1

PROJECT LOCATION

El Dorado Hills Business Park

areas to accomodate high technology, non-polluting manufacturing plants, business offices and related facilities in a campus like setting. Up to 50% of the site may be covered by buildings. A full description of the Research and Development Zone is included in Appendix B. The site is presently designated on the El Dorado County General Plan as "Industrial". The Research and Development Zone is consistent with this designation. A citizens advisory group is currently preparing a community plan for the area but the completion of the plan is still several months away.

3. Annexation to the El Dorado Fire Protection District and the EL Dorado Irrigation District

The project currently lies outside the jurisdiction of any fire protection service area that provides structural fire control. Consequently the site must annex into the El Dorado Fire Protection District. In order to receive sewer service, the site must annex into the El Dorado Irrigation District.

4. Development of a High Technology Industrial/Business Park

Kimbur Resources Inc. proposes to develop 909 acres of the Euer Ranch into a high tech industrial/business park. The Euer family intends to retain 161 acres and have no plans to develop it The "park" will be developed in the following manner:

(a) Project Objectives and General Description

- Construct a high quality industrial and business park that emphasizes aesthetic design and extensive landscaping.

- Create a project with a wide range of complimentary uses such as research and development, production, warehouses and high tech associated business offices.

- Attract firms seeking sites in areas with a high quality of life such as is found in El Dorado County.

- Construct a nine hole golf course so that recreational and business activities can be conducted simultaneously.

- Provide employment opportunities and diversify the El Dorado County economy.

(b) Infrastructure

- Drainage- the site would be drained by an underground pipe system that will empty into Carson Creek which crosses the site.

- Water- Applicant is currently negotiating for 1,000 acre feet of Folsom Lake Water. The water presumably would be transferred via the El Dorado Irrigation District.

- Sewer- Applicants intend to annex into the El Dorado Hills Irrigation District. An assessment district must be formed to finance the expansion of the system.

(c) Development Sequence

There are no present plans or scheduled when improvements will take place. Marketing the project will commence once all development permits are approved.

TABLE 1. SUMMARY OF IMPACTS AND MITIGATION MEASURES

CATEGORY	IMPACTS	MITIGATION MEASURES
LAND USE	Will add an additional 1070 acres of light industrially zoned (R&D) land. Ultimate project will induce new growth into area. Secondary growth may create conflicts with agricultural uses	Limit new light industrial zoning in order to direct new industry into existing industrially zoned areas. Examine land use plans to determine if revisions are necessary to cope with new development. Require preparation of focused EIR's to determine impact of new development on agricultural land.
SOILS	Soils rated as severe for septic tank systems. Soil depth and rocks will make utility excavations difficult. Quality of most soil will make landscaping difficult.	Require hookup to community sewage treatment system. Top soil should be imported for landscaping.

CATEGORY	IMPACT	MITIGATION
WILLIAMSON ACT	Elimination of 1070 acres of rangeland Reduce cattle production by 192 head (not including calves).	Overall agricultural production may be better served by allowing development to occur in foothills where soil has lower productivity value.
CUMULATIVE IMPACT OF WILLIAMSON ACT CANCELLATIONS	The county may lose up to 7979 acres of range land. May result in 766 fewer head of cattle.	Loss probably not as severe as stated. Some land is in parcels to small for grazing. County should consider requiring rangeland management permits (see Appendix F). The County should explore adopting land use planning techniques to slow conversion of range land (see Appendix F).
EMPLOYMENT	Project could create up to 5624 direct and 3986 indirect jobs by 1990. Total jobs by 1990 - 9680. Project could create up to 23027 direct and 16119 indirect jobs by 2000. Total jobs by 2000 - 39146.	

CATEGORY	IMPACT	MITIGATION
POPULATION	Project could result in 5718 new County residents by 1990.	
	Project could result in 45414 new County residents by 2000.	
HOUSING	Project will create a demand for 2287 new housing units by 1990.	Impliment Housing Element. Especially policies regarding housing for low and moderate income residents.
	Project will create a demand for 18166 new housing units by 2000.	Establish density bonus provision in zoning ordinance.
	Project will create additional demand for low and moderate income housing.	Include inclusionary zoning provision in zoning ordinance.
SCHOOLS	Will increase enrollment by 1415 in 1990.	Continue to monitor residential development.
	Will increase enrollment by 11716 in 2000	Continue to charge impact fees.

CATEGORY	IMPACT	MITIGATION
WATER	On site: No significant impact. Regional: Induced growth will speed up the consumption of available water.	Regional: Develop new water sources or conserve.
SEWAGE DISPOSAL	On Site: No significant impact. Regional: Growth will reduce sewage treatment capacities.	Regional: Expand capacity by applying for grants or form assessment districts.
FIRE PROTECTION	Project not located in district that provides structural fire protection service. Hazardous and toxic substances may create difficult fire fighting situations. Project may create need for additional fire personnel or equipment.	Annex into the El Dorado Hills Fire Protection District. Annexation, mitigation fees, and increased tax revenues will pay for increasd service requirements. District should review all building plans and reccommend measures to reduce fire danger. County or District should adopt a right to know ordinance.
SOLID WASTE	Project will diminish useable life of landfill	County should consider solid waste sites in update of planning documents

CATEGORY	IMPACT	MITIGATION
TOXIC SUBSTANCES	May create problems in the following ares: 1. Transportation 2. Storage 3. Use and Handling 4. Disposal	Construct onsite disposal facilities. Minimize use of toxic substances or recycle them. Require above ground or vault storage of toxic substances
GEOLOGY	Site has a seismic index rating of 4. Site has a seismic hazard exposure group rating of II. Site has a seismic performance category rating of C.	Use seismic criteria to design and construct buildings.
ARCHEOLOGY	Site ranges in sensitivity from moderate to high for prehistoric and historic resources.	Conduct an archeological survey of the area before construction occurs.
NOISE	Primary noise generator is traffic.	Reduce traffic or spread traffic peak over several hours.

CATEGORY	IMPACT	MITIGATION
TRAFFIC	Traffic generated from the project will require improvements by 1990. Additional improvement will be needed to handle year 2000 traffic load.	Construct a wide variety of improvements to surrounding roads. Specific improvements are cited in TJKM study. Mass transit and staggering work hours may reduce peak traffic by up to 20%.
AIR QUALITY	Business Park will result in few emissions. Major emissions are from traffic and dust from construction.	Dust during construction can be abated by scheduling grading during periods of high soil moisture content. Reducing trip lenghts can reduce air pollution. Reduce dependence on automobile.

LAND USE

A. SETTING

1. On Site

Existing on site improvements include two homes, a barn and a cluster of out buildings located on 10-15 acres in the northwestern portion of the ranch. The remaining acreage is winter rangeland. Since 1969, the site has been classified as Industrial on the General Plan. Industrial designation of the property can be traced back to 1962 when a master plan of the area was prepared. The ranch was enrolled in the Williamson Act in 1971. The site is presently zoned Exclusive Agriculture (EA). The Research and Development (R&D) zoning requested by the applicants is consistent with the General Plan. The R&D zoning allows light, "clean" industry. The zoning requires that all proposed facilities be subject to a design review procedure before building plans are submitted. The zoning allows no more than 50% building coverage. The availability of community water and sewer service determines the minimum parcel size for this zoning.

2. Adjacent Uses

To the North a 255 acre 173 lot subdivision has been approved. Several custom homes have been built and several sections of road constructed. This area is shown on the General Plan as High Density and Multi-Family Residential, but is zoned for Rural residential. The area between these homes and Latrobe Road is designated as Commercial but is zoned as Agriculture. The actual use of the land is uncertain but it is believed that it may still be used for grazing. The residential community of El Dorado Hills is located north of Highway 50. El Dorado Hills is extensively subdivided and is served with a community water and sewer system. An 18 hole golf course, commercial uses and several schools form the other principle land uses in this area.

The 883 acre Russell ranch lies northwest of Highway 50. The Russell ranch is in an agricultural preserve, but is one of 19 Williamson Act cancellation requests the county has received. The owners cited the increased urbanization of the area as one reason for the cancellation request. The El Dorado Agricultural Commission, an advisory body to the Board of Supervisors, has recommended approval of the cancellation request.

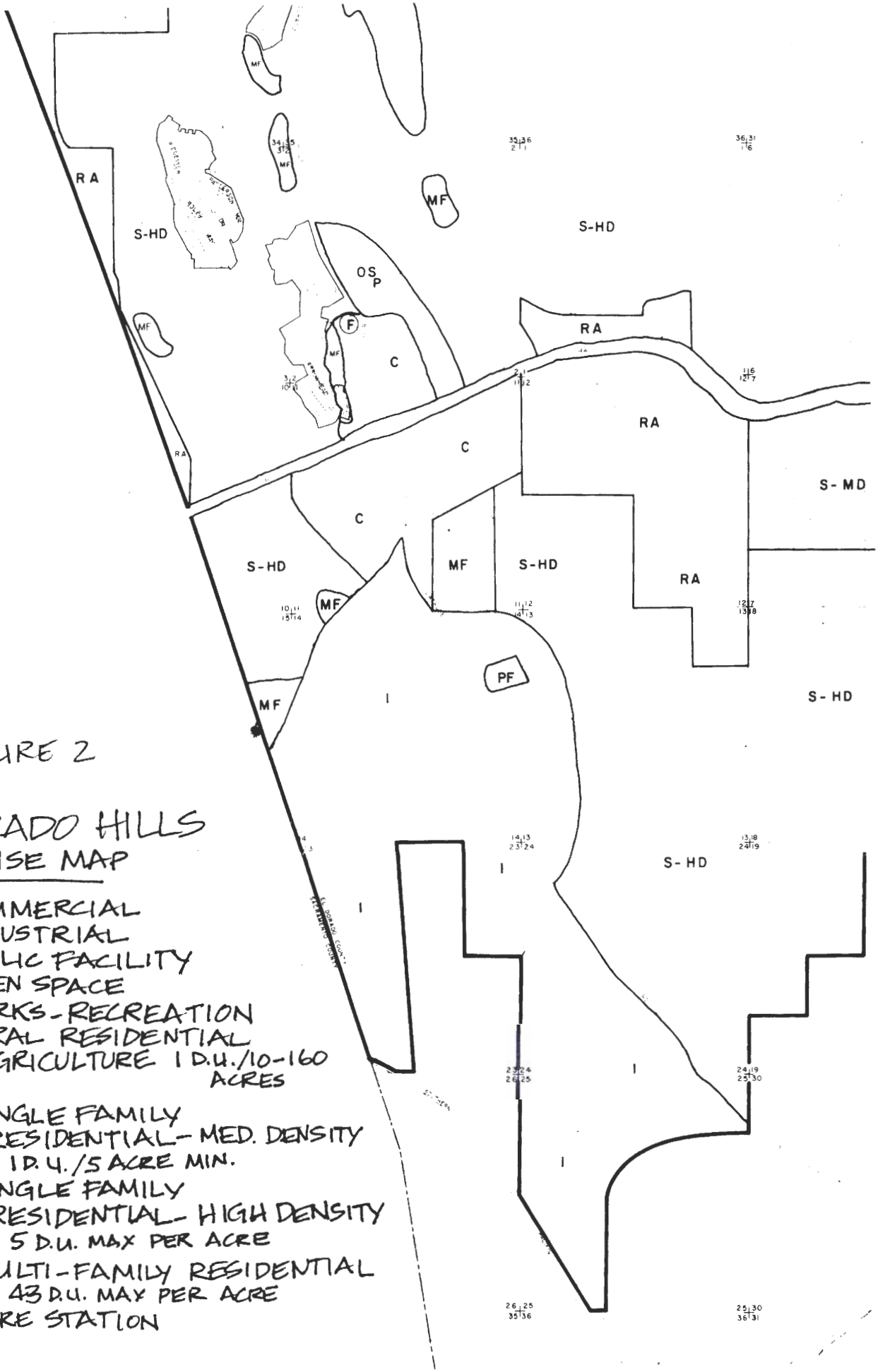

FIGURE 2

EL DORADO HILLS
LAND USE MAP

C – COMMERCIAL
I – INDUSTRIAL
PF – PUBLIC FACILITY
OS – OPEN SPACE
P – PARKS-RECREATION
RA – RURAL RESIDENTIAL AGRICULTURE 1 D.U./10-160 ACRES

S-MD – SINGLE FAMILY RESIDENTIAL – MED. DENSITY 1 D.U./5 ACRE MIN.

S-HD – SINGLE FAMILY RESIDENTIAL – HIGH DENSITY 5 D.U. MAX PER ACRE

MF – MULTI-FAMILY RESIDENTIAL 43 D.U. MAX PER ACRE

F – FIRE STATION

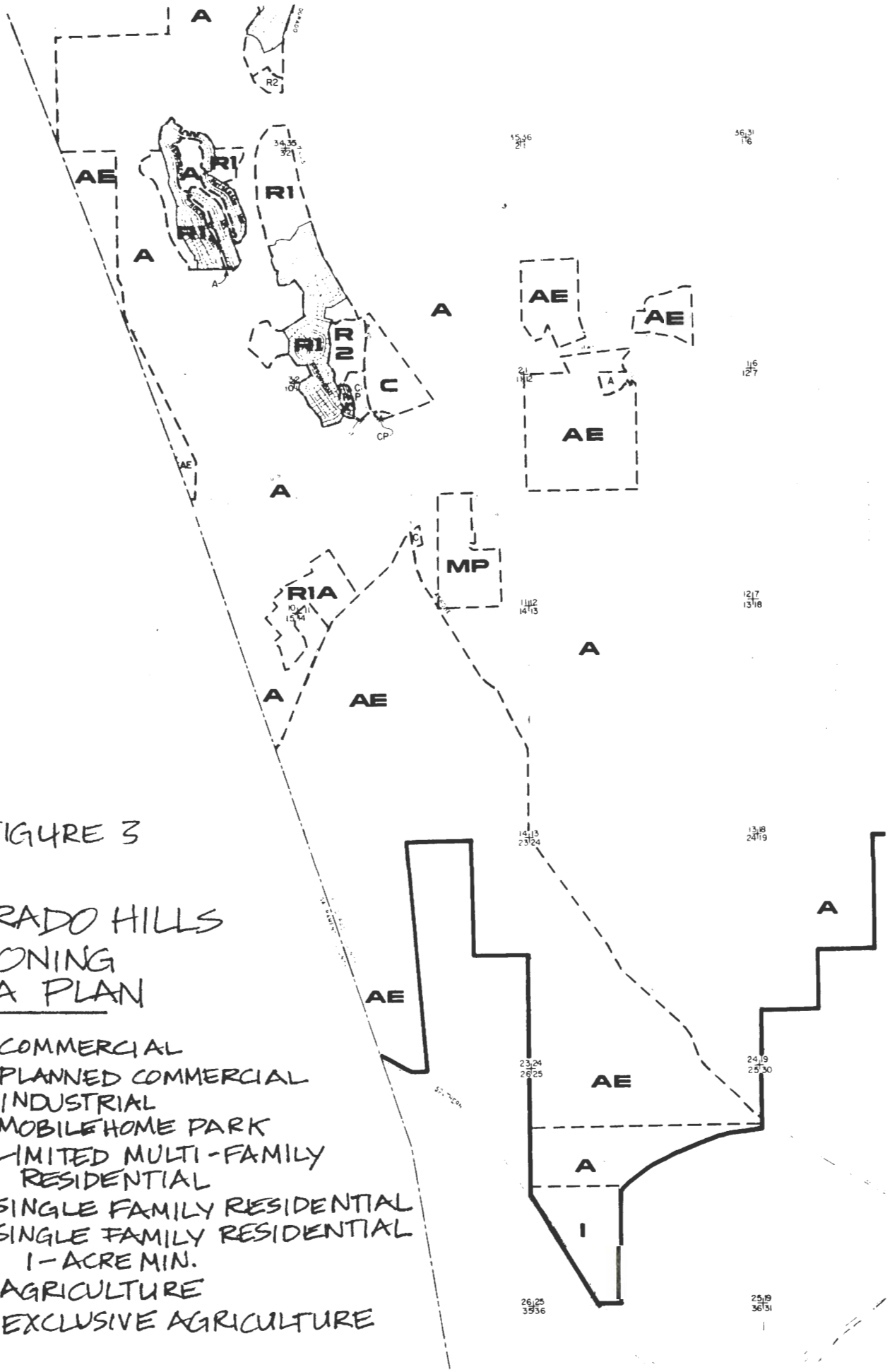

FIGURE 3

EL DORADO HILLS ZONING AREA PLAN

C – COMMERCIAL
CP – PLANNED COMMERCIAL
I – INDUSTRIAL
MP – MOBILEHOME PARK
R2 – LIMITED MULTI-FAMILY RESIDENTIAL
R1 – SINGLE FAMILY RESIDENTIAL
R1A – SINGLE FAMILY RESIDENTIAL 1-ACRE MIN.
A – AGRICULTURE
AE – EXCLUSIVE AGRICULTURE

To the East the terrain is rolling and is used as winter range. The EID Sewage Treatment Plant, a one hundred unit mobile home park and the El Dorado Hills Community Service District Office are the most notable land uses. One hundred ninty acres, south of the treatment plant, are General Plan designated as Industrial and was recently rezoned to Research and Development. Additional industrially designated land lies north of the treatment plant but the terrain will probably preclude this type of use for some time.

To the South is a forest products industry that manufactures boxes. This property is designated and zoned for industrial use. Further to the south, land is used as winter range and zoned Exclusive Agriculture and Rural Residential - 80 acre minimum.

To the West is winter rangeland. This land is shown as Industrial on the General Plan but zoned for Exclusive Agriculture. The land between the site and the Sacramento County border is enrolled in the Williamson Act. The land to the northwest in Sacramento County is part of the Russell Ranch mentioned earlier. This 2500 acre ranch is under Williamson Act contract and is being considered for cancellation by Sacramento County. It is currently zoned Exclusive Agriculture and planned as Urban Reserve. The area northwest of Highway 50 is within the City of Folsom Sphere of Influence and is designated as Low-Low-Density Residential on their General Plan.

3. Other Industrial Land

According to the El Dorado Chamber of Commerce, about 500 acres are designated and zoned for industrial use. Roughly 50% is vacant and parcel sizes are relatively small. The small parcels have inhibited the recruitment of industries requiring large parcels for their operations. There are currently two planned industrial parks in the process of development. One is 71 acres the other one about 52 acres. These estimates do not include the 190 acres east of Latrobe Road.

A recent survey by the City of Sacramento shows that there is presently between 1,000-3,000 acres of industrial land that could accomodate high technology development in Sacramento County.

B. IMPACT

Rezoning the land will make an additional 1070 acres available for light industry. This may result in slower buildout of land already designated and zoned for industrial use in both El Dorado

and Sacramento Counties. If the project is perceived by other developers as being successful, both El Dorado and Sacramento Counties may receive additional proposals for industrial use in this area.

The project will also induce more residential and commercial development into the area. Short commutes to the project area is the primary factor influencing this growth. New growth is likely to occur in and around the Cities of Folsom and Placerville and the residential communities of El Dorado Hills and Cameron Park. The housing section in this report estimates the number of new residential units needed to accomodate new residents.

The project itself will have minimal impacts on surrounding agricultural operations. However, the introduction of additional urban/suburban uses into the area may eventually result in other agricultural enterprises curtailing their operations. For example, the proximity of residential uses makes it difficult for ranches to operate efficiently and profitably. Trespass, vandalism and marauding dogs divert the attention of the operator and cost him money. These problems combined with present day cattle prices, make it nearly impossible to operate at a profit.

C. MITIGATION

El Dorado and Sacramento Counties may wish to limit zoning additional land for light industry. This would have the effect of directing new light industrial development into existing industrially zoned areas.

El Dorado and Sacramento Counties should determine if new land use plans are needed to direct new development. Additionally, as requests are made for residential development in cattle grazing areas, the County should require a focused EIR to determine the probable impacts on agriculture.

SOILS

A. SETTING

A soil survey of the site was conducted by Grant Kennedy a registered soil scientist. His full report is found in the technical studies component of this report.

The topography of the area is undulating to moderately sloping. The soils are shallow to moderately deep over hard metamorphased rock. They are somewhat stony in character and have numerous rock outcroppings. The principle soils are the Auburn series found on the higher topography; the Argonaut series found on footslopes, swales and saddles and; the Perkins series which lies along stream courses.

The Auburn soils occupy about 65% of the site. These soils consist of 12 to 24 inches of silt loam over fractured rock. They are stony and are interspersed with rock outcroppings. Approximately 75% of the Auburn soils have a land capability rating of Class VI. The remaining 25% are Class IV because of fewer rock outcroppings.

Approximately 20% of the site is Argonaut series soils. These soils are moderately deep over bedrock and have fewer rock out-croppings than the Auburn soils. The Argonaut soils have a Class IV land capability rating.

The Perkins soils occupy about 15% of the property. These soils are found along narrow stream bottoms and are subject to occasional flooding or overflow during wet seasons. These soils have a Class III land capability rating.

The soils are representative of much of the typical range land in the lower foothills and the surrounding area. The annual grasses provide forage during the late winter and early spring months. Rock out-croppings and shallow soil conditions limit the use of the land to grazing uses.

B. IMPACT

The agricultural potential of this property is for range land. Although several hundred acres could be planted to irrigated pasture, this use seems unlikely in view of the high price of land, development, (grading, fencing, installation of irrigation system), and water costs. These costs, would appear to discourage this type of land use. Although the deeper Perkins soils could support some selected crops, their low-lying position makes them subject to flooding and frost hazard. In addition, the long and narrow configuration of this soil prevents efficient cultivation. For these reasons, the site has little potential as cropland.

The El Dorado Area Soil Survey Report (1974), reports no severe restrictions for foundations of buildings and structures. Soil depth and rocks will make utility, excavation and grading operations difficult.

Soils in this area are rated as severe for septic tank systems because of poor percolation qualities. The use of the property for residential purposes requires community sewage system available for use.

Landscaping the site may be difficult because of the quality of soil in the area.

C. MITIGATION

The soil conditions of the site would severely restrict the use of septic tank systems. The County should require any use to annex into the El Dorado Irrigation District to obtain sewage treatment service or to be served by a county approved sewage treatment system.

To meet the landscaping requirements of the zoning, top soil should be imported.

WILLIAMSON ACT

A. SETTING

The Williamson Act or the Land Conservation Act of 1965 allows property owners to voluntarily enroll their land in an agricultural or open space preserve in exchange for reduced property tax assessments.

The purposes of the Act are:

- Protect a limited supply of agricultural land that is necessary for the State's economic resources and to assure the production of food and fiber for the future residents of the State and nation.

-Discourage premature development which may result in discontinuous development patterns.

-Preserve agricultural land for its open space value.

Contracts can be terminated by filing a notice of non-renewal. This procedure terminates the contract in 10 years, cancellation on the other hand, terminates the contract immediately.

The case of Sierra Club vs City of Hayward, (1981 28 Cal. 3d 840) defined the requirements for cancelling Williamson Act contracts. However, the State legislature felt the requirements were too stringent and passed AB 2074 (Chapter 1095, Statutes of 1981) into law. This law allows local governments to cancel contracts using a one time only, less stringent findings procedure.

The Euer Ranch was enrolled in the Williamson Act in 1971. The Euer's have applied to cancel contract under the AB 2074 procedures. A copy of their cancellation request is included in Appendix A.

The ranch is used as winter range land. On the average, the ranch supports about one cow and calf per 6 acres from November to June (FN-1). At this rate, the ranch can support about 192 head, not including calves. In June the cattle are trucked from this site to another Euer ranch in the high sierra for summer grazing.

A recent environmental impact report prepared for the Russell Ranch Williamson Act Cancellation (FN-2) contains a pertinent discussion of the economics of raising beef cattle. Because of the relevance of this discussion, pages 13-16 are incorporated by reference into this document and are included in Appendix C. To summarize the information in the EIR, profitable cattle operations are rare because of the high production costs. Generally, over the last seven years stock operators have lost money every year. A summary of the studies are shown in Table 2.

In addition to the poor economics of the cattle industry, the Euer's have cited problems associated with the suburbanization of the area. Trespass, damage to fencing and roaming dogs have made it increasingly difficult to run a profitable operation.

On August 11, 1982, the applicants appeared before the El Dorado County Agricultural Commission to review their cancellation request. The Commission voted unanimously to recommend approval of the cancellation. In reaching their decision, the Commission considered the impact of the proposed use on the surrounding lands and determined that light industry would not affect agricultural uses in the immediate area.

B. IMPACT

The project will ultimately eliminate 1070 acres of range land and reduce cattle production by about 192 head (not including calves) per year. Based on the Agricultural Commissions' findings, the project will not have a significant adverse impact on surrounding agricultural uses. A copy of these findings are found in Appendix D.

C. MITIGATION

In evaluating the loss of agricultural productivity an important factor to consider is the value of this site compared to sites in the valley being considered for high technology uses. For example, the Natomas areas around the I-5 and I-880 interchange and sites in southern Sacramento County, are actively being considered for high technology development similar to that proposed for the El Dorado Hills Business Park. However these sites have a higher agricultural productivity value than the Euer Ranch. Overall, agricultural productivity may be better served by allowing development such as this to occur on soils with lower agricultural value.

TABLE 2

SUMMARY OF STUDIES
NET RETURNS FROM STOCKER OPERATIONS
(DOLLARS PER HEAD)

YEAR	AREA	NET RETURN
1973	ELDORADO COUNTY	-21.15
1974	EASTSIDE - STANISLAUS CTY	-54.40
1974	CENTRAL COAST REGION	-5.00
1976	CENTRAL COAST REGION	-27.51
1979	SACRAMENTO VALLEY REGION	-25.26
1979	COASTAL REGION	35.79
1980	EASTSIDE - STANISLAUS CTY	-45.80

SOURCE: DEIR RUSSELL RANCH
WILLIAMSON ACT CANCELLATION

CUMULATIVE IMPACT OF ALL WILLIAMSON ACT CANCELLATIONS

A. SETTING

The proposed Euer Ranch Williamson Act cancellation is one of 19 requests, totalling 7,979 acres. A complete list of all proposed cancellations is shown in Appendix E. These requests are all being processed under the special "window" procedures.

B. IMPACT

According to the 1978 U.S. Census of Agriculture, there are 161,273 acres of non-irrigated range land in El Dorado County. This includes both private and publically owned land. A loss of 7979 acres amounts to less than 5% of the total County rangeland. According to the U.S. Department of Agriculture, the County produced a total of 15,500 head of cattle in 1981 (FN-3). When this figure is combined with the 161,273 acres of range land, an average of one head of cattle per every 10.4 acres results. By applying this average to the 7979 acres being considered for cancellation, 766 fewer head of cattle will be produced each year.

However, the loss of this much productive range land and cattle is probably overstated. Some of the land has little range land value because of their small size. Six cancellations involve parcels less than 100 acres. making their utility as productive range land suspect. Additionally, it is doubtful that cancelling the Williamson Act Contracts will immediately signal the end of cattle raising operations. Instead, cattle raising will probably be phased out as the land is ultimately developed into rural residential use. Lastly, the proposed zoning for these parcels requires fairly large parcels (10-80 acres). Parcels this size are large enough to allow owners to raise cattle for their own consumption. This should partially offset the loss of cattle due to the cancellations.

C. MITIGATION

The County should consider requiring the preparation of range land management plans as a condition for approving discretionary permits (parcel maps and use permits) on contracted range land. A management plan would lay out steps to improve the soil and manage the resources that cattle grazing are dependent on. A management plan could recommend proper stocking requirements for the season, the length of grazing time and proper water development.

Marin County has adopted a management plan requirement similar to this. However, since their management plan requirement is tied to approving commercial uses on agricultural lands, only one plan has been approved to date.

Other mitigation measures the County may wish to pursue are found in Appendix F.

EMPLOYMENT

A. SETTING

The total El Dorado County labor force is 35,675. This includes self employed persons but not the high number of County Residents employed in Sacramento and Stateline, Nevada (FN-4).

The major categories of employment include service (24%), government (26%), and trade (26%), other categories of employment include mining/construction, manufacturing, finance/insurance/real estate, transportation, communications/utilities, and agriculture. Tourism is the major employer in the county. Fifty percent of the total work force is in the service and trade industry which primarily represents tourist-related business.

The County's employment opportunities have stagnated. Between 1980 and 1981 the County gained only 225 jobs. At the same time, unemployment rose by 275, reaching 3,775 in 1981. Unemployment was 9.4% in 1980 and 10% in 1981. Current unemployment is estimated at 11.1%. In the "western corridor" area of the County, unemployment is about 11.3% (FN-5).

In addition to the high unemployment rate, there is high employment leakage. This means that many people work outside the County. For example, in the western corridor area of the County, it is estimated that of a total labor force of 19,954 about 7,196 or 36% work in Sacramento (FN-6).

B. IMPACT

1. Forecasting Direct Project Employment

Forecasting employment from this project involves two steps. The first is to construct a schedule of "buildout", the rate at which the site will be covered by new tenants' floorspace. The second is to combine the buildout rate with a schedule of employee density. By multiplying the number of workers who occupy a given floor area by the amount of floor coverage, we can anticipate the total number of jobs created by the project.

2. Buildout Rates

Three distinct parcels are included in this analysis. The three parcels are shown in Figure 4. The bulk of the land is in one parcel of 854 net acres (909 acres minus 55 acres earmarked for a golf course); this parcel is subject to the most buildout. Other parcels include the 190 acres located east of Latrobe Road and the 161 acres the Euer family intends to retain. The 190 and 161 acre parcels are included in this analysis as it is necessary to determine employment at these sites before the traffic impact can be determined.

The main 854 acre parcel can be expected to achieve 40% buildout by 1990, with full buildout at the earliest in 2000. Under the R&D zoning classification no more than 50% of the site may be covered by buildings. It is highly improbable that more than 40% buildout will occur by 1990 since the development process is a long and laborious one. Customarily, the search for industrial tenants cannot begin until the zoning and permits are in order. Even assuming early success in signing a major tenant, the infrastructure must be put in place and then the tenant must design, put out to bid and construct a sophisticated production facility. All these actions are subject to time consuming review.

The second parcel of 190 acres is expected to achieve 20% buildout in the year 2000. This represents a buildout rate 50% slower than the larger 854 acre parcel. This rate is based on the assumption that the parcel will attract tenants whose business is ancillary to the project's manufacturers and will begin operating only after the projects' manufacturers are established.

Although the Euer family has no intention to develop their remaining 161 acres, it is included in this scenario as 50% buildout by the year 2000. It is assumed that as surrounding acreage becomes increasingly valuable, the Euers will eventually sell their remaining parcel for high tech development. These buildout schedules are summarized in Table 4.

2. Worker Densities

Another component of the employment forecast is employment density. This is the number of jobs that can be supported on each acre of land. Evidence for determining this figure comes from a report issued in 1980 by the City of Sunnyvale called Characterictics of Sunnyvale Industrial Development. Based on information from 60 electronics firms, each employing 100 workers, the report estimates employee density as follows:

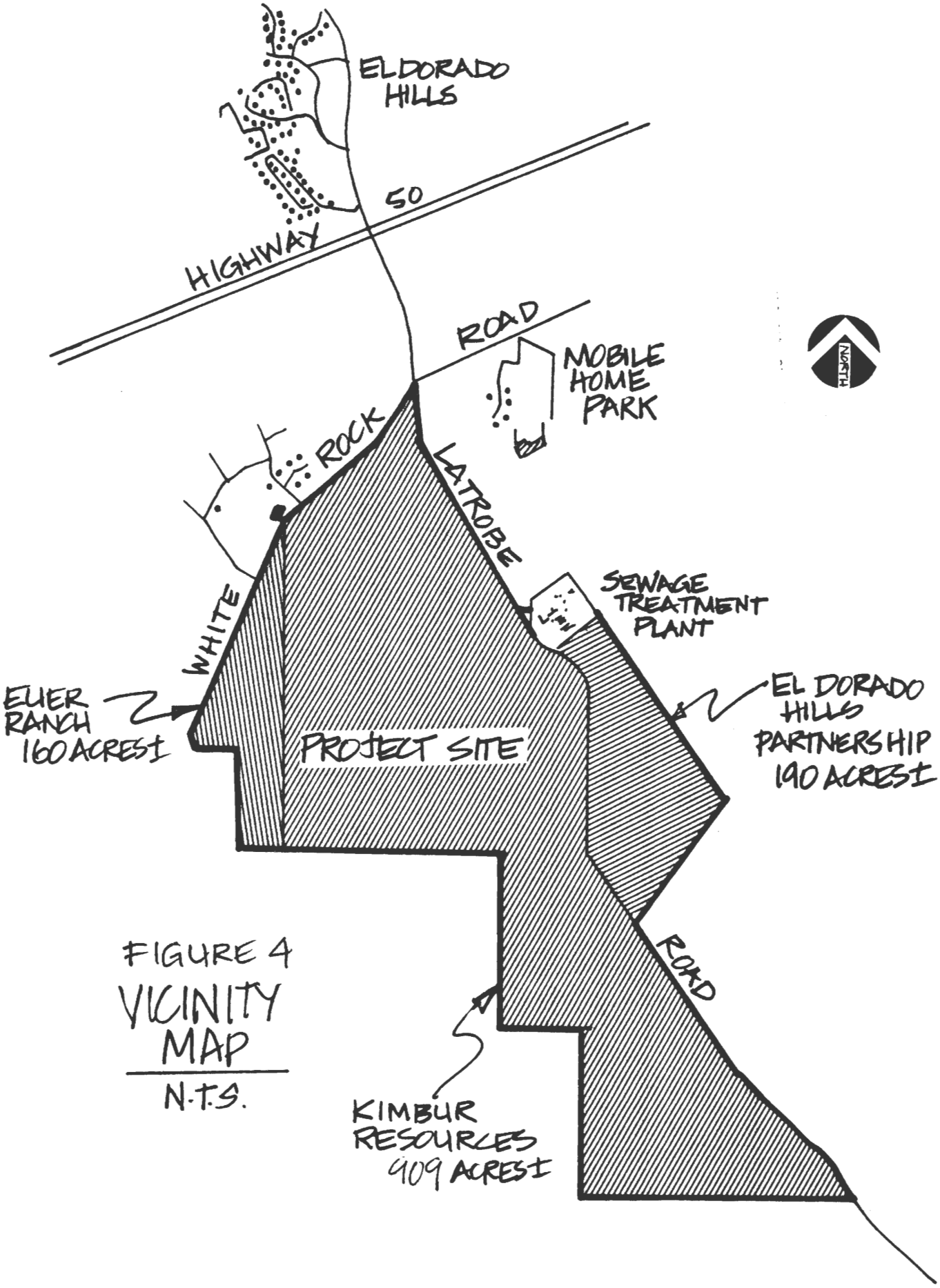

FIGURE 4
VICINITY MAP
N.T.S.

TABLE 4

FORECAST BUILDOUT RATE
EL DORADO HILLS PROJECT

YEAR	PARCEL	854	190	EUER(161)
1990		40%	20%	0%
2000		100%	50%	50%

For work involving production, central administration, or research and development - 50 employees per acre.

For work involving warehouse and other functions - 25 employees per acre.

3. Densities in the Project

It is highly unlikely that this project's densities will match those of Sunnyvale's. The cost of project land will range from one quarter to one tenth the cost of land in Sunnyvale. This should considerably relax the pressure for dense building. Four other considerations should dilute Sunnyvale-like densities. First, the zoning limits building coverage to 50% of the site. Secondly, the zoning requires a campus-like environment which implies more than typical industrial landscaping. Third, the progressive substitution of automation for manual labor will lower employment densities. Lastly, development in Sunnyvale proportions would run contrary to community sentiment which values the rural character of the area.

Given these considerations, an employee density of 35 employees per acre is used in this study.

4. Phasing Employee Density

Most high tech companies phase in their operations and workforce. That is to say they progressively add to their operation and hire new employees. To determine a phasing schedule, the plans of two Roseville electronics firms, Hewlett-Packard and Electronic Arrays were examined. Both firms have purchased property, obtained their development permits and expect to open new facilities in 1985. Hewlett-Packard owns 500 acres. Electronic Arrays purchased 73 acres. Hewlett-Packard plans to commence its' first phase of operations with 4,655 employees (9.3 employees per acre) and will ultimately phase in 22,000 workers. Electronic Arrays plans to initially employ 600 (8.2 employees per acre), and eventually phase in 1,500 workers by 1990. These two cases suggest that the density of 15 employees per acre, used in this study as a starting point for initial employee density, is plausible and conservative. In summary, a density of 15 employees per acre, will occur as land is initially developed. Land developed in 1990 will increase to 35 employees per acre by the year 2000. The analysis of employment was curtailed at 2000 because forecasting employment after this date is highly speculative. Automation of the labor force may actually result in fewer employees than cited above.

5. Combining Buildout and Employment Densities

Table 5 multiplies the outlined buildout and density schedules and expresses their product as total direct employment in the years 1990 and 1995 and 2000. Results of these calculations are: In 1990 - 5,694 jobs will be created, in 1995 - 14,301 jobs will be created, and in 2000 - 23,027 jobs will be created.

6. Forecasting Indirect Employment

The labor market impact of a new industrial project extends beyond the direct creation of jobs at the project site. Each new worker creates a demand for additonal economic activity. For instance new industry will create new business for local trucking firms, who in turn will hire new workers. This is called indirect or secondary employment.

In order to estimate the indirect employment impacts, this study uses the multiplier developed by Angus McDonald and Associates in their study of high tech development in the City of Sacramento (FN-7). In this study, a multiplier of 1.71 was used to determine indirect employment. This means that for every direct job, .71 indirect jobs will be created. Table 6 shows that the project will result in the creation of 3,986 indirect jobs in 1990 and 16,116 indirect jobs in 2000.

7. Total Jobs Created

By combining direct and indirect employment the following results:

1990 - 9,680 total jobs

2000 - 39,146 total jobs

C. MITIGATION

Employment impacts require no mitigation.

TABLE 5

DIRECT EMPLOYMENT

YEAR	ACREAGE	BUILDOUT	EMPLOYEE DENSITY	WORKERS SUBTOTAL	WORKERS TOTAL
1990	854	.4	15	5,124	5,694
	190	.2	15	570	
1995	854	.4	25	8,540	14,361
	854	.3	15	3,843	
	190	.2	25	950	
	190	.15	15	428	
	161	.25	15	600	
2000	854	.4	35	11,956	23,027
	854	.6	15	7,686	
	190	.2	35	1,330	
	190	.3	15	855	
	161	.5	15	1,200	

TABLE 6

TOTAL EMPLOYMENT ALLOCATION
McDONALD MULTIPLIER

	DIRECT JOBS	ADD'L-7 INDIRECT	TOTAL DIR&INDIR	DIRECT in EL DORADO	INDIR. in EL DORADO	TOTAL in EL DORADO
1990	5,624	3,986	9,680	3,701	1,196	4,897
1995	14,361	10,053	14,414	10,053	5,027	15,080
2000	23,027	16,119	39,146	17,270	11,283	28,554

POPULATION - HOUSING - SCHOOLS

A. SETTING

1. Population

According to the El Dorado County Housing Element, the County was one of the fastest growing areas of California between 1970 and 1980. During this period the County nearly doubled its' population. Inmigration, not natural increase has been and will remain the motor behind this growth. Table 7 shows 1970-1980 growth rate for the County and several sub-regional areas.

