Continued September 16, 1981

FILLEY RANCH E.I.R.

Notice thereof having been published in accordance with law and affidavit of publication being on file in the office of the City Clerk, Mayor McCarty called for the Public Hearing to consider the Certification of the Filley Ranch E.I.R.

Associate Civil Engineer Richard Prima addressed the Council regarding the subject matter and responded to questions as were posed by the Council. Diagrams of the subject area were presented by Mr. Prima for Council's perusal.

Mr. Ron Thomas, 1209 W. Tokay Street, Lodi, addressed the Council regarding the subject E.I.R.

There being no other persons wishing to speak on the matter, the public portion of the hearing was closed.

A very lengthy discussion followed with questions being directed to Mr. Thomas and to Staff.

On motion of Councilman Hughes, McCarty second, Council deferred action on certifying the Filley Ranch E.I.R. to allow time to receive information regarding alternate sources for storm drainage and the financing or funding thereof.

FILLEY RANCH

FINAL

ENVIRONMENTAL IMPACT REPORT

EIR 81-2

Prepared by:

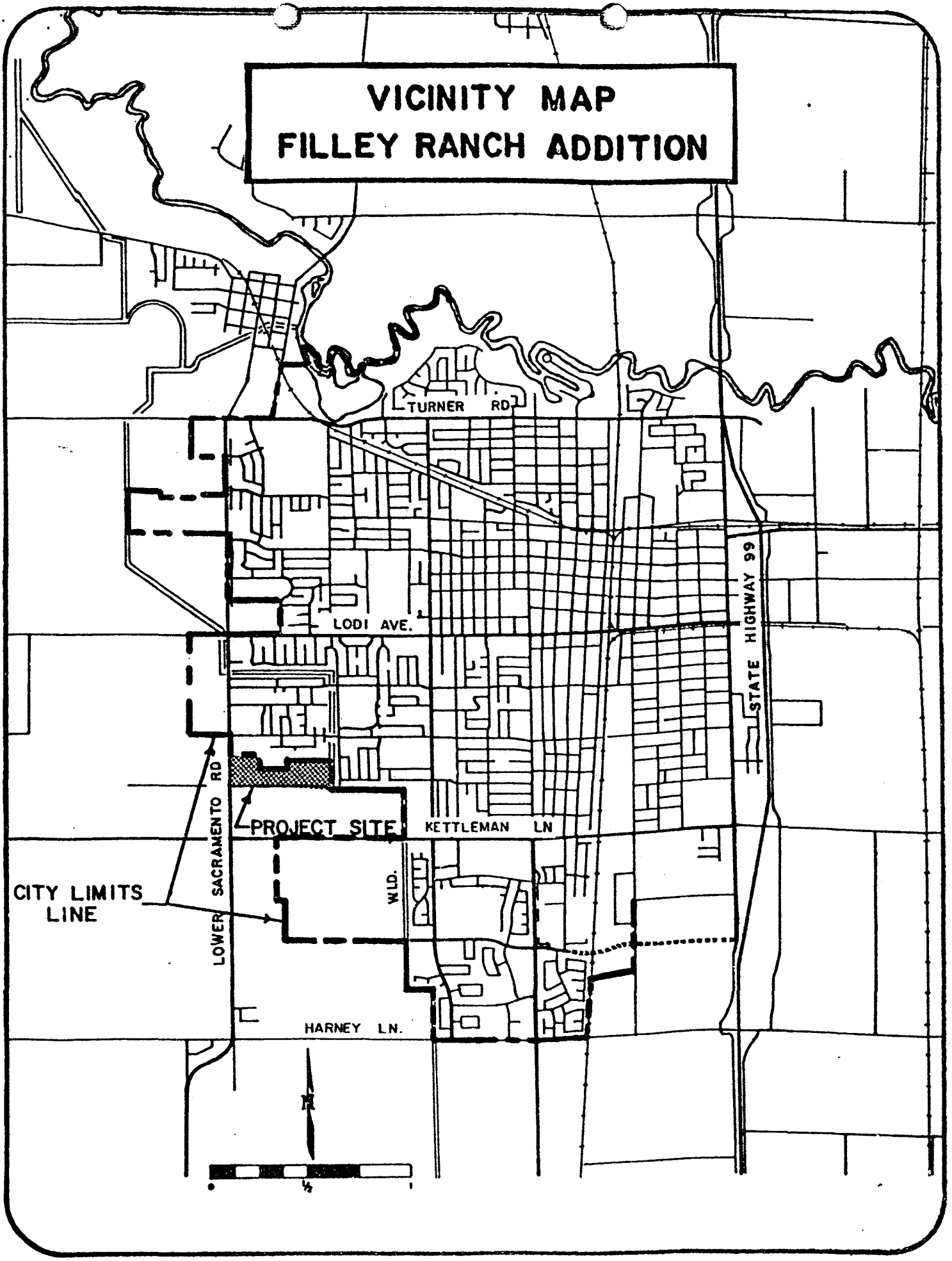
City of Lodi
Community Development Department
221 West Pine Street
Lodi, CA 95240