These rapid growth patterns are likely to continue as people from urban areas continue to seek a higher quality of life that they believe exists in California's foothills. Population projections prepared by the State Department of Finance show that the population of El Dorado County could be 117,000 by 1990 and 155,600 by 2000.

2. Housing

In 1980, there were 44,987 housing units in the County, includidng the two incorporated cities. Approximately 55% or 25,097 are on the west slope while 19,890 are within the Lake Tahoe Basin.

According to the El Dorado County Housing Element, single family dwellings account for 77% of the total housing stock and multiple family dwellings represent 15%. Mobilehomes increased significantly to represent 8% of the housing stock in the County.

Assembly Bill 2853 (Chapter 1143, Statutes of 1981) requires the Department of Housing and Community Development (HCD) to develop regional allocations of housing needs for all income levels to determine areas that must accomodate their "fair share". HCD has determined that the west slope of El Dorado County does not require a "fair share" plan at this time.

TABLE 7
EL DORADO COUNTY
POPULATION DATA

	1970	1975	1980	1970-1980 % of CHANGE
EL DORADO COUNTY	43,833	59,219	85,812	95.8
CITY of PLACERVILLE	5,416	5,809	6,739	24.4
CITY of SOUTH LAKE TAHOE	12,921	18,885	20,681	60.1
UNINCORPORATED WESTERN SLOPE			51,602	
UNINCORPORATED EASTERN SLOPE			6,790	

3. Schools

Information about El Dorado Schools and enrollment was not available on a county basis. The Superintendent of Schools recently prepared a document entitled Demographic Study and Faculty Needs (1980). The information it contains is detailed and specific to each of the 15 school districts it examines. For purposes of this report it is sufficient to say that rapid inmigration will result in steady enrollment growth. Elementary enrollment is expected to increase from 10,319 in 1979 to 19,500 in 2000. High school enrollment is expected to increase from 5,791 in 1979 to 9,500 in 2000. Enrollment in several districts currently exceed the capacity of the facilities. One is Buckeye Union Elementary School District in which the project is located.

B. IMPACT

1. Population

Although we may think of an industrial project in terms of jobs that it creates, these jobs are held by people and to a great extent it is the number of people and their characteristics that creates the impact from this project.

In order to forecast population increase from this project it is necessary to 1) determine how many jobs will be captured by existing residents, 2) the total number of workers that will reside within the county, 3) how many will be filled by inmigrants, and 4) the employment forecast must be inflated by a worker/non-worker ratio.

a. How Many Jobs Will The County Capture?

Studies prepared for the City of Sacramento to examine the effects of high tech development estimate that Sacramento is likely to capture only 13% of the new jobs created (FN-7). However, these estimates are for jobs captured by currently unemployed and underemployed workers. In estimating the local capture rates the studies did not include people that would enter the workforce if employment were available locally. "Urban Refugees", housewives, recent high school graduates and retirees make up the bulk of these persons. One way to verify this assumption is to examine the experience of two firms that recently moved to El Dorado County. One experience involves Diametrics Inc., a high tech type firm that manufactures automated welding equipment. Diametrics opened a plant about one year ago and about 66% of the people they

hired were from El Dorado County. Another example is that of Blue Shield, a medical insurance company, that opened a data processing company in Placerville. Of the 172 employees 168 (97%) were hired from El Dorado County. These high local employment rates can be partially attributed to the fact that the County sponsored a training program for Diametrics and that the companies are both located outside comfortable commuting distance from Sacramento. While it is unlikely that existing County citizens would capture high tech jobs at the rates cited above it is safe to say that the capture rate would be higher than cited in the McDonald study. For this report it was assumed that about 35% of the jobs created from this project will be filled by existing county residents. This estimate is conservative and the actual capture rate may be higher.

b. Indirect Employment

We now come to the question of indirect employment. We will also assume that about 35% of the indirect jobs in El Dorado County will be filled by existing county residents. Although fewer indirect jobs will be created initially, the county will progressively capture higher percentages of indirect employment. This study assumes that El Dorado County will capture only 30% of indirect employment in 1990 but the percentage will grow to 70% by 2000.

During the early phase of the project most new indirect jobs will be carried out by an expansion of existing businesses, the majority of which are in the Sacramento SMSA. As the county grows, its' capture rate for indirect employment should rise, reaching levels about the same as for direct employment. Table 6 shows the number of direct and indirect jobs that county residents will capture.

c. How Many Workers Will Live In The County

The greatest influence affecting the decision where workers will live is the price and the availability of housing in proximity to the project. The workforce was allocated according to assumptions concerning the present and potential availability and affordability of housing within a reasonable drive along each road. These allocations are:

- Looking north from Highway 50 interchange along El Dorado Hills boulevard, 20% of the workforce is allocated on the basis of proximity. This share will increase to 30% by 2000.

-Looking south from the interchange along Latrobe and White Rock Roads we allocate a 10% share in 1990, increasing to 15% in 2000. Although these routes are not designed to support heavy circulation, an abundance of inexpensive land and its' proximity should encourage housing construction.

- Looking east from the interchange, we allocate 35% of the workforce a share that should remain constant through the year 2000. This large share is probable in view of present reasonably priced housing near Placerville, the progressively beautiful scenery, and the relatively easy commute.

- Looking west to Sacramento, we allocate 35% of the workforce. This share decreases considerably to 20% by 2000. Sacramento's initially large share is likely because it is the regional center of culture. As El Dorado County establishes its' own identity the commute will lose its appeal.

Table 8 summarizes these allocations expressing them as county totals. Reading the top row, El Dorado's capture of the projects workforce is 60% in 1990, increasing to 75% in 2000. Sacramento's share is 40% in 1990, declining to 25% in one decade.

d. Inmigrant Population

To derive total inmigrant population we take the total employment allocations from Table 6, and subtract the jobs captured by present residents. a nonworker-to-worker ratio is then applied to this product. The nonworker-to-worker ratio is a measure of the economic active portion of the population. For every worker there are some persons not in the labor force. The nonworker-to-worker ration in 1980 was 1.31. In other words, for each working person, the county had an additional 1.31 persons not economic active. The result is a total of 5718 inmigrants in 1990 and 45,414 inmigrants in 2000. Table 9 displays the results.

2. HOUSING

Determining the number of housing units required by the inmigrants was a rather easy calculation. The basic procedure is to divide the total inmigrant population by the 1980 average household size of 2.6 persons per unit. The result of these calculations are that 2,287 additional dwelling units will be needed to house the inmigrants and 18,166 additional units for 2000. The number of housing units required by the inmigrants does not tell the entire story of the impact. Many high tech employees perform unskilled

TABLE 8

ALLOCATION OF THE
EL DORADO HILLS INDUSTRIAL PROJECT WORKFORCE *
BY COUNTY OF RESIDENCE

AREA	1990	2000
EL DORADO COUNTY	60	75
• EL DORADO HILLS	20%	30%
• EAST OF US. 50 (TOWARD PLACERVILLE)	35	35
• SOUTH ON LATROBE	5	10
SACRAMENTO SMSA	40	25
• WEST ON US. 80	35	20
• SW ON WHITE ROCK	5	5
	100%	100%

* THIS IS TOTAL DIRECT WORKFORCE:
"OLD" INHABITANTS AS WELL AS NEW IN-MIGRANTS.
SEE TEXT FOR EXPLANATION.

TABLE 9

PROJECT-GENERATED COUNTY IN-MIGRANTS

	DIRECT AND INDIRECT JOBS		NUMBER CAPTURED BY EXISTING RESIDENTS		INCREASE BY NON-WORKER TO WORKER RATIO		TOTAL IN-MIGRANTS
1990	4,897	-	2,411	x	2.30	=	5,718
2000	28,554	-	8,809	x	2.30	=	45,414

TABLE 10

HOUSEHOLDS AND HOUSING DEMAND GENERATED BY THE PROJECT

	IN-MIGRANT POPULATION		AVERAGE HOUSEHOLD SIZE		NO. OF HOUSEHOLDS		VACANCY FACTOR		NO. OF DWELLING UNITS REQ'D
1990	5,718	÷	2.60	=	2,199	×	1.04	=	2,287
2000	45,414	÷	2.60	=	17,467	×	1.04	=	18,166

or semi-skilled tasks that pay relatively low wages. For these workers, finding affordable housing will not be an easy task. Although the cost of housing in El Dorado County is less than the State average ($83,950 vs. $105,742) it is higher than most families of moderate income can afford.

3. SCHOOLS

In order to determine potential school enrollments we must make and assumption that the project inmigrants will resemble the age distribution of the inmigrants of 1970 - 1980.

Provided that we have made good assumptions about the age profile, the 0-19 age group forms the basis for forecasting the number of pupils who will attend county schools as a consequence of their family's involvement with the project firms. The gist of the method is to multiply the children in the age groups by a school participation rate. The product is the number of pupils. The resulting figures are displayed in Table 11.

C. MITIGATION

1. Population

No mitigation necessary.

2. Housing

The following efforts should be considered by the County in response to the additional demand created by this project:

-Implement the Housing Element - the County recently adopted a Housing Element that contains many strategies to provide housing to county residents. The Element also contains specific actions the County could carry out to assure that housing is available to its' low and moderate income residents.

-Establish density bonuses - County allowances could be made for project-specific density bonuses in return for providing a percentage of units for sale to below-market-rate home buyers at or near "cost" (unit construction cost plus financing). The increased density could result in "extra units" with free land, reduced site preparation and marketing costs, and reduced need for profit.

-Revise the zoning ordinance- include "inclusionary zoning" provisions that require new major residential projects to sell some percentage of the units at below market rates.

-Rezone Land- within a short commuting distance to high density residential zone. High density will result in a higher number of units on a smaller land area. This could result in lowering the cost of each unit. Additionally, the shorter commuting distances will reduce air quality and traffic problems.

3. SCHOOLS

Schools should continue to monitor new residential development and determine their potential enrollment impact and charge appropriate State and locally authorized impaction fees.

TABLE 11

FORECAST USING COUNTY 1970-80 MIGRATION PROFILE

	AGE GROUP	NUMBER	PARTICIPATION	ENROLLMENT
1990	5-9	686	.85	583
	10-14	572	1.00	572
	15-19	400	.65	260
				1,415
2000	5-9	6,358	.85	5,404
	10-14	4,541	1.00	4,541
	15-19	2,725	.65	1,771
				11,716

WATER

A. SETTING

The applicants are negotiating for 1,000 acre feet of Folsom Lake water from the U.S. Bureau of Reclamation (USBR). Details of how the water would be transferred must still be worked out, but presumably it would involve the El Dorado Irrigation District. If water is not available from the USBR the applicants may negotiate for water from other sources. Drilling on site wells does not seem feasible due to high drilling and pumping costs. If only limited water supplies are available, the applicants may scale down the development of the site.

The applicants are proposing to construct two on site water delivery systems. One system will supply drinking, irrigation and sewer system water. Water from this system will be used, then piped to the treatment plant just like water from any domestic source. The second system will supply water for manufacturing purposes. The applicants intend to recycle this water by constructing a closed looped water system. Process water will pass through an on site treatment system to remove heavy metals and adjust ph levels. It will then be piped to the EID plant for treatment and then piped back to the El Dorado Hills Business Park for reuse. Heavy metals and other toxic substances that are removed will be contained and disposed of either on site or shipped to a class 1 dump site for disposal or treatment. It is estimated that the closed loop system allows up to 90% of the dn,000 acre feet of water to be recycled. By recycling, the amount of water available for use is actually multiplied many times.

B. IMPACT

1. On Site

No significant adverse environmental affects can be determined.

2. Regional

People moving into the region will speed the consumption rate of water supplies

C. MITIGATION

1. On Site

No significant adverse environmental affects can be determined therefore, no mitigation is necessary.

2. Regional

There are two ways to mitigate declining regional supplies of water. One method is to develop new sources. The other way is through conservation. Conservation is the least environmentally harmful.

SEWAGE DISPOSAL

A. SETTING

Although the site is adjacent to the El Dorado Irrigation District (EID) Sewage Treatment Plant, the site is not within the district boundaries. The EID is currently considering a proposal to form an assessment district to increase plant capacity by .85 million gallons per day. All of this additional capacity is reserved for the proposed assessment district. The proposed assessment district covers much of El Dorado Hills and an area south of Highway 50. It does not include the project site. In order to receive sewer service, the project must annex into the district and another assessment district must be formed to pay for the added capacity requirements. The project will probaby require an additional capacity of approximately one million gallons per day and possibly more. Engineers of the EID believe that the sewage treatment plants' capacity can be increased to handle the effluent generated from the project. No adverse environmental impact will result from the expansion of the plant.

B. IMPACT

1. On Site

Increasing the capacity of the sewage treatment plant to serve the project should not have any significant environmental impact. Growth induced into the EID assessment district area can be served by the additional capacity created by the plant expansion now being proposed.

2. Regional

As more people move into the region, the reserve capacity of sewage treatment systems will be diminished and expansion, much like the one the EID is pursuing, will be necessary. Increased use of septic tank systems by people moving into the foothills could eventually create isolated water quality problems.

FIRE PROTECTION

A. SETTING

The site is currently served by the California Department of Forestry for wildland protection. The site is not within any district that provides structural fire protection. In order to receive strucural fire protection service, the site must annex into the El Dorado Hills Fire Protection District.

B. IMPACT

The size and number of buildings that could occupy the project site could potentially create difficult fire fighting situations. Additionally, high tech industry presents unique fire protection requirements because highly toxic and flamable substances used in the manufacturing process, are stored on site.

According to Robert Cima, Chief of the District, without a specific project to review it is highly speculative to assess the potential impacts on the District. However, the Chief believes the District can provide this project with effective fire protection service. However, before annexing this project the District will require the applicant to pay annexation and mitigation fees. The fees, and additional tax revenue generated from the project would be used to add new personnel or equipment.

C. MITIGATION

The annexation and mitigation fees along with additional property taxes should provide the district with enough revenue to purchase additional fire fighting equipment or personnel. Since the taxable value of the site will go up dramatically once the site is annexed into the District, there should be enough added revenue to absorb the gradual buildout of the project.

Before each building is constructed, the District will review the building plans and specifications and recommend appropriate features to reduce fire hazards.

Lastly, the County, or District should adopt a "right to know" ordinance which requires industries to file a list of toxic substances they store on site with the fire district. By examining the list, firemen will know what special precautions they should take before engaging a fire.

SOLID WASTE

A. SETTING

The project will be served by the Union Mine Landfill. The landfill is located south of the town of El Dorado. The landfill cannot dispose of toxic or hazardous wastes. These must be transported to a privately owned Class 1 landfill in Martinez, Contra Costa County.

B. IMPACT

The volume of solid waste generated by any type of industrial development is dependent on factors such as type of product manufactured, the type of packing material used, the intensity of labor and the ultimate size of the operation. Since definitive solid waste generation figures are not available, standards employed by the Solid Waste Management Board were used to determine potential volumne. The board uses a figure of 2.8 pounds per capita to estimate solid waste generation from industrial development. One cubic yard of landfill is equivilant to about 350-360 pounds. Given these standard the project is likely to produce about 14,350 pounds or about 41 cubic yards of solid waste per day in 1990. By 2000, the project will generate about 55,000 pounds of waste per day or about 157 cubic yards. Growth induced by the project will also add to this volumne.

Specific estimates of life expectancy of the Union Mine landfill in cubic yards were not available when the draft EIR was prepared. However, local officials estimate that given current population estimates the landfill can accept solid waste for another 33 years.

Given this information it is safe to say that the project will reduce the life expectancy of the Union Mine landfill but that it will not immediately have any dramatic affect on its' future.

C. MITIGATION

When the County updates its' land use and solid waste planning documents, it should consider locations for future landfills.

TOXIC SUBSTANCES

A. SETTING

The transportation, storage, use and disposal of toxic and hazardous chemicals by most high tech firms represent varying degrees of hazards for the surrounding community and employees. In general, the type of hazard ranges from simple eye irritation to permanent physical damage and even death. Appendix G summarizes the health effects of the major toxic and hazardous materials used by high tech industries.

B. IMPACT

Toxic substances present several types of potential hazards to the community. These hazards include:

Transportation of toxic and hazardous chemicals represent a community hazard in the form of spills due to traffic accidents. Such spills can release hazardous vapor and fumes into populated areas. Depending on the chemical type, evacuation of homes, schools and surrounding businesses may be required in the event of a spill.

Storage of toxics presents another series of concerns. Toxic chemicals may deteriorate the containers they are stored in and leaks may eventually occur. Significant leaks can contaminate surface and ground waters and result in vapor and fume exposure.

Use and Handling of toxic wastes represent a third level of hazard. Some chemicals used by high tech industry are known or suspected carcinogens. Permanent injury to vital organs can also occur if workers are exposed to certain toxic substances over a long period of time.

Disposal of toxics presents a unique and serious problem. The closest site is a privately owned facility in Contra Costa County. Since wastes must be transported over a long distance, the chance that a spill or illegal dumping may occur is increased.

C. MITIGATION

One way to minimize transportation and disposal problems is to construct onsite waste disposal facilities. On site disposal problems can be through chemical process, incineration, or concentration of the substances.

Another method is to design manufacturing systems that minimize the amount of toxic substances used or allows them to be easily recycled.

Safe storage of toxic substances can be accomplished by requiring all storage containers to be placed above ground or in underground vaults so they can be visually inspected on a regular basis.

GEOLOGY

A. SETTING

A geological study of the site was conducted by George Wheeldon and Associates. A complete copy of their report is included in the technical studies component of this report.

A summary of the study is as follows:

No potential landslides were observed within the project boundary.

No areas of potential ground instability were observed within the project boundary.

No fault zones were mapped within the project boundary.

The Bear Mountain Fault lies approximately 2,000 feet to the east of the project.

B. IMPACT

Architects and engineers examine three factors regarding seismicity in order to design and construct buildings that will minimize hazard to life and improve the capability of the building to function during and after a earthquake. These factors are:

Seismic Index of Project Site - Seismic index values range from 1-4 with 4 associated with the most severe ground shaking expected. The site received a rating of 4.

Seismic Hazard Exposure Group - Seismic hazard exposure groups have values that range from I to III, with category III assigned to uses requiring the highest level of protection. Seismic hazard exposure group III are buildings that have a large number of occupants, or buildings in which the occupants' movements are restricted of their mobility is impaired. This project is assigned to seismic hazard exposure group II.

Seismic Performance Category - Seismic performance categories range from A to D with D assigned to provide the highest level of design performance criteria. The proposed El Dorado Hills Business Park site, with a seismicity index of 4 and a seismic hazard exposure group II is assigned a seismic performance category of C.

C. MITIGATION

Architects and engineers should use seismic factors cited above to design and construct earthquake resistant buildings.

ARCHEOLOGY

A. SETTING

An archeological literature survey of the site was conducted by the North Central Informations Center. A copy oftheirreportis found in Appendix 8.

The Center made the following findings:

Prehistoric Resources - No previously recorded sites of this type occur within the project boundary. However, two such resources occur just outside the project boundary, one is located east of Latrobe Road and one is south of the site.

Historic Resources - The Carson Emigrant Road between Clarksville and White Rock probably followed the route of the present White Rock Road. It is quite possible that artifacts dating as early as 1840 - 1850 may be present.

B. IMPACT

Based upon the following information, the site ranges in sensitivity from moderate to high for both prehistoric and historic resources.

C. MITIGATION

An archeological survey should be prepared prior to development of final project plans.

NOISE

A. SETTING

Ambient noise levels near the project are generally low since the area is relatively rural in nature. Ambient levels in the project area are dominated by traffic noise from Latrobe Road and air traffic from Mather Air Force Base.

B. IMPACT

The noise impacts from the proposed project will be related primarily to construction activities and vehicular traffic.

During construction, noise will be generated by equipment used for leveling, road construction and building activities. After construction, increased vehicular traffic will probably have a noticeable affect on ambient noise levels in the area. Traffic sounds will contribute to the overall noise environment of the site and adjacent properties. However, there are no sensitive receptors such as hospitals or schools within the area affected by increased noise nor is traffic induced noise expected to exceed 65 DBA for prolonged periods of time.

C. MITIGATION

The proposed R&D zoning requires all facilities to be constructed in such a manner to confine noise within the exterior walls. Additionally, berms can be placed and landscaped between noise generators and receivers. Traffic noise can be reduced by staggering working hours so that the noise from traffic can be reduced by spreading it out over several hours. Additionally, reducing the volume of traffic can reduce noise levels. Measures such as pubic transit, encouraging car and van pooling and creating bicycle paths should be explored.

TRAFFIC

A. SETTING

The project is located three eighths of a mile south of Highway 50. Latrobe and White Rock Roads form the local roads which would serve the site.

Latrobe Road forms the easterly boundary of the site and travels from east to west. White Rock Road is one means of access into Sacramento County. Other significant circulation features include an uncompleted overpass seven-tenths of a mile east of the site on White Rock Road and the existing El Dorado Hills Highway 50 interchange at El Dorado Hills Boulevard and Latrobe Road. A complete list of existing transportation facilities and traffic counts are included in Table VII and in the appendix of the TJKM study.

B. Impact

The study says that by 1990, the traffic generated from the project will require improvements in order to maintain smooth traffic flows. For example, the study recommends that by 1990 the following improvements may be necessary:

-Latrobe and White Rock Roads - provide four lanes of traffic on Latrobe.

-Latrobe and the eastbound off ramp - construct a duel left turn lane and a separate north bound right turn lane on Latrobe Road.

-El Dorado Hills and the westbound off ramp - provide a duel northbound left turn lane.

-Traffic signal needs - project traffic and cumulative impacts to 1990 will require new traffic signals at five locations. By 2000 more imrpovements will be necessary to handle expected traffic flows.

C. MITIGATION

The suggested improvements for 1990 and 2000 are listed in detail on pages 8-13 and Table VII of the TJKM study. In addition to the road improvements, the study recommends that mitigation measures such as car pooling, staggared work shifts, flex-time, etc., could reduce the volumne of traffic up to 20%.

AIR QUALITY

Technically, the project is within the Mountain Counties Air Basin (MCAB) which ranges from Plumas to Mariposa Counties. However, the air quality distribution around the project site is most influenced by the Sacramento Metropolitan area. The California Air Resources Board has shown rather conclusively that Sacramento area emissions are primarily responsible for the formation of these pollutants downwind of Sacramento and that attainment of the ozone standards depends upon control of precursor emissions in Sacramento.

B. IMPACT

The business park itself will result in few air pollutants. The primary source of air quality impact will result from transportation-related emissions, principally the automobile. These vehicular emissions will incrementally degrade air quality on a regional basis and may create localized pollution "hotspots" near traffic-intensive sources such as, parking lots or large intersections. Secondary development-related air quality impacts result from construction related activities and energy demands met by burning fossil fuels in furnaces or heaters.

C. MITIGATION

In any large project dominated by vehicular sources of air pollution the opportunity for effective mitigation is limited. Never-the-less, mitigation measures must be sought in order to maintain good air quality, areas that should be considered are:

1. Additional dust abatement during construction by scheduling major grading during periods of high soil moisture, by revegetating graded areas not to be builtout immediately, by controlling erosion and transport of silt onto traveled roadway systems and by enforcing a reasonable speed limit within unpaved construction areas.

2. Reducing trip lengths and trip generation by providing residential, comercial and recreational opportunities near the business park. As employment levels increase, the intensity of

development in surrounding areas should keep pace to maintain an integrated development rather than drawing the labor pool from long distances away.

3. Mandatory measures to reduce the dependence on the single passenger automobile. Such measures might include mandatory subsidized vanpool programs, transit incentives, 4/40 or flexible work schedules or other transportation incentive/disincentive programs.

4. Energy conservation and incorporation of solar planning into project designs. Solar electrical generation may be economical by 2000 such that the entire project should be laid out for optimum solar access. Cogeneration with thermal efficiencies of 60-65 percent should be utilized in major production facilities able to utilize waste heat in light manufacturing applications. Energy cost and air pollution benefits may be useful stimulants to offset higher initial construction costs of an energy efficient project.

IMPACTS NOT CONSIDERED SIGNIFICANT

I. RARE OR ENDANGERED ANIMALS OR PLANTS

Although a formal biological inspection of the site was not conducted it is believed that the site is not a habitat for any rare or endangered species of animals or plants. This finding is based on discusions with the Euer family and repeated visual inspections by consultants preparing this EIR. There is little possibility that the site contains rare or endangered plants because cattle grazed the property until June of 1982 and would have trampled or eaten them.

2. ENERGY

Pacific Gas and Electric (P.G.&E.) representatives have reviewed the electrical requirements of the project. Although it is uncertain how much energy the project would actually consume, it was estimated that four to six megawatts should be used for planning purposes. P.G.&E. can supply the project with this much electricity. Power lines capable of delivering this much electricity are in place several hundred feet north of the site.

Although the proposed project will consume additional electricity not already consumed in the area, this is not considered an significant adverse impact. This is because no matter where high tech industry located in this region they will consume energy. Additionally many of the energy purveyors, regardless if they are public or private institutions, obtain the power from the same sources. for example many utilities purchase their power from the US Bureau of Reclamation. Additionally, utilities such as P.G.&E. and S.M.U.D. frequently swap power in order to meet consumer demands in their service area.

3. RUNOFF AND EROSION

The soil of the site is for the most part very rocky. This condition results in soils with very slow percolation rates and high runoff potential. In fact the soils in this area are rated as severe for septic tank systems because of this condition. For this reason, creating impermeable surfaces by adding building andparking lots will not result in substantially more runoff than presently exists.

In fact the project may actually result in no increase in the amount of runoff because large amounts of top soil will be imported to the site for landscaping and building the golf course. The soil will be far more permeable than present soils and will reduce the level of runoff from the site.

The zoning ordinance requirements will result in extensive landscaping of the site including heavy plantings of shrubs, perenial grasses and trees. These plantings will hold the soil in place and should eliminate any substantial erosion problems.

ALTERNATIVES TO THE PROJECT

1. Locate High Tech Development In Sacramento County

There are several areas that are being considered in Sacramento County for high tech development. Several of these areas such as the Natomas area, and the Delta Shores area, are considered highly productive agricultural land. Locating the project in these areas will result in the loss of agricultural land with a higher productivity value than the Euer Ranch. Growth induced by high tech development will also consume agricultural land. Other impacts such as increased traffic and additional demand for housing and schools will be transferred from one location to another. Additionally, the danger created by toxic waste spills in areas of higher population densities, is greatly increased.

2. Locate High Tech Development In Existing Industrial Parks In El Dorado County.

Although there is existing vacant industrially zoned land much it is in parcels too small for major high tech firms. For example, Hewlett Packard purchased 500 acres and Electronic Array purchased 73 acres in Roseville. Intel Electronics purchased 268 acres in Folsom. The cost of acquiring smaller parcels and assemblying them into a larger parcel would be prohibitively expensive. Additonally much of the industrially zoned land is adjacent to industrial uses that would be incompatible with high tech industry. For example heavy industry that generate dust or vibrations are unacceptable neighbors. Lastly, other industrial sites are located further east, increasing the potential of a toxic waste spill during transportation to a dump or treatment site.

3. No Project

The no project alternative will result in high tech development locating in other areas. In some situations, locating high tech development in other areas will result in more severe impacts than those mentioned in this report. Additionally, El Dorado County would not enjoy the social or economic benefits the jobs and the increased taxes the project will generate. If the project is not approved, The present owners may file a notice of non-renewal and ultimately sell the land for for rural residential uses. Rural residential uses are often incompatible with agricultural operations. The result could be faster displacement of remaining agricultural operations than if the land was developed into

industrial use. Residential development frequently costs local government more to service than it provides in tax revenue. Unless land uses are added that generate more tax revenue than they consume, the County may eventually have to curtail some governmental service in order to balance their budget.

TECHNICAL STUDIES
TRAFFIC AND CIRCULATION
AIR QUALITY

DRAFT ENVIRONMENTAL IMPACT REPORT

PLANNING
ANSWERS
1982

GRANT M. KENNEDY
Consulting Soil Scientist
Specialist In Interpretation of Soil Surveys For All Uses

August 9, 1982

SOIL INVESTIGATION

EL DORADO HILLS BUSINESS PARK

WHITEROCK-LATROBE ROADS, EL DORADO COUNTY, CALIFORNIA

A field review was made on about 1,069 acres of land in the lower foothills of El Dorado County adjacent to the Sacramento County line. This parcel is designated as the El Dorado Hills Business Park. It is bounded on the north by the Whiterock Road, on the east by the Latrobe Road, and portions extend to the Sacramento County line along the west boundary. The purpose of this investigation was to review the soils of this parcel to determine the nature and extent of the major soil types and their potential for various uses.

The property was inspected along the roads bordering it and by transects within the property boundaries. The Soil Survey of the El Dorado Area 1) was also utilized as a reference in conducting this work.

The topography of the area is undulating to moderately sloping. The soils are shallow to moderately deep over hard metamorphased rock. They are somewhat stony in character and have numerous outcroppings of rock. The more shallow soils occupy the ridges and more sloping topography while the footslopes swales and small bottoms are somewhat deeper and finer textured.

The principal soils are the Auburn series which occurs on the higher topography, the Argonaut series which is found on footslopes swales and saddles, and the Perkins series that lies along stream bottoms. These soils are described in the El Dorado Area Soil Survey Report. The results of a number of observations along roads and transects confirmed that these soils are properly delineated and defined as shown in the El Dorado Area Soil Survey Report.

1) Soil Survey of El Dorado Area, USDA Soil Conservation Service, Forest Service, UC Agr. Exp. Station, April, 1974.

1316 La Sierra Drive · Sacramento, California 95825 · (916) 482-6887

The Auburn soils occupy about 65 percent of the El Dorado Hills Business Park. These soils consist of 12 to 24 inches of silt loam over fractured rock. They usually have some stones and are interspersed with rock outcrops. About 75 percent of the Auburn soils are shown in the Soil Survey Report as being in Land Capability Class VI. The balance is in Class IV. The latter areas have fewer rock outcrops. Approximately 20 percent of the project area is comprised of the Argonaut soils. These soils are moderately deep over bedrock. They have a gravelly silt loam surface and a finer subsoil generally of clay loam and clay texture. Bedrock is found at about 30 inches from the surface. These soils have a few scattered rock outcrops. These soils are classified within Land Capability, Class IV. The Perkins soils occupy about 15 percent of the property. They are characterized by having a gravelly loam surface over a gravelly clay loam subsoil overlying hard bedrock at about 36 inches. These soils are along narrow stream bottoms and portions are subject to occasional flooding or overflow during wet seasons. These soils are categorized within Land Capability Class III. A complete list of the soil types found within the El Dorado Hills Business Park is attached for reference.

The area has been grazed for many years. Selected portions may have been cropped to grain or grain hay many years past. Several old ditches indicate there may have been attempts at irrigation or waterspreading. The present ocver is dominantly annual gasses with the exception of a few more moist zones slong stream channels. The annual grasses on the lower slopes are intermixed with considerable tarweed where soils are deeper.

The soils on this property are representative of much of the typical rangeland in the lower foothills. The annual grasses provide forage during the late winter and early spring months. Rock outcrops and shallow soil conditicns limit the use of the land principally to grazing uses.

The Argonaut and Perkins soils have somewhat better depth and are less rocky, and mostly occupy gentler slopes. They could be planted to irrigated pasture using sprinkler irrigation portions of the Perkins soils might grow selected tree or vine crops, if irrigated.

The agricultural potential of this property is for grazing uses as rangeland. There are several hundred acres which could be planted to irrigated pasture. The development of this enterprise seems unlikely in view of land costs, development costs (grading, fencing, installation of irrigation system), and the outlook for high water costs. These costs, considered with present day beef prices, would appear to discourage this type of land use. The deeper Perkins soils might support some selected

crops. Their lowlying position, however, makes them subject to some overflow and a moderate frost hazard. Also, the soil bodies are rather narrow and irregular in shape and would restrict management operations. Therefore, the Perkins soils are not potentially satisfactory cropland sites.

The El Dorado Area Soil Survey Report indicates the potential suitabilities and limitations of these soils under various uses. There would be no severe restrictions for foundations of buildings and structures because of the bedrock at shallow to moderate depths. The soil depth would impose some limitations for excavations for utilities and grading operations. Stockpiling or importing soil would be needed to revegetate some graded sites.

Septic tank systems and disposal of effluent would be severely restricted because of soil conditions. The use of the property for residential purposes would require that there be an adequate sewage system available for use.

Runoff potential on the property and adjacent watersheds is very high.

Sincerely,

Grant M. Kennedy

GRANT M. KENNEDY
Certified Professional Soil
Scientist No. 855

GMK:mv

Attachments

SOIL TYPES

EL DORADO HILLS BUSINESS PARK

(As shown in El Dorado Area Soil Survey Report)

MAP SYMBOL	NAME
AkC	Argonaut gravelly loam, 2 to 15 percent slopes.
AmD	Argonaut very rocky loam, 3 to 30 percent slopes (minor extent).
AwD	Auburn silt loam, 2 to 30 percent slopes.
AxD	Auburn very rocky silt loam, 2 to 30 percent slopes.
PgB	Perkins gravelly loam, moderately deep variant, 2 to 5 percent slopes.
Prd	Placer diggings (minor extent).

GEOLOGIC - SEISMIC INVESTIGATION

OF THE

EL DORADO HILLS BUSINESS PARK SITE

by.

Michael VanDerdussen, Associate Geologist

and

David Jermstad, Staff Geologist

of

George A. Wheeldon & Associates
Registered Geologist #2881

August 1982

TABLE OF CONTENTS

I. INTRODUCTION

During the month of July, 1982, I was contacted by Mr. Gene E. Thorne, of Gene E. Thorne & Associate, to conduct a geologic seismic investigation of a business park site in the El Dorado Hills area, El Dorado County, California.

A. Purpose of the Report

The purpose of this report is to provide basic geologic and seismic data to determine the suitability of this site for a business/industrial complex, golf course and sewer treatment plant. This report will provide an assessment of the geologic nature of the site and the potential for earthquake or other geologic hazard damage.

B. Location and Access

The proposed El Dorado Hills Business Park site encompasses approximately 1,000 acres of land that lies south of White Rock Road and west of Latrobe Road in El Dorado County, California. (See enclosed Geologic Map for site location.)

The site is characterized by low rolling hills and broad valleys (elevations of 460-680 ft.) covered with annual grasses and forbs. The few trees growing on the property are located in two of the major drainage channels and in the southeast corner of the site. Generally, this area experiences moderate rainfall in winter and spring, with a dry, warm summer and fall. Current land useage is limited livestock grazing.

C. Field Work

Geologic mapping to obtain information for this report was completed during the month of July, 1982. The general geology of the project

was mapped on a base of 1" = 500'. A Brunton pocket transit was used to determine attitudes within the project boundary. Air photos were used for structural interpretation.

D. Soils

Soil types within the project site have been mapped by the U.S.D.A. Soil Conservation Service and are included in the following series: (AkC) Argonaut gravelly loam, 2-15% slopes; (AmD) Argonaut very rocky loam, 3-30% slopes; (AwD) Auburn silt loam, 2-30% slopes; (AxD) Auburn very rocky silt loam, 2-30% slopes; (PgB) Perkins gravelly loam, moderately deep varient, 2-5% slopes; (PrD) Placer Diggings; (WhE) Whiterock gravelly silt loam, 3-50% slopes. (See Soils Map composit in Appendix.)

II. GENERAL GEOLOGY OF THE SITE

The project lies within the western belt metamorphic rocks of the Sierra Nevada. The Bear Mountains fault zone, which separates volcaniclastic and slaty rocks on the west from ophiolitic rocks on the east, lies east of the property. The rocks of this area have undergone several complex stages of metamorphism including ocean floor subduction and accretion from the southwest and periods of Sierra Nevada mountain building. These stresses have resulted in a general northwesterly trend of the structural fabric of the rock units and fault zones.

A. Description of Rocks within the Project Boundary

Two rock units are exposed on the property: Copper Hill volcanics (Jch) and Salt Springs slate (Jss), both Jurassic in age.

1. Jurassic Copper Hill Volcanics: The Copper Hill volcanics consist of metamorphosed basaltic to andesitic flows and dikes with possible tuffs and pillow lavas. These metavolcanic rocks are generally green to blue-gray, are foliated to massive, very fine grained to porphyritic with visible crystals and porphyroblasts of feldspar and pyroxene. Some areas are rich in silica. Accessory sulfides are present throughout the unit, with one extensively mineralized zone prospected to about 20 feet below the surface in the central southern portion of the project (shown on map).

2. Jurassic Salt Springs Slates: Salt Springs slates are blue-black to dark gray, thinly bedded, fissile, carbonaceous slates and siltstones, with cleavage planes parallel to bedding planes.

III. STRUCTURAL FEATURES

A. Foliation, Shearing and Jointing

The complex tectonic history in this area has produced several structural features observed on this project. Stresses involved in ocean floor subduction and accretion produced zones of foliation within the volcanics that strike approximately $N5^{O}$-$20^{O}W$ and dip steeply east. These foliated zones alternate with more massive zones in an east-west traverse of the project. The foliated zones are less resistant and have resulted, through weathering and erosion, in valleys and low areas. The massive zones have remained topographically higher as north-west trending ridges.

Shear zones have also developed in response to tectonic stresses. A talcose shear zone was located in the extreme western portion of the project, trending northwest. The contact between the Copper Hill volcanics and Salt Springs slates in the southwest corner of the property is also characterized

by a shear zone, with mixing of metasediments and metavolcanics and some mineralization within the zone.

Several joint systems have resulted from nearby intrusions and Sierra Nevadan orogenic events. Joint surfaces within the volcanics are commonly coated with epidote and quartz. Major joint sets have influenced directions of many of the minor east-west drainage systems.

B. Evidence of Faulting within the Project

The two shear zones and foliation development are considered to have developed during previous periods of tectonic activity. Field mapping, aong with topographic map and air photo interpretation, does not indicate any features of recent fault movement (fault scarps, offset drainages, sag ponds, etc.).

C. Major Faults within the Area

The Bear Mountains fault zone trends northwesterly through the western region of the Sierra Nevada foothills. It is the major fault near the site and lies between 2,000 ft. and 3,600 ft. east of the property. (See enclosed Geologic Map and Fault & Seismicity Map.)

IV. SEISMICITY

Recent information gathered from the Oroville earthquake of 1975 (M 5.7) (Sherburne, 1975) and the intensive studies of the Auburn dam site (CDMG Special Publication 54, Special Report 141, 149, 1980) have caused a re-evaluation of the general seismicity of the Foothills fault system. James Slosson (Sherburne, 1975) states, "The Oroville earthquake suggests that this event is indicative of future earthquakes within the fault zones of the western

Sierra Nevada foothills. If this hypothesis is reasonable, earthquakes of at least magnitude 6 should be anticipated and considered when design criteria is established for engineered structures."

A. The Maximum Credible Earthquake Event (MCE)

The maximum credible earthquake is the maximum earthquake that appears capable of occurring under the presently known tectontic framework (CDMG Note 43). The MCE for the Foothills fault system in this area is 6.5 (CDMG Special Publication 54).

B. The Maximum Probable Earthquake Event (MPE)

The maximum probable earthquake is the maximum earthquake that is likely to occur during a 100-year interval (CDMG Note 43). The MPE for this area would be between 5.0 to 5.5 (Sherburne, 1980). An estimate of 5.0-5.5 for the MPE is supported by an inventory of earthquakes in this area of the foothills from 1900 to 1975 (C. R. Real, 1978). (See list tabulated in the Appendix.)

C. Maximum Acceleration Values

The maximum accelerations which are likely to develop in rock formations during earthquakes have been developed at the University of California, Berkeley, California (Schnabel & Seed, 1972). Using magnitudes of 5.0 to 5.5 would give values of 0.2 g to 0.45 g at a distance of up to two miles from the causative fault.

D. Durations of Strong Ground Shaking

The bracketed duration of ground shaking is the elapsed time (for a particular frequency range) between the first and last acceleration excursions on the record greater than a given amplitude level. A magnitude 5.5

earthquake less than 10 miles from a major fault zone would produce a bracketed duration of strong ground shaking for approximately 8 seconds (Bolt, 1975).

V. RECOMMENDATIONS FOR DESIGN CRITERIA

The following information is provided to establish design and construction criteria for architects and engineers who will work on this project. This information has been developed for buildings subject to earthquake motions in order to minimize the hazard to life and improve the capability of essential facilities to function during and after an earthquake (Applied Technology Council Publication, ATC-3-06, 1978).

A. Seismic Performance

Seismic performance is a measure of the degree of protection provided for the public and building occupants against the potential hazards resulting from the effects of earthquake motions on buildings. The Seismicity Index and the Seismic Hazard Exposure Group are used in assigning buildings to Seismic Performance Categories.

1. Seismicity Index of Project Site: Seismicity Index values range from 1-4, with 4 associated with the most severe ground shaking expected. Design ground motions are defined in terms of Effective Peak Acceleration, A_a, or Effective Peak Velocity-Related Acceleration, A_v. The seismicity index is related to the Effective Peak Velocity-Related Acceleration, A_v.

Effective Peak Acceleration, A_a = 0.15
(map area 4 on Fig. 1-1 in Appendix)

Effective Peak Velocity-Related Acceleration, A_v = 0.2
(map area 5 on Fig. 1-2 in Appendix)

Seismicity Index = 4
(from value of A_v in Table 1-B in Appendix)

2. Seismic Hazard Exposure Group: Seismic Hazard Exposure Groups have values that range from I to III, with Category III assigned to uses requiring the highest level of protection. Seismic Hazard Exposure Group II shall be buildings having a large number of occupants or buildings in which the occupants' movements are restricted or their mobility is impaired. This project is assigned to Seismic Hazard Exposure Group II.

3. Seismic Performance Category: Seismic Performance Categories have ranges from A to D, with D assigned to provide the highest level of design performance criteria. The proposed El Dorado Hills Business Park site, with a Seismicity Index of 4 and a Seismic Hazard Exposure Group II, based in accordance with Table 1-A (see Appendix), is assigned to a Seismic Performance Category of C.

VI. GROUNDWATER CONDITIONS AND AVAILABILITY FROM WELLS

Groundwater flow can be expected in shear zones and joint systems. This condition is evidenced by several springs and wet areas in the southern portion of the property. In addition, the Prospect shaft, also located in the southern portion of the site, was approximately 20 feet deep with water standing 8 feet from the surface. A test well is currently being drilled by Gary C. Tanko, Inc. to verify groundwater availability on the site.

VII. SUMMARY

1. No potential landslides were observed within the proposed project boundary.

2. No areas of potential ground instability were observed within the project boundary.

3. No fault zones were mapped within the project boundary.

4. Because of the proximity of an "active" fault zone within the vicinity of the pojrect site (Bear Mountains - 2,000 ft. east), seismicity data for design purposes within the project boundary would be:

a. Maximum Credible Earthquake (MCE) = 6.5

b. Maximum Probable Earthquake (MPE) = 5.0-5.5

c. Maximum Acceleration = 0.2 g to 0.45 g

d. Duration of Strong Ground Shaking = bracketed duration of 8 seconds

e. Effective Peak Acceleration, A_a = 0.15

f. Effective Peak Velocity-Related Acceleration, A_v = 0.20

g. Seismicity Index = 4

h. Seismic Hazard Exposure Group = II

i. Seismic Performance Category = C

If you have any questions regarding the information in this report, please feel free to contact me.

GEORGE A. WHEELDON
Registered Geologist #2881
10 August 1982

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IX. APPENDIX

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MAGNITUDE TYPE: A = Local Richter
D = Local Estimated from Intensity

INTENSITY TYPE: A = No Intensity Given but Felt
B = Rossi Forel
C = Modified Mercalli

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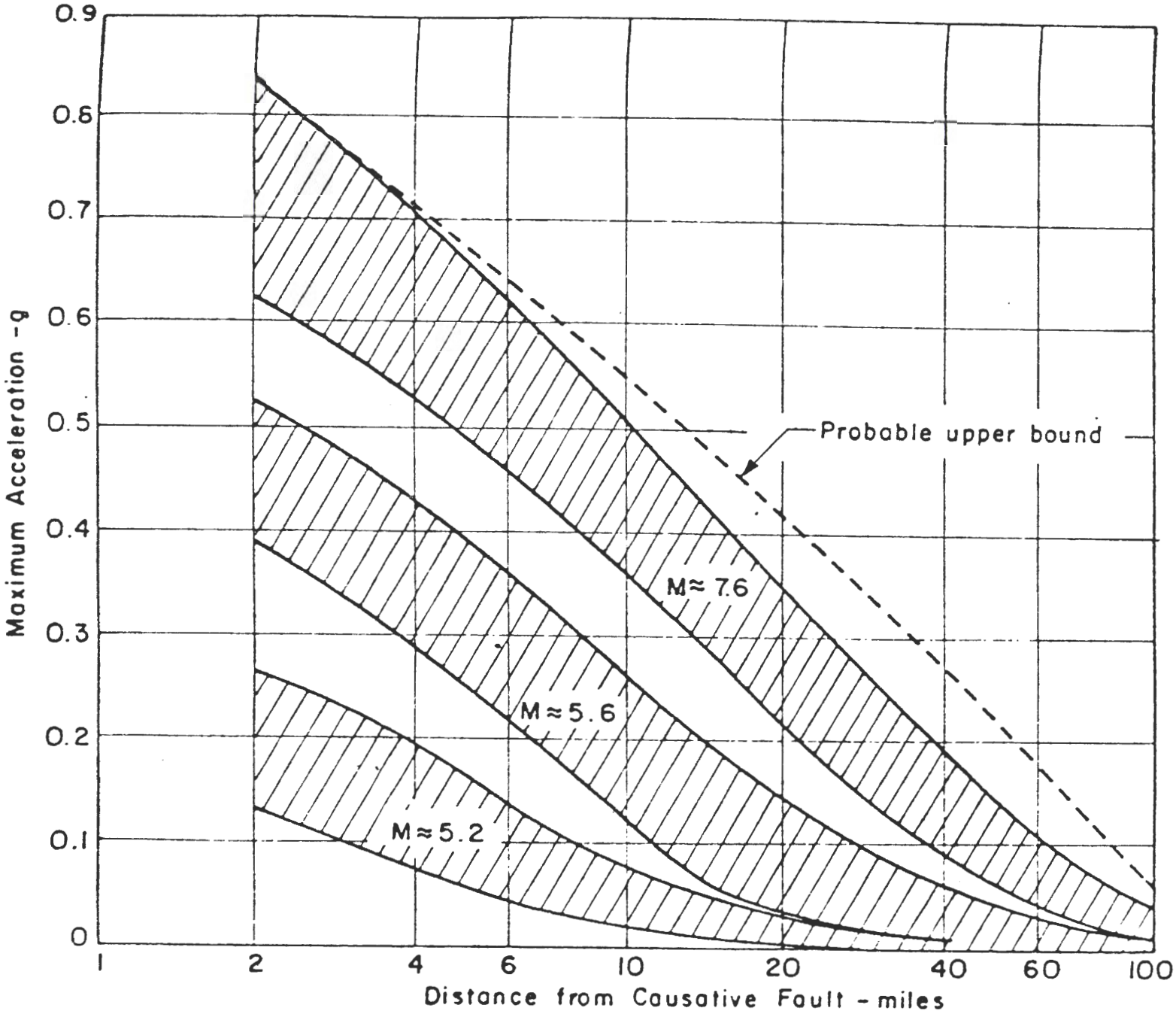


Fig. 6 RANGES OF MAXIMUM ACCELERATIONS IN ROCK

HISTORICAL SEISMICITY WITHIN THE WESTERN SIERRA NEVADA FOOTHILLS FAULT SYSTEM
FROM 1900-1975, BETWEEN LATITUDES 38°10' AND 39°15'N AND LONGITUDES 120°15' AND 121°45'W
M 4.0 AND GREATER FROM 1 JANUARY 1975-MARCH 1979

Map #	Year	Month	Day	ID Number*	North Latitude	West Longitude	Reference	Magnitude	Type	Reference	Intensity	Type	Reference
1	1908	5	30	4300091	38.8	121.1	7	4.0	D	7	5	C	7
2	1912	8	31	4200001	38.92	120.33	1	4.5	D	7	6	B	4
3	1939	7	15	4300003	38.20	121.50	1					A	6
4	1940	2	4	4600023	39.25	120.25	1					A	6
5	1942	12	22	4200006	38.53	120.75	1					A	6
6	1943	3	19	4300004	38.8	121.10	1	3.9	A	1			
7	1946	3	5	4200009	38.70	120.30	1	4.1	A	1	6	C	6
8	1948	1	29	4200010	38.75	120.70	1				4	C	1
9	1949	3	3	4700015	39.25	121.50	1					A	6
10	1951	8	16	4200012	38.50	120.30	1	3.0	A	1			
11	1952	5	22	4200014	38.67	120.27	1	3.5	A	1			
12	1953	8	24	4600079	39.25	120.30	1	3.5	A	1			
13	1956	7	5	4200018	38.35	120.75	1					A	6
14	1960	7	3	4200020	38.87	120.78	1	1.8	A	1			
15	1960	7	7	4200021	38.57	120.35	1	2.6	A	1			
16	1961	8	2	4300042	38.17	121.67	1	2.5	A	1			
17	1961	9	16	4200022	38.48	120.33	1	3.3	A	1			
18	1961	12	16	4300044	38.17	121.75	1	2.6	A	1			
19	1964	12	4	4200024	38.57	120.42	1	3.0	A	1			
20	1965	7	25	4600133	39.10	120.40	1	2.9	A	1			
21	1971	8	29	4600202	39.08	120.67	1	3.4	A	1			
Oroville	1975	8	1		39.44	121.53	8	5.7	A				
So. of Tahoe	1979	9	4		38.80	119.80	8	5.2	A				

*As catalogued in California Division of Mines & Geology, Earthquake Catalog of California, 1 Jan. 1900-31 Dec. 1974, Special Publication 52, First Edition, 15 p.

TABLE 1-A

SEISMIC PERFORMANCE CATEGORY

Seismicity Index	Seismic Hazard Exposure Group III	II	I
4	D	C	C
3	C	C	B
2	B	B	B
1	A	A	A

TABLE 1-B

COEFFICIENTS A_a AND A_v AND SEISMICITY INDEX

Coeff. A_a Figure 1	Map Area Number	Coeff. A_v Figure 2	Seismicity Index
0.40	7	0.40	4
0.30	6	0.30	4
0.20	5	0.20	4
0.15	4	0.15	3
0.10	3	0.10	2
0.05	2	0.05	2
0.05	1	0.05	1

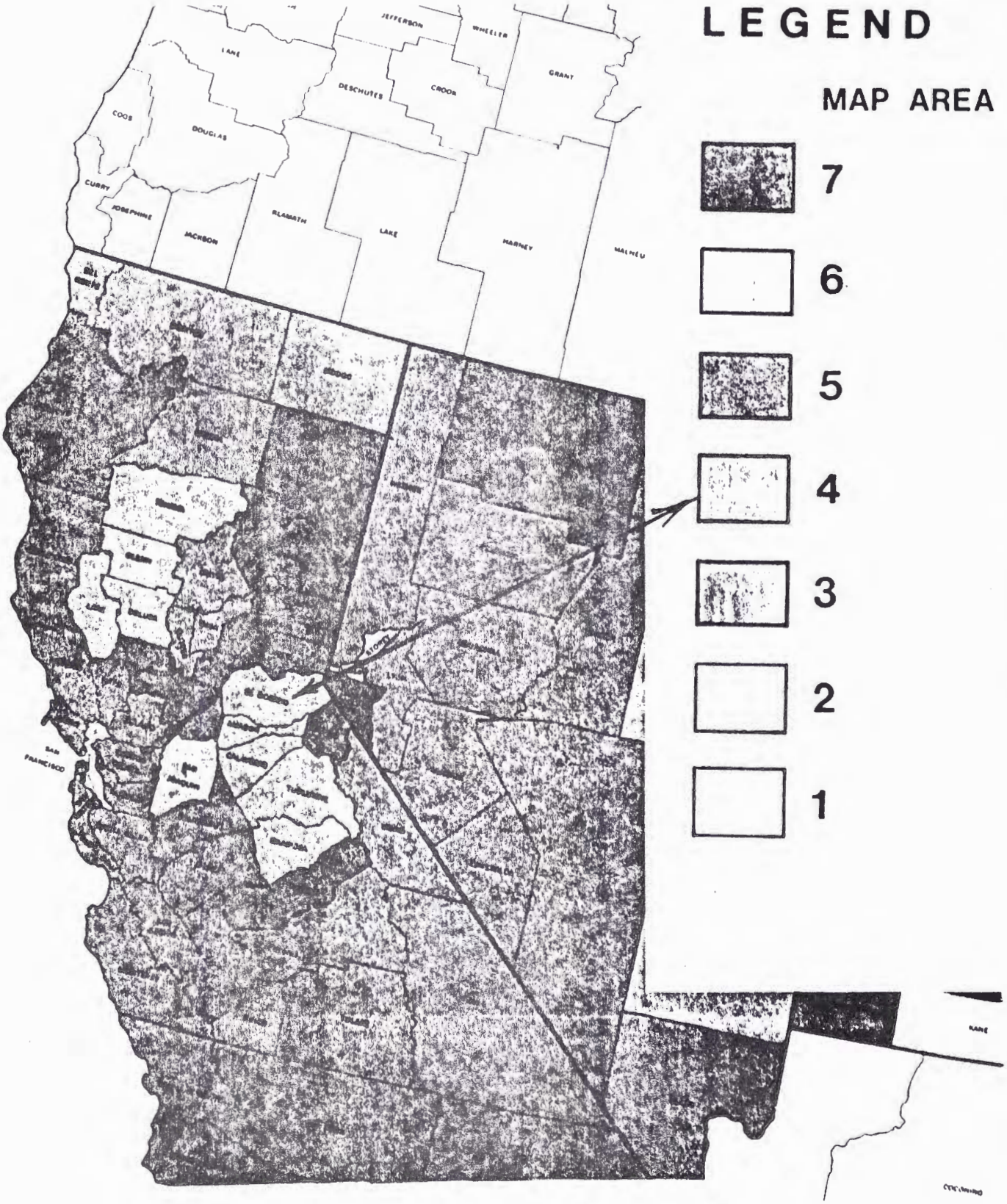


FIGURE 1-1

PREPARED BY APPLIED TECHNOLOGY COUNCIL

MAP FOR COEFFICIENT A_a

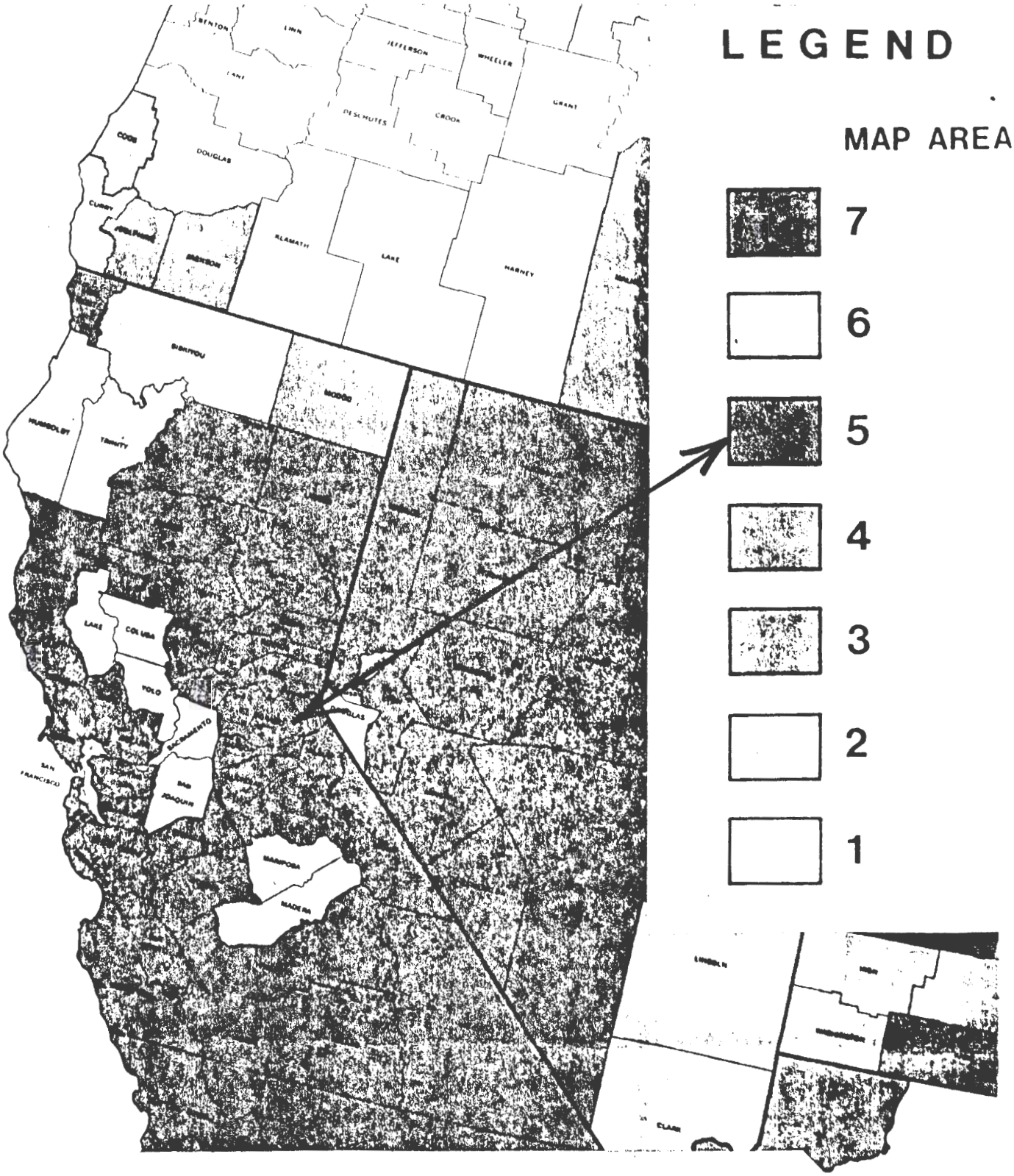


FIGURE 1-2

PREPARED BY APPLIED TECHNOLOGY COUNCIL

MAP FOR COEFFICIENT A_V

0 100 200 300

MILES

EL DORADO HILLS BUSINESS PARK

S.C.S. SOILS CLASSIFICATION

AkC - Argonaut gravelly loam, 2-15% slopes

AmD - Argonaut very rocky loam, 3-30% slopes

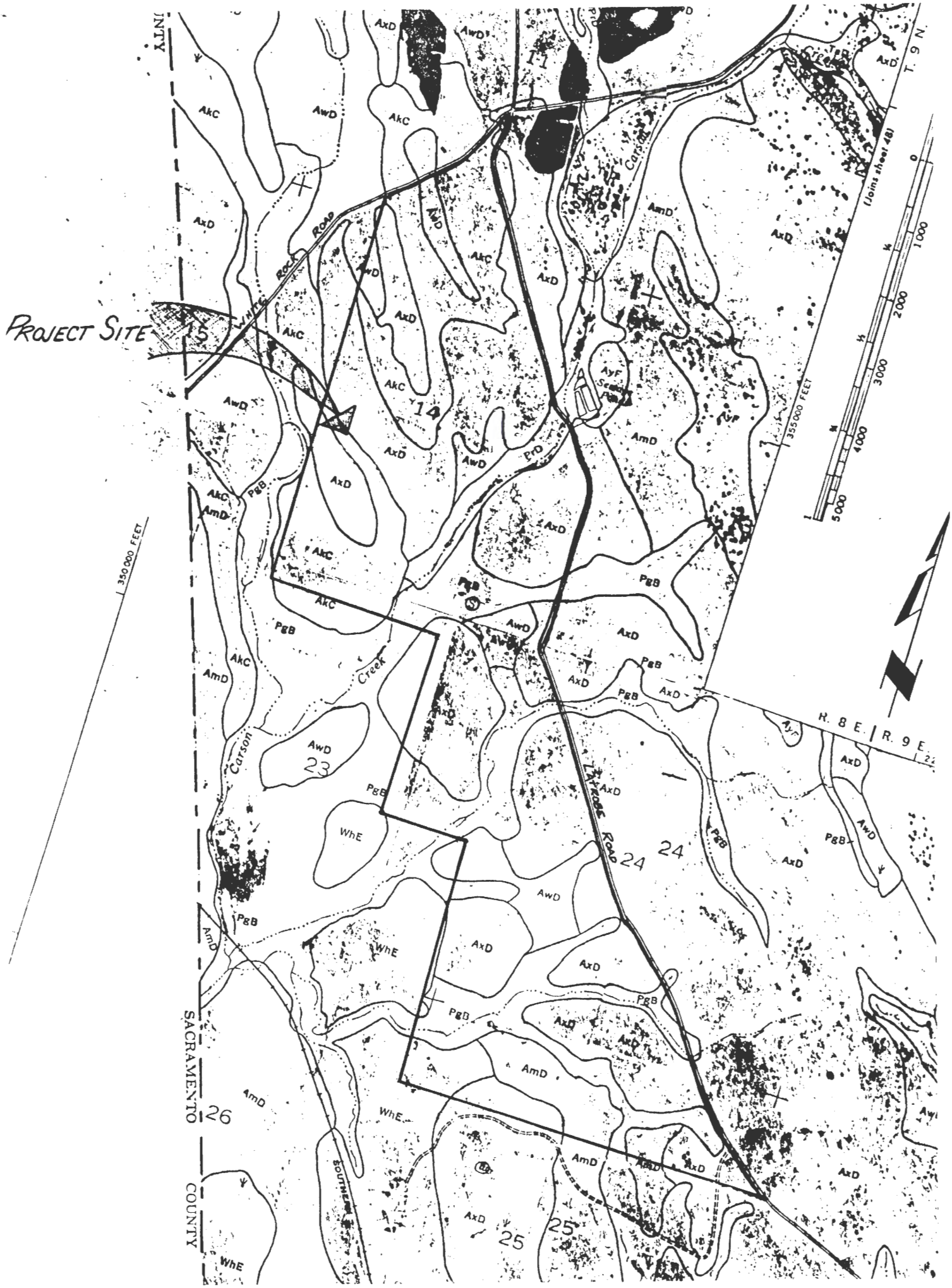
AwD - Auburn silt loam, 2-30% slopes

AxD - Auburn very rocky silt loam, 2-30% slopes

PgB - Perkins gravelly loam, moderately deep variant, 2-5% slopes

PrD - Placer Diggings

WhE - Whiterock gravelly silt loam, 3-50% slopes


PROJECT SITE
WHITE ROCK ROAD
Carson Creek
LATROBE ROAD
SACRAMENTO COUNTY
T. 9 N.
R. 8 E.
R. 9 E.
355000 FEET
350000 FEET
(Joins sheet 48)
AkC
AmD
AwD
AxD
AyF
PgB
PrD
WhE
15
14
23
24
25
26

TJKM TRANSPORTATION CONSULTANTS

WALNUT CREEK
SACRAMENTO

August 17, 1982

Mr. Dennis Castrillo
Planning Answers
601 University Avenue, Suite 150
Sacramento, CA 95825

Dear Mr. Castrillo:

TJKM Transportation Consultants has completed a traffic impact study for the proposed El Dorado Hills industrial park in the vicinity of Highway 50 and Latrobe Road. Specifically, this industrial park would be located on a 909 acre site southerly of White Rock Road and on the westerly side of Latrobe Road. Reference is made to Figure 1 which is a vicinity map outlining the location of the proposed project in reference to Highway 50, Latrobe Road and White Rock Road.

Figure 2 is a larger scaled map showing the study area in more detail. It is anticipated that all access would be from Latrobe Road with traffic using Latrobe Road, White Rock Road, El Dorado Hills Boulevard and U. S. 50 to gain access to and from the proposed project.

The primary purpose of this study was to determine the traffic impact on surrounding streets in the study area resulting from the proposed development and cumulative impacts. Cumulative impacts considered in this analysis include the 160 acre Euer property and the 190 acre John Hancock property, both of which were evaluated as future industrial properties. In order to account for future residential and commercial growth including through traffic on U. S. 50 and El Dorado Hills Boulevard/Latrobe Road an annual traffic growth factor was developed and incorporated into the traffic analysis. The elements of this study included obtaining current traffic count data, estimating trip generation, distribution of traffic to the existing and proposed street system, a traffic analysis for several alternatives of development, and recommending mitigations appropriate for the proposed development project.

TRAFFIC DATA

In order to properly evaluate traffic conditions, current traffic count data is necessary and was obtained by the consultant. Contacts were made with the public works department of El Dorado County and CalTrans District 3 in Marysville to

obtain the most current count information available on county roads and the freeway. In addition, the consultant made peak hour turning movement counts for both the morning and afternoon peak hour periods during a typical weekday at the following four intersections: Latrobe Road and White Rock Road, Latrobe Road and the eastbound freeway off ramp, El Dorado Hills Boulevard and the westbound freeway off ramp, and El Dorado Hills Boulevard and Saratoga Way. A summary of these peak hour counts is shown in Figure 3. The afternoon peak hour period which occurred from 4:45 to 5:45 P. M. was determined to be the critical peak period of an average day and was used in this traffic analysis to determine traffic impacts.

TRIP GENERATION

A breakdown of land use and trip generation for the proposed project and cumulative impacts is shown in Table I. The generation of 24-hour and peak hour trips was done using trip generation rates available to TJKMfrom several sources: California Department of Transportation, The Institute of Transportation Engineers, and TJKM. The trip generation rates shown for the proposed project and other possible future industrial properties were correlated with the number of estimated employees that would be working in the proposed industrial developments for both the 1990 and the year 2000 scenarios. By 1990 it was estimated that the proposed industrial park and the John Hancock industrial property would be operating with an average of 15 employees per gross acre of development. Using an average of three trips per employee per day for all traffic to the industrial park a trip generation rate of 45 trip ends per gross acre is shown in Table I for the 1990 scenario. By the year 2000 it was estimated that the proposed industrial park and the John Hancock industrial property would have 23 employees per gross acre for a trip generation rate of 69. The Euer property would still be in its initial phase of development and a trip generation rate of 45 was employed.

Other cumulative impacts such as future commercial property near the U. S. 50 Freeway and Latrobe Road along with future residential development in the El Dorado Hills area were taken into consideration by developing a growth factor for the 1990 and year 2000 scenarios. Since extensive commercial and residential land uses are shown on the proposed El Dorado Hills Plan Area it would be difficult to determine to what extent future commercial and residential would be developed by the year 2000.

In reviewing information from the El Dorado County Planning Department, the population in El Dorado Hills/Salmon Falls area has increased from 1580 in 1965 to approximately 5450 in 1980. This is an annual growth of 8½%. In reviewing prior traffic count information of El Dorado Hills Boulevard and Latrobe Road the increase in daily traffic over the past nine years has been approximately the same as the population growth. The annual traffic increase on the U. S. 50 Freeway over the past three years has been approximately 6%. El Dorado County is estimating that the El Dorado Hills Plan Area will experience a population growth over the next 18 years from 3% to 8½% which is an average of slightly less than 6%. In estimating the annual growth of traffic on El Dorado Hills Boulevard, Latrobe Road, White Rock Road and the U. S. 50 Freeway over the next 18 years the consultant used an annual growth factor of 5% from the present year to 1990 and a 6% growth from 1990 to the year 2000. These growth factors have been used in estimating cumulative impacts on the roadway system in addition to the proposed industrial park and other future industrial properties as listed in Table I.

In reviewing Table I the 1990 scenario shows the proposed industrial park at 40% of development along with a 55 acre golf course that would be constructed as a part of the project and restricted to use only by company employees. For this reason no outside trip generation is shown for the golf course. In reference to the John Hancock property it is estimated that by 1990 20% of this 190 acres will be developed. The 1990 scenario would generate 17,100 daily trips and 2,480 P. M. peak hour trips with an estimated 20% inbound and 80% outbound split.

The year 2000 scenario shows the proposed industrial park at 100% of development, The Euer property at 50% development and the John Hancock property at 50% of development. Total daily trips come to 69,100 with 10,000 peak hour trips again distributed in a 20% inbound and an 80% outbound split.

TRIP DISTRIBUTION

In estimating the distribution of trips from the proposed industrial park development and cumulative impacts this was done using the 1980 census information and adjusting this for 1990 and the year 2000 according to input and discussions with the planning consultant. The results of the traffic distribution are shown in Table IIA for the 1990 and year 2000 scenarios using the existing road and freeway system.

An alternate distribution pattern was developed to account for a possible new freeway interchange located easterly of the Latrobe Road Interchange and this distribution is shown in Table IIB for the year 2000 scenario.

In arriving at these distribution patterns the consultant estimated that 62% of the work force in the El Dorado Hills area which now travels to Sacramento County each day would reduce to 40% by 1990 and 25% by the year 2000. Also, it was estimated that by 1990 20% of the work force for the proposed industrial project would reside in El Dorado Hills and that this would increase to 30% by the year 2000. 35% of the trips were assigned easterly on U. S. 50 and the southbound movement on Latrobe Road was estimated at 5% for 1990 and 10% for the year 2000.

Generation of the year 2000 impacts are sufficiently high that a new freeway interchange will be required and this will be discussed later on in the report. Also, an adjustment of traffic distribution will be necessary to reduce impacts as much as possible. For example, in 1990 it was estimated that 5% of the trips to Sacramento County would use White Rock Road, a relatively small number. To facilitate the distribution of the year 2000 traffic and reduce impacts at the Latrobe Road Interchange it was estimated that 12% of the Sacramento County traffic would use White Rock Road. Since the movement of traffic under the freeway from the proposed project to El Dorado Hills becomes more critical with the higher traffic generated by the year 2000 the assignment of trips north of the freeway was reduced from 30% to 25% with the additional 5% being assigned westerly on the freeway gaining access at the new proposed interchange easterly of Latrobe Road.

TRAFFIC ANALYSIS

In order to properly evaluate intersection capacity current P. M. peak hour counts were obtained by the consultant as referred to earlier in the report. These counts were taken on Latrobe Road at White Rock and at the eastbound freeway off ramp and on El Dorado Hills Boulevard at the westbound off ramp and at Saratoga Way. Both A. M. and P. M. peak hour counts were taken but the P. M. condition was determined to be critical as can be seen by reviewing the traffic volumes in Figure 3.

Capacity calculations were made at the above listed intersections

for existing traffic, existing traffic plus proposed impacts to 1990 and existing traffic plus proposed impacts to the year 2000. In order to calculate the level of service capacity the critical lane volume method was used by the consultant using level of service lane columes as shown in Table III. To allow a capacity calculation for comparison with future volumes intersections not already signalized are assumed to be operating in a mode that a two-phase traffic signal would generate. This assumption does not quite approximate existing conditions, however, the approximation was considered sufficiently accurate to generate data for comparative purposes. An analysis of the operation of each intersection was conducted using the critical movement summation method of capacity analysis as shown in Table IV. Also, reference is made to Table V which lists the description of six levels of service for urban and suburban arterial streets used in capacity analysis. This table relates the volume to capacity ratio to the six levels of service with an explanation for each as used in capacity analysis. Generally speaking, Level of Service C is considered acceptable for urban design conditions although LOS D has been accepted at times by governmental agencies. In this report the capacity calculations were based on Level of Service C having a maximum allowable ratio of 1.00. This means that the maximum ratio for Level of Service E would be 1.25 instead of 1.00 as sometimes used in this type of analysis.

Analysis of peak hour traffic has been conducted for the four intersections previously referenced and located adjacent to and serving the proposed project development and cumulative impacts. Capacity analyses at these locations were conducted to determine the current and future levels of operation.

The results of the capacity analysis are shown in Table VI which outlines the v/c ratio and level of service for the locations included in the project study. The detailed P. M. capacity calculation to support Table VI are shown in Appendix A for existing and project traffic. Similar calculations are, also, included for the cumulative impacts, both for the 1990 and the year 2000 scenarios.

To clarify the distribution of traffic utilized by the consultant Figures 4 and 5 have been prepared which show projected P. M. peak hour trips including existing traffic for the proposed industrial park development and cumulative impacts for the 1990 and year 2000 scenarios. Figure 5 modifies

the distribution in Figure 4 by taking into consideration the future construction of a new interchange easterly of the Latrobe Road Interchange. Referring again to Table VI the v/c ratios for existing traffic are all at LOS A since there is very little development on the south side of the freeway at the Latrobe Road Interchange. When the projected traffic to 1990 is added to the system the two intersections on Latrobe Road under existing geometric conditions are at LOS F, including the eastbound off ramp and White Rock Road. El Dorado Hills Boulevard and the westbound off ramp is at LOS D and El Dorado Hills and Saratoga Way is at LOS B. These intersections can be mitigated as shown in the table by installing dual left turn lanes for northbound and southbound traffic at the freeway off ramps and by constructing Latrobe Road to four lanes south of the freeway and along side the proposed project. This mitigation results in LOS C at Latrobe and White Rock, partially into LOS D at Latrobe and the eastbound off ramp, with the westbound off ramp being at LOS C and El Dorado Hills at Saratoga remaining at LOS B.

When the year 2000 traffic is added to the roadway system all four of the intersections studied are at LOS F with very high v/c ratios. These v/c ratios can be reduced some by constructing six lanes of traffic on Latrobe Road south of the freeway, by installing a dual left turn lane for the westbound freeway off ramp and by providing three northbound through lanes on El Dorado Hills Boulevard at Saratoga Way and two westbound lanes at the same intersection. However, all four intersections still remain at LOS F. A summary of mitigation measures for 1990 and year 2000 traffic is listed in Table VII.

To further mitigate the year 2000 traffic condition, traffic was redistributed as discussed earlier in the report in accordance with a possible new freeway interchange that could be constructed where an existing grade separation is located near Clarksville approximately seven to eight tenths of a mile easterly of the Latrobe Road Interchange. Using the new distribution pattern as shown in Table IIB and as outlined in Figure 5 the v/c ratios were recalculated for the four intersections studied. One of the intersections, El Dorado Hills Boulevard at Saratoga Way improves to LOS E, however, the other three intersections remain at LOS F. Using the same distribution pattern and eliminating the Euer property and John Hancock property impacts, Latrobe and White Rock Road improves to LOS E, El Dorado Hills Boulevard and Saratoga Way is at LOS D, but the two freeway off ramps remain at

LOS F. If a further mitigation is analyzed by assuming that the proposed project would be at 80% development in addition to the Euer and Hancock properties not being developed the El Dorado Hills Boulevard and the westbound off ramp intersection is at LOS E and the other three intersections are at LOS D.

Listed below is a brief discussion describing the capacity analysis and recommended mitigation for each location studied:

1. Latrobe Road and White Rock Road

The existing v/c ratio of 0.21 or LOS A increases to 1.89 or LOS F with project traffic to 1990. This can be mitigated to LOS C by providing four lanes of traffic on Latrobe Road. When the year 2000 traffic is added the v/c ratio increases to over three times the desirable level. By increasing Latrobe Road to six lanes of traffic this v/c ratio decreases to 2.11. Construction of a new freeway interchange easterly of Latrobe causes a further decrease in the v/c ratio to 1.47, but still LOS F. Further mitigation by removing impacts from the Euer and John Hancock properties and reducing the proposed project to 80% of proposed development results in a v/c ratio of 1.21, LOS E, and 1.09, LOS D, respectively.

2. Latrobe Road and the Eastbound U. S. 50 Off Ramp

At this intersection the existing v/c ratio of 0.48 is increased to 1.35 or LOS F for project traffic to 1990. By providing a dual southbound left turn lane on Latrobe Road and a separate northbound right turn lane the v/c ratio is reduced to 1.04 or LOS D. However, when traffic to the year 2000 is added the v/c ratio increases to a high level of 2.54. Provision of a new freeway interchange easterly of Latrobe Road reduces this ratio to 1.41, but still LOS F. Further mitigation is possible by reducing the amount of industrial development. Removing impacts from the Euer and John Hancock properties reduces the v/c ratio to 1.28. LOS F, and restricting project development to 80% results in a ratio of 1.10, LOS D.

3. El Dorado Hills Boulevard and the U. S. 50 Westbound Off Ramp

The existing operating level volume which produces a v/c ratio of 0.36, LOS A, increases to 1.13, LOS D, with project traffic to 1990. A dual left turn lane for northbound

traffic along with two northbound through lanes mitigates traffic conditions to 0.90, LOS C. While the existing northbound approach width of 44 feet is minimal to handle four lanes of traffic some widening is possible on the east side between the freeway support column and the westbound off ramp. When traffic impacts from the year 2000 are considered the v/c ratio increases back up to LOS F at 2.20. A dual westbound left turn lane for the U. S. 50 Freeway off ramp decreases this slightly and the decrease is magnified considerably with construction of a new freeway interchange and the v/c ratio becomes 1.58, but still LOS F. Eliminating the Euer and John Hancock properties from traffic impact considerations reduces the ratio to 1.43, LOS F. If the project is developed at 80% capacity the ratio is in the top level of LOS E at 1.25.