Applicant:

Filley Ranch, A General Partnership
Ronald B. Thomas, Partner
P. O. Box B-28
Lodi, CA 95241

TABLE OF CONTENTS

		Page
VICINITY MAP		i
PROJECT MAP		ii
SUMMARY		iii
I.	Project Description	1
II.	Site Location & Description	1
III.	General Plan and Zoning	1
IV.	Description of Environmental Setting	2
	A. Topography	2
	B. Hydraulics	2
	C. Soil Conditions	3
	D. Seismic Hazard	4
	E. Biotic Conditions	4
	F. Atmospheric Conditions	4
	G. Noise	5
V.	Utilities	
	A. Storm Drainage	6
	B. Sanitary Sewer	6
	C. Domestic Water	7
	D. Electricity and Natural Gas	7
VI.	Community Services	
	A. Traffic & Circulation	7
	B. Police & Fire Protection	8
	C. Schools	8
	D. Recreation	9
	E. Solid Waste	10
VII.	Special Districts	10
VIII.	Historic and Archeological Site	11
IX.	Environmental Assessment	
	A. Environmental Impacts	11
	B. Mitigation Measures	12
	C. Alternatives to the Project	13
	D. Irreversible and Long Term Impacts	13
	E. Cumulative Impacts	14
	F. Growth-Inducing Impacts	14
	G. Energy Conservation	14


VICINITY MAP
FILLEY RANCH ADDITION
TURNER RD.
LODI AVE.
STATE HIGHWAY 99
LOWER SACRAMENTO RD
PROJECT SITE
KETTLEMAN LN
W.L.D.
CITY LIMITS LINE
HARNEY LN.
N
0
½
1

SUMMARY

FILLEY RANCH

Environmental Impact Report

PROJECT DESCRIPTION

The project is a 52.6± acre residential development. The project will contain 142 single-family lots and 176 cluster homes. The project will also contain a 6.1 acre recreational lake that will also function as a temporary storm drainage basin.

The subject site is currently designated low-density residential in the Lodi General Plan. This designation permits an overall residential density of 1-10 units per acre. The parcel is currently zoned GA-40 (San Joaquin County) and will require a rezoning to P-D, Planned Development. The project will require an annexation to the City of Lodi.

LOCATION

The project will be located on the east side of Lower Sacramento Road, 1/4 mile north of Kettleman Lane (Highway 12). The parcel is designated as San Joaquin County Assessor's parcel 027-040-21.

ENVIRONMENTAL IMPACTS

1. Loss of 52.6± acres of prime agricultural soil. Parcel is Class 1 soil made up of Hanford Sandy Loam; well suited for a variety of agricultural uses. Development will mean loss of agricultural use of land.

   Urbanization could affect adjacent agricultural parcels by restricting normal spraying and cultivation operations. Vandalism, trespassing and homeowner's complaints could increase.

2. Traffic will increase on Lower Sacramento Road and Vine Street. The project will generate approximately 2,524 vehicle trips per day when fully developed.

3. Air pollution will increase slightly as a result of increased vehicular traffic. Increase will be less than 1% of San Joaquin County emissions.

4. Residential units adjacent to Lower Sacramento Road will be subject to noise levels that exceed recommended levels for residential units.

5. Approximately 265 additional school-aged children could be added to the already overcrowded L.U.S.D. Providing adequate classroom space could be a problem.

MITIGATING MEASURES

1. No real mitigation possible for loss of agricultural land. Entire Lodi area is prime agricultural land. Property is within the General Plan area for the City of Lodi and is designated for residential use.