4. El Dorado Hills Boulevard and Saratoga Way

Traffic impacts for this intersection with existing traffic is 0.46, LOS A. Adding project traffic plus cumulative to 1990 increases the ratio to 0.82, LOS B. When the year 2000 traffic is added this intersection becomes in a failure mode with a ratio of 2.02, LOS F. By providing three northbound through lanes and two westbound lanes at the subject intersection the v/c ratio is decreased to 1.36, but still LOS F. Provision of a new freeway interchange easterly of the existing intersection allows traffic impacts to be reduced to LOS E with a ratio of 1.24. For comparison purposes impacts were determined by eliminating the Euer and John Hancock properties and restricting project development to 80% of capacity. The v/c ratios were 1.12, LOS D, and 1.10, LOS D, respectively.

MITIGATION MEASURES

The necessary mitigation measures to provide maximum traffic service for the proposed project and cumulative impacts have been discussed earlier in the report and a summary of these mitigations is shown in Table VI. When comparing the v/c ratios for each location the ratios are cumulatively added and decreased for each impact and mitigation measure taken. For example, at Latrobe and White Rock Road the existing ratio is increased to 1.89 with 1990 traffic. The first mitigation reduces this to 0.99. When year 2000 traffic is added the 0.99 ratio is increased to 3.14. A second mitigation reduces the ratio to 2.11 and the third, fourth, and fifth mitigations further reduce the v/c ratio.

A summary of mitigation measures are listed below for your convenience and reference.

A. Existing Traffic Conditions

No mitigation measures are necessary as existing traffic is at LOS A.

B. Project Traffic and Cumulative Impacts to 1990

1. Latrobe and White Rock

Provide four lanes of traffic on Latrobe including separate north and southbound left turn lanes. The existing cross section of one lane in each direction on White Rock Road is sufficient to handle this level of traffic flow.

2. Latrobe and the Eastbound Off Ramp

Project traffic to 1990 can be mitigated to 1.04 or LOS D with a southbound dual left turn lane and a separate northbound right turn lane on Latrobe Road. The existing southbound approach width of 44 feet is minimal to handle four lanes of traffic, however, the westbound curb line can be set back as traffic proceeds past the freeway support column. There is ample room on the east side to construct a separate northbound right turn lane.

3. El Dorado Hills and the Westbound Off Ramp

Project traffic to 1990 is at LOS D, however, a dual northbound left turn lane reduces the traffic impacts to LOS C. As in number 2 above the 44 foot approach width is minimal for northbound traffic but some widening is possible north of the freeway support column to the westbound off ramp intersection.

4. El Dorado Hills and Saratoga Way

Project traffic to 1990 increases impacts from LOS A to LOS B. The existing cross section of two lanes in each direction plus left turn lanes for El Dorado Hills Boulevard and one lane of traffic in each direction for Saratoga Way is acceptable.

5. Traffic Signal Needs

Project traffic and cumulative impacts to 1990 will require new traffic signals at five locations. Early need for signalization will occur on El Dorado Hills Boulevard at the westbound off ramp and at Saratoga Way and, also, at Latrobe Road at the eastbound off ramp. Traffic signals, also, will be desirable at Latrobe and White Rock Road and at the main entrance into the proposed industrial park from Latrobe Road.

Since the intersections of El Dorado Hills and Saratoga and the westbound off ramp are relatively close together traffic signals for these two locations will need to be carefully coordinated to allow for proper clearances on El Dorado Hills between the two intersections. It may be necessary to effectively operate the two intersections as one intersection for phasing and clearance purposes. Also, the proposed traffic signals on Latrobe Road southerly from these intersections will need to be coordinated together to allow for proper flow of traffic on Latrobe Road/El Dorado Hills Boulevard.

C. Project Traffic and Cumulative Impacts to the Year 2000

1. Latrobe and White Rock

Cumulative impacts to the year 2000 are not mitigable for full development of the project along with estimated development for the Euer and John Hancock properties. Recommended construction at this intersection to handle traffic is four northbound through lanes plus a dual left turn lane and a separate right turn lane, four southbound through lanes plus a separate left turn lane, two eastbound lanes including a separate right turn lane and three westbound lanes including a dual left turn lane. As can be seen from Table VI it is possible to mitigate traffic to LOS D by limiting the amount of industrial development.

2. Latrobe and the Eastbound Off Ramp

This intersection, also, is not mitigable with full industrial development, although a new freeway

interchange helps considerably. Proposed geometrics are: three northbound through lanes plus a separate right turn lane, two southbound through lanes and a dual left turn lane, and a dual left turn lane for the eastbound off ramp.

3. El Dorado Hills and the Westbound Off Ramp

Similar to the intersections discussed in one and two above mitigation is not possible even with a new freeway interchange. Traffic impacts are at the high level of LOS E by restricting development as shown in the table. Proposed geometrics at this intersection are for two northbound through lanes and a dual left turn lane, two southbound through lanes with an added lane allowing access onto the freeway and a dual left turn lane for the westbound off ramp.

4. El Dorado Hills and Saratoga Way

Full development results in less traffic impacts at this intersection but still LOS F. Provisions for a new freeway interchange would result in LOS E and restricting the amount of industrial development would further reduce the impact to LOS D. Recommended geometrics at this intersection are for three northbound through lanes plus a separate left turn lane, two southbound through lanes plus a separate left turn lane and a right turn lane for access onto the freeway, two approach lanes for westbound traffic including a separate left turn lane and a combination through and right turn lane with similar treatment for the eastbound approach.

5. Street and Freeway Construction Needs

As stated earlier a new freeway interchange will be needed to handle anticipated industrial development after 1990. The extension of White Rock Road easterly from Latrobe proceeds under the freeway with a grade separation in the vicinity of Clarksville. This grade separation is approximately three quarters of a mile easterly of the Latrobe Road/El Dorado Hills Boulevard interchange. Although this distance between interchanges is less than desirable according to CalTrans standards it may be possible to locate

the ramps on the easterly side of the interchange if standard construction procedures would not allow sufficient weaving and merging distance on the freeway.

White Rock Road easterly of Latrobe would need to be constructed as a four lane facility tying in with the new interchange. White Rock Road west of Latrobe could handle anticipated traffic on a high standard two lane county road with proper widening at critical intersections. For Latrobe Road south of White Rock Road the street cross section from the main entrance into the industrial park northerly to White Rock should be for six lanes of traffic with proper widening at traffic signal locations. Southerly from the main entrance the street width should accommodate two to four lanes of traffic depending on the traffic circulation design for the project industrial park.

6. Mass Transit

In the capacity analysis it was assumed that all of the trips would come and go by private automobile. This position was taken by the consultant since the present bus service is very limited with service on each Wednesday and on the second and fourth Mondays. There are two round trips on each of these days from Placerville with two stops in El Dorado Hills: one at the Raleys Super Market near U. S. 50 and the other stop at the Village Plaza. In the future some relief to the traffic impacts could be provided by transit facilities and other transportation system management improvements such as car pools, staggered work shifts, flex time operation etc. With proper implementation of TSM the year 2000 traffic impacts could be reduced from 10% tp 20% and thus allow full project development in conjunction with a new freeway interchange and other roadway improvements outlined in this report.

Very truly yours,

A A Johnson

Arnold A. Johnson

AAJ:mj

TABLE I

PROPOSED LAND USE AND TRIP GENERATION FOR

LATROBE ROAD HIGH TECH INDUSTRIAL PARK

LAND USE	ACRES	ESTIMATED ACRES OF DEVELOPMENT	DAILY TRIP RATE PER ACRE	DAILY TRIPS	PEAK HOUR (%)	PEAK HOUR TRIPS	PEAK HOUR IN %	PEAK HOUR OUT %	PEAK HOUR TRIPS IN	PEAK HOUR TRIPS OUT
1990 Scenario										
Proposed Industrial Park	854	342 (40%)	45	15,390	14.5	2,232	20	80	447	1,785
Golf Course	55	55	--	------	----	-----	--	--	---	-----
John Hancock Industrial	190	38 (20%)	45	1,710	14.5	248	20	80	50	198
				17,100		2,480			497	1,983
Year 2000 Scenario										
Proposed Industrial Park	854	854	69	58,926	14.5	8,544	20	80	1,709	6,835
Euer Property	160	80 (50%)	45	3,600	14.5	522	20	80	104	418
John Hancock Industrial	190	95 (50%)	69	6,555	14.5	951	20	80	190	761
				69,081		10,017			2,003	8,014

Source: TJKM 8/82

TABLE II (B)

TRIP SPLIT AND DISTRIBUTION (%)

(ALTERNATE B DISTRIBUTION)
YEAR 2000

AREA OF DEVELOPMENT	WEST ON U. S. 50		EAST ON U. S. 50		NORTH ON EL DORADO HILLS	SOUTH ON LATROBE	WEST ON WHITE ROCK
	LATROBE	CLARKSVILLE	LATROBE	CLARKSVILLE			
Proposed Project	13	5	15	20	25	10	12
Euer Property	13	5	15	20	25	10	12
John Hancock Property	13	5	15	20	25	10	12

Source: TJKM
8/82

TABLE II (A)

TRIP SPLIT AND DISTRIBUTION (%)

(ALTERNATE A DISTRIBUTION)

AREA OF DEVELOPMENT	WEST ON U. S. 50	EAST ON U. S. 50	NORTH ON EL DORADO HILLS	SOUTH ON LATROBE	WEST ON WHITE ROCK
1990 Distribution					
Proposed Project	35	35	20	5	5
John Hancock Property	35	35	20	5	5
Year 2000 Distribution					
Proposed Project	20	35	30	10	5
Euer Property	20	35	30	10	5
John Hancock Property	20	35	30	10	5

Source: TJKM
8/82

TABLE III

LEVEL OF SERVICE LANE VOLUMES

TYPE OF FACILITY	HOURLY VOLUMES LEVEL C	LEVEL D	LEVEL E
Surface Street Left Turn Lane	1,000	1,150	1,250
Surface Street Through and Turning Lane	1,100	1,265	1,375
Surface Street Through Lane	1,200	1,380	1,500
Surface Street Dual Left Turn Lane	1,800	2,070	2,250
Freeway Ramp	1,600	1,840	2,000

Source:

Highway Capacity Manual, TJKM

8/82

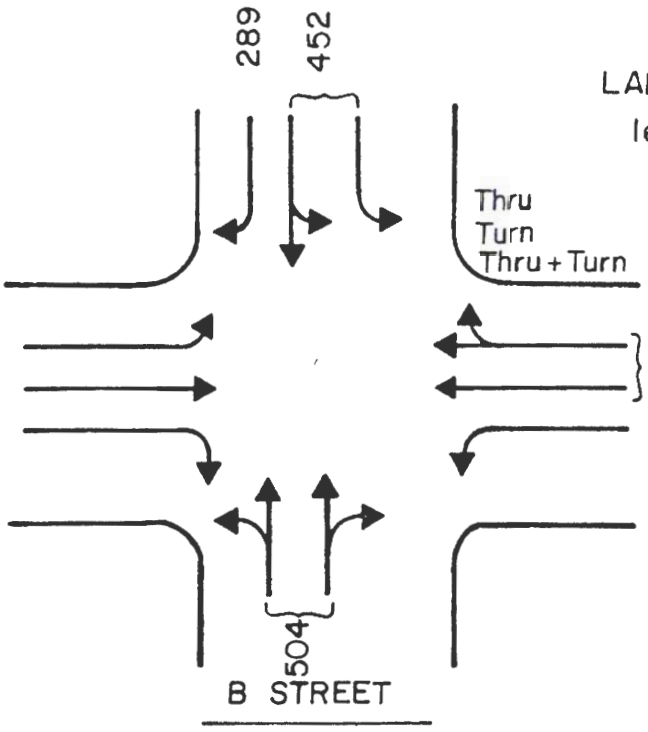
TABLE IV

INTERSECTION CAPACITY ANALYSIS

INTERSECTION A STREET AND B STREET P.M. PEAK HOUR

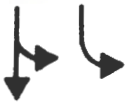
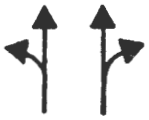
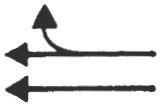
LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



LANE CAPACITIES (vph)

	level of service C	D	E
Thru	1200	1380	1500
Turn	1000	1150	1250
Thru + Turn	1100	1265	1375

PHASE	CRITICAL MOVEMENT	CAPACITY OF * CRITICAL MOVEMENT	VOLUME	V/C
1		2625 (1250 + 1375)	452	0.172
2		2750 (1375 + 1375)	504	0.183
3		2875 (1500 + 1375)	704	0.245
	OPPOSING LEFT 	1250	110	0.088
		YELLOW TIME/CYCLE LENGTH		0.10
		V/C OF INTERSECTION		0.79
		LEVEL SERVICE OF INTERSECTION		C

1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

TABLE V

LEVELS OF SERVICE FOR URBAN AND SUBURBAN ARTERIAL STREETS

LEVEL OF SERVICE	DESCRIPTION	V/C RATIO
A	Free flow (relatively). If signalized, conditions are such that no approach phase is fully utilized by traffic and no vehicle waits through more than one red indication. Very slight or no delay.	0.00 - 0.75
B	Stable flow. If signalized, an occasional approach phase is fully utilized; vehicle platoons are formed. This level is suitable operation for rural design purposes. Slight delay.	0.76 - 0.90
C	Stable flow of operation. If signalized, drivers occasionally may have to wait through more than one red indication. This level is suitable operation for urban design purposes. Acceptable delay.	0.91 - 1.00
D	Approaching unstable flow or operation; queues develop, but are quickly cleared. Tolerable delay.	1.01 - 1.15
E	Unstable flow or operation; the intersection has reached ultimate capacity; this condition is not uncommon in peak hours. Congestion and intolerable delay.	1.16 - 1.25
F	Forced flow or operation. Intersection operates below capacity. Jammed.	1.25+

Source: Highway Capacity Manual, HRB Special Report 87

TABLE VI

SUMMARY OF CAPACITY ANALYSIS

INTERSECTION	EXISTING TRAFFIC V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO 1990 V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO 1990 1ST MITIGATION V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO YEAR 2000 V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO YEAR 2000 2ND MITIGATION V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO YEAR 2000 3RD MITIGATION V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO YEAR 2000 4TH MITIGATION V/C	LOS	EXISTING PLUS PROJECT AND CUMULATIVE TO YEAR 2000 5TH MITIGATION V/C	LOS
Latrobe & White Rock	0.21	A	1.89	F	0.99[a]	C	3.14	F	2.11[d]	F	1.47[g]	F	1.21[h]	E	1.09[i]	D
Latrobe & E/B Off Ramp	0.48	A	1.35	F	1.04[b]	D	2.54	F	2.54	F	1.41[g]	F	1.28[h]	F	1.10[i]	D
El Dorado Hills & W/B Off Ramp	0.36	A	1.13	D	0.90[c]	C	2.20	F	2.00[e]	F	1.58[g]	F	1.43[h]	F	1.25[i]	E
El Dorado Hills & Saratoga	0.46	A	0.82	B	----	-	2.02	F	1.36[f]	F	1.24[g]	E	1.12[h]	D	1.10[i]	D

NOTES

a. Four lanes on Latrobe
b. Dual S/B left turn lane & separate N/B right turn lane
c. Dual N/B left turn lane
d. Six lanes on Latrobe
e. Dual W/B left turn lane and dual N/B left turn lane
f. Three N/B through lanes & two W/B lanes
g. New interchange easterly of Latrobe Road near Clarksville
h. Impacts without Euer and John Hancock property development
i. Impacts with proposed project at 80% development

Source:

TJKM
8/82

TABLE VII

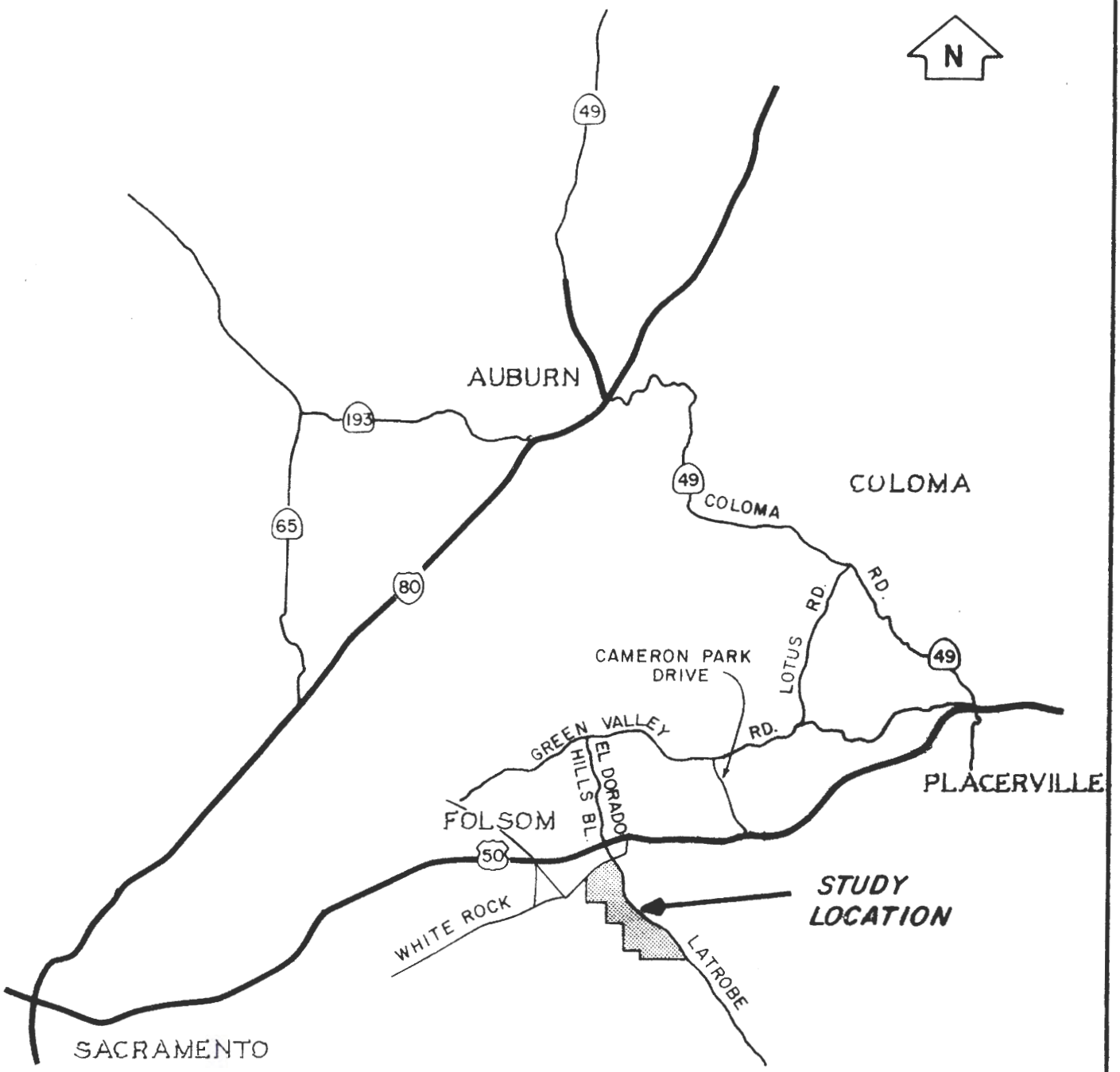
SUMMARY OF MITIGATION MEASURES FOR

EL DORADO HILLS INDUSTRIAL PARK

LOCATION	DIRECTION (APPROACH)	EXISTING CONDITIONS	TRAFFIC IMPACTS TO 1990	TRAFFIC IMPACTS TO 2000
Latrobe & White Rock	EB	1T	1T	1T, 1R
	WB	1T	1T	2L, 1T
	NB	1T	1L, 2T	2L, 4T, 1R
	SB	1T	1L, 2T	1L, 3T
Latrobe & E/B Off Ramp	EB	1L, 1R	1L, 1R	1L, 1R
	NB	2T	2T, 1R	2T, 1R
	SB	1L, 2T	2L, 2T	2L, 2T
El Dorado Hills & W/B Off Ramp	WB	1L, 1R	1L, 1R	1L, 1L & R
	NB	1L, 2T	2L, 2T	2L, 2T
	SB	2T	2T	2T, 1R
El Dorado Hills & Saratoga	EB	1T	1T	1L, 1T
	WB	1T	1T	1L, 1L & T
	NB	1L, 2T	1L, 2T	1L, 3T
	SB	1L, 2T	1L, 2T	1L, 3T

Intersection lane requirements.

T = Through
L = Left
R = Right
FR = Free Right (no signal control)

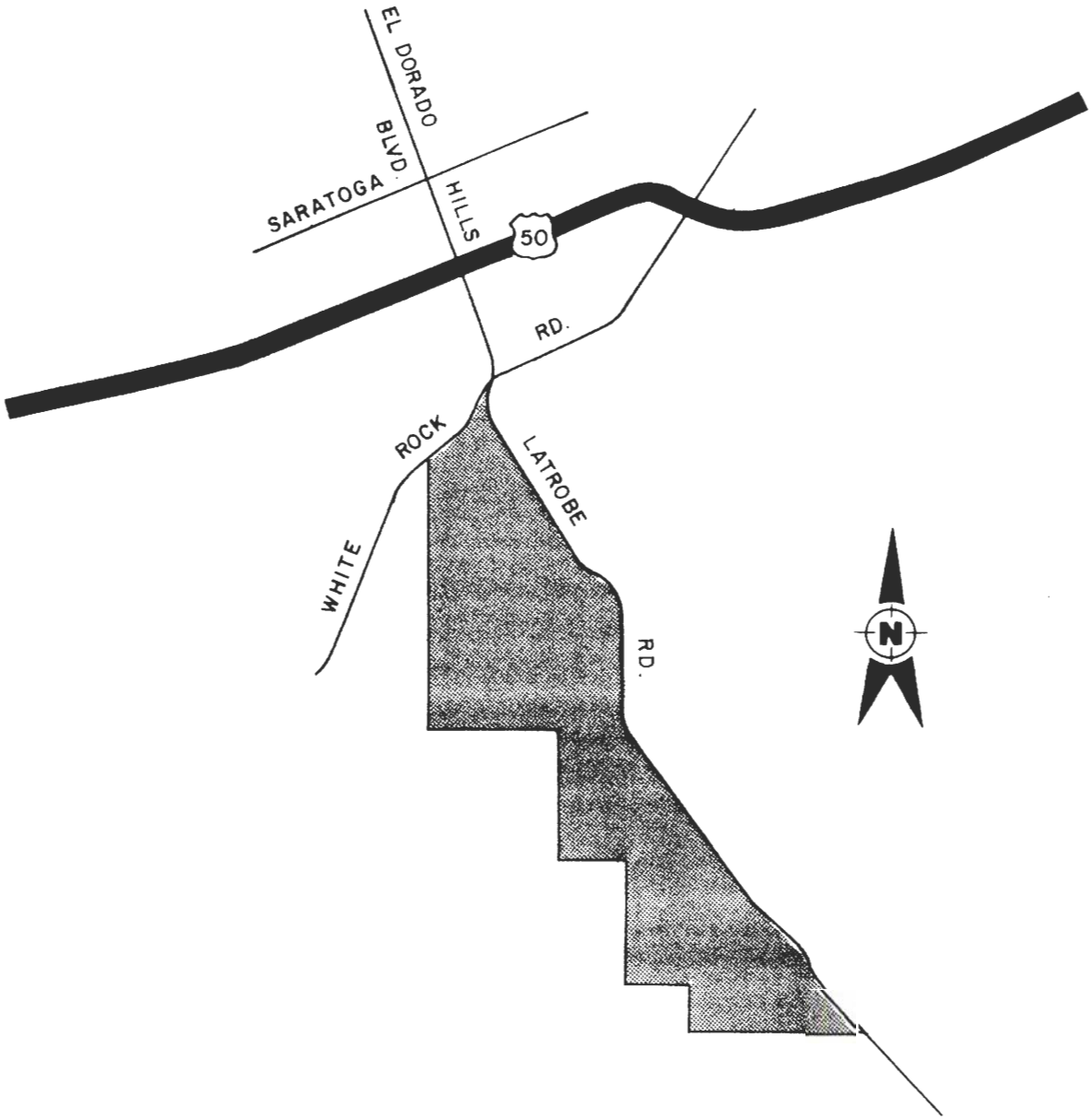


EL DORADO HILLS INDUSTRIAL PARK TRAFFIC STUDY

VICINITY MAP

TJKM
Walnut Creek, Ca.

FIGURE
1

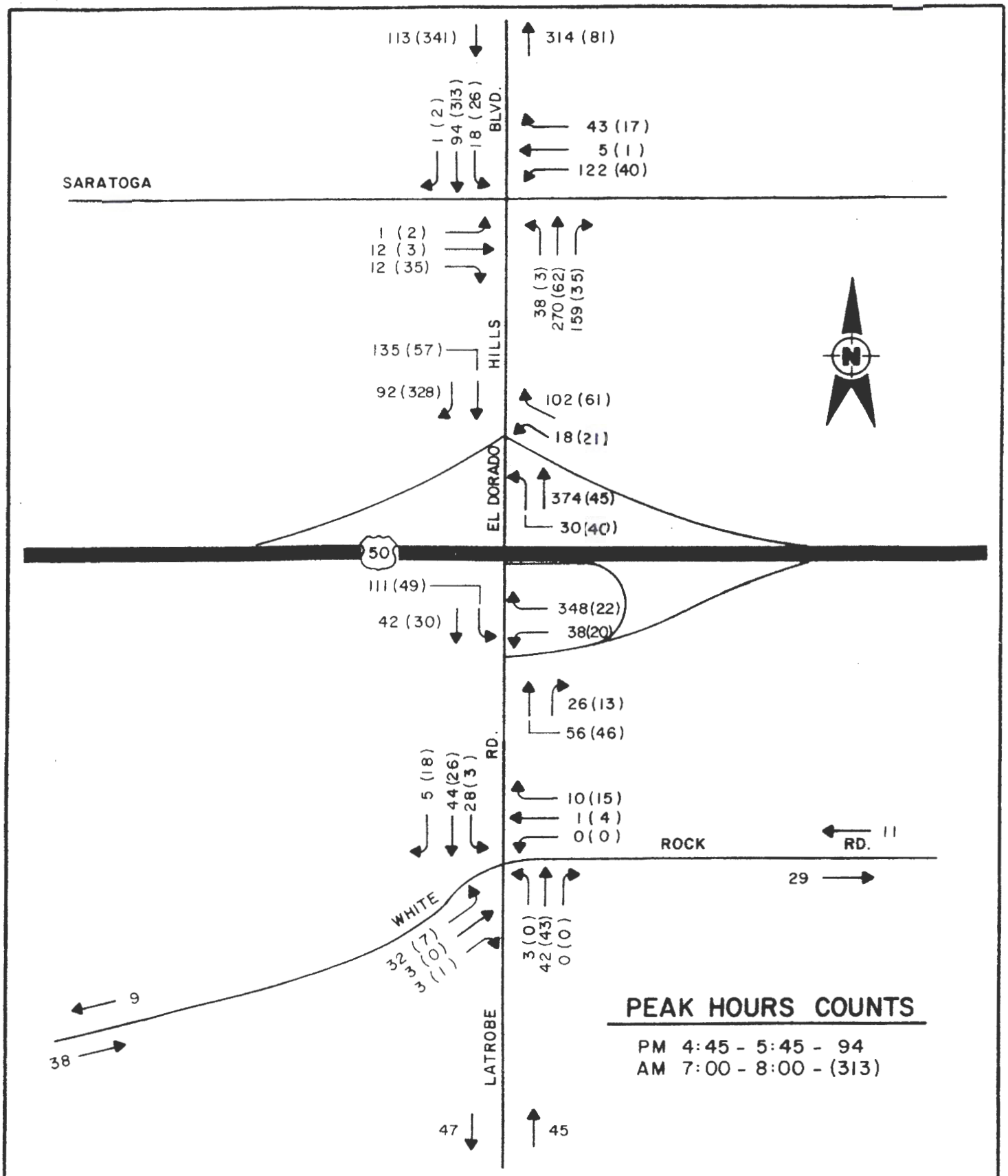


EL DORADO HILLS INDUSTRIAL PARK TRAFFIC STUDY

STUDY AREA

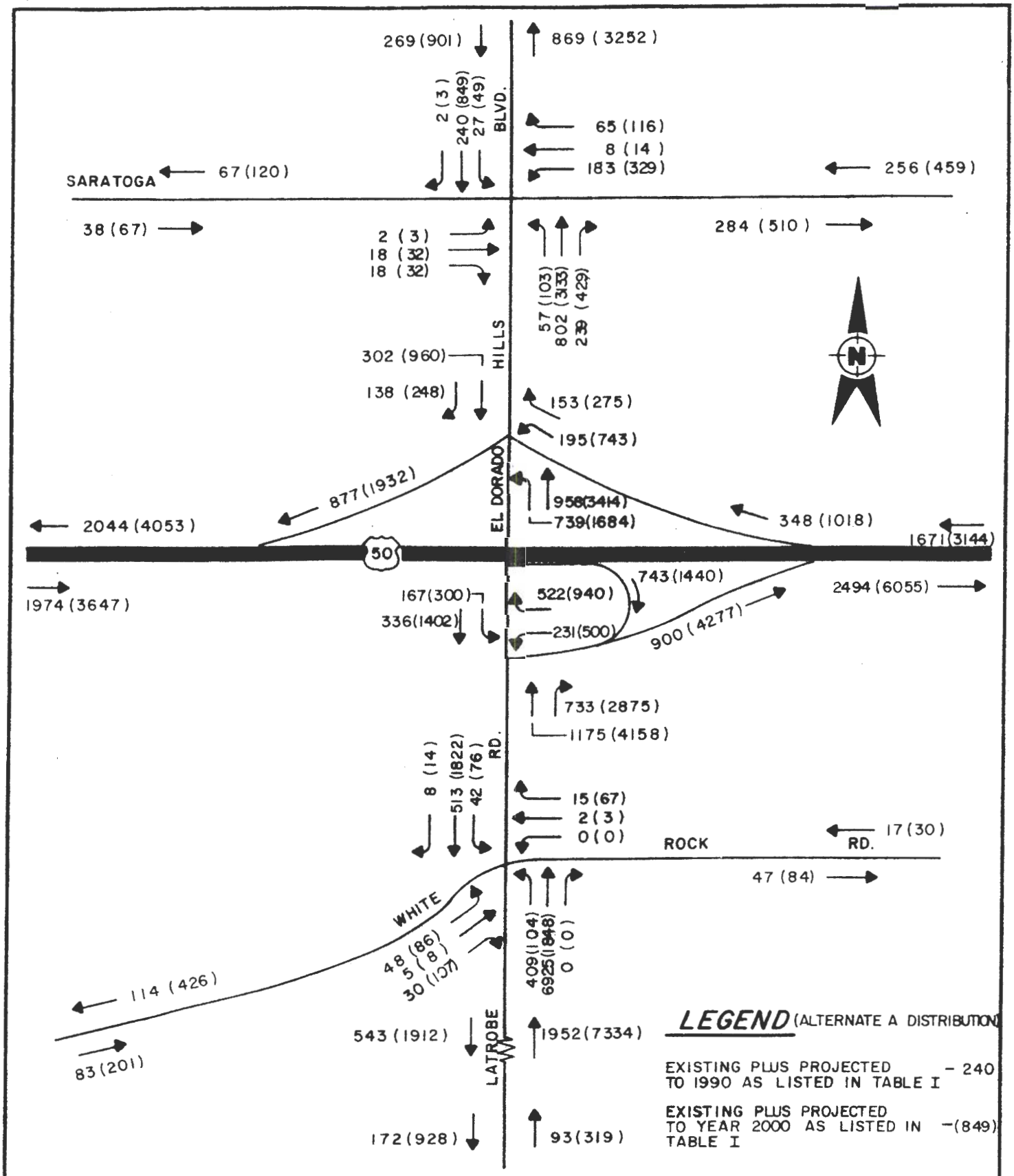
TJKM
Walnut Creek, Ca.

FIGURE 2



EL DORADO HILLS INDUSTRIAL PARK TRAFFIC STUDY

PEAK HOUR TURNING MOVEMENTS	JKM Walnut Creek, Ca.	FIGURE 3

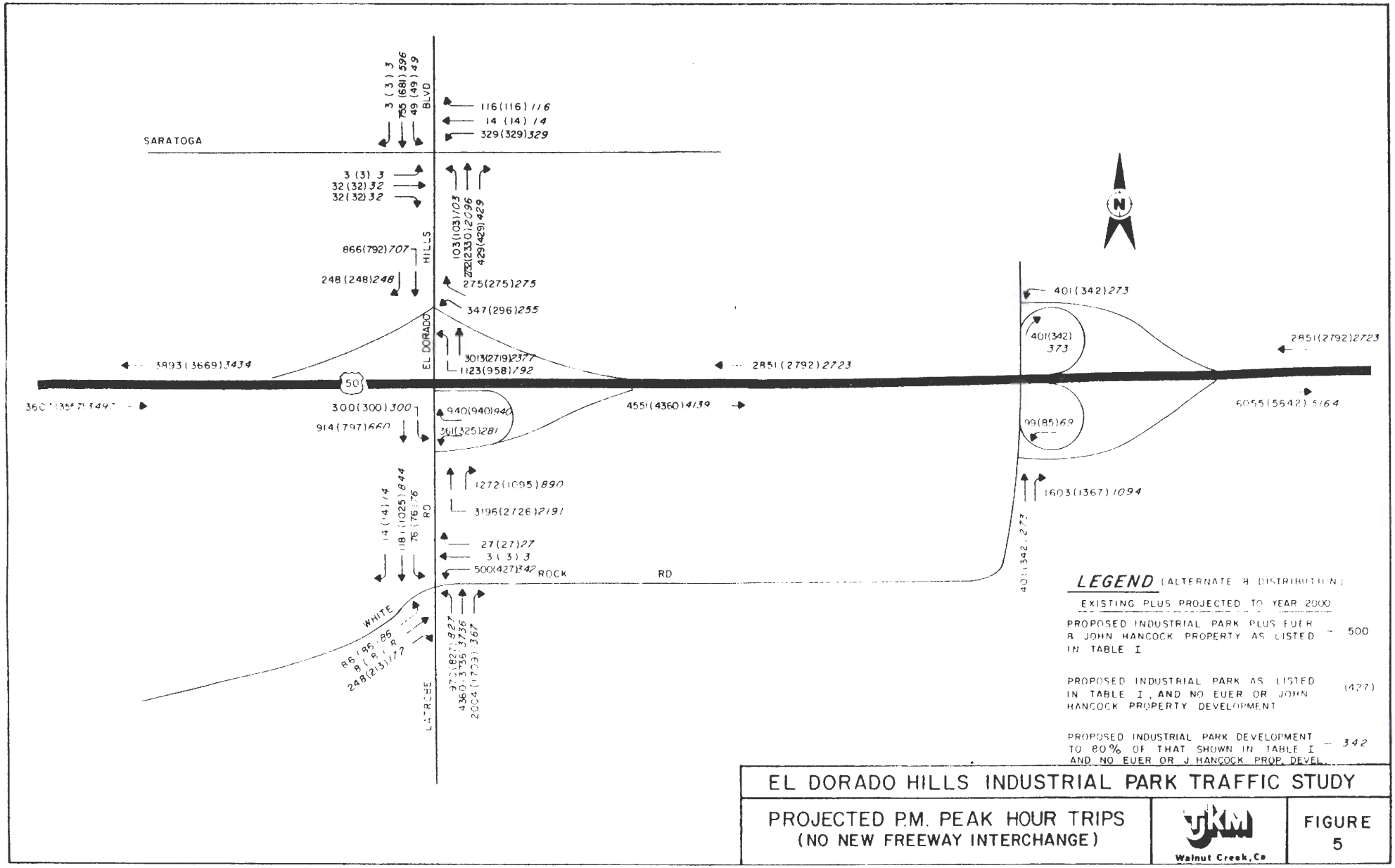


EL DORADO HILLS INDUSTRIAL PARK TRAFFIC STUDY

PROJECTED P.M. PEAK HOUR TRIPS (NO NEW FREEWAY INTERCHANGE)

JKM
Walnut Creek, Ca.

FIGURE 4



LEGEND (ALTERNATE B DISTRIBUTION)

EXISTING PLUS PROJECTED TO YEAR 2000

PROPOSED INDUSTRIAL PARK PLUS EUER & JOHN HANCOCK PROPERTY AS LISTED IN TABLE I — 500

PROPOSED INDUSTRIAL PARK AS LISTED IN TABLE I, AND NO EUER OR JOHN HANCOCK PROPERTY DEVELOPMENT (427)

PROPOSED INDUSTRIAL PARK DEVELOPMENT TO 80% OF THAT SHOWN IN TABLE I AND NO EUER OR J HANCOCK PROP. DEVEL. — 342

EL DORADO HILLS INDUSTRIAL PARK TRAFFIC STUDY

PROJECTED P.M. PEAK HOUR TRIPS (NO NEW FREEWAY INTERCHANGE)

JKM Walnut Creek, Ca

FIGURE 5

APPENDIX A

INTERSECTION CAPACITY ANALYSIS

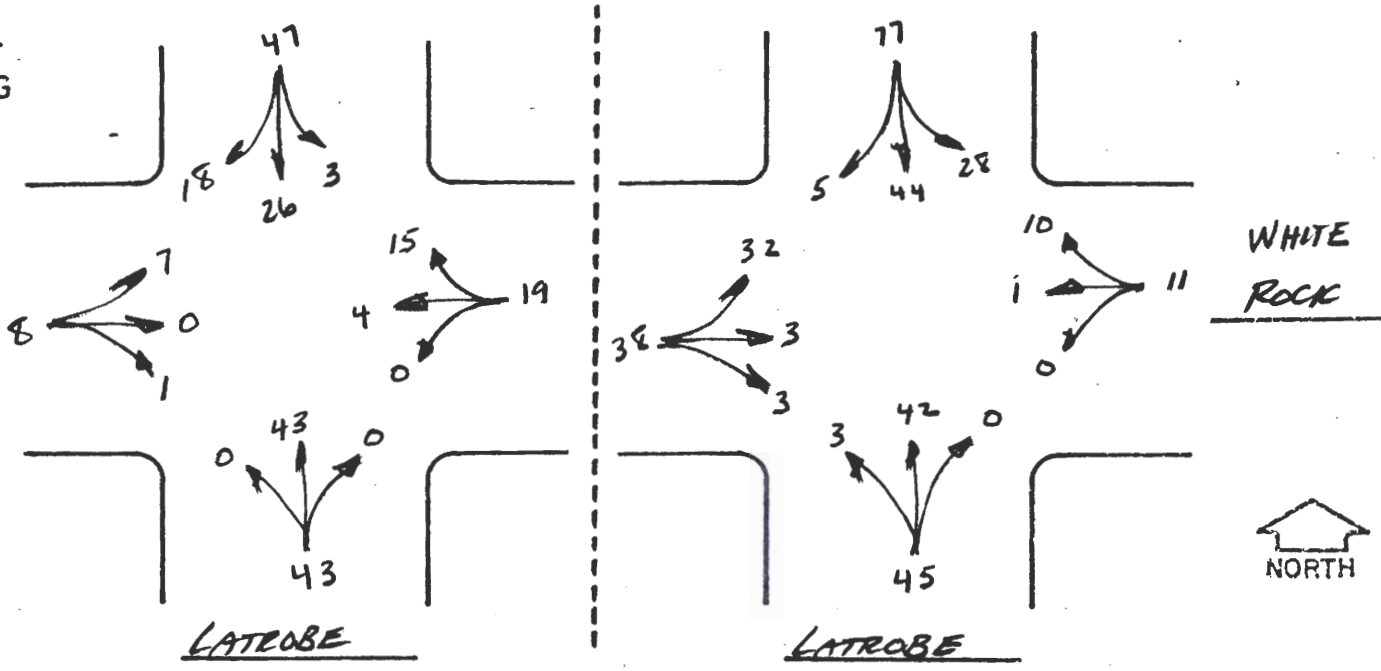
INTERSECTION LATROBE & WHITE ROCK

CONDITION

LANE PATTERN & TRAFFIC VOLUMES

AM | PM

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT AM	CRITICAL MOVEMENT PM	* CAPACITY OF CRITICAL MOVEMENT AM	* CAPACITY OF CRITICAL MOVEMENT PM	VOLUME AM	VOLUME PM	V/C AM	V/C PM
1			1100	1100	47	77	.043	.070
2			1000	1000	0	3	0	.003
3			1000	1000	7	0	.007	0
4			1100	1100	19	38	.017	.035
				YELLOW TIME/CYCLE LENGTH			0.10	0.10
				V/C OF INTERSECTION			0.17	0.21
				LEVEL OF SERVICE OF INTERSECTION			A	A

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

INTERSECTION CAPACITY ANALYSIS

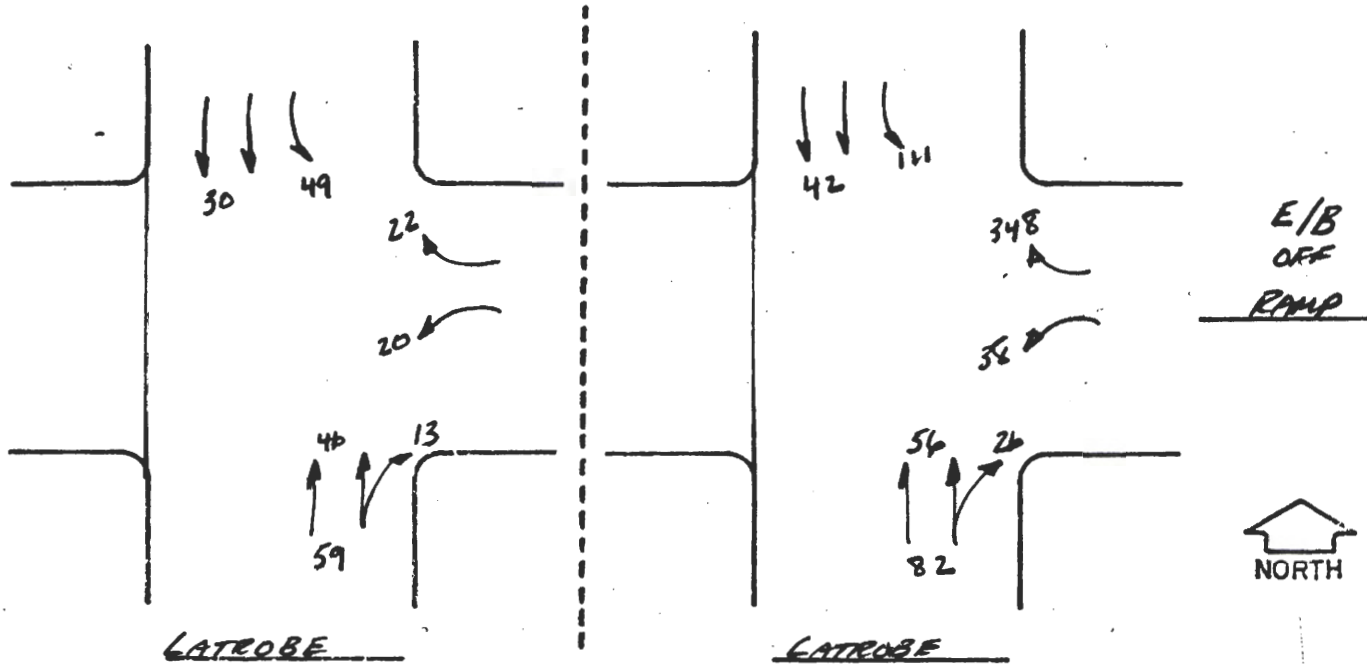
INTERSECTION LATROBE & E/B OFF RAMP

CONDITION PEAK HOUR - EXISTING CONDITIONS

LANE PATTERN & TRAFFIC VOLUMES

AM PM

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT AM	CRITICAL MOVEMENT PM	* CAPACITY OF CRITICAL MOVEMENT AM	* CAPACITY OF CRITICAL MOVEMENT PM	VOLUME AM	VOLUME PM	V/C AM	V/C PM
1	↓	↓	1000	1000	49	111	.049	.111
2	↑↱	↑↱	2300	2300	59	82	.026	.036
3	↰	↰	1000	1000	20	237	.020	.237
				YELLOW TIME/CYCLE LENGTH			0.10	0.10
				V/C OF INTERSECTION			0.19	0.48
				LEVEL OF SERVICE OF INTERSECTION			A	A

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

INTERSECTION CAPACITY ANALYSIS

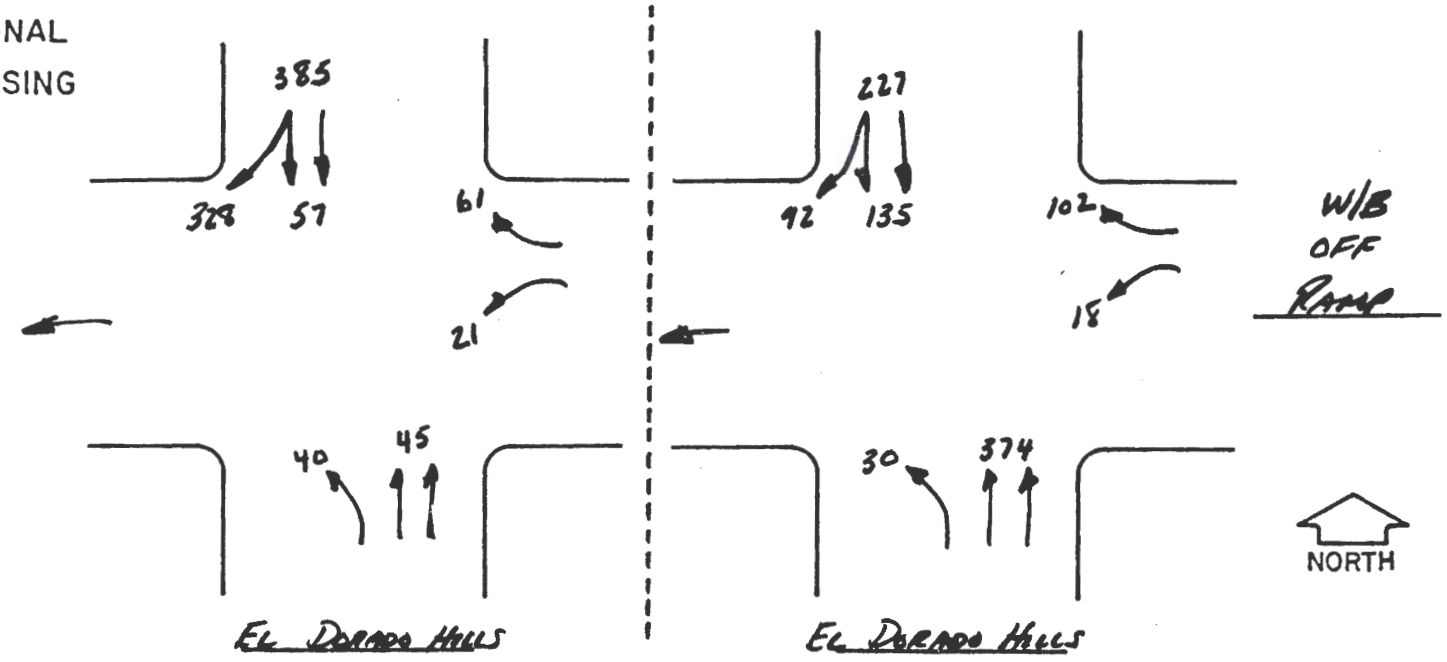
INTERSECTION El Dorado Hills Blvd & W/B OFF Ramp

CONDITION Peak Hour - Existing Conditions

LANE PATTERN & TRAFFIC VOLUMES

AM PM

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT AM	CRITICAL MOVEMENT PM	* CAPACITY OF CRITICAL MOVEMENT AM	* CAPACITY OF CRITICAL MOVEMENT PM	VOLUME AM	VOLUME PM	V/C AM	V/C PM
1	↖	↑↑	1000	2400	40	374	.040	.156
2	↑↓	—	2300	—	385	—	.167	—
3	↰	↰	1000	1000	61	102	.061	.102
				YELLOW TIME/CYCLE LENGTH			.10	.10
				V/C OF INTERSECTION			0.37	0.36
				LEVEL OF SERVICE OF INTERSECTION			A	A

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills Blvd & Saratoga

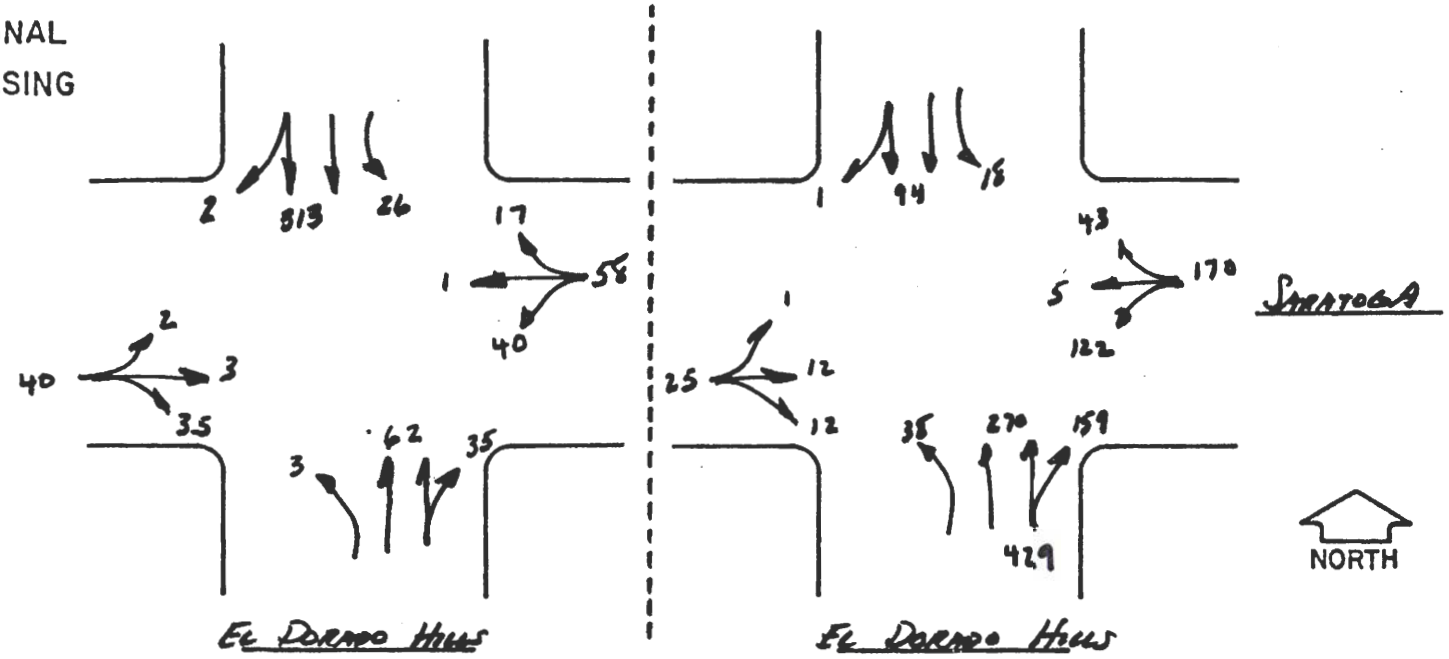
CONDITION Peak Hour - Existing Conditions

LANE PATTERN & TRAFFIC VOLUMES

AM

PM

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT AM	CRITICAL MOVEMENT PM	* CAPACITY OF CRITICAL MOVEMENT		VOLUME		V/C	
1			1000	1000	3	18	.003	.018
2			2300	2300	315	429	.137	.187 .258
3			1100	1100	40	170	.036	.155
4			1000	1000	40	1	.040	.001
						YELLOW TIME/CYCLE LENGTH	.10	.10
						V/C OF INTERSECTION	0.32	0.46
						LEVEL OF SERVICE OF INTERSECTION	A	A

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

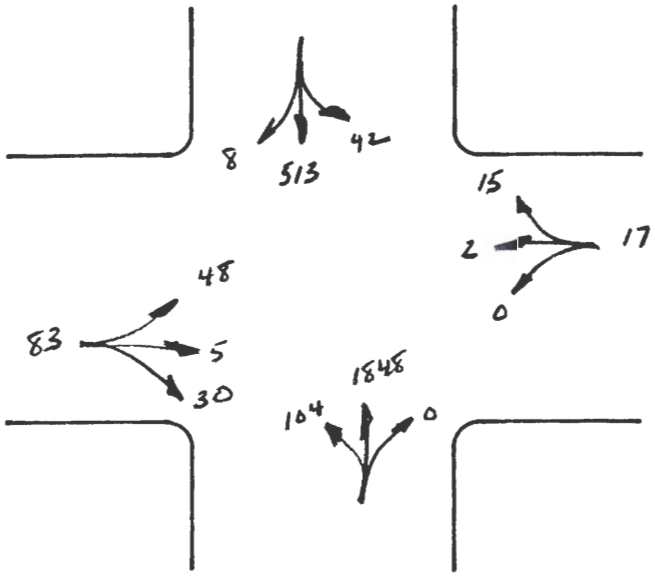
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND WHITE ROCK

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO 1990

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	42	0.042
2		1100	1952	1.775
3		1100	83	0.075
4		1000	0	-
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		1.89
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

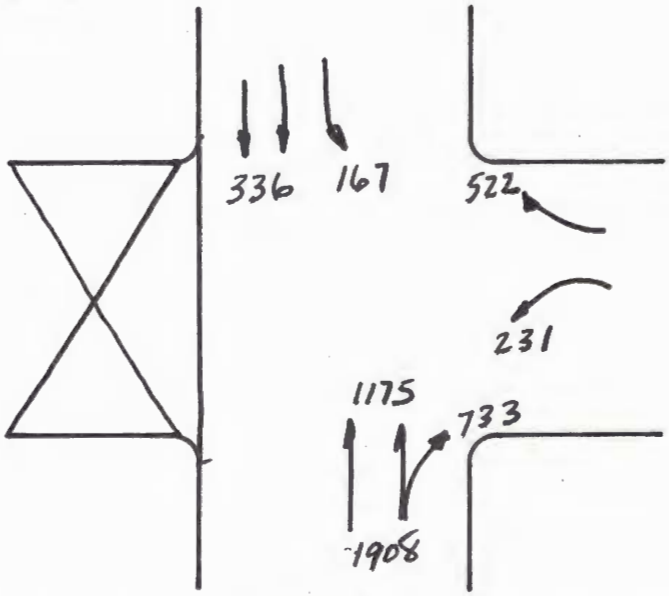
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND E/B OFF RAMP

CONDITION P.M. PEAK HOUR - EXISTING PLUS PROJECT TO 1990

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↳	1000	167	0.167
2	↑↑	2300	1908	0.830
3	↰	1000	522-167 = 355	0.355
			YELLOW TIME/CYCLE LENGTH	-
			V/C OF INTERSECTION	1.35
			LEVEL OF SERVICE OF INTERSECTION	F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

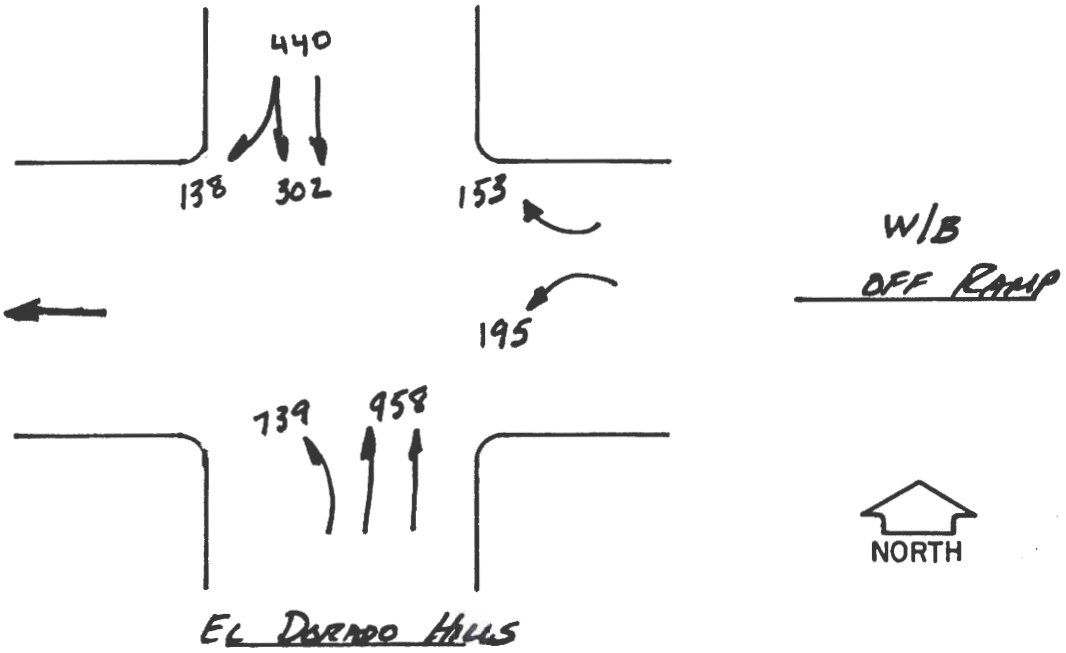
INTERSECTION CAPACITY ANALYSIS

INTERSECTION *El Dorado Hills and W/B Off Ramp*

CONDITION *PM Peak Hour - Existing Plus Project to 1990*

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↰	1000	739	0.739
2	↑↓	2300	440	0.191
3	↰	1000	195	0.195
			YELLOW TIME/CYCLE LENGTH	-
			V/C OF INTERSECTION	1.13
			LEVEL OF SERVICE OF INTERSECTION	D

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

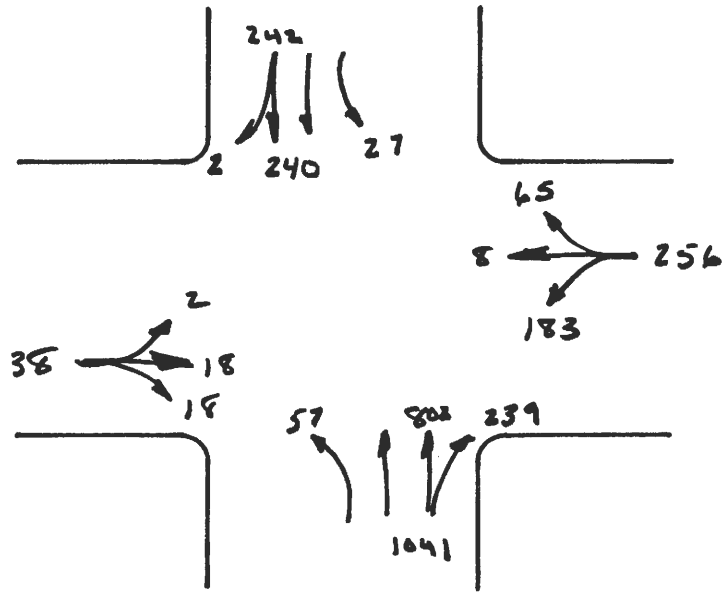
INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills and Saratoga

CONDITION PM Peak Hour - Existing Plus Project to 1990

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↘	1000	27	0.027
2	↑↑	2300	1041	0.453
3	⑂	1100	256	0.233
4	↗	1000	2	0.002
	YELLOW TIME/CYCLE LENGTH			0.10
	V/C OF INTERSECTION			0.82
	LEVEL OF SERVICE OF INTERSECTION			B

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

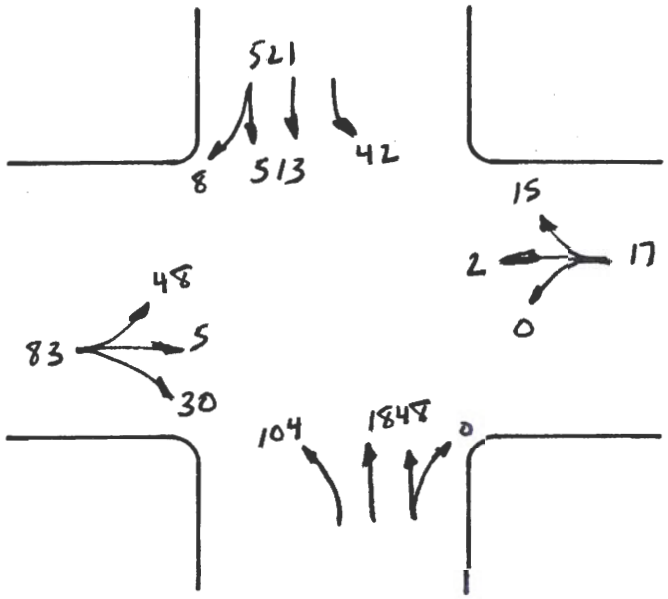
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND WHITE ROCK

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO 1990 - 1ST MITIGATION

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	42	0.042
2		2400	1848	0.77
3		1100	83	0.075
4		1000	0	-
		YELLOW TIME/CYCLE LENGTH		0.10
		V/C OF INTERSECTION		0.99
		LEVEL OF SERVICE OF INTERSECTION		C

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

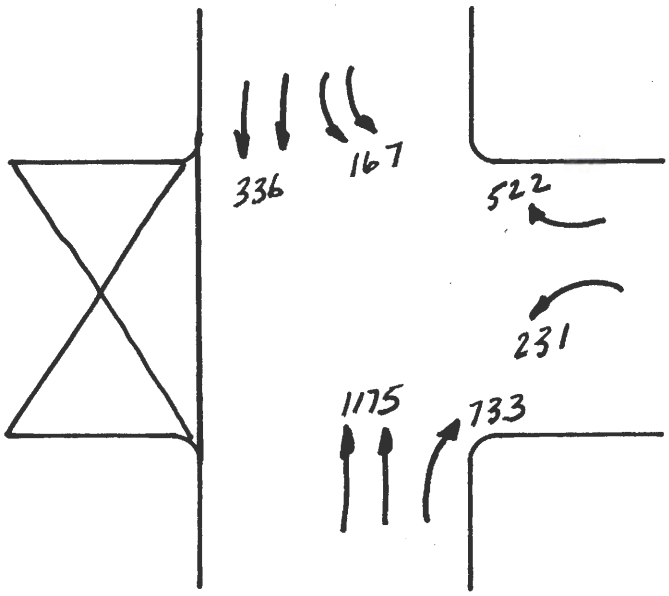
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND E/B OFF RAMP

CONDITION P.M. PEAK HOUR - EXISTING PLUS PROJECT TO 1990 - 1ST MITIGATION

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



E/B OFF RAMP

LATROBE

PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1800	167	0.093
2		2400	1175	0.490
3		1000	355	0.355
			YELLOW TIME/CYCLE LENGTH	0.10
			V/C OF INTERSECTION	1.04
			LEVEL OF SERVICE OF INTERSECTION	D

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

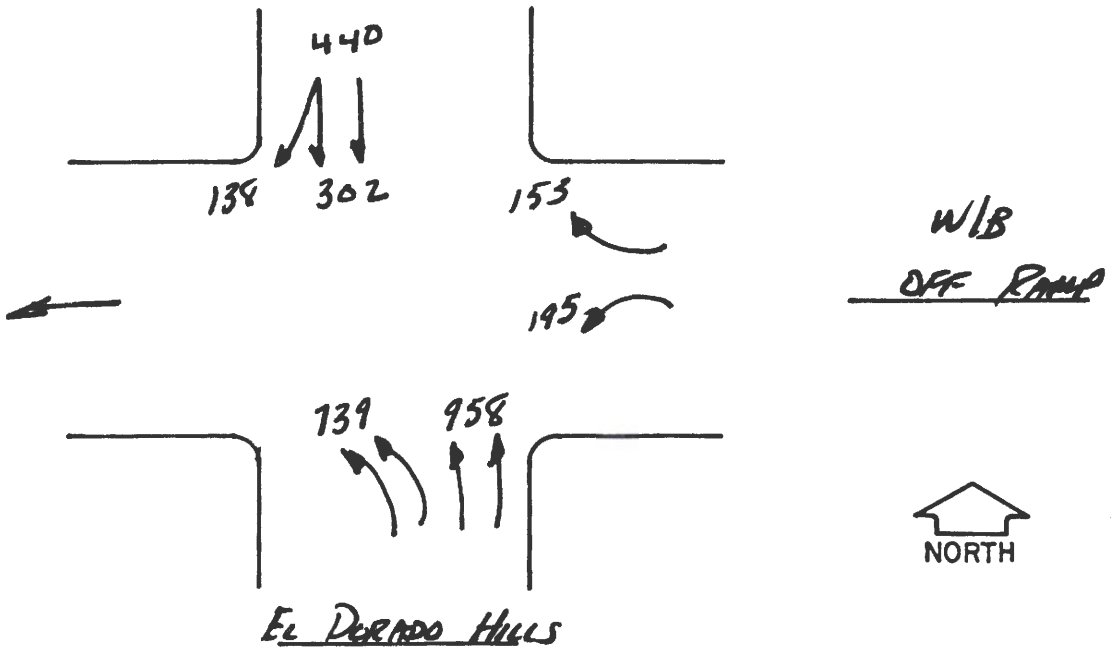
INTERSECTION CAPACITY ANALYSIS

INTERSECTION *El Dorado Hills and W/B Off Ramp*

CONDITION *PM Peak Hour - 1990 - 1st Mitigation*

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1800	739	0.411
2		2300	440	0.191
3		1000	195	0.195
			YELLOW TIME/CYCLE LENGTH	0.10
			V/C OF INTERSECTION	0.90
			LEVEL OF SERVICE OF INTERSECTION	C

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

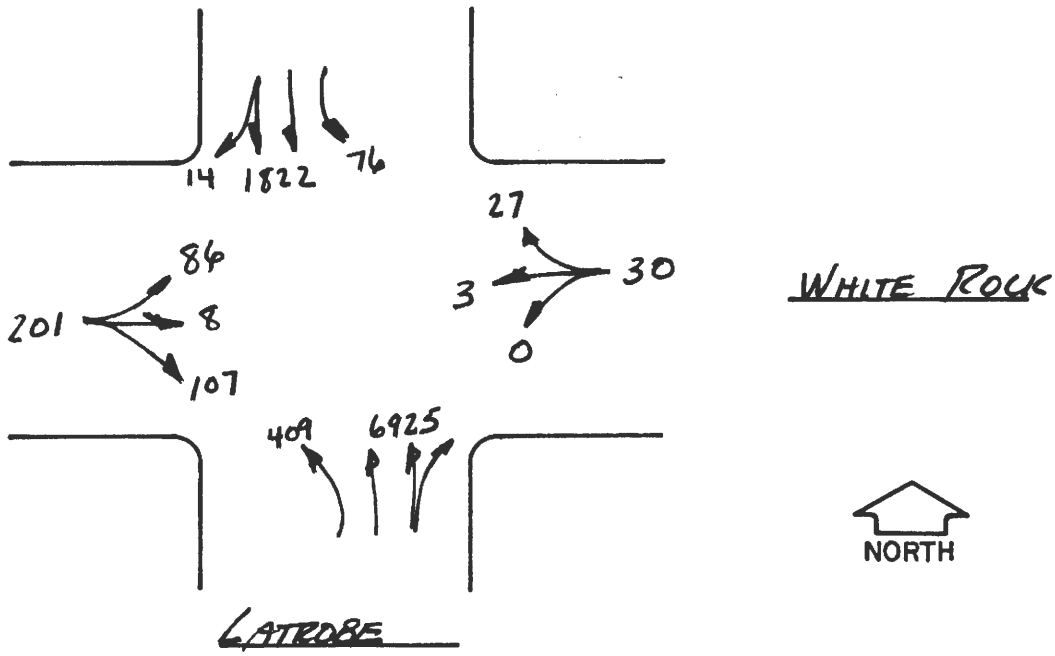
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND WHITE ROCK

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO YEAR 2000

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	76	0.076
2		2400	6925	2.885
3		1100	201	0.183
4		1000	0	-
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		3.14
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

INTERSECTION CAPACITY ANALYSIS

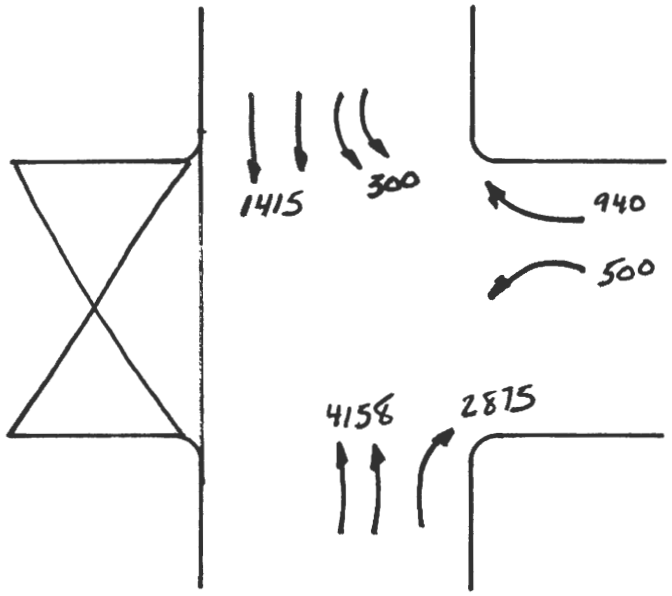
JKM

INTERSECTION LATROBE AND E/B OFF RAMP

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO YEAR 2000

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



NORTH

PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↓↓	1800	300	0.167
2	↑↑	2400	4158	1.733
3	↖	1000	940 - 300 = 640	0.640
			YELLOW TIME/CYCLE LENGTH	-
			V/C OF INTERSECTION	2.54
			LEVEL OF SERVICE OF INTERSECTION	F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

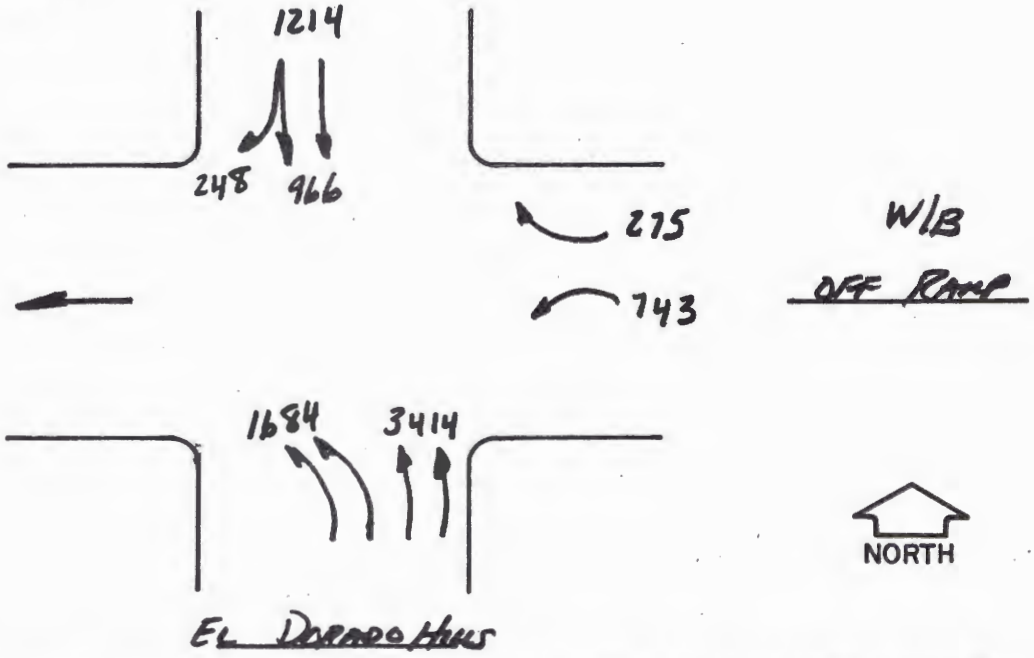
INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills and W/B Off Ramp

CONDITION P.M. Peak Hour - Year 2000

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1800	1684	0.936
2		2300	1214	0.528
3		1000	743	0.743
			YELLOW TIME/CYCLE LENGTH	-
			V/C OF INTERSECTION	2.20
			LEVEL OF SERVICE OF INTERSECTION	F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

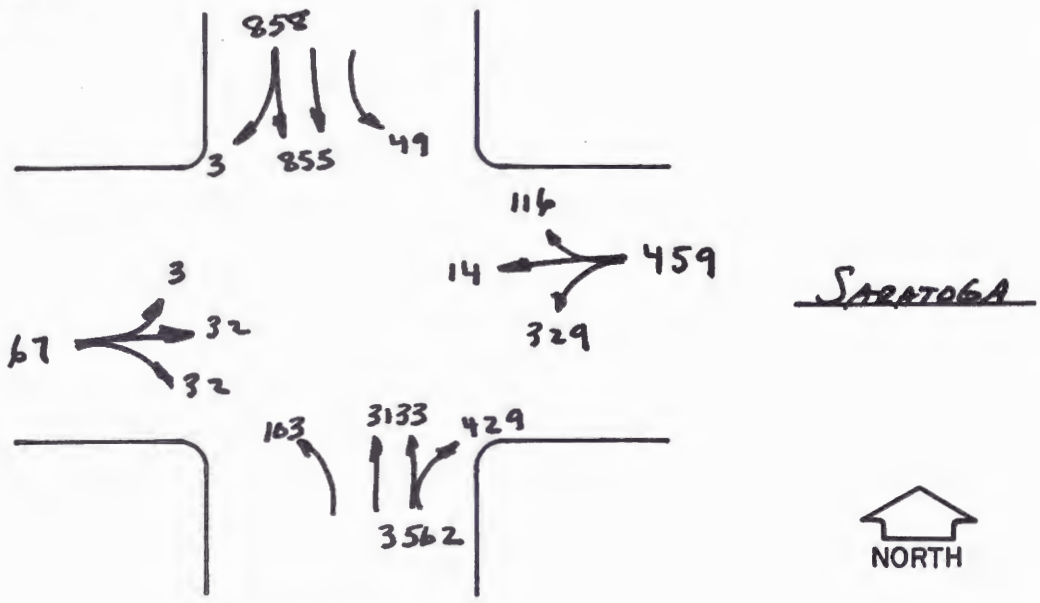
INTERSECTION CAPACITY ANALYSIS

INTERSECTION *El Dorado Hills and Saratoga*

CONDITION *P.M. Peak Hour - Year 2000*

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↓	1000	49	0.049
2	↑↑	2300	3562	1.549
3	→	1100	459	0.417
4	↱	1000	3	0.003
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		2.02
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

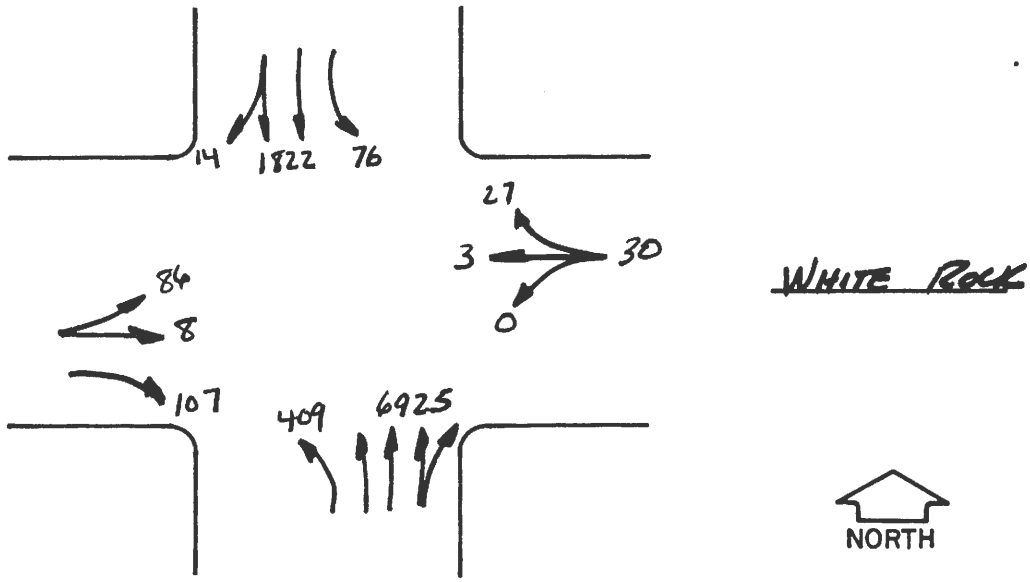
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND WHITE ROCK

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO YEAR 2000 - 2nd MITIGATION

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↓	1000	76	0.076
2	↑↑↑	3600	6925	1.924
3	→	1000	107	0.107
4	←	1000	0	-
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		2.11
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