2. Additional traffic can be mitigated by proper design and construction of the street system, and by limiting access to Lower Sacramento Road.

3. Noise levels in residential structures can be reduced by shielding the units with a sound wall along Lower Sacramento Road. Also design features can be built into the units (insulation, double-glazed windows, etc.) to reduce noise levels inside of the units.

4. Impaction of schools can be mitigated by the developer financially assisting the L.U.S.D. to provide additional classroom space. The developer has signed an agreement with the L.U.S.D. to pay an agreed upon amount to the school district.

ALTERNATIVE TO THE PROJECT

1. "No build" alternative. Eliminates all impacts by leaving the site in agricultural use.

2. Different mix of residential and/or commercial uses. Does not significantly improve or change the environmental impacts of the proposed project. Loss of agricultural land is not affected.

IRREVERSIBLE AND LONG-TERM IMPACTS

1. Loss of agricultural land is permanent and irreversible.

CUMULATIVE IMPACTS

1. Loss of agricultural land is cumulative. In the past years, several hundred acres of land have been developed with various residential, commercial and industrial projects. Because the City of Lodi is entirely surrounded by prime agricultural land, all future projects will utilize agricultural land.

2. There is a cumulative impact on the L.U.S.D. The L.U.S.D. includes much of northern San Joaquin County, including the City of Lodi and north Stockton. It is estimated that there is the potential for an additional 5,000 students in projects currently approved and in some state of development. This includes Lodi, north Stockton and the unincorporated County areas. This would seriously affect the L.U.S.D.

   The L.U.S.D. is working with developers in the north County area to assist the District financially to provide additional classroom space. Many, including the Filley Ranch developer, have signed agreements with the District.

   Additionally, there is a Countywide Task Force working on permanent solutions to the school financing problem.

GROWTH-INDUCING IMPACT

1. The project will have a growth-inducing impact on that area of Lodi. Development of this parcel will affect properties to the south, down to Kettleman Lane. Residential development could affect the operation of

adjacent agricultural operations.

Additionally, the installation of utilities in this area could encourage further development of the area. The lake/basin concept could, with Council approval, be utilized by other property owners and developers.

FILLEY RANCH

Environmental Impact Report

I. PROJECT DESCRIPTION

The applicant is proposing a 52.6± acre residential project located in the City of Lodi. The project would contain a total of 320 units of housing. There would be 142 single-family lots and 176 units of cluster housing. The single-family lots would occupy 34± acres. The cluster housing would occupy 11.9± acres with a density of 15 units per acre. The overall project density will be 6.1± units per acre.

The project will also contain a 6.1± acre lake. The lake will serve a dual purpose. It will function both as a recreational feature for the homeowner's and as a temporary storm drainage retention facility for the project. (see Project Map).

The proposed project will require the following: Annexation to the City of Lodi; granting of a City of Lodi Zoning classification of Planned Development (P-D); approval of a specific project plan; and approval of a subdivision map.

II. SITE LOCATION & DESCRIPTION

The project site contains 52.6± acres and is located adjacent to the existing Lodi City Limits. The parcel is San Joaquin County Assessor's parcel 027-040-21. The area is located east of Lower Sacramento Road and approximately 1300' north of Highway 12 (Kettleman Lane). (See Vicinity Map).

The 52.6 acre parcel is the remainder of what once was an 80 acre parcel. The northern 37.4 acres were annexed to the City of Lodi several years ago, and are currently being developed as a part of the Sun-West Subdivision. A portion of that land is also being used as a temporary storm drainage facility for the Sunwest area.

The project property is currently being farmed. Approximately 8 acres are planted in vineyards with the remainder planted in field crops. There is also a farm residence and related structures located on the property.

The area surrounding the project site is primarily residential or agricultural. On the north are residential subdivision and Lodi Community Hospital. On the east, across the Woodbridge Irrigation Canal (W.I.D.) are residential subdivisions. To the south are agricultural properties with scattered residences, a church and a commercial business. To the west are agricultural parcels and a concentration of small lot rural residences located along Taylor Road and Lower Sacramento Road

III. GENERAL PLAN AND ZONING

The project parcel currently is designated General Agriculture with a 40 acre minimum parcel size (GA-40), by the San Joaquin County General Plan. The

City of Lodi General Plan designates the area low density residential which allows 1-10 units per acre.