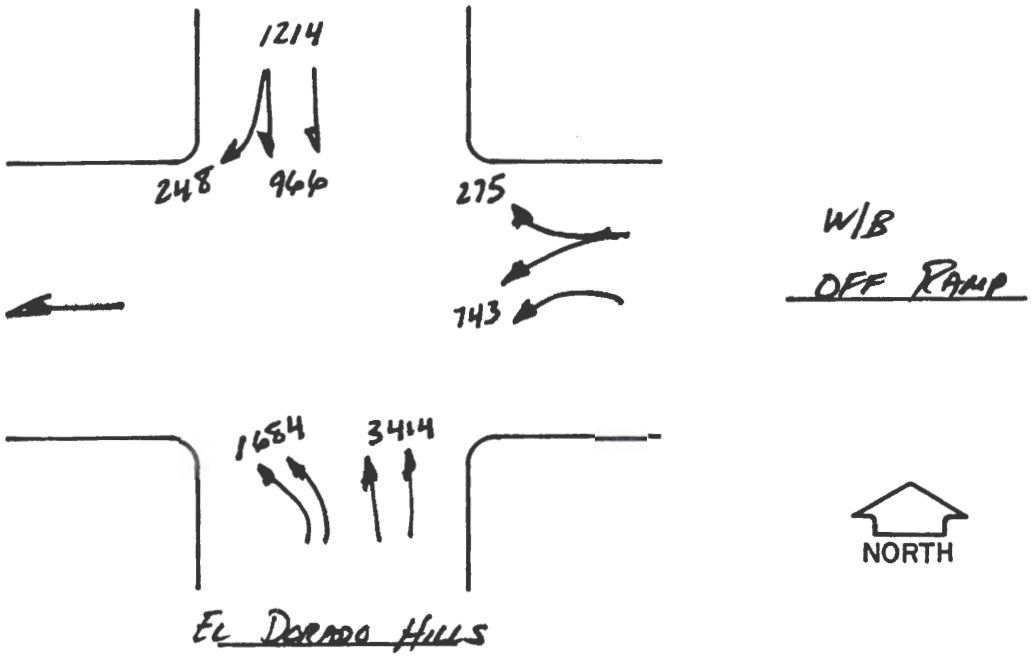
INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills and W/B Off Ramp

CONDITION PM Peak Hour - Year 2000 - 2nd Mitigation

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1800	1684	0.936
2		2300	1214	0.528
3		1900	1018	0.536
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		2.00
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

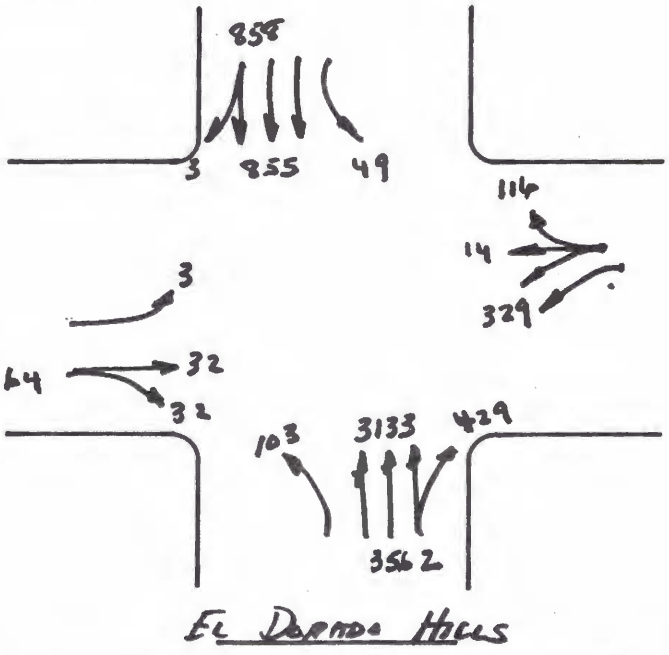
INTERSECTION CAPACITY ANALYSIS

INTERSECTION *El Dorado Hills and Saratoga*

CONDITION *P.M. Peak Hour - Year 2000 - 2nd Mitigation*

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	49	0.049
2		3500	3562	1.018
3		2000	459	0.230
4		1100	64	0.058
		YELLOW TIME/CYCLE LENGTH		–
		V/C OF INTERSECTION		1.36
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

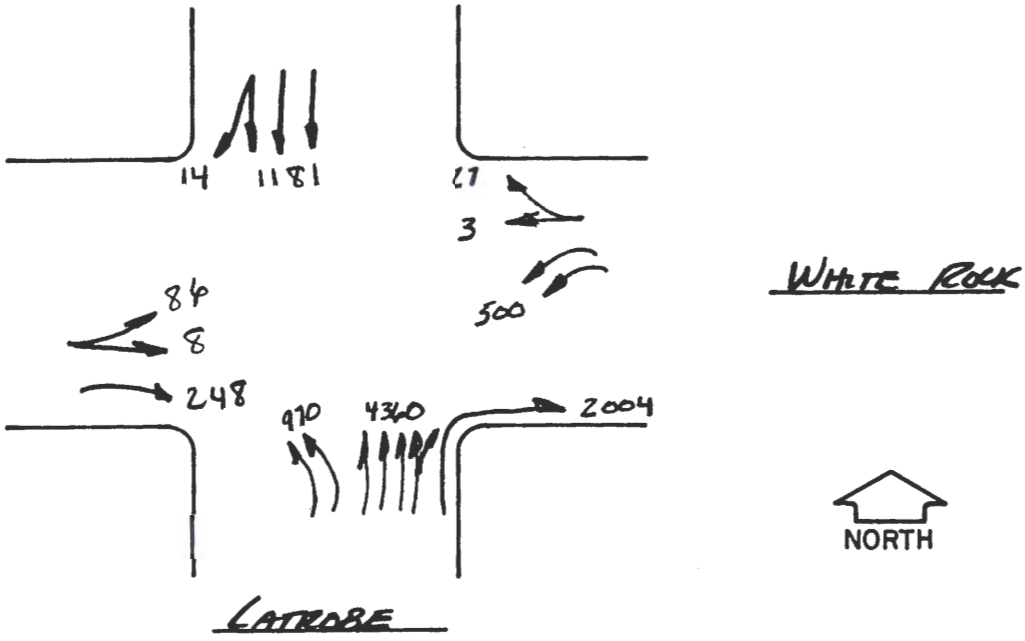
INTERSECTION CAPACITY ANALYSIS

INTERSECTION Latrobe and White Rock

CONDITION PM Peak Hour - Existing Plus Project to Year 2005 - 3rd Mitigation

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	76	0.076
2		4700	4764	1.014
3		1000	94	0.094
4		1800	500	0.278
		YELLOW TIME/CYCLE LENGTH		—
		V/C OF INTERSECTION		1.47
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

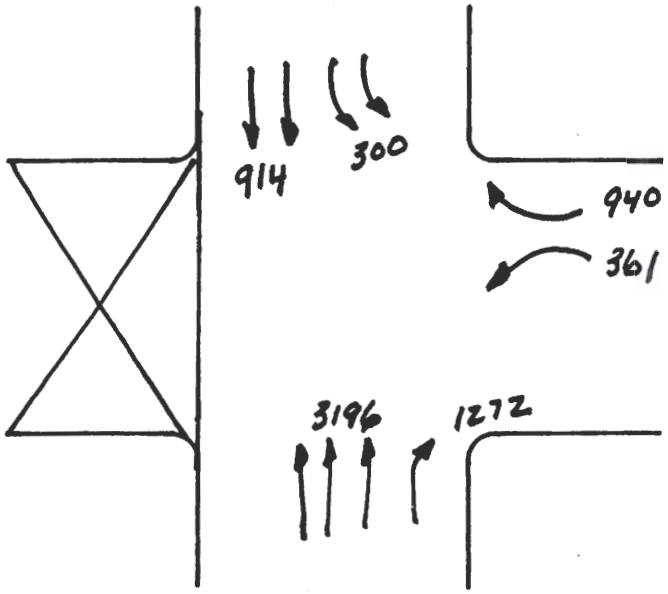
INTERSECTION CAPACITY ANALYSIS

INTERSECTION LATROBE AND E/B OFF RAMP

CONDITION PM PEAK HOUR - EXISTING PLUS PROJECT TO YEAR 2000 - 3rd MITIGATION

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↓↓	1800	300	0.167
2	↑↑↑	3600	3196	0.888
3	↖	1800	640	0.356
			YELLOW TIME/CYCLE LENGTH	-
			V/C OF INTERSECTION	1.41
			LEVEL OF SERVICE OF INTERSECTION	F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

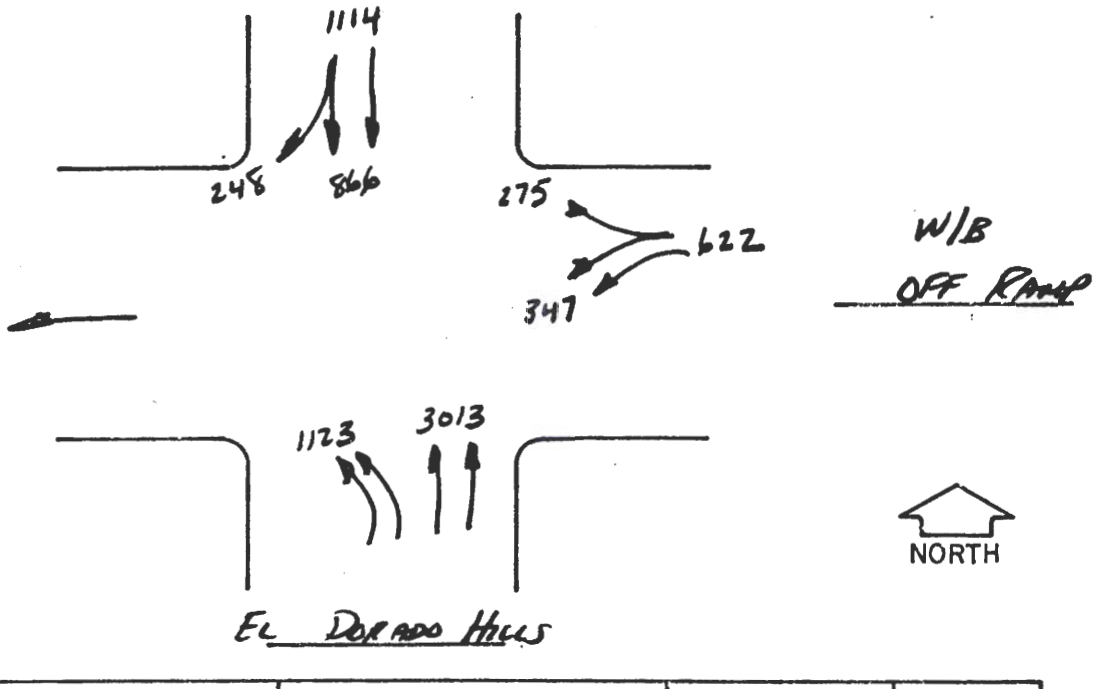
INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills and W/B Off Ramp

CONDITION PM Peak Hour - Year 2000 - 3rd Mitigation

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1	↑↑	2400	3013	1.253
2	↖↑↗	1900	622	0.327
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		1.58
		LEVEL OF SERVICE OF INTERSECTION		F

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

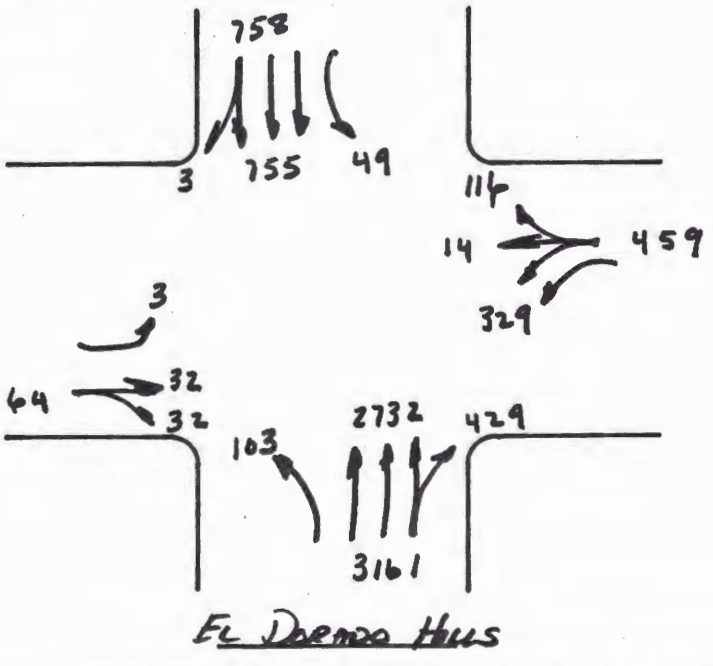
INTERSECTION CAPACITY ANALYSIS

INTERSECTION El Dorado Hills and Saratoga

CONDITION P.M. Peak Hour - Year 2000 - 3rd Mitigation

LANE PATTERN & TRAFFIC VOLUMES

SIGNAL PHASING



Saratoga

El Dorado Hills

PHASE	CRITICAL MOVEMENT	* CAPACITY OF CRITICAL MOVEMENT	VOLUME	V/C
1		1000	49	0.049
2		3500	3161	0.903
3		2000	459	0.230
4		1100	64	0.058
		YELLOW TIME/CYCLE LENGTH		-
		V/C OF INTERSECTION		1.24
		LEVEL OF SERVICE OF INTERSECTION		E

* CAPACITIES CALCULATED AT LEVEL OF SERVICE C

ENVIRONMENTAL ANALYSIS OF AIR QUALITY IMPACTS RELATED TO PROPOSED DEVELOPMENT OF THE EL DORADO HILLS BUSINESS PARK

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August 25, 1982

METEOROLOGY

The weather and climate of the El Dorado Hills area is typical of Central Valley weather patterns, characterized by hot, dry summers and mild winters. In summer, the subtropical high pressure center over the Pacific Ocean maintains clear skies, moderate breezes and little day-to-day change in the weather. In winter, the high moves farther south and the area experiences periodic intrusions of mid-latitude storms interspersed with frequent periods of fair weather. During the fall and winter, light wind stagnation conditions and strong inversions create periods of hazy skies or thick fog that persist until a storm front creates adequate turbulent mixing to ventilate the valley.

Temperatures near the project site average around 59°F annually, with summer afternoons in the low- to mid-90s and winter mornings in the mid-30s. Although diminished by distance, the moderating influence of the Pacific Ocean is strong enough to prevent most temperature extremes; maxima much over 100°F or minima much below 32°F generally do not occur.

Rainfall at Folsom averages 23.9 inches per year and falls almost exclusively from mid-October to early May. June and September may have isolated showers while July and August are almost completely dry. Light rainfall (more than 0.1 inch in 24 hours) occurs on an average of 40 days per year, with 15-20 of those days having moderate or heavy (more than 0.5 inches in 24 hours) rain. Snowfall almost never drops down to the 500-600 foot project area elevation, posing a significant winter traffic problem only in the higher elevations east of Placerville.

Winds across the El Dorado Hills area reflect the combination of the Central Valley circulation system which is primarily along the valley area (NW-SE) and the upslope/downslope flow system (day heated and night cooled slopes). Daytime winds are usually from a westerly direction (SSW-WNW) while nocturnal winds are mainly from the east (ENE-SSE).

This marked bimodal distribution means that any air pollution generated during the daytime near the project site will be carried eastward toward Placerville by moderate winds while nocturnally generated emissions will drift slowly westward toward Sacramento. Any air quality degradation attributable to El Dorado Hills development will occur well east of the area during the daytime but may occur quite close to the site at night.

The two dominant airflow regimes are also accompanied by two distinct temperature inversion distributions that affect the depth through which air pollutants are

mixed. The daytime upslope flow, especially in summer, is capped by a temperature inversion at 3000-4000 feet above the valley floor. This inversion acts as a lid over the valley except where the inversion intercepts the heated mountain slopes of the Sierra Nevadas. While allowing for good ventilation along the valley floor, this lid concentrates air pollutants at the base of the inversion and causes observable air pollution damage to trees in the mountains at the 3000-4000 foot elevation level. The nocturnal drainage and pooling of cold air forms a second type of inversion close to the ground. These inversions are especially strong on long, clear winter nights and create elevated levels of air pollution near sources such as freeways or major concentrations of traffic. While both inversion types may occur throughout the year, their major effects are usually well separated both seasonally and diurnally.

AIR QUALITY

In order to assess the significance of the air quality impact of the proposed development, that impact, plus any existing baseline concentrations, must be compared to the applicable ambient air quality standards (AAQS). These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, young children, the elderly or persons already weak from other illness. Healthy adults can tolerate periodic exposures to pollution levels well above these standards without irreversible effects such that occasional violations of AAQS are not uniformly unhealthful for all receptor populations.

National AAQS have been promulgated for seven pollution species with an attainment deadline of 1987 for all standards established by the Clean Air Act Amendments of 1977. States retained the option to adopt their own standards as long as they do not conflict with national AAQS. Because of California's unique air quality problems and because California state standards were in existence before national standards were adopted, there is considerable diversity between state and national AAQS. Those standards currently in effect in California are shown in Table A.

Technically El Dorado Hills is within the Mountain Counties Air Basin (MCAB), which ranges from Plumas County on the north to Mariposa County on the south. However, the air quality distribution around the project site is most influenced by the Sacramento metropolitan area. The nearest ambient air quality measurements within the MCAB are in Rocklin and Auburn, but data from the Sacramento Valley Air Basin station at Folsom and to a lesser extent at Citrus Heights are perhaps more representative than the Rocklin and Auburn data. Table B summarizes the 1981 monitoring data from the monitoring locations closest to El Dorado Hills. Photochemical oxidant (ozone) standards are exceeded with similar frequencies over much of the area east and northeast of Sacramento. The California Air Resources Board (ARB) has shown rather conclusively that Sacramento area emissions are primarily responsible for the formation of these pollutants downwind of Sacramento and that attainment of the ozone standards depends upon control of precursor emissions in Sacramento. To the extent that the proposed development contributes to pollutant emissions within the Sacramento Valley Air Basin, those emissions will continue to create an incremental air quality degradation within the impacted Sacramento "urban plume."

Table A

AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Oxidant[10]	1 hour	0.10 ppm (200 ug/m³)	Ultraviolet Photometry	—	—	—
Ozone	1 hour	—	—	240 ug/m³ (0.12 ppm)	Same as Primary Standard	Chemiluminescent Method
Carbon Monoxide	12 hour	10 ppm (11 mg/m³)	Non-Dispersive Infrared Spectroscopy	—	Same as Primary Standards	Non-Dispersive Infrared Spectroscopy
	8 hour	—		10 mg/m³ (9 ppm)		
	1 hour	40 ppm (46 mg/m³)		40 mg/m³ (35 ppm)		
Nitrogen Dioxide	Annual Average	—	Saltzman Method	100 ug/m³ (0.05 ppm)	Same as Primary Standards	Gas Phase Chemiluminescence
	1 hour	0.25 ppm (470 ug/m³)		—		
Sulfur Dioxide	Annual Average	—	Conductimetric Method	80 ug/m³ (0.03 ppm)	—	Paraosanilne Method
	24 hour	0.05 ppm (131 ug/m³)[9]		365 ug/m³ (0.14 ppm)	—	
	3 hour	—		—	1300 ug/m³ (0.5 ppm)	
	1 hour	0.5 ppm (1310 ug/m³)		—	—	
Suspended Particulate Matter	Annual Geometric Mean	60 ug/m³	High Volume Sampling	75 ug/m³	60 ug/m³	High Volume Sampling
	24 hour	100 ug/m³		260 ug/m³	150 ug/m³	
Sulfates	24 hour	25 ug/m³	AIHL Method No. 61	—	—	—
Lead	30 day Average	1.5 ug/m³	AIHL Method No. 54	—	—	—
	Calendar Quarter	—	—	1.5 ug/m³	1.5 ug/m³	Atomic Absorption
Hydrogen Sulfide	1 hour	0.03 ppm (42 ug/m³)	Cadmium Hydroxide Stractan Method	—	—	—
Hydrocarbons (Corrected for Methane)	3 hour (6-9 a.m.)	—	—	160 ug/m³ (0.24 ppm)	Same as Primary Standards	Flame Ionization Detection Using Gas Chromatography
Vinyl Chloride (Chloroethene)	24 hour	0.010 ppm (26 ug/m³)	Gas Chromatography (ARB staff report 78-8-3)			
Ethylene	8 hour	0.1 ppm	—	—	—	—
	1 hour	0.5 ppm				
Visibility Reducing Particles	1 observation	In sufficient amount to reduce the prevailing visibility to less than 10 miles when the relative humidity is less than 70% [8]		—	—	—
APPLICABLE ONLY IN THE LAKE TAHOE AIR BASIN:						
Carbon Monoxide	8 hour	6 ppm (7 mg/m³)	NDIR	—	—	—
Visibility Reducing Particles	1 observation	In sufficient amount to reduce the prevailing visibility to less than 30 miles when the relative humidity is less than 70% [8]		—	—	—

Table B

1981 AMBIENT AIR QUALITY MONITORING SUMMARY
(Number of days a given standard was exceeded)

Pollutant: Standard	Citrus Heights*	Folsom*	North Highlands*	Rocklin°	Auburn°
Ozone					
1 hr ≥ 0.10 ppm	33	43	32	44	41
1 hr > 0.12 ppm	12	12	11	9	6
Max. 1-hr Conc. (ppm)	0.14	0.17	0.18	0.14	0.16
Carbon Monoxide					
8 hr > 9 ppm	0	—	0	—	—
Max. 1-hr Conc. (ppm)	10	—	9	—	—
Max. 8-hr Conc. (ppm)	5.1	—	3.9	—	—
Nitrogen Dioxide					
1 hr ≥ 0.25 ppm	0	0	0	—	—
Max. 1-hr Conc. (ppm)	0.10	0.07	0.08	—	—
Particulates					
24 hr ≥ 100 $\mu g/m^3$	3/57	—	0/16	0/58	1/56
24 hr > 260 $\mu g/m^3$	0/57	—	0/16	0/58	0/56
Max. 24-hr Conc. ($\mu g/m^3$)	119	—	84	97	111

Source: California Air Quality Data, 1981, California ARB

--- = No Data

*Sacramento Valley Air Basin

°Mountain Counties Air Basin

While ozone levels are high in the Sacramento Valley Basin, the other pollutants measured in the area are well below any unhealthy levels. A few violations of the state standard for suspended particulates have been observed, but maximum concentrations were less than one-half of the dust level allowed by the federal primary standard. With the exception of elevated ozone levels which result from the long-range transport of pollutants, air quality in the El Dorado Hills is excellent. If any air quality problems exist, they are on a very localized scale not detectable by any regional monitoring network.

To reduce emissions and improve air quality, an air quality management plan has been formulated for the Sacramento air quality maintenance area that will directly affect the proposed project site. This plan, combined with the Rules and Regulations of the El Dorado County APCD relative to the non-attainment status for ozone for portions of El Dorado County, is designed to meet the 1987 attainment deadline. Delays in implementation of provisions of the plan (such as mandatory vehicle inspection and maintenance) may cause a corresponding delay in the attainment date, but future levels of air quality in the El Dorado Hills area close to the ozone standard are a realistic expectation.

Impact

A research and development high technology complex such as El Dorado Hills Business Park is generally considered a "clean" industry with few air pollutant emissions. For such a development, the primary source of any air quality impact would result from transportation-related emissions (principally the automobile) which carry employees, products, and provide services. These vehicular emissions will incrementally degrade air quality on a regional basis (mesoscale impacts) and they may create localized pollution "hot spots" near traffic-intensive sources such as major parking areas or large intersections (micro-scale impacts). Secondary development-related air quality impacts result from construction activity emissions and from those energy demands met by learning fossil fuels in power plants, furnaces, heaters, boilers, etc. However, these impacts typically are either temporary or far less in magnitude than from the vehicular sources and are therefore much less of an air quality concern. As with any project spanning several decades of development, it is difficult to predict vehicular driving patterns, emissions characteristics, energy use, etc. 20 years from now. These estimates in the following impact discussion are based on current experience and current air pollution plans and laws, but these factors become more uncertain in the later years of project development.

Construction Impacts: During construction, clearing, grading, excavation and travel on unpaved surfaces generates considerable quantities of fugitive dust. The California ARB estimates that each acre of soil disturbed causes about 80 pounds of dust to be lofted into the air without dust control. Dust control by watering and other soil stabilization techniques performed in accordance with the nuisance prohibition of the El Dorado APCD can reduce this dust generation level by 50 percent for building sites and by 75 percent for roadway projects. For industrial land uses, the period of soil disturbance is estimated by the ARB to be about 11 months. At an annual buildout rate of around 55 acres per year from 1983 to the year 2000, the daily dust generation is calculated as follows:

0.6 tons/acre month x 11 months/project x 55 acres/year	360 tons/year 1 ton/day

Thus, about 1 ton of construction dust will be injected into the prevailing west-to-east daytime winds. Much of this dust is comprised of inert soil particles with a large diameter that is easily filtered by human breathing passages. Such particulates constitute far more of a soiling nuisance as the dust settles out on cars, foliage and other horizontal surfaces rather than any adverse health impact.

The operation of heavy equipment on the site and offsite trucks hauling concrete, steel and other primary building materials will also add combustion-related pollutants to the local airshed. The ARB estimates it requires about 245,000 Brake Horsepower Hours (BHP-HR) of heavy equipment operations to develop 1 acre of industrial use. If most of the heavy equipment is diesel-powered, the buildout of 55 acres per year results in the following average daily combustion pollutant emissions:

Reactive Hydrocarbons	-	0.04 tons/day
Carbon Monoxide	-	0.11 tons/day
Oxides of Nitrogen	-	0.42 tons/day
Particulates (soot)	-	0.04 tons/day
Sulfur Dioxide	-	0.04 tons/day

The mobile nature of these equipment sources minimizes the long-term exposure of any one receptor to these emissions. While most of these emissions are small on a regional scale, the NO_x emissions may be nominally significant because of the interaction of NO_x with reactive hydrocarbons in the photochemical smog formation process.

Vehicular Impacts: By far, the greatest project-related air quality concern stems from the 69,000+ daily vehicle trips the business park may generate upon project

completion. The trip generation, in conjunction with long average trip lengths for employee commuting and for goods and services to the Sacramento or Placerville area, results in almost 650,000 vehicle miles traveled (VMT) added to the regional traffic burden by the year 2000.

Data from the project traffic study yielded trip assignments, mean speeds and average trip lengths on five main roadway segments. These segments with their respective average trip lengths and mean speeds included:

U.S. 50 - westbound	-	15	miles	-	50-55 mph
U.S. 50 - eastbound	-	10	miles	-	45-55 mph
El Dorado Hills Blvd.	-	4	miles	-	35-40 mph
White Rock Road	-	15	miles	-	35 mph
Latrobe Road	-	9	miles	-	50 mph

Predicted traffic volumes on each of these five segments for 1990 and 2000 generated by the business park were combined with vehicular emissions data from the EMFAC6C computer program to generate a segment-by-segment and cumulative emissions burden as shown in Table C. Future emissions increase almost linearly with VMT as any small emissions benefits from continued automotive pollution controls are offset by reductions in vehicle speeds by the year 2000 as area roadway systems become more congested.

By way of perspective, the California ARB projects that by the year 1995, El Dorado County will generate 8.2 tons of NO_x and 18.8 tons of hydrocarbons. If these rates are approximately correct for 1990 and 2000, that portion of the project vehicular burden within El Dorado County calculated in Table C represents the following fractions of the County total:

	1990	2000
Total Hydrocarbons	.07/18.8 = 0.4%	.36/18.8 = 1.9%
Oxides of Nitrogen	.21/8.2 = 2.6%	.73/8.2 = 8.9%

While the project's portion of the hydrocarbon burden is low, its fraction of the NO_x burden potentially will be a major element in the County's future emissions inventory by the turn of the century. Because of the upslope flow during the day, many of the vehicular pollutants generated within the Sacramento Valley Air Basin portion of the roadway network may also end up in El Dorado County. While it is not possible to

Table C

EL DORADO HILLS BUSINESS PARK VEHICULAR EMISSIONS
(tons/day)

Pollutant	Sacramento Valley Air Basin: Westbound U.S. 50	Sacramento Valley Air Basin: White Rock Road	Mountain Counties Air Basin: Eastbound U.S. 50	Mountain Counties Air Basin: El Dorado Hills Blvd.	Mountain Counties Air Basin: Latrobe Road	Total
1990						
Carbon Monoxide	1.02	0.18	0.68	0.17	0.09	2.14
Total Hydrocarbons	0.08	0.02	0.05	0.01	0.01	0.17
Reactive Hydrocarbons	0.07	0.01	0.05	0.01	0.01	0.15
Oxides of Nitrogen	0.25	0.03	0.16	0.03	0.02	0.49
Sulfur Dioxide	0.02	negl.	0.02	negl.	negl.	0.04
Suspended Particulates	0.03	negl.	0.02	negl.	negl.	0.05
2000						
Carbon Monoxide	1.94	0.58	2.31	0.92	0.58	6.33
Total Hydrocarbons	0.18	0.06	0.22	0.09	0.05	0.60
Reactive Hydrocarbons	0.16	0.05	0.19	0.08	0.05	0.53
Oxides of Nitrogen	0.43	0.09	0.46	0.14	0.13	1.25
Sulfur Dioxide	0.05	0.01	0.06	0.02	0.02	0.16
Suspended Particulates	0.07	0.02	0.09	0.03	0.02	0.23

translate these emission levels into a corresponding air quality impact without considering the whole Sacramento area pattern of growth and the project's relationship to that pattern, the sheer size of the project and its resulting vehicular emissions will nevertheless generate an incrementally small, but certainly significant, air quality degradation in downwind communities.

Presuming that the additional emissions from regional traffic growth are offset by corresponding reductions in other Sacramento area pollution sources, such growth could be accommodated within the regional air quality planning framework without any adverse impact. Locally, however, increases in vehicle volumes from 26,000 to 75,000 in 20 years on U.S. 50 and comparable increases in nearby arterials raises the possibility of localized air quality degradation. To test for this possibility, the California line source model CALINE3 was initialized with projected 8-hour traffic volumes and 8 hours of stagnant meteorology to predict worst-case 8-hour CO concentrations adjacent to the roadway network near the El Dorado Hills Boulevard interchange with U.S. 50. Calculations were carried out along free-flowing portions of the roadway system under steady-state conditions with relatively flat terrain because it is impossible to estimate speed distributions or lane geometries by the year 2000 near intersections or within the U.S. 50 interchange based only on current conceptual development plans for the business park. Detailed results of the CALINE3 calculations for theoretical winds of 2 mph parallel to each of the roadway segments and Pasquill Class F atmospheric stability are shown in the appendix. Background CO concentrations were estimated based on the average hourly maxima observed in the Sacramento area and extrapolating these data out to 2000 using future basinwide CO emissions as the predictor for future CO levels.

The only locations where CO concentrations above the national standard of 9 ppm were predicted was on the shoulder of U.S. 50 and within a few feet of Latrobe Road north of the project site. At 100 feet from the edge of the roadway, predicted 8-hour CO concentrations (ppm) (including regional background levels) were as follows:

Location	1982	1990	2000
U.S. 50-West	5.1	4.4	5.1
U.S. 50-East	5.1	4.4	5.4
Latrobe Road	3.8	4.0	5.6
El Dorado Hills Blvd.	4.0	3.5	4.4

At 100 feet, CO concentrations were well below the 9 ppm federal standard. Except on the roadways most heavily traveled by project-related vehicles, CO concentrations in

the year 2000 are similar to present levels despite large increases in traffic volumes. As long as a nominal setback is maintained between major roadways and any permanent receptor populations, development of the El Dorado Business Park poses no threat to healthful levels of microscale air quality near the project site.

Energy Impacts: Until more specific development plans are formulated as to the types of "clean" businesses in the R&D park, energy demand is difficult to calculate. Based on typical facilities in California and considering the newest statewide energy conservation standards for non-residential buildings at buildout, the El Dorado Business Park may consume about 200 million KWH of electricity annually. If that demand is met by hydroelectric, nuclear, geothermal, wind or solar generation, no air quality impact would result in the Sacramento area. Fossil fueled sources, however, would add air pollutants to Sacramento Valley airflows from Bay Area or Delta power plants. For example, if oil is burned somewhere to meet that demand, stationary source emissions from 200 million KWH are about as follows:

SO_2	-	300	tons/year
NO_x	-	250	tons/year
CO	-	50	tons/year
HC	-	25	tons/year
Particulates	-	25	tons/year

Coal-fired generation would have comparable emissions. While hydrocarbon emissions, (precursors to photochemical smog), are not large from power plants, SO_2 and NO_x emissions are appreciable from fossil fueled plants. Such emission levels emphasize the importance in developing alternate means of electrical generation and provide strong incentives for energy efficiency through conservation or cogeneration in major project design.

Mitigation

In any large project dominated by vehicular sources of air pollution, the opportunities for effective mitigation of air quality impacts are very limited. Mitigation measures that rely on voluntary compliance by project sponsors or project occupants are not overly successful in reducing atmospheric emissions. While mitigation potential is limited, those opportunities for even nominal emission reductions should nevertheless be sought out and implemented as part of the commitment to cleaner air and to ease the burden on other emission sources that must be reduced to accommodate the emission increases associatd with the El Dorado Hills Business Park.

The areas that should be considered for sources of mitigation include:

1. Additional dust abatement during construction by scheduling major grading during periods of high soil moisture, by revegetating graded areas not to be builtout immediately, by controlling erosion and transport of silt onto traveled roadway systems and by enforcing a reasonable speed limit within unpaved construction areas.
2. Reducing trip lengths and trip generation by providing residential, commercial and recreational opportunities near the business park. As employment levels increase, the intensity of development in surrounding areas should keep pace to maintain an integrated development rather than drawing the labor pool from long distances away.
3. Mandatory measures to reduce the dependence on the single passenger automobile. Such measures might include mandatory subsidized vanpool programs, transit incentives, 4/40 or flexible work schedules or other transportation incentive/disincentive programs.
4. Energy conservation and incorporation of solar planning into project designs. Solar electrical generation may be economical by 2000 such that the entire project should be laid out for optimum solar access. Cogeneration with thermal efficiencies of 60-65 percent should be utilized in major production facilities able to utilize waste heat in light manufacturing applications. Energy cost and air polution benefits may be useful stimulants to offset higher initial construction costs of an energy efficient project.

APPENDIX ___

RESULTS FROM CALINE3 PREDICTED 8-HOUR CO CONCENTRATIONS (ppm) AT VARIOUS DISTANCES FROM SPECIFIED ROADWAY SEGMENTS (STANDARD = 9 ppm)

U.S. 50 WEST OF EL DORADO HILLS BOULEVARD INTERCHANGE

Year	Distance From Roadway	No Project	Project Only	Total	Back-ground	Total & Back-ground
1982	0'	4.1	—	4.1	3.7	7.8
	50'	2.0	—	2.0	3.7	5.7
	100'	1.4	—	1.4	3.7	5.1
	300'	0.6	—	0.6	3.7	4.3
	500'	0.3	—	0.3	3.7	4.0
1990	0'	3.2	0.6	3.8	3.1	6.9
	50'	1.5	0.3	1.8	3.1	4.9
	100'	1.1	0.2	1.3	3.1	4.4
	300'	0.4	0.1	0.5	3.1	3.6
	500'	0.2	0.0	0.2	3.1	3.3
2000	0'	4.0	1.1	5.1	3.3	8.4
	50'	2.0	0.5	2.5	3.3	5.8
	100'	1.4	0.4	1.8	3.3	5.1
	300'	0.6	0.2	0.8	3.3	4.1
	500'	0.3	0.1	0.5	3.3	3.7

U.S. 50 EAST OF EL DORADO HILLS BOULEVARD INTERCHANGE

Year	Distance From Roadway	No Project	Project Only	Total	Back-ground	Total & Back-ground
1982	0'	4.1	—	4.1	3.7	7.8
	50'	2.0	—	2.0	3.7	5.7
	100'	1.4	—	1.4	3.7	5.1
	300'	0.6	—	0.6	3.7	4.3
	500'	0.3	—	0.3	3.7	4.0
1990	0'	3.2	0.6	3.8	3.1	6.9
	50'	1.6	0.3	1.9	3.1	5.0
	100'	1.1	0.2	1.3	3.1	4.4
	300'	0.5	0.1	0.6	3.1	3.7
	500'	0.2	0.0	0.2	3.1	3.3
2000	0'	4.0	1.9	6.0	3.3	9.3
	50'	2.0	0.9	2.9	3.3	6.2
	100'	1.4	0.7	2.1	3.3	5.4
	300'	0.6	0.3	0.9	3.3	4.2
	500'	0.3	0.1	0.4	3.3	3.7

LATROBE ROAD NORTH OF WHITE ROCK AND SOUTH OF U.S. 50

Year	Distance From Roadway	No Project	Project Only	Total	Back-ground	Total & Back-ground
1982	0'	0.3	—	0.3	3.7	4.0
	50'	0.1	—	0.1	3.7	3.8
	100'	0.1	—	0.1	3.7	3.8
	300'	0.0	—	0.0	3.7	3.7
	500'	0.0	—	0.0	3.7	3.7
1990	0'	0.9	2.0	2.9	3.1	6.0
	50'	0.4	0.9	1.3	3.1	4.4
	100'	0.3	0.6	0.9	3.1	4.0
	300'	0.1	0.2	0.3	3.1	3.4
	500'	0.0	0.1	0.1	3.1	3.2
2000	0'	0.5	6.9	7.4	3.3	10.7
	50'	0.2	3.0	3.2	3.3	6.5
	100'	0.2	2.1	2.3	3.3	5.6
	300'	0.1	0.8	0.9	3.3	4.2
	500'	0.0	0.4	0.4	3.3	3.7

EL DORADO HILLS BOULEVARD NORTH OF U.S. 50

Year	Distance From Roadway	No Project	Project Only	Total	Back-ground	Total & Back-ground
1982	0'	0.9	—	0.9	3.7	4.6
	50'	0.4	—	0.4	3.7	4.1
	100'	0.3	—	0.3	3.7	4.0
	300'	0.1	—	0.1	3.7	3.8
	500'	0.0	—	0.0	3.7	3.7
1990	0'	0.8	0.4	1.2	3.1	4.3
	50'	0.4	0.2	0.6	3.1	3.7
	100'	0.3	0.1	0.4	3.1	3.5
	300'	0.1	0.1	0.2	3.1	3.3
	500'	0.0	0.0	0.0	3.1	3.1
2000	0'	1.3	2.4	3.7	3.3	7.0
	50'	0.6	1.1	1.7	3.3	5.0
	100'	0.4	0.7	1.1	3.3	4.4
	300'	0.2	0.3	0.5	3.3	3.8
	500'	0.1	0.1	0.2	3.3	3.5

APPENDIX

DRAFT ENVIRONMENTAL IMPACT REPORT

PLANNING
ANSWERS
1982

APPENDIX A: WILLIAMSON ACT CANCELLATION REQUEST

Z82 35

May 24, 1982

Kenneth Milam
Director
El Dorado County Planning
Department
County Office Center
360 Fair Lane
Placerville, CA 95667

Re: Williamson Act Cancellation Request

Dear Mr. Milam:

The undersigned owners hereby request that the following described parcels be considered for cancellation under the provisions of the California Land Conservation Act and more particularly the so-called "window" cancellation procedures contained in Section 51282.1 of the California Government Code. The subject parcels are identified as follows:

86-070-07
86-080-02
86-080-03
86-080-04
86-080-08
86-080-09

The foregoing parcels collectively compromise El Dorado County Agricultural Preserve No. 124.

This cancellation request is submitted for the following reasons:

1. The subject property lies in the immediate path of the further non-agricultural development already underway in the general vicinity of El Dorado Hills, Latrobe and White Rock Roads;

2. Development interest runs high in the subject property, witness the fact that the owners have been contacted by numerous parties interested in purchasing the property for purposes of non-agricultural development;

3. The subject property has long been designated "Industrial" on the El Dorado County General Plan, reflecting the judgment of County officials that the location and topography of this area are uniquely suited for industrial development;

4. Industrial development of the property would substantially alleviate the loss of jobs, payroll and business-generated tax base to adjacent counties, which has been a major continuing concern in El Dorado County; and

5. The current agricultural use of the subject property, e.g., winter grazing, is directly threatened by the sizeable urban-oriented population which has resulted from the residential development in the immediate vicinity of the property. Encroachments upon the property, e.g., trespass, damage to fencing, and uncontrolled dogs and other animals, have become

more of a problem as the development has continued.

The petitioning landowners enclose herewith an application for rezoning of the subject property to the "I" classification, consistent with their cancellation request and the reasons stated above.

Also enclosed herewith are two checks in the amount of $240.00 each in payment of the required processing fees for cancellation and rezoning of the property.

Please advise should you require any additional information in order to process this request.

Very truly yours,

John W. Euer

John W. Euer

Robert B. Euer

Robert B. Euer

"Owners"

APPENDIX B: RESEARCH AND DEVELOPMENT ZONING

DRAFT #3

8/4/82

Section 1. Chapter 17.35, Sections 010 et. seq., are hereby added to Title 17 of the El Dorado County Ordinance Code to read as follows:

RESEARCH AND DEVELOPMENT ZONE DISTRICT (R&D)

17.35.010 Purpose

The purpose of the Research and Development Zone District is to provide areas for the location of high technology, non-polluting manufacturing plants, and related facilities in a campus-like setting. This zone shall be combined with a Design Review District to ensure a high quality, aesthetic environment.

17.35.020 Permitted Uses

(a) Production of goods and services including support services and accessory business offices, when such use is carried on within buildings and when such uses will not cause significant dust, noise, air or water pollution, or electrical interference beyond the exterior walls or buildings containing them. Certain outdoor activities which are incidental to the principal use are permitted only if they do not generate significant dust, noise, air or water pollutants or electrical interference beyond the property line. Such uses may include parking, signs, loading and unloading.

(b) Outdoor storage of material or equipment shall only be permitted where:

(1) The area used for storage does not exceed fifty percent(50%) of the aggregate area of the ground floor of all buildings on the parcel upon which the stored material is located; and

(2) No stored material or equipment is visible from adjacent parcels or roadways; and

(3) The storage occurs only within the setbacks prescribed for buildings; and

(4) The entire perimeter of any area used or intended to be used for storage shall be fenced and landscaped according to Section 17.35.030 (D) (3) (b) or (c).

17.35.025 Uses Permitted by Special Use Permit

A special use permit shall be obtained prior to the establishment of those uses which are partially or wholly conducted outside buildings, except as provided in Section 17.35.020, or which may, in the opinion of the Planning Director, cause measurable dust, noise, air or water pollutants, or electrical interference beyond the exterior walls or buildings which could detrimentally impact neighboring lands and uses.

17.35.030 Development Standards

Any use developed within the R&D Zone District shall meet the following standards:

(A) Minimum Lot Area:

(1) Outside Urban Area on Long Range Plan - 10 acres;

(2) Inside Urban Area on Long Range Plan with:

(a) On-site water and sewer ..... 4.5 acres;

(b) Community water or sewer ..... 1 acre or such larger parcel as may be required to accommodate a septic system and 300% replacement of leach field area;

(c) Community water and sewer ..... 10,000 sq. ft.

(B) Building Coverage:

(1) Outside Urban Area on Long Range Plan - no more than 10% of the site;

(2) Inside Urban Area on Long Range Plan - no more than 50% of the site.

(C) Minimum Lot Width:

100 feet measured at the front property line except that on a pie-shaped lot, the width shall be measured at the front setback line.

(D) Minimum Setbacks and Buffers:

(1) Front Setback - all structures except signs shall be set back at least 20 feet from street and highway frontages. Signs except entry monument signs, shall be set back at least 10 feet and when located on corner or double frontage lots involving a major collector, thoroughfare or arterial, shall not be oriented to front upon such major collector, thoroughfare, or arterial. Entry monument signs shall be set back at least 100 feet but may be located along any street or roadway. All area included within the 20 foot front setback, for the full width of the lot, shall be landscaped, irrigated, and maintained according to Section 17.35.030 (D) (3) (d). Neither fences, nor parking shall be permitted within the front building setback area with the exception of driveways.

(2) Side and Rear Setback - no setback required except:

(a) Where required by the County Building Code; and

(b) If adjacent to an existing residential use or a zone which permits residential uses by right, a landscaped buffer shall be installed according to Section 17.35.030 (D) (3) (a) or (b); and

(c) On corner or double frontage lots the front setback requirement shall apply along each street frontage.

(3) Landscaped Buffers - shall be as prescribed by the appropriate preceding section from among the following (a through f):

(a) A 30 foot setback landscaped with at least 3 trees and 9 shrubs per 100 feet of length; or

(b) A 10 foot setback with a dark colored, vinyl-coated chain-link type fence landscaped along its outer perimeter with at least 9 trees and 9 shrubs per 100 feet length; or

(c) A 10 foot setback with an 8 foot fence of solid material landscaped along its outer perimeter with at least 3 trees and 9 shrubs per 100 feet of length; or

(d) A 20 foot setback with an 8 foot fence of solid material landscaped along its outer perimeter with at least 3 trees and 9 shrubs per 100 feet of length; and shall

(e) Be based upon a plan approved by the Planning Director prior to the commencement of construction or establishment of the proposed use; and

(f) All plant materials shall be from an approved list, non-poisonous and shall be maintained free from physical damage or injury arising from lack of water, chemical damage, insects and diseases. Plant materials showing such damage shall be replaced by the same or similar species. Planting areas shall be kept free from weeds, debris, and undesirable materials which may be detrimental to safety, drainage, or appearance.

(4) Landscaped Parking Areas:

(a) Parking lots of five (5) spaces or more shall provide landscaped areas interior to the parking lot covering a percentage of the total parking area as follows:

Parking Spaces Required	% of Total Parking Area to be Landscaped
5 - 24 spaces	5.0% minimum
25 - 49 spaces	7.5% minimum
50+ spaces	10.0% minimum

(b) Parking lot landscaping shall include shade trees, approved by the Planning Director, placed so as to cover a percentage of the total parking area with tree canopies within fifteen years of securing building permit, as follows:

Parking Spaces Required	% of Total Parking Area to be Shaded
5 - 24 spaces	30% minimum
25 - 49 spaces	45% minimum
50+ spaces	50% minimum

(c) All landscaping shall be within planters bounded by a curb at least six (6) inches high. No planter shall be smaller than twenty-five (25) square feet, excluding curbing. Each planter shall include an irrigation system.

(E) Maximum Building and Sign Height:

Fifty feet (50') above the mean finished grade elevation within the perimeter formed by the outer walls of the building.

(F) Signs:

The developer of a project shall present for approval and shall coordinate the approved uniform sign package for his entire development prior to obtaining a building permit for any structure. The number of signs per business shall not exceed either:

(1) one free standing sign no greater than fifty (50) square feet in area and no greater than 20 feet in height; or

(2) two signs attached to the face of a building no greater than 80 square feet in aggregate area which shall not extend above the verticle face of any building wall.

No more than two (2) entry monument signs no greater than 10 feet in height and 60 feet in length shall be permitted to identify the entire tract of parcels developed within any industrial subdivision.

(G) Loading:

All loading and unloading of goods shall be conducted within a building or an area fenced for outdoor storage.

(H) Other Standards:

The standards described in 17.35.030 (A through G) shall be superceded by a development plan approved pursuant to Chapter 17.02 of the El Dorado County Ordinance Code (Planned Development Ordinance).

APPENDIX C: RUSSELL RANCH DEIR

If the Board finds that this cancellation will best serve the purposes of the Act and outweigh any negative aspects, then the public interest is being served.

The following section is a brief description of the current economic situation of rangeland in this area. It provides a background of the situation currently facing cattlemen in Northern California. The Williamson Act states that the uneconomic character of the existing uses may be considered only if there is no other agricultural use for the land. The US Department of Agriculture Soil Conservation Service rates the majority of this site with a capability unit of VI (see "Soils" section of this report). Due to physical limitations, such as slope and shallow soil depth, the use of the land is limited to rangeland. According to the County Farm Advisor*, the ranging of other animals, such as sheep, will not provide any better return to the farmer. Further, he stated that sheep will be subject to more predatory losses than cattle. Since the rancher is presently losing cattle to domestic dogs, the problem would be more extensive with sheep. Due to soil conditions and the economics of ranging animals, there are no other agricultural uses for this land. Therefore, the Board of Supervisors may, if they desire, consider the economics facing the rancher as a portion of the grounds for cancellation.

Rangeland Economics

A discussion of the economics of raising beef cattle on rangeland is presented because it effects two aspects of this study. First,

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* Phone conversation with Barry Leeson, County Director, Cooperative Extension, University of California

are the economic problems facing the applicant and the second is the trend of rangeland in El Dorado County. Three studies printed by the University of California's Cooperative Extension are used as reference material for this discussion*. The assumptions used in each study are important and have a bearing on the results. Therefore, the entire studies are included in Appendix B. The following is a brief summary of the studies.

The 1975 study summarized the economic conditions as follows:

> "Current high prices on rangeland are one of the major problems facing cattlemen. Available cost studies indicate that operators paying for range at current rental rates may break even on their cattle operation, but the rental rate leaves little or no return on the investment in rangeland. When an interest charge for the use of owned range is charged against the beef operation, there is usually a loss for the enterprise."

The study presents an income and cost analysis for a stocker cattle ranch in El Dorado County based on 1973 operations. The analysis is not directly applicable to the Russell Ranch, since it includes rangeland and irrigated pasture; however, the economics are similar. The study shows the net income from the total ranch operations is -$21.15 per cow.

The 1976 study does not present data for a specific area, but base the analysis on an 800 cow stocker operation where the cows are grazed for 7 months on winter range. The "management income" (net sales minus total expenses) is -$27.51 per cow.

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* University of California, Division of Agricultural Sciences, "Beef Costs & Returns", October 1975
----- "Beef Planning Profitable Production", revised August 1976, James H. Cothern, Extension Economist, University of California, Davis, "The Economics of Livestock Production on the Central Coast", February 1980

Mr. James H. Cothern, in his 1980 study, notes, "If one were to calculate the cost of production at any one point in time and include a value for the land with any prevailing interest rate, the cost of production would rarely be covered." The report provides ranch budget information for various areas in Northern California, based on 1979 data. The net return per head in the Sacramento Valley region is -$25.26 and in the Northern San Joaquin Valley region is -$63.23. Another budget prepared in 1980 for the Eastside of Stanislaus County shows a net return of -$45.80 per head. A summary of these three studies is shown in Table 1. It can be seen that over the last seven years in most areas, except coastal regions where the yield from rangeland is better, stocker operations have been losing money on a year-to-year basis.

An obvious question is, "Why be in the cattle business when the returns barely cover variable and cash costs?" According to Cothern, the answer is: "Ranchers remain content to take a small return on labor and management in order to accept the appreciation in land values, which cannot be captured until the land is liquidated. It is the 'live poor - die rich' syndrome." The rancher is able to continue to have a poor cash flow as long as he can count on receiving money for the increased value of his land at the end of the ranching operation. Mr. Cothern summarizes the cattleman's situation as follows:

> "Livestock operators have much of their life, labor and returns to capital tied up in the appreciative aspects of land. When land is frozen in a particular use for an indefinite period, immediate winners and losers emerge. The winners are those who benefit vicariously from open space or some other aspect of maintaining a quality environment. The losers are those who are deprived of "cashing a savings plan" that may have accrued over a lifetime."

Table 1
Net Returns from Stocker Operations
(dollars per head)

Year	Area	Net Return
1973	El Dorado County	-21.15
1974	Eastside of Stanislaus County	-54.40
1974	Central Coast Region	- 5.00
1976	Central Coast Region	-27.51
1979	Sacramento Valley Region	-25.26
1979	Coastal Region	35.79
1980	Eastside of Stanislaus County	-45.80

APPENDIX D: AGRICULTURAL COMMISSION RECOMMENDATIONS

VIII, B.

County of El Dorado

AGRICULTURAL COMMISSION
311 Fair Lane Drive • Placerville, CA 95667
Phone (916) 626-2305

TO: EL DORADO COUNTY PLANNING COMMISSION

FROM: BURTON THRELKEL, CHAIRMAN
EL DORADO COUNTY AGRICULTURAL COMMISSION

DATE: AUGUST 12, 1982

SUBJECT: REQUEST FOR AGRICULTURAL PRESERVE "WINDOW" CANCELLATION - EUER, PRESERVE #124

BACKGROUND

The El Dorado County Agricultural Commission, at their August 11, 1982 meeting reviewed Mr. Euer's request to remove from the California Land Conservation Act 1,070 acres (Agricultural Preserve No. 124). This property is located south of Highway 50 in the El Dorado Hills area. Mr. Cotton, representing potential buyers for this property, is proposing to develop this property into light industry. Mr. Cotton is also proposing that the zoning of this property be changed to R&D (Research and Development). The Agricultural Commission has found that in many cases industrial operations are compatible with agriculture. Mr. Euer's request was filed under the agricultural preserve "window" cancellation created by the 1982 California legislature.

RECOMMENDATION

It was moved, seconded and carried by the Agricultural Commission to advise the Planning Commission that the removal of this property from the California Land Conservation Act and placed into R&D (Research and Development zoning) would create no significant impact on the surrounding agricultural operations. This recommendation is conditioned on the fact that the entire parcel be used for industrial and not for residential use.

BT:EPD:mlb
cc: Mr. Euer

APPENDIX E: PROPOSED WILLIAMSON ACT CANCELLATIONS

EL DORADO COUNTY

INTEROFFICE COMMUNICATION

DATE: June 16, 1982

TO: Board of Supervisors

FROM: Douglas J. Noble,
Assistant Planning Director

SUBJECT: Agricultural Preserve
"Window" Cancellation Requests

SPECIFIC REQUEST

The County has received nineteen requests for the cancellation of Williamson Act Contracts, encompassing a total of 8,000± acres. This is somewhat more than our office had expected and we are therefore requesting comments and guidance from your Board concerning both the potential environmental impact of proposed cancellations and the sequence in which your Board will hear the requests.

RECOMMENDATION

That your Board direct the Planning Department to proceed with the preliminary paperwork for the preparation of an Environmental Impact Report which will examine both the individual and cumulative impact of the proposed cancellations and rezonings (E.I.R. to be paid for by the applicants); adopt a specific sequence in which the cancellations will be heard; and, request the Assessor to proceed with the calculation of the cancellation fees.

BACKGROUND

In 1981 the State enacted a law which provided a five-month "window" for agricultural preserve cancellation requests and reduced the findings necessary for these cancellations.

Your Board, in response to this law, directed our department to notify all agricultural preserve land owners of the change and adopted a fee schedule for the cancellations, including a provision for passing on to the applicants any costs for the preparation of environmental documents.

We have reviewed the requests and feel than an E.I.R. should be prepared which will discuss the individual and cumulative impact of these potential cancellations on public services, including roads, utilities and schools, and upon adjacent and nearby land uses including the other agricultural preserves. We feel this document should be professionally

Memo to:
Board of Supervisors
Ag Preserve "Window" Cancellations

prepared since it will need to be circulated through the State Clearinghouse to State agencies, along with the local agencies and concerned groups. During the preparation of the E.I.R., a subcommittee of two members of the Planning Commission and two members of the Agricultural Commission will be reviewing the applications and providing comments to the two commissions. Upon completion of the E.I.R., the Agricultural Commission and Planning Commission will hear the applications and make recommendations to your Board.

The following are the approximate times required for processing the documents:

Notice of Preparation	45 days
Preparation of Draft E.I.R.	120 days
Circulation of Draft	45 days
Preparation of Final E.I.R.	14-28 days

In addition, we have received several requests from applicants concerning the order in which the cancellations will be heard. Attached is our proposal which takes the most intensive change in land use first.

jcb
attch.

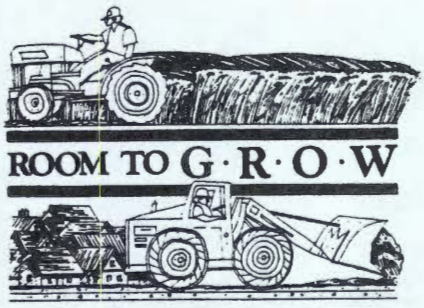
AG PRESERVE CANCELLATIONS

PRESERVE #	NAME	ACREAGE	REMAINDER	REQUESTED ZONING	AREA
192	MacCready	16.66	70	RA-20	Pleasant Valley
227	Graham	5	221	RA-20	Gold Hill
211	Jet Air, Inc.	1,021.2	-0-	RA-20 RA-40 RA-80	Cool/Pilot Hill
190	Russell	883	-0-	RA-40	El Dorado Hills
76	Pampered Campers	475±	-0-	RA-20 RA-40	Cool/Pilot Hill

AG PRESERVE CANCELLATIONS

RESERVE #	NAME	ACREAGE	REMAINDER	REQUESTED ZONING	AREA
124	Euer	1,070	-0-	I	El Dorado Hills
24	Thomas	37	SEE: ANASTASIOS	R1A	Shingle Springs
51	Cool Investments	93	-0-	R3A	Cool/Pilot Hill
154	Berg	92.67	-0-	RE-5 RE-10	Greenstone
24	Anastasios	48.591	-0-	RE-10	Shingle Springs
138	Neigel/Ellinghouse	473.5	-0-	RE-10	Greenwood
213	Hengenius	196.96	-0-	RE-10	Pleasant Valley
205	Cool Investors	675	-0-	RE-10	Cool/Pilot Hill
171	Varozza/Simas	663.5	-0-	RE-10	Latrobe
137	Morse Trusts	258.23	-0-	RE-10 RA-20	Greenwood
190	Lawyer	1,122±	-0-	RE-10 RA-40	Lotus/Coloma & Cool/Pilot Hill
165	Melvaic/Forni	236.6	-0-	RA-20	Diamond Springs/ El Dorado
4	Fredericks	206+	-0-	RA-20	Diamond Springs/ El Dorado
37	Fehnemann (Wing)	194.8	7.5	RA-20	Rescue

APPENDIX F: MITIGATION MEASURES FOR AGRICULTURAL LAND CONVERSION



OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO, CA
95814

SOME DO IT – SOME DON'T
What Local Governments Are Doing To Conserve Agricultural Land

by Dennis Castrillo
June 1982

Agricultural land conservation is an issue state legislators debate nearly every year. Since 1974, many agricultural land conservation bills have been introduced ranging from establishing new state agencies with broad powers to requiring state agencies to determine how their actions affect agricultural lands. With the exception of AB 585 (Chapter 545, Statutes of 1981), which limits the scope of nuisance suits brought against agricultural operations, all have failed.

Even though nearly everyone agrees that the conservation of agricultural land is a noble cause, significant forces work against establishing a statewide agricultural lands conservation program. These forces include:

- The California Constitution requires local agencies to be reimbursed for all work the State mandates them to perform. With no money available in general or special funds, it is unlikely the State can afford costly new planning programs.
- Public sentiment favors less, rather than more, government. Imposing new state-mandated programs goes against this attitude and influences the Legislature.
- Some local governments object to a statewide program because they feel it strips them of home rule. For this reason, they have opposed many legislative proposals.
- Conditions vary widely from county to county. What works well in one county may create a host of problems in another. For example, a statewide 20-acre minimum parcel size may be too large for coastal areas where truck farming flourishes on small parcels. In the central valley, however, 20 acres probably will not support economically sound farms in areas where row crops dominate.
- There is disagreement about how to define agricultural land. Additionally, there are no data on where and how agricultural land is being converted. This makes lobbying difficult, especially when trying to demonstrate to legislators what the impact loss of farm land has on their districts.
- Recently the Legislature has been very sympathetic to issues concerning housing supplying and cost. Developers and ardent housing enthusiasts

have argued that programs to preserve agricultural land reduces housing supply and increases its cost.

Because the State has been and may remain unable to adopt significant programs or policies for protecting agricultural lands, the actions local governments take will remain the first line of defense to protect productive agricultural land.

But what can local governments do to conserve productive agricultural land? In 1981, the Office of Planning and Research surveyed every county to determine which ones were using 11 planning tools important to preserving agricultural land. The results of the survey appear in Saving the Good Earth. The survey pointed out that counties do not consistently apply planning tools that are already available to conserve agricultural land. The survey also showed that no single planning tool constitutes an effective land use program. Local officials must combine many local programs, such as regulation of land use, establishing minimum parcel sizes, carrying out orderly annexations, and even in some cases, enacting ordinances to protect farmers from unnecessary lawsuits. While local governments can do more to protect productive agricultural land, some have recognized its economic, social, and environmental benefits and have developed good agricultural conservation programs. The substance of these programs can be transferred to other localities. They are proof that local governments are capable of developing techniques to conserve productive agricultural land.

General Plan Urban Transition Designation – Stanislaus County

One goal of the Stanislaus County General Plan is to protect agricultural land located along the outskirts of urban areas from conversion to nonagricultural uses. To achieve this the County established an urban transition land use category in its general plan in 1973. This category covers the area between the cities' existing incorporated boundaries and their sphere of influence. Nearly all the land is zoned as agriculture. Within these areas, the County's policy allows urban uses only upon annexation to the adjacent city or special district providing sewer and water service. The policy assumes that development will take place within an urban environment where public services are available. The County also encourages cities to include the transition areas within their general plans. This lets citizens and land developers know how the city intends to zone the property when it is annexed. It also gives the County an indication of how the city may react to development proposals.

Since the land will be ultimately turned to urban uses, the County allows it to be divided into as many as four parcels of less than the minimum lot size. The lot sizes must be consistent with the ultimate urban use of the property and must not conflict with any adopted city zoning and development plans. The policy further allows land in the transition areas to enroll in the Williamson Act. If the adjacent city agrees, the Williamson Act contracts can be terminated without penalty upon annexation to the city. The County believes that by alleviating a portion of the tax burden, farmers will be less motivated to sell their land prematurely for urban uses. Although this policy is a potential haven for land speculators, for the most part, it has not been abused.

Since the County adopted this policy in 1973, it has been amended several times to strengthen it or to take care of previously unforeseen circumstances. The planning staff reports that the Board of Supervisors has, in nearly all cases, adhered to the policy. The staff also believes that the policy is generally well accepted by both citizens and developers because it shows where the County will allow future growth.

Contact: Ron Freitas
Stanislaus County Planning Department
(209) 526-6330

Rural Valley Lands Plan – Tulare County

Tulare County's economy is dominated by agriculture. The County is consistently one of the nation's top three agricultural producers in terms of dollar value. The rapid development of land into five-acre "ranchettes," however, has prompted the Board of Supervisors to amend the general plan to stem the loss of productive agricultural land. The amendment is known locally as the Rural Valley Lands Plan (RVLP).

The plan contains two components. The first component consists of zoning categories of 10, 20, 40, and 80 acres. The lot sizes were determined with the aid of an agricultural advisory group. County planners and the advisory group examined such factors as crop types, soil quality, cropping history of sub-county areas, and the extent of Williamson Act contracts. From this assessment, lot sizes and the areas to apply them were determined.

The other component consists of a system for determining whether the land can be used for agricultural purposes. Many requests for general plan amendments and zone changes are made on the grounds that the parcel is too small or is incapable of supporting a commercial agricultural use. To rezone a parcel of this type in the past, the County had to amend its general plan each time. After months of testing, the County developed a matrix for evaluating agricultural suitability according to 15 factors. The matrix considers such factors as soil type, parcel size, and the location of services. (The factors the County considers are shown in Chart 1.) Each of the factors is assigned a point value to reflect its importance in the decision. If the parcel receives fewer than 11 points, the parcel is clearly unsuitable for agricultural development and may be considered for rezoning. If it receives 17 or more points, the parcel may not be considered for rezoning. Recognizing that decisions are not always black or white, the matrix contains a "gray" area in the 12-16 point range. If a parcel scores in this range, the Board may consider other factors specific to the parcel in determining whether the property should be considered for rezoning.

The matrix has many advantages as a policy tool. It allows the County to determine objectively whether a parcel should be considered for nonagricultural zoning. It also does away with the need to amend the general plan each time a rezoning is approved because the general plan now contains policy language that allows the County to make a finding of consistency between the general plan and the zoning action. Additionally, landowners who want to apply for a zone change can apply the matrix to their property and get a good indication of whether the County would consider it for rezoning. Doing this can save the property owner time, money, and the grief of filing an application

CHART I

APPLICATION NO. ____ APPLICANT'S NAME _____

PARCEL EVALUATION CHECKLIST

A. RESTRICTED TO AGRICULTURE VALUES

If the following factors meet the "restricted to agriculture" criteria, place an "R" in the value column. If they meet the "nonagricultural" criteria, place an "O" in the value column.

1. Agricultural Preserve Status ____
2. Limitations for Individual Waste Disposal Facilities ____

B. VARIABLE POINT VALUE

Each of the following land capability ratings (SCS) has been awarded a number value. The land capability ratings and their number value are:

Land Capability	Point Value
Class I or II	4 points
Class III	3 points
Class IV	2 points
Class V, VI, or VII	0 points

For the following factor determine the land capability ratings of the parcel under review and award its corresponding point value in the value column.

Class I or II	(4 pts.)	____
Class III	(3 pts.)	____
Class IV	(2 pts.)	____
Class V, VI, or VII	(0 pts.)	____

C. POINT VALUES

If the following factors meet the agricultural criteria, award the factor the number of points listed for the category. If the factor meets the nonagricultural criteria, award the factor a "0".

4 Point Value Category

1. Existing Parcel Size ____
2. Existing Land Use/Suitability for Cultivation ____

3 Point Value Category

1. Surrounding Parcel Size ____
   (Do not evaluate this factor if the site received "0" points for Existing Land Use/Suitability for Cultivation. Enter "0" for this factor in such cases.)
2. Surrounding Land Use ____
3. Proximity to Dairies, Feedlots, Concentrated Animal-Raising Operations, Sand and Gravel Operations ____

2 Point Value Category

1. Level of Groundwater and Soil Permeability ____
2. Proximity to Lands in Agricultural Preserves ____

1 Point Value Category

1. Proximity to Fire Protection Facilities ____
2. Access to Paved Roads ____
3. Historical, Archaeological, Wildlife Habitats, and Unique Natural Features ____
4. Flood-Prone Areas ____
5. Availability of Community Domestic Water ____

TOTAL POINTS ____

and discovering weeks later that the property received a poor rating. There is also a political advantage to the system. Since the policy requires the Board to turn down a rezoning request if the parcel receives too many points, the matrix creates an objective, rather than a political, process by which rezoning is determined. Since the policy was adopted in 1975, it has not been amended.

Contact: Mike Olmos
Tulare County Planning Department
(209) 733-6259

Basic Data Report and Agricultural Element – San Diego County

Not all attempts to conserve agricultural lands are successful. In 1979, the San Diego County Planning Department prepared a Basic Data Report and an Agricultural Element but it was never adopted. According to Supervisor Paul Eckert, the San Diego Board of Supervisors decided it was inappropriate to preserve agriculture by singling out agricultural lands for special land use restrictions. The Supervisors felt the value of land as an agricultural resource should be weighed with the merits of providing new residential or commercial growth and more jobs. The Board also felt that an incentive approach should be pursued, such as improved tax advantages and beneficial water rates rather than more restrictions. Nevertheless, the Report and Element still provide a good example of a basic format all general plan elements should follow.

How the discussion of agriculture is organized in a general plan is a matter left to local discretion. Some local governments have chosen to adopt a distinct agricultural element, while others have incorporated agricultural policies into other parts of their general plans. Regardless of the approach local governments choose, every general plan element should contain three basic components: data and analysis, policy, and implementation measures. Plans that the Office of Planning and Research reviews commonly lack either data or analysis or both. Data are important in the planning process because they provide the information that must be collected in order to analyze problems. Analysis is the review of the data to determine their implications. Essentially, data and analysis are important for three reasons.

1. They verify the existence of an issue or a problem.
2. They determine the magnitude of the issues.
3. They form the basis of justifying policy and implementation measures.

San Diego's Basic Data report is commendable because it provides the type of data and the level of analysis necessary to provide the foundation for the goals and policies in the Agricultural Element. The report describes the agricultural resources of the county and their location, the economic importance of agriculture, the regulatory choices available to the County, and the advantages and disadvantages of each.

The report also summarizes the findings of the Data and Analysis Report, and serves as the background for the Agricultural Element. By compiling the data and analyzing them, the planning department staff concluded that an agricultural element could effectively help the County retain agriculture land uses by:

- ensuring that existing plans and policies are clear and coherent and support local industry;
- introducing new concepts in agricultural conservation; and,
- guiding development, both urban and nonurban, away from areas which have the best chance for long-range production.

Contact: Lee Vance
San Diego County Planning Department
(714) 565-3968

Scott Valley Plan – Siskiyou County

Scott Valley is one of Siskiyou County's most significant agricultural areas. The County has classified about 106,000 acres in the valley as prime agricultural land. In the early 1970s, citizens in the valley became very concerned about the rate and quality of growth occurring there. Initially, the County reacted by attempting to manage growth through zoning. But after a few years, it became apparent that zoning was not the solution, since zoning changes were frequently allowed.

Citizens in the valley requested the County Board of Supervisors to appoint a citizens' committee to prepare a land use plan for the valley and to provide the citizens with technical assistance from the County Planning Department. In 1978, the Board appointed an advisory group. Over the next year, the group held 21 public hearings before completing a draft plan. The Board then put the plan up to an advisory vote of residents of Scott Valley to determine if the majority wanted the County to adopt either the Scott Valley Area Plan or alternative provisions set forth in the County Land Use Element. The citizens of the valley voted overwhelmingly for the plan by a 2-to-1 margin.

While the Scott Valley Plan addresses many growth issues, one of its primary features is the preservation of agricultural land. It identifies and maps agricultural soils and establishes policies that limit the use and parcel size of prime agricultural land.

- Extensive Mapping of Valley Soils. County staff identified and mapped Class I, II, and III soils, using the U.S. Department of Agriculture's index. The plan supplements this definition of prime agricultural land with considerations of climate, rainfall, growing practices, and the "location of the majority of agriculture pursuits existing and peculiar to the Scott Valley Watershed." The mapping serves as the basis for determining where the agricultural policies apply.
- Policies. The policies limit the use and parcel size of prime agricultural land and establish a rebuttable, presumptive method for reclassifying nonprime land. The policy allows nonprime land to be divided into 40-acre parcels, which the County decided were large enough to limit incompatible land uses.

CHART 2

SCOTT VALLEY PLAN
AGRICULTURAL CONSERVATION POLICIES

- Only agricultural uses may be permitted on prime agricultural soils.
- The minimum parcel size that is permitted on prime agricultural land is 80 acres.
- On lands mapped as prime agricultural land, but proven not to be prime agricultural land, the minimum parcel size shall be 40 acres. The intent of this policy is to allow a higher density on land that is not capable of being as productive for agriculture as prime agricultural land and at the same time to retain a density in agricultural areas that is compatible with agricultural interests.
- Proof that mapped prime agricultural soils are in fact not prime can only be accomplished by providing the following information:
  a. submission of a soils test prepared by a California Certified Soil Scientist; or,
  b. submission of well logs that specifically demonstrate there is not enough water available for irrigation purposes; or,
  c. a letter from the applicable irrigation district stating that it will not and cannot provide water; or,
  d. any other factual, documented information that the area is not and has not been capable of supplying enough water for irrigation.

- Spheres of Influence. To efficiently develop the land in and adjacent to the valley's two cities, Fort Jones and Etna, the plan includes two spheres of influence and separate growth management policies for each territory. The policies encourage intensive development near existing public services rather than in the valley's agricultural areas. Other counties throughout the State have also used a sphere of influence designation as a means of separating urban and rural uses.

Because a vast majority of the residents in the area approved the plan, the Board has a strong commitment to it and has not amended it since it was adopted.

Contact: David Hedberg
Siskiyou County Planning Department
(916) 842-5691 Ext. 42

Right-To-Farm Ordinance – Butte County

When urban land uses extend into nonagricultural areas, agricultural operations often become the subject of nuisance suits. In some instances, these pressures force farms to cease or, at least, substantially curtail some aspect of their operations. Some farmers become discouraged from making agricultural improvements which, in turn, affect other commercial enterprises in the area.

The Butte County Board of Supervisors adopted a "right-to-farm ordinance" designed to protect farms from unwarranted nuisance suits. The ordinance limits the circumstances under which an agricultural operation may be deemed to constitute a nuisance. The ordinance requires every deed or contract of sale for land adjacent to or within an agricultural district to contain the following statement:

> The property described herein is adjacent to or within land utilized for agricultural purposes and residents of this property may be subject to inconvenience or discomfort arising from the use of agricultural chemicals, including, but not limited to herbicides, pesticides, and fertilizers, and from the pursuit of agricultural operations including, but not limited to, cultivation, plowing, spraying, pruning, and harvesting which occasionally generate dust, smoke, noise, and odor. Butte County has established agricultural zoning which sets as a priority the use of these agricultural lands included therein, and residents of adjacent property or within the zoned areas should be prepared to accept such inconvenicnes of discomfort from normal, necessary farm operations.

The ordinance also requires real estate agents to disclose to prospective buyers that farming operations may create inconveniences. Prior to receiving a building permit, the property owners must file the above statement. Once recorded, the statement appears in the title insurance report for the property. The County designed the ordinance to inform potential land buyers that it will not assist in the abatement of the effects created by normal farming operations. It also assures farmers that new residents have been warned of possible inconveniences that might arise.

According to Nina Lambert, Butte County Planning Commissioner, no one is sure if it has been an effective deterrent of nuisance suits. The Commissioner also added that its potential effect is unclear since it has yet to be tested in the courts. Lake, San Mateo, Santa Cruz, Sonoma, and Stanislaus counties all have similar ordinances.

Contact: Charlie Woods
Butte County Planning Department
(916) 534-4601

Management Plans for Agricultural Areas – Marin County

George Lucas, the director of Star Wars, wanted to relocate his filmmaking facilities to Marin County, but after months of searching, he could not locate a single, suitable site. Lucas finally settled on an old dairy and purchased several adjacent ranches, totaling 3,000 acres, to provide the seclusion and backdrop for his filmmaking facilities. There was one problem. Although Lucas only planned to use 5 percent of the land for his filmmaking facilities, the zoning allowed only agricultural uses on the property. Lucas' venture was clearly commercial. Undaunted, Lucas' attorneys met with county staff and forged a compromise. In exchange for an amendment to the zoning ordinance to allow limited, compatible commercial uses on agricultural land, Lucas agreed to:

- merge his ranch parcels into a single parcel;
- rezone several parts of the ranch from A-10 and A-30 (10- and 30-acre minimum) to A-60 (60-acre minimum); and,
- prepare an agricultural management plan to maximize the agricultural use of the land and the quality of the soil.

The concept of a management plan presents a unique method for lessening the effects of development on agricultural land. By improving the quality of the soil and managing the natural resources of the areas, the benefits of allowing a venture like Lucas' could outweigh its detrimental effects.

Since Lucas intends to lease out the majority of the land for cattle grazing, the management plan provides general guidelines on how the range should be used. The management plan tries to balance the amount of forage that is removed so that fire hazards are kept to a minimum, enough is left to protect against erosion, and there is sufficient seed for the following year. The plan also suggests proper stocking requirements for the season, the length of grazing time, and proper water development. Through careful application of the management plan, the land's value for agriculture can be increased.

Contact: Don Dickenson
Marin County Planning Department
(415) 499-6269

Summary: What Makes an Effective Program?

There are many techniques available to local governments for conserving agricultural lands. Regardless of which techniques local governments choose to employ, an effective program should contain three basic elements.

- Basic Data. Good decisions and policies rest on good data. No matter what techniques local governments choose, the techniques should be developed from a good data base that explains where and how much agricultural land exists, as well as its economic, social, and environmental signficance. In addition, local governments should be able to monitor

on an annual basis the conversion of agricultural land to nonagricultural uses.

- Planning Activities. Local governments should have up-to-date and effective general plan elements. New, innovative programs may be ineffective if they are teamed with plans that are out of date or contain ambiguous policies that are open to interpretation from public hearing to public hearing.

- Implementation. In order to successfully conserve agricultural land, local governments must be consistent in their application of planning activities. For example, it makes little sense to adopt a right-to-farm ordinance if small acreage land divisions are allowed in the agricultural areas. In this instance, farmers may be somewhat protected but the potential for nuisance suits is increased. In addition, the "ranchettes" have effectively removed land from production.

Above all, local governments should heed the words of Franklin Roosevelt: "It is common sense to take a method and try it. If it fails, admit it frankly and try another. But above all, try something."

This paper by Dennis Castrillo is one of several prepared by the Office of Planning and Research in its "Room To Grow" project. Castrillo is a Staff Analyst in the Local Government Unit of OPR. For a complete list of other available papers, please contact: Office of Planning and Research, Local Government Unit, 1400 Tenth Street, Sacramento, California 95814, (916) 322-6312.