The applicant is requesting a City zoning classification of Planned Development, (P-D). The zoning and the proposed overall project density of 6.1 units per acre meets the requirements of the residential-low density general plan designation.

IV. DESCRIPTION OF ENVIRONMENTAL SETTING

A. TOPOGRAPHY

The project site and the surrounding area are generally flat with elevations of approximately 40-45 feet above sea level. The land is currently planted in vineyards and field crops. It is probable that the land was leveled some time in the past to facilitiate surface irrigation. The parcel contains no natural drainage channels or other topographic features.

B. HYDRAULICS

There are no natural water features located on the project site. The Woodbridge Irrigation Canal runs along the east property line and is a source for agricultural irrigation to this and other properties in the area. The property does not lie within the floodplain of the Mokelumne River and would not be affected during a 100 year flood.

Except for properties served by the Woodbridge Irrigation District Canal, the majority of land in the Lodi area, including the City of Lodi, is served by groundwater. There are existing private agricultural and domestic wells on the property.

The proposed project includes a 6.1 acre recreational lake. The lake will also serve as a temporary storm drainage holding facility until the City can construct a permanent basin in the area and the storm drain outfall line to Beckman Park pumping station. The source of water for the lake will be the existing agricultural well and water from the W.I.D. Canal. The developer has an agreement with the W.I.D. to use district water during any period that the W.I.D. has surplus water available. This agreement may require a State permit because of previous water rights contracts. The agricultural well will serve as a backup source of water for the lake.

The 6.1 acre lake will contain approximately 30-37 acre feet of water, based on an average depth of 5-6 feet. It is estimated that an additional 15-20 acre feet will be required annually to replace water loss to evaporation.

The City Water Department reports that the average daily water consumption per capita in Lodi is 270 gallons per day. This figure includes commercial and unmetered industrial uses as well as residential uses.

The following water consumption chart breaks down the various water uses by acre feet/acre year for different development zones.

Single family residence	3.1 acre feet/acre/year
Multiple family residence	2.4 acre feet/acre/year
Commercial residence	2.3 acre feet/acre/year
Office/Professional	1.4 acre feet/acre/year

The proposed development has the following number of acres in the above described uses.

Use	No. of Acres	No. of Acre Ft./ Acre/Year	Total No. of Acre feet/Acre Year
Single-family	34	3.1	105.4
Multi-family	11.9	2.4	28.6
			134.0

The combined residential acreages will use approximately 134 acre feet per year. Adding the 15-20 acre feet of water needed to replenish the lake annually, the total annual water use for the project will be approximately 149-154 acre feet.

Using figures provided by the San Joaquin County Farm Advisor for agricultural water use, we can make some water use comparisons. The average vineyard requires approximately 35 inches of water annually. Natural rainfall provides approximately 9 inches of the annual demand. The remaining 26 inches is supplied by irrigation. Converted to acre feet, each acre of vineyard will use approximately 2.2 acre feet of water per year, excluding rainfall.

The 52.6 acres of the project x 2.2 acre feet = approximately 115.7 acre feet of water required by the agricultural operation annually. This is close to the 149-154 acre feet required annually by the proposed development.

C. SOIL CONDITIONS

The soil type of the project site is Hanford Sandy Loam. The surface soil of the Hanford Sandy Loam consists of an 8 to 14 inch layer of light, grayish brown, soft friable sandy loam which has a distinct grayish cast when thoroughly dry. The matrial grades downward into a subsoil of slightly darker and richer brown soil.

Agriculturally, Hanford Sandy Loam is one of the best soils. It is used in the production of orchard, vineyard and other intensive perennial crops. In the Lodi area this soil is primarily used for grape vineyards. The soil conservation service rates Hanford Sandy Loam as Class 1 (the highest rating) and the Storie Index rates it at 95 percent for the ability to produce crops.

The soil is also rated good for construction purposes. The bearing capacity of the soil is 2,000 lbs. per square foot. It does not have expansive qualities and will support most structural building loads.

The 1978 edition of the Uniform Building Code designates Lodi as being in Seismic Zone 3, one that requires the strictest design factors for lateral forces.

The project will contain a man-made lake. The lake will be excavated and the soil used on-site. Soils studies done by J. H. Kleinfelder & Associates, geologist and engineers for Filley Ranch, indicate the lake will not create soil problems if constructed according to sound engineering practices. (J. H. Kleinfelder & Associates Soils Investigation for Filley Ranch, 1981.)

D. SEISMIC HAZARD

Earthquake faults are not found in the immediate vicinity of the subject parcel. The nearest faults are approximately 14 miles to the south and west. The most probable sources of strong ground motion are from the San Andreas Fault, Hayward Fault, the Livermore Fault and the Calaveras Fault, all located in the San Francisco Bay area.

E. BIOTIC CONDITONS

The site has been cleared of natural vegetation and replaced with cultivated crops. The property currently contains grape vineyards and field crops. The type of plants and wildlife found on the site are common to lands in the agricultural areas surrounding Lodi. There are no known rare or endangered species of plant or animal located on the project site.

F. ATMOSPHERIC CONDITONS

Air Quality in the San Joaquin Valley is affected by a combination of climatology and topography. Topographically, San Joaquin County is located approximately in the middle of the Sacramento/San Joaquin Valley. The valley has a trough-like configuration that acts as a trap for pollutants. Mountain ranges surrounding the valley restrict horizontal air movement and frequent temperature inversions prevent vertical air movement. The inversion forms a lid over the valley trough, preventing the escape of pollutants.

Climatology also affects the air quality. High summer temperatures accelerate the formation of smog. This, combined with summer high pressures which create low wind speeds and summer temperature inversions to create the potential for high smog concentrations.

San Joaquin County air quality is not in compliance with National Air Quality Standards.

Pollutant	Nat. Air Quality Standard	San Joaquin Air Quality
Ozone	0.12 ppm (1 hr.avg)	0.17 ppm
Carbon Monoxide	9.0 ppm (8 hr. avg)	14.4 ppm
Total suspended particulate matter	75 ug/m^3 (AGM)	81 (highest AGM)
Sulfur-dioxide	365 ug/m^3 (24 hr. avg) 80 ug/m^3 (annual avg)	no measurement

The primary source of air pollution generated by the development will be from vehicular traffic. The trip generation estimates are based on data from the Institute of Traffic Engineers.

Single-Family Residential:

Based on 9 vehicle trip ends per unt, the 142 units will generate 1278 vehicle trips per day.

Attached Housing Units:

Based on 7 vehicle trip ends per unit, the 178 units will generate 1246 vehicle trips per day.

Total vehicle trip generation will be 2,524 vehicle trips per weekday generated by the proposed development.

There is no specific data for the City of Lodi, so information was generated based on the data for San Joaquin County. The City of Lodi was assumed to generate 9.9% of the total for San Joaquin County. The following emission data was generated:

	*SOx	*Particulate Matter	*Lead	*Hydro-Carbons	*CO	*NOx
San Joaquin County	1.687	3.065	0.209	22.052	221.394	26.851
City of Lodi 9.9% of S.J.C.	.167	.303	.021	2.183	21.918	2.658
Filley Ranch 2 cars per house	.007	.012	.001	.088	.886	.107

*Figures in Tons/day

Filley Ranch would account for less than 1% of the total for San Joaquin County. This is a worst-case situation and the figure for Filley Ranch is probably higher than what will actually be generated. (See Appendix I for Sample Work Sheet).

G. NOISE

The primary source of noise in the area of the proposed project will be vehicular traffic on Lower Sacramento Road. Lower Sacramento Road serves as a major north-south collector street connecting the north San Joaquin County area with Lodi and Stockton.

City of Lodi noise contour maps based on 1995 traffic projections show the following:

70 decibles to 60' of the roadway
65 decibles to 160' of the roadway

Readings are based on Ldn noise criteria.

The San Joaquin County Noise Element sets forth the following noise guidelines for residential development:

Less than 60 decibles	=	Acceptable
60 - 69 decibles	=	Conditionally acceptable
70 - 74 decibles	=	Normally unacceptable
75 decibles or greater	=	Clearly unacceptable

This data indicates that noise levels up to 60' of the roadway are unacceptable and noise levels up to 160' of the roadway are classified as conditionally acceptable:

As currently proposed, a portion of the parcels designated for cluster housing units will fall within the high noise area.

V. UTILITIES

A. STORM DRAINAGE

The City of Lodi operates a system of interconnected storm drainage basins to provide temporary storage for peak storm runoff. The runoff is stored until the water can be pumped into the W.I.D. Canal at a controlled rate. The City does not currently have a basin to serve the area of the Filley Ranch project.

In order to provide storm drainage for the project, the applicant is proposing to use the recreational lake as a temporary storm drainage basin. The lake on the subject property will pond the storm drainage from the project during periods of peak runoff. As the storm subsides, the runoff from the lake will be pumped into the City's storm drainage system and eventually pumped into the W.I.D. Canal.

In addition to the lake, the project will require the construction of a major line connecting the project lake to the City system. The line would run along the Community Drive right-of-way.

The lake will be designed to accommodate the project runoff from a 100 year storm. The design will permit a rise of 2-3 feet in the level of the lake during periods of heavy rainfall.

The lake only provides a temporary solution to the storm drainage. At some future date, a permanent storm drainage basin and approximately 2 miles of major outfall line will be constructed south of the project site. When this is done, the project site will then serve only a recreational purpose. Storm water from the project will be stored in the City basin G-South and will then be discharged in W.I.D. Canal at the Beckman Park pumping station.

B. SANITARY SEWER

The project will be served by the City of Lodi sanitary system. The City's existing sanitary sewer system is not adequate to handle the total sewage from the proposed project. Sufficient grade is not available to drain all sewage to the Lower Sacramento Road trunk line. The area east of Filley

Drive is planned to drain south to Highway 12 at Mills Avenue to a future lift station.

C. DOMESTIC WATER

Domestic water will be provided by the City of Lodi. There are existing lines on Lower Sacramento Road, Vine Street and Filley Drive, which will be extended to serve the project. The City's Water Master Plan does not include a domestic well in this area. However, a 10-inch watermain tie to Mills Avenue may be required in order to obtain reasonable interim fire flows.

Water for the filling and recharge of the recreational lake will not come from the domestic water system. The developer has a tentative agreement with the W.I.D. Canal to use canal water for this purpose during years that the W.I.D. has surplus water. There is also a private irrigation well on the property that could be used for this purpose.

D. ELECTRICITY AND NATURAL GAS

Electricity will be provided by the City of Lodi and natural gas will be provided by P.G.&E. Both services can be adequately supplied to the project with normal line extensions.

VI. COMMUNITY SERVICES

A. TRAFFIC & CIRCULATION (Also See Atmospheric section)

The project site will tie into the City's street system. Lower Sacramento Road which runs along the west property line, will be the major street serving the property. The property will also be served by extensions of Community Drive and Filley Drive which will connect to Vine Street to the north. Community Drive should be extended to Vine Street at this time.

Lower Sacramento Road is a major north-south street carrying traffic between Stockton, Lodi and north county areas. Traffic counts taken by the City of Lodi in 1979 and 1980 for Lower Sacramento Road are 7,500 vehicle trips per day north of Vine Street and 6,500 vehicle trips per day between Vine Street and Kettleman Lane.

The specific plan for Lower Sacramento Road requires a total right-of-way width of 110 feet. This provides for a main thoroughfare having two travel lanes and one emergency parking lane in each direction and also provides for a 22-foot center median. The Specific Plan denies access on the east side of Lower Sacramento Road from Kettleman Lane to Vine Street. The developer is proposing access to Lower Sacramento Road via a public street. This proposed access will require an amendment to the existing Specific Plan. The developer is proposing that all access to the cluster home parcels be taken off of interior streets and not off of Lower Sacramento Road.

Kettleman Lane (Highway 12) is a major east-west street and is located 1/4 mile south of the project site. Kettleman Lane currently carries 10,000 vehicle trips per day between Lower Sacramento and Ham Lane. Kettleman Lane serves as a major connector between west and east side of Lodi. The street also connects I-5 and State Highway 99.

Lodi Avenue, located 1/4 mile north of the project site is a major connector between west Lodi and the central business district. Current traffic volumes on Lodi Avenue are 5,500 vehicle trips per day between Lower Sacramento Road and mills Avenue and 10,000 vehicle trips per day between Mills Avenue and Ham Lane.

Filley Drive will connect the proposed development to Sun West Subdivision to the north. Community Drive will serve as the major north-south collector street in the project, connecting to Vine Street to the north and to future developments to the south.

The proposed project will have a total of 320 residential units. There will be 142 single-family lots and 176 units of cluster housing.

Using a factor of 9 vehicle trips per single family dwelling, the single-family lots will generate 1,278 vehicle trips per day (v.t./sfd x 142 units = 1,278 v.t.)

For the cluster housing we use a factor of 7 v.t. per unit. The cluster housing would generate 1,232 v.t. per day (8 v.t./cluster unit x 176 units = 1,232 v.t.)

The total vehicle trips generated by the Filley Ranch project would be 2,510 v.t. per day.

B. POLICE & FIRE PROTECTION

The City of Lodi will provide police and fire protection to the proposed development. The Chief of Police has indicated that the department has no "level of reserve" which should be maintained in the city department. He indicates that the additional service for the subject property will come from reordering of departmental enforcement priorities. The Chief notes, however, that this new development and other areas of the city will receive uniform treatment with regard to service levels.

The Chief of Police will review the project plans to insure that the street lighting system and building and street layout permit adequate security surveillance by police patrol units.

The nearest fire station to the subject development is the main station at Elm and Church Streets. The Fire Chief will review all plans to assure adequate fire protection. He will work with the developer on the number and location of fire hydrants and will review the project plan to insure adequate accessibility for fire equipment.

C. SCHOOLS

The Lodi Unified School District (LUSD) is experiencing a problem of student overcrowding in many of its schools. Many of the schools are at maximum capacity and the District must transport students out of their normal attendance area to accommodate all the students.

In order to defray the costs of construction of needed new school facilities, the City of Lodi passed City Ordinance No. 1149. This ordinance, passed pursuant to Senate Bill 201, was enacted prior to the passage of Proposition 13 of 1978. The ordinance provided for the City Building Department to collect a "fee" of $200 per bedroom in new residential developments.

Currently, lawsuits are pending regarding the legality of this type of levy. The monies collected under the Lodi ordinance are currently being impounded. The school district may or may not be able to use the impounded funds and may not be able to continue the levy pending the outcome of the litigation.

The developer has a recorded agreement with the LUSD to provide some type of payment to the school district. If Ordinance No. 1149 is declared unconstitutional, the developer has agreed to pay directly to the district a monetary amount equal to the fees established by No. 1149.

The agreement also states that the LUSD can request dedication of a school site in lieu of payment of the fees. This would be at the discretion of LUSD.

The proposed project will contain approximately 320 residential units. The number of students is estimated as follows:

Housing Type	No. of Units	Child Per Unit	TOTAL
Single Family homes	142	1.0	142
Cluster homes	176	0.7	123
		TOTAL CHILDREN	265

The school district allocates children in new developments proportionately among their thirteen grade system.

It can be concluded that the proposed development does not, in itself, warrant construction of a school or schools; however, in combination with existing need and future development in the project area, additional classroom space will be required.

D. RECREATION

The proposed project provides a 6.1 acre private lake for use by the homeowners. The lake could be used for non-motorized boating and fishing. A one-half acre recreation area has been set aside adjacent to the west end of the lake. The Homeowner's Association will be responsible for the maintenance and regulation of the lake.

Additionally, there will be a permanent storm drainage basin/park south of the project which will be constructed sometime in the future. When constructed this will provide a 20-30± acre park and open space area built in conjunction with the basin.

E. SOLID WASTE

Existing collection of residential solid waste within the City of Lodi is on a weekly basis by a franchise collector. At the present time waste is hauled directly to the Harney Lane Disposal site, a Class II-2 landfill, by the collector; however, future plans include a transfer station and expanded resource recovery facilities at the company's headquarters in the eastside industrial area. Current and proposed operations are consistent with the San Joaquin County Solid Waste Management Plan, adopted June, 1979. The subject area is within County Refuse Service Number 3 and the North County Disposal Area, which is served by the Harney Lane site.

During the Fall season, city crews regularly pick up leaves, which are currently being taken to a city site approximately 2½ miles north of the subject area, where they are picked up by a private contractor for composting. Alternative disposal is direct haul to Harney Lane.

The subject area was within the planned urban growth area of the City of Lodi at the time the county Solid Waste Management Plan was developed and adopted. Solid waste volume projections used in the plan were based on future urban development, which included the subject area. Following are solid waste estimates based on planned and projected residential densities.

The volume of solid waste which will be generated by the proposed commercial area (compared to the area developing residentially) is considered insignificant in terms of its impact on the existing and future disposal and collection systems.

The number of units built in the project will be 320. The City's franchise collector estimates that each residential unit in the City of Lodi generates an average of 39 pounds