APPENDIX G: SUMMARY OF HAZARDOUS AND TOXIC MATERIALS

SUMMARY OF HAZARDOUS AND TOXIC MATERIALS
COMMONLY USED IN THE ELECTRONICS INDUSTRY

Name	Effects
Acids	
Nitric Acid	Irritation and damage to eyes, nose, throat, and skin; can cause ulceration in skin; erosion of the teeth; symptoms of exposure to large amounts, such as chestpain, fluid in lungs, and dryness of throat and nose, may not show for 30 to 70 hours
Sulfuric Acid	Small concentration dry out and scar skin; erosion of the teeth; severe irritation of eyes, skin and lungs; long-term exposure to small amounts may cause emphysema, thickening of lung walls, chronic runny nose, and respiratory infections
Hydrofluoric Acid (HF)	Severe skin burns; from skin, it penetrates to bone, causing fluoride poisoning; bone damage; stiffness in joints; mists can severely damage the eyes; severe lung irritant
Chromic Acid	Severe irritation of skin and lungs; holes in nasal passages; erosion of the teeth, skin discoloration; tumors in the mouth and larynx; liver damage; increased risk of lung, nasal, and skin cancer
Hydrochloric Acid (HCL, muriatic acid)	Very irritating to upper breathing passages and skin; damages vision; skin disease (dermatitis) with repeated exposure; erosion of the teeth
Bases	
Cyanides (potassium and sodium cyanide)	Irritating to skin, nose, and eyes; keeps oxygen from traveling through blood; large amounts can lead to unconsciousness and death; weakness, headaches, and nausea after long-term exposure; in presence of acids, very toxic hydrogen cyanide gas is released
Sodium Hydroxide	Severe skin and tissue destruction; severe lung irritation; if it enters and burns eating passage, may lead to cancer
Some other acids and bases used in electronics include: acetic acid, boric acid, phosphoric acid, picric acid, ammonium compounds, and hydrogen peroxide.	
Metals	
Arsenic	Skin irritation, specially to mucous membranes; discoloring and thickening of skin, especially on palms and soles of feet; skin sensitization; skin cancer; possible reproductive effects; larger amounts first cause symptoms such as diarrhea, and may lead to paralysis and liver, blood and kidney damage
Antimony	Skin, nose, and eye irritation; rash and itching around oil and sweat glands of the skin; irritation and inflammation of the breathing passages; possible increased risk of heart disease
Lead	Constipation; headaches and other "flu-like" symptoms; insomia; stomach pain; anemia; nerve damage; increased risk of heart disease; reproductive hazards; long-term exposure may lead to liver and kidney damage, and possible cancer
Cadmium	Eye, skin, and breathing passage irritation; loss of smell; holes in nose; kidney and liver damage; lung damage similar to emphysema; possible lung and prostrate cancer; possible effects on the reproductive system
Beryllium	Skin ulcers and irritation; severe lung disease called berylliosis (sometimes occurring a long time after exposure to even a small amount); lung and possible bone cancer
Copper	Eye, nose, and throat irritation; holes in the nose; dermatitis; "metal fume fever" (metallic taste in mouth, chills, fever, aching muscles, dryness in mouth and throat, headaches, nausea)
Other metals used in the electronics industry include: indium, chromium, tin, zinc, nickel, silver, platinum, gold, tantalum, and vanadium	
Solvents	
Methyl Alcohol (Methanol)	Narcotic effects; mild dermatitis; blindness, in large exposures
Hexane (N-Hexane)	Narcotic effects; dermatitis; possible peripheral neuropathy
Xylene (Xylol)	Narcotic effects; dermatitis; irritation of the eyes, nose, and throat; reversible effects on the liver and kidneys; reversible eye damage, after repeated exposure; possible effects on menstrual cycle
Methyl Ethyl Ketone (MEK)	Narcotic effects; dermatitis; irritation of eyes, nose, and throat; numbness in fingers, arms, and legs; possible reproductive effects
Freons (Fluorocarbons, trichlorofluoro-methane, freon TMC, freon TF, freon 113)	Mild narcotic effects; dermatitis; irregular heartbeat leading even to death at very high levels; when heated may decompose to form phosgene (a dangerous gas)
1,1,1-Trichloroethane	Narcotic effects; skin irritation; eye irritation; irregular heartbeat; liver and possible kidney damage after severe exposure; possibly a carcinogen
	S = skin designation. This means that gloves and/or other protective clothing must be worn to prevent skin contact with these substances
Some other solvents commonly used in electronics include: trichloroethylene (TCE), isopropyl alcohol, Stoddard Solvent, toluene, acetone, methylene chloride, and cellosolve	
Gases	
Arsine	Jaundice and anemia (with long-term exposure to small amounts); shivering; thrist; chest-pain; general tiredness; dizziness; stomach problems; kidney, liver and heart damage; eye damage at high levels
Phosphine	Vomiting; diarrhea; chest and back pain, shortness of breath; coldness; anemia; liver damage
Diborane (Boron Hydride)	Eye, nose, skin, and lung irritation; dizziness; muscle tremors; chills; when exposed to toxic amounts, it may take up to 24 hours for symptoms to show, such as chest and heart pain, breathing problems
Germane	Shallow breathing; blood and kidney damage
Hyrodgen Selenide	Metallic taste in mouth; nausea; dizziness; fatique; liver and soleen damage; eye, nose and throat irritation; lung inflammation
Phosgene (from heating chlorine compounds)	Eye irritation; dryness or burning in throat; shallow breathing; pain in chest; dizziness; chills; excess lung fluid with single exposure to large amounts (after a delay of 5-12 hours) may cause death; exposure over a long period may cause lung damage
Other gases found in the electronics industry include: boron trifluoride, chlorine, hydrogen bromide, silane, notrous oxide, ammonia, dichlorosilane, trichlorosilane, silicon tetrachloride, boron trichloride, arsenic pentafluoride, phosphorous pentafluoride, chlorosilanes, and ozone	

APPENDIX I: NOTICE OF PREPARATION

NOTICE OF PREPARATION

TO: _____

_____

_____

FROM: EL DORADO COUNTY PLANNING DEPT.

360 Fair Lane

Placerville, CA 95667

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The El Dorado County Planning Department will be the Lead Agency and will prepare an Environmental Impact Report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location and the probable environmental effects are contained in the attached materials. A copy of the Initial Study [ ] is, [X] is not attached.

Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but not later than 45 days after receipt of this notice.

Please send your response to Douglas Noble at the address shown above. We will need the name for a contact person in your agency.

PROJECT TITLE: Immediate Cancellation of Agricultural Preserve Contract #124; Rezone property from AE, Exclusive Agricultural, to I, Industrial zone; Annexation to El Dorado Hills County Water District and to El Dorado Irrigation District; Land Divisions for an Industrial Park.

PROJECT APPLICANT, IF ANY:

Robert Euer and John Euer
P.O. Box 400
Folsom, CA 95630

NOTE: The 45-day time period shall be from July 12, 1982, to August 26, 1982. If the information is not provided before this date, this department will conclude that your agency has no environmental concerns resulting from this project.

Signature Jake Lapen
Jake Rapery

Title Principal Planner

Telephone (916) 626-2438

Date _____

Reference: California Administrative Code, Title 14, Sections 15035.7, 15054.3 and 15006

State of California
GOVERNOR'S OFFICE
OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

EDMUND G. BROWN JR.
GOVERNOR

DATE: July 9, 1982

TO: Reviewing Agencies

FROM: Norma Wood Norma Wood by nm

SUBJECT: El Dorado County Planning Department
Euer Ranch Ag Preserve Cancellation and Rezoning
SCH #82070503

Attached for your review is El Dorado County Planning Department's Notice of Preparation of a draft Environmental Impact Report (EIR) for Euer Ranch Ag Preserve Cancellation and Rezoning.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 45 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Douglas Noble
El Dorado County Planning Dept.
360 Fair Lane
Placerville, CA 95667
916/626-2438

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call me at 916/445-0613.

attachments

cc: Douglas Noble

DISTRIBUTION LIST

82070503

Air Resources Board
1102 Q Street
Sacramento, CA 95814
916/322-6010

Barbara Kierbow
Dept. of Boating and Waterways
1629 S Street
Sacramento, CA 95814
916/322-4165

Gary Holloway
California Coastal Commission
631 Howard Street, 4th Floor
San Francisco, CA 94105
415/543-8555

Kim Epperson
California Energy Commission
1111 Howe Avenue, MS 39
Sacramento, CA 95825
916/920-7533

Burd Miller
Caltrans - Division of Aeronautics
1120 N Street
Sacramento, CA 95814
916/322-4954

Mary Kelly
Caltrans - Planning
1120 N Street
Sacramento, CA 95814
916/445-3821

Esther Mazur, Env. Program Coord.
Dept. of Conservation
1416 Ninth Street, Room 1354
Sacramento, CA 95814
916/322-4873

Harry Kreda
Dept. of Food and Agriculture
1220 N Street
Sacramento, CA 95814
916/322-1992

Dean Lucke
Dept. of Forestry
1416 Ninth Street, Rm. 1506-17
Sacramento, CA 95814
916/322-2996

James Hargrove
Dept. of General Services
1015 L Street
Sacramento, CA 95814
916/445-0780

Harvey Collins
Dept. of Health
714 P Street, Room 430
Sacramento, CA 95814
916/322-2308

Dave Williamson
Dept. of Housing & Community Dev't.
921 - 10th Street, 5th Floor
Sacramento, CA 95814
916/445-4725

Native American Heritage Comm.
1400 Tenth Street
Sacramento, CA 95814
916/322-7791

Nick del Cioppo
Office of Historic Preservation
1220 K Street Mall, Third Floor
Sacramento, CA 95814
916/322-8703

Maurice "Bud" Getty
Dept. of Parks and Recreation
1220 K Street Mall, Third Floor
Sacramento, CA 95814
916/445-7067

George Hersh, Env. Section
Public Utilities Commission
350 McAllister Street
San Francisco, CA 94102
415/557-8903

Tom Sherman
Public Works Board
650 Howe Avenue
Sacramento, CA 95825
916/920-6272

Mel Schwarm
Reclamation Board
1416 Ninth Street
Sacramento, CA 95814
916/445-3524

Robert Batha
S.F. Bay Conservation & Dev't. Comm.
30 Van Ness Avenue, Room 2011
San Francisco, CA 94102
415/557-3686

Frank Plesko
Solid Waste Management Board
1020 Ninth Street, Room 300
Sacramento, CA 95814
916/323-0129

Ted Fukushima
State Lands Commission
1807 - 13th Street
Sacramento, CA 95814
916/322-7813

John Huddleson
State Water Resources Control Board
1416 Ninth Street
Sacramento, CA 95814
916/322-0211

Region # 5

Division of Water Rights

Delta Unit

Ken Fellows
Dept. of Water Resources
1416 Ninth Street
Sacramento, CA 95814
916/445-7416

Lori Mehan, LGU

EL DORADO HILLS
COMMUNITY SERVICES DISTRICT

831 REDWOOD LANE • EL DORADO HILLS, CALIFORNIA 95630 • TELEPHONE 916-933-6624

July 16, 1982

Mr. Jake Raper, Principal Planner
El Dorado County Planning Dept.
360 Fair Lane
Placerville, CA 95667

Dear Mr. Raper:

With reference to your Notice of Preparation of a Draft Environmental Impact Report, Project Title: Immediate Cancellation of Agricultural Preserve Contract #124; Rezone property from AE, Exclusive Agricultural to I, Industrial Zone; Annexation to El Dorado Hills County Water District and to El Dorado Irrigation District; Land Division for an Industrial Park; Project Applicant Robert and John Euer, our Board would like to make the following statement.

At a regular meeting of our Board of Directors on July 15, 1982, our Board voted to support this change provided the applicant be required to annex to the El Dorado Hills Community Services District and make a dedication of park land in accordance with the County Ordinance. We would also request that the Planning Department require the industrialization to be compatible with the surrounding residential area, i.e., LIGHT industrial of a non-polluting nature.

Please keep us informed.

Yours very truly,

William C. Kriz

WILLIAM C. KRIZ
President of the Board

WCK/v

STATE OF CALIFORNIA—RESOURCES AGENCY

EDMUND G. BROWN JR., GOVERNOR

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION

3201 S STREET
SACRAMENTO, CALIFORNIA 95816
PHONE: (916) 445-0270

16 July 1982

EL DORADO COUNTY
RECEIVED
JUL 20 1982
DEPT. OF PLANNING

Mr. Doug Noble
El Dorado County Planning Dept.
360 Fair Lane
Placerville, CA 95667

COMMENTS ON EUER RANCH PROJECT; NOTICE OF PREPARATION

The following areas concerning water quality should be addressed in the Draft EIR for the subject project:

1. It must be demonstrated that capacity will be available at the El Dorado Hills Wastewater Treatment Plant for project sewage flows. If this is not feasible, then other alternatives for sewage treatment and disposal should be discussed.

2. Control of erosion and runoff from the site to surface drainage courses, during and after construction, should be discussed.

If you have any questions, please call me at (916) 322-1595.

Charles B. McKinley

CHARLES B. MCKINLEY
Area Engineer

CBM/gs

BUCKEYE UNION School District

POST OFFICE BOX 547 • SHINGLE SPRINGS, CALIFORNIA 95682 • (916) 677-2261—622-7020

July 19, 1982

Douglas Noble
El Dorado County Planning Department
360 Fair Lane
Placerville, CA 95667

RE: Cancellation of Agricultural Preserve Contract #124

Thank you for the information concerning this project.

This project will have a significant effect on our school district. The Buckeye Board of Trustees has adopted the attached policy and regulations to comply with current law; particularly Section 15011.6 (b) of the Government Code, which states:

> 10511.6 State Policies Regarding Use of Environmental Impact Reports.
>
> (b) Each public agency shall mitigate or avoid the significant effects on the environment of the projects it approves or carries out to the extent it is feasible to do so.

The mitigation measure, according to our policy, for the planned development, would be $1301.00 per unit, or the equivalent in services or property.

Sincerely,

Lyle Graf
Superintendent

LG:av

RICHARD F. PACILEO
SHERIFF-CORONER-PUBLIC ADMINISTRATOR
COUNTY OF EL DORADO
STATE OF CALIFORNIA

Telephone (916) 626-2211
300 Fair Lane
PLACERVILLE, CALIFORNIA 95667

EL DORADO COUNTY
RECEIVED

JUL 22 1982

DEPT. OF PLANNING

TO: EL DORADO COUNTY PLANNING COMMISSION

FROM: Deputy Al Hunt

DATE: June 16, 1982

SUBJECT: Re-zoning

The project identified by the El Dorado County Planning Agency is located near Highway 50 (South Side) boardering the Sacramento County line encompassing 1150 acres.

Not knowing exactly what type of buildings or industrial sites will eventually be built here, it is hard to pinpoint the necessary needs as far as law enforcement is concerned.

Projects like this put more demand on the Sheriff's Department in areas such as increased demand for our service, regarding criminal activity, extra patrol and increased traffic problems.

The estimated response time to the proposed development site is approximately 15 minutes, depending on the nature of the call and the location of the patrol deputy, response time may vary.

If this area develops in a manner commensurate with zoning, it will have a substantial impact on the Sheriff's Department, insofar as its ability to provide services, given our present level of staffing.

Respectfully submitted,

Al Hunt 3219

AL HUNT, Deputy
Crime Prevention Unit
El Dorado County Sheriff's Office

California Archeological Inventory

NORTH CENTRAL INFORMATION CENTER

AMADOR
SIERRA
EL DORADO
NEVADA
SUTTER
PLACER
SACRAMENTO
YUBA

Department of Anthropology
California State University, Sacramento
6000 J Street, Sacramento, CA 95819

(916) 454-6217

July 31, 1982

Douglas Noble
El Dorado County
Plann ıg Department
360 Fair Lane
Placerville, CA 95667

RE: NOTICE OF PREPARATION OF DRAFT EIR FOR CANCELLATION OF AGRICULTURAL PRESERVE CONTRACT # 124: ROBERT AND JOHN EUER.

Dear Mr. Noble,

With regard to Cultural Resource values for the above project I refer you to the Record Search and Sensitivity Map for the El Dorado Hill/ Salmon Falls Area Plan I recently prepared for Brad Kortick. There is one previously recorded prehistoric archeological site within the area and we estimate the area to be of moderate sensitivity for both historic and prehistoric resources. According to our records there have been no systematic archeological surveys of any portion of the area and as recommended in the Area Plan Record Search a survey will be necessary to adequately determine what effect any construction projects will have on cultural resources which occur within the property.

If you have any questions please feel free to call me.

Sincerely,

Marianne L. Russo
Assistant Coordinator

EL DORADO COUNTY
RECEIVED

AUG 2 1982

DEPT. OF PLANNING

New Construction

Mitigation Measures

Procedure for mitigation measure settlement.....

.....Upon receipt of notification of a filing of a preliminary map for a subdivision, the superintendent or his designee will notify the Planning Department, in writing, of board policy.

The Planning Department will be informed of the mitigation measure necessary to relieve the district of the effect that the development will cause to the district.

The person responsible for negotiating the mitigation measure will meet with the superintendent or his designee to determine whether money, property, or services, or any combination thereof, will be used to relieve the effect of the project on the district.

The terms of the contract will be negotiated and presented to the Board for consideration.

Regulation Approved: 3/18/81

COUNTY OF SACRAMENTO
PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT

ENVIRONMENTAL IMPACT SECTION

SAM MILLER
DIRECTOR

ALCIDES FREITAS
ENVIRONMENTAL COORDINATOR

July 21, 1982

Douglas Noble
El Dorado County Planning Department
360 Fair Lane
Placerville, CA 95667

Subject: Notice of Preparation of a Draft EIR for the Cancellation of an Agricultural Preserve Contract.

Dear Mr. Noble:

It is our request that the Draft EIR for the cancellation of the open space contract involving 1,150± acres should address the need for the conversion of such large agriculture acreage to industrial uses and its ultimate impacts upon nearby lands and facilities within Sacramento County.

We would appreciate receiving a copy of the Draft EIR once it becomes available for public review.

Sincerely,

Alcides Freitas
Environmental Coordinator

AF/jam

827 SEVENTH STREET • ROOM 101 • SACRAMENTO, CALIFORNIA 95814 • (916) 440-7914

New Construction

Mitigation Measures

The school district, through the superintendent or a designee, will inform all property owners filing subdivision of land (including parcel splits) of the cost of the effect of such subdivisions on the school district.

A mitigation measure of dollars, property and/or services, to reduce the effects of development will be agreed upon. The mitigation measure will be concluded prior to the close of escrow for any parcels sold.

In the case of a parcel zoned or being zoned for multiple family units, the mitigation measure will be expanded to cover the maximum permissible number of units for that zoning or as modified by deed restriction. Mobile homes will be considered a dwelling unit.

It is the intent of the board that the mitigation measures will cover the cost of site and construction in accordance with new construction policies, 7000 series, when practicable.

Policy Adopted: 3/18/81

New Construction

Mitigation Measures

Formula to determine the mitigation measures include the cost of the site, the current cost of construction, the amount of space an elementary child is entitled to, and the average pupil yield per parcel for the district.

The formula on a per student basis is.....

.....The per pupil cost of the site plus the current cost of school construction that an elementary school-age child is entitled to, times the pupil yield for the school district, less the anticipated impact fee at the time the building permit is issued.

It should be noted that transportation costs and operating costs are not part of the formula.

[$400 + ($60.00 X 59 sq.ft.)] X .4 = Mitigation Cost

Mitigation Cost - Impact Fee = Mitigation Measure

The current mitigation measure would be $1,301.00.

Site Cost -- includes cost of site plus development divided by users.

Cost of Construction -- a variable dependent upon Office of Local Assistance adjusted allowable costs.

Square Footage -- as determined by Office of Local Assistance. K-6 children are entitled to 55 sq.ft. each. 7-8 children are entitled to 75 sq.ft. (2/9 X 75/1) + (7/9 X 55/1) = 59 sq.ft.

Pupil Yield -- presently is .4, as determined by recent demographic survey.

Impact Fee -- is presently $275, as determined by local board policy.

The main variables are Site Cost and Cost of Construction. The constants tend to be the Square Footage Entitlement and the Pupil Yield.

Regulation Approved: 3/13/81

EL DORADO UNION HIGH SCHOOL DISTRICT

ADMINISTRATION

HERBERT J. HEMINGTON, Ed.D.
Superintendent
ARTHUR B. CATE
Ass't Superintendent-Personnel
NORMAN R. MENZIE
Director - Educational Services

August 3, 1982

Mr. Jake Raper, Principal Planner
El Dorado County Planning Dept.
360 Fair Lane
Placerville, CA 95667

RE: Euer Ranch Project

Dear Mr. Raper:

We are in receipt of your letter asking for comments by the school district on the cancellation of Agricultural Preserve Contract #124; Rezoning; Annexation and Land Division for Robert Euer and John Euer.

As you are already aware the El Dorado Union High School District is seriously lacking facilities for high school students. Our Board has adopted a Mitigation Measure and is charging a fee based on the number of bedrooms when a building permit is issued, to alleviate the detrimental impact that any developments have on the education and transportation of students serviced.

With the commencement of the 1982-83 school year the El Dorado Union High School District will be operating with in excess of 86 portable buildings on its various campuses. We are still faced with more than 1000 unhoused students. Add to that the potential of 1150 acres being developed and generating additional student population, and our situation becomes even more impossible. Monies collected from Mitigation Measures, Bedroom Fees and LeRoy Greene Funds must be continual in order for the district to provide uninterrupted educational services. Unlike the impacted elementary districts, the high school district is servicing all students on the West slope of El Dorado County, with the exception of a small portion of students in the Black Oak Mine Unified School District. These conditions of overcrowding are anticipated to continue for a good number of years according to Vern Weber's demographic survey.

The El Dorado County Planning Staff, for the most part, has identified and recognized the problems of cumulative impact which are affecting the services provided by the high school district. In preparing the EIR for this project, general provisions should be included with respect to another high school site to serve this area. We apprciate your soliciting our comments on these EIR's. Should you need any further information in order to proceed, please do not hesitate to contact me.

Sincerely yours,

Herbert J. Hemington

HERBERT J. HEMINGTON, Ed.D.
District Superintendent

HJH/fc

STATE OF CALIFORNIA—RESOURCES AGENCY EDMUND G. BROWN JR., Governor

DEPARTMENT OF FISH AND GAME
REGION 2
1701 NIMBUS ROAD, SUITE A
RANCHO CORDOVA, CALIFORNIA 95670
(916) 355-7030

August 11, 1982

Mr. Douglas Noble
El Dorado Department of Planning
360 Fair Lane
Placerville, CA 95667

Dear Mr. Noble:

The California Department of Fish and Game has reviewed the Notice of Preparation of an EIR for the cancellation of Robert and John Euer's Agricultural Preserve Contract #124. The property would be rezoned to Industrial. The property contains approximately 1,150 acres and is located between the Sacramento County line on the west and Latrobe Road on the east approximately one to three miles south of Highway 50. The property is presently used as grazing land and consists of annual grasses and forbes on rolling foothill terrain with no permanent streams. The Department comments are as follows:

> The EIR should address the impact of the project on any rare and/or endangered plants or animals that may be present in the area and provide appropriate mitigation measures. It should also address the issue of open space within the project area.

Thank you for the opportunity to comment on this cancellation. If you have any additional questions, please contact Jerry Mensch, Environmental Services Supervisor, telephone (916) 355-7030.

Sincerely,

Paul T. Jensen
Regional Manager

El Dorado Hills/Salmon Falls Area Plan Advisory Committee
2067 Wood Nar Drive, El Dorado Hills, CA 95630

25 August 1982

Mr Doug Noble
El Dorado County Planning Dept.
360 Fair Lane
Placerville, CA 95630

Re: Input to Environmental Impact Report - Cancellation of Ag Preserve #124,
The Euer Ranch

Dear Mr Noble,

In our discussion concerning the Euer Ranch coming out of the Williamson Act and being zoned Industrial (i.e. the proposed R&D Zone District Ordinance 17.35), the following concerns were considered primary:

1. The additional congestion on Latrobe Road and resulting impact on current resident traffic, Highway 50 and future business park (s) employees' traffic is a prime concern. An overall Traffic Study of area should be accomplished to determine what type of roads and traffic controls will be necessary to accomodate this development and future business parks in the general area. Due to the large number of employees predicted for this one business park, Latrobe Road will be significantly impacted.

a. A determination of whether a 4 lane Latrobe Road and a 4 lane White Rock Road adjacent to Business Park would be adequate for future traffic needs should be made and land dedicated for this purpose now.

b. Latrobe Rd/El Dorado Hills Blvd/Highway 50 interchange would need to be improved to handle impact of the additional vehicles.

c. When traffic density warrants, traffic lights should be considered at the west bound Highway 50 entrance from El Dorado Hills Blvd, at White Rock Road and Latrobe Road intersection and at other intersections as indicated by the traffic study.

The responsibility for mitigating traffic impact should be shared by all business parks utilizing these roads.

2. Additional pollution of the general area is a significant concern since the present El Dorado County air pollution level is at the "of concern" level. Methods are needed to alleviate the rise in auto emissions level from the vehicles of the predicted work force plus the per usual supply trucks entering the business parks. Burning during or after construction should not be allowed. Release of pollutants from client companies should not be a problem, hopefully, since R&D Zone District Ordinance 17.35 is designed to address this factor.

3. The acreage proposed for development should be in all appropriate service districts.

4. In addition we feel the visual impact of this development would be significant to surrounding areas. To conform with the proposed Area Plan scenic policy, all utility lines along the affected county roads and private roads within and adjacent to the business park(s) should be underground. Also of concern is the quantity and positioning of street and parking lot lights. The area residents desire to retain a "rural atmosphere", which would be determintally affected by a multitude of lights from any adjacent business park(s). We feel this concern can and will be mitigated readily as has been done in past commercial developments, but felt it important enough to address here. Other 'visual impact' items we could mention are adequately addressed in the new (still proposed) R&D Zone District Ordinance, 17.35 and in the El Dorado County Community Design Guide. The community design review group included in the Area Plan policies will be able to address these and other issues as the individual projects are submitted to it for consideration.

We appreciate your time and consideration of our points of concern.

Sincerely,

William W. Sturch

William W. Sturch
Chairman

cc: Mr Bob Dorr, Supervisor, District #1

August 25, 1982

Douglas Noble
El Dorado County Planning Dept
360 Fair Lane
Placerville, CA 95667

Re: Notice of Preparation
Euer Agriculture Preserve

EPIC has the following comments on the proposed project:

1. EIR must address the change in open space of the general plan.

2. Does't the proposed project create discontigious patterns of urban development? After all, they need to annex to two service disticts.

3. Is there a need for this much industrial? Is this a realistic project in light of the recent industrial development in Sacramento where the cost of electrial power is much less?

4. What safe guards will protect the development to remain "park like" if the development cannot attact the few high cost industries needed. Can the developers change the requirements to allow a higher density?

5. Who will maintain the project after completion?

Thank you for the opportunity to discuss our concerns.

Sincerely,

Russell Langley

Russell Langley, Chairman
EPIC

EPIC
PO Box 447
Shingle Springs, CA 95682

Received
El Dorado Irrigation District
JUL 9 1982

NOTICE OF PREPARATION

TO: EID
P.O. Box 1608
Placerville, CA 95667

FROM: EL DORADO COUNTY PLANNING DEPT.
360 Fair Lane
Placerville, CA 95667

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The El Dorado County Planning Department will be the Lead Agency and will prepare an Environmental Impact Report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location and the probable environmental effects are contained in the attached materials. A copy of the Initial Study ☐ is, ☒ is not attached.

Due to the time limits mandated by State Law, your response must be sent at the earliest possible date but not later than 45 days after receipt of this notice.

Please send your response to Douglas Noble at the address shown above. We will need the name for a contact person in your agency.

PROJECT TITLE: Immediate Cancellation of Agricultural Preserve Contract #124; Rezone property from AE, Exclusive Agricultural, to I, Industrial zone; Annexation to El Dorado Hills County Water District and to El Dorado Irrigation District; Land Divisions for an Industrial Park.

PROJECT APPLICANT, IF ANY:
Robert Euer and John Euer
P.O. Box 400
Folsom, CA 95630

NOTE: The 45-day time period shall be from July 12, 1982, to August 26, 1932. If the information is not provided before this date, this department will conclude that your agency has no environmental concerns resulting from this project.

Signature Jake Rapery
Jake Rapery
Title Principal Planner
Telephone (916) 626-2433
Date

Reference: California Administrative Code, Title 14, Sections 15035.7, 15054.3 and 15006

EL DORADO COUNTY
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AUG 18 1982
DEPT. OF PLANNING

8-13-82
The subject property is not within the Boundary of the El Dorado Irrigation District. No water or sewer service available in the forseeable future
Lew Archuletta
El Dorado Irrigation Dist

El Dorado County Resource Conservation District

1024 SIMON DR. PLACERVILLE, CA 95667 TELEPHONE 622-1410

August 19, 1982

Subject: Euer Williamson Contract Cancellation

To: Jake Raper, El Dorado County Planning Department

Thank you for the opportunity to provide input on the draft EIR for the Euer Williamson Contract Cancellation. We would recommend that the following items be included in this document:

1. Are soils on the site in any way limited for the proposed future use? Are important watershed areas to be affected by the project? Will "choice" designated soils areas to be lost to future use?
2. Are provisions being considered for erosion control and drainage management during any proposed construction activities? Will water quality be affected by runoff from construction areas?
3. Will the project generate any environmental pollution? What mitigation, if any, will be implemented to minimize or eliminate impacts?
4. Will flood or fire hazard potentials be increased by the project or affect the project? If so, what mitigation should be considered?
5. Will zoning buffer areas be established to protect agricultural operations adjacent to this land which are currently in Williamson contract status?

Sincerely,

GREG BOEGER, President
Board of Directors

By
Vernon E. Cassell,
Resource Coordinator.

cc: Linden A. Brooks, DC, SCS, Placerville

STATE OF CALIFORNIA—TRANSPORTATION AGENCY

EDMUND G. BROWN JR., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 3

P. O. BOX 911, MARYSVILLE 95901

Telephone (916) 674-4277

August 20, 1982

03-ED-50
Euer Williamson
Act Cancellation/
Industrial Rezone

Mr. Douglas Noble
El Dorado County
Planning Department
360 Fair Lane
Placerville, CA 95667

Dear Mr. Noble:

Thank you for the opportunity to review and comment upon a notice of preparation of a draft EIR for the cancellation of an agricultural preserve contract for 1,150 acres located south of Highway 50 and the Latrobe Road Interchange.

As a transportation agency, our concerns focus on the potential commute problems that employees could face traveling from existing residential areas to the proposed Industrial Park. The Industrial Park could generate low-paying jobs for many people near a high-cost residential area. Employees may be forced to live in more distant affordable housing which would create undesirable long-distance commuting. Problems associated with such commuting include high energy use, peak hour traffic congestion, lowered air quality and expensive roadway improvements. An assessment of the traffic impacts to Highway 50 and the Latrobe Road interchange should be made.

As a means to help mitigate certain impacts, affordable housing should be provided near the Industrial Park for its employees who desire to relocate from other residential areas. For those who would be commuting, facilities should be provided which would enhance the use of alternatives to automobile travel. Such facilities include park and ride lots, bicycle trails and lockers, and bus stops.

The EIR should identify existing bicycle trails and roadways available for bicycle usage. Public transit mitigation measures should also be identified. Privately contracted buses and vanpools could be utilized.

A ridesharing program should be developed to encourage carpooling/ridesharing among project employees. For further information on ridesharing programs, the developers may contact Caltrans Sacramento Office of Ridesharing, telephone (916) 445-POOL.

The EIR should evaluate how flex-time and work shift programs could be established by employers to distribute peak period traffic flows on Highway 50, Latrobe Road and other nearby County roads.

Finally, the EIR should provide an estimation of the types of businesses and number of employees anticipated in the Industrial Park. This would help to more accurately determine transportation-related impacts.

Sincerely,

LEO J. TROMBATORE
District Director of Transportation

By R.D. Skidmore
R. D. Skidmore
Chief, Environmental Branch

EL DORADO HILLS
FIRE DEPARTMENT

990 LASSEN LANE, EL DORADO HILLS, CALIFORNIA 95630 TELEPHONE 933-6623

August 24, 1982

Mr. Doug Noble, Planner
El Dorado County Planning Department
360 Fair Lane
Placerville, Ca 95667

re: Euer property; Enviromental Impact Report

Dear Mr. Noble:

The El Dorado Hills County Water District Board has reviewed the aforementioned project and determined there will be no significant impact so long as the impact mitigation fees are paid. However, we are having some difficulty in determining the appropriate mitigation fee for commercial and industrial projects when we are not fully appraised of the type of occupancy that will be constructed. Unlike residential where the use is known, commercial and industrial development may vary from a warehouse or store with non-flammable stock to buildings storing or utilizing highly flammable materials or liquids, explosives, toxic materials or hazardous chemicals.

The Board of Directors are presently reviewing the mitigation fee schedule to better reflect the impact of such occupancies and vary the fee schedule accordingly.

If you have any questions concerning the above please feel free to contact myself or Chief Robert Cima.

Yours truly,
EL DORADO HILLS COUNTY WATER DISTRICT

Linnwood Bloathner

Linnwood Bloathner, President

LB/rbc

APPENDIX H: ARCHEOLOGY

California
Archeological
Inventory

NORTH CENTRAL
INFORMATION
CENTER

AMADOR
~~COLUSA~~ SIERRA
EL DORADO ~~SOLANO~~
NEVADA SUTTER
PLACER ~~YOLO~~
SACRAMENTO YUBA

Department of Anthropology
California State University, Sacramento
6000 J Street, Sacramento, CA 95819

(916) 454-6217

August 23, 1982

Dennis Castrillo
Planning Answers
601 University Ave.
Suite 150
Sacramento, CA 95825

RE: RECORD SEARCH FOR THE PROPOSED EL DORADO HILLS BUSINESS PARK, EL DORADO COUNTY.

Dear Mr. Castrillo,

In response to your request of August 13, a record search for the above project located on the USGS Folsom S.E. Quad. T9N R8E Sections 23 and 24, and Clarksville 7.5' Quad. T9N R8E Sections 11, 14, 15, 23 & 24, revealed the following results:

PREHISTORIC RESOURCES: No previously recorded sites of this type are occur within the project boundary. There are, however, two such resources just outside the project, one to the east of Latrobe Road and one about 1000 ft. south of the property. These are known as CA-Eld-69: recorded in 1958 by L.A. Payen and J. Davis as a prehistoric campsite with scattered artifacts and some petroglyphs, and CA-Eld-80: recorded in 1965 by K. Dyson and D. Marx also as a prehistoric camp with 34 bedrock mortars and scattered artifacts.

HISTORIC RESOURCES: Although no historic landmarks or recorded historic archeological sites occur within or immediately adjacent to the project, one important historic feature, the Carson Emigrant Road between Clarksville and White Rock probable followed the route of the present White Rock Road which is the northwestern boundary of the property. It is quite possible that artifacts or other remains dating as early as 1840-50 may be present along this route. Also of potential importance is Carson Creek which may bear evidence of early mining activity.

SENSITIVITY AND RECOMMENDATIONS: Based upon the above information and the local topography the project area is felt to range in sensitivity from moderate to high for both prehistoric and historic resources. Those areas highest in sensitivity would be along the drainages and adjacent to both White Rock and Latrobe Roads but site can and do occur in the open areas such as those in the project. (One such example is CA-Eld-69 just to the south as mentioned above) In view of this assessment we recommend that a complete archeological survey be performed prior to the development of final project plans. In this way any significant archeological remains can identified and located in time to incorporate preservation or mitigation measures into the final plan rather making modifications. See attachment "A" for specific instructions.

LITERATURE SEARCH: Reviewed were the official maps and file for El Dorado and Sacramento Counties, the National Register of Historic Places (1982), California Inventory of Historic Resources (1976), California Historical Landmarks (1979), California Gold Districts (1979), California Gold Camps (1975), California Place Names (1969) and Historic Spots in California (1966).

As indicated on the attached agreement form the charge for this record search is $31.70. Please make your check payable to the FOUNDATION OF CSUS and forward it here to the Information Center along with the signed and completed YELLOW copy of the agreement form. Thank you.

If you have any additional questions please feel free to call me.

Sincerely,

Marianne L. Russo
Assistant Coordinator

APPENDIX K: FOOTNOTES

(FN-1) Personal Communication with John Euer

(FN-2) Draft EIR Russell Ranch, Williamson Act Cancellation, No 122, November 1980 (SCH #80092204)

(FN-3) U.S. Department of Agriculture, Livestock Report, 1981

(FN-4) Community Economic Profile, El Dorado County Chamber of Commerce.

(FN-5) Information supplied by Scott Wilson, Economic Development Coordinator El Dorado County Chamber of Commerce.

(FN-6) IBID

(FN-7) Angus McDonald and Associates, Growth of Sacramento SMSA 1970 - 1980.

APPENDIX J: LIST OF PERSONS CONTACTED

1. Doug Noble
   Jake Raper
   El Dorado County Planning Department

2. Fred Sanford
   El Dorado County Environmental Health Department

3. Norma Wood
   Ron Bass
   Bill Abbott
   Office of Planning and Research

4. Crystal Waters
   Solid Waste Management Board

5. Phyllis Tichinin
   Office of Appropriate Technology

6. Jerry Minsch
   Department of Fish and Game

7. Jim Harnish
   Attorney and Consultant to the City of Sacramento

8. Steve Jenkins
   Consultant to the City of Sacramento

9. Leona Frank
   Folsom City Planning Department

10. Scott Wilson
    Marian Watry
    El Dorado Chamber of Commerce

11. Ed Santa Rosa
    CH2MHill

12. John Euer
    Owner of Property

13. Bill Cotten
President, Kimbur Resources, Inc.

14. Don Beckman
Westco Commercial Real Estate

15. Dave Robinson
Western National Reality

16. Gene Thorne
Gene Thorne and Associates

APPENDIX K: FOOTNOTES

(FN-1) Personal Communication with John Euer

(FN-2) Draft EIR Russell Ranch, Williamson Act Cancellation, No 122, November 1980 (SCH #80092204)

(FN-3) U.S. Department of Agriculture, Livestock Report, 1981

(FN-4) Community Economic Profile, El Dorado County Chamber of Commerce.

(FN-5) Information supplied by Scott Wilson, Economic Development Coordinator El Dorado County Chamber of Commerce.

(FN-6) IBID

(FN-7) Angus McDonald and Associates, Growth of Sacramento SMSA 1970 - 1980.

CREDITS

THIS REPORT WAS PREPARED BY

Planning Answers
601 University Ave., Suite 150
Sacramento, California 95825
916-325-4715

In Cooperation With:

TJKM Transportation Consultants
Westec Services (Air Quality)
George Wheeldon and Associates (Geology)
Grant Kennedy (Soil Survey)

This report was written by Dennis Castrillo, Principal, Planning Answers. Ken Chew provided assistance with the demographics. Special thanks to D&G Computers and Graphic Entity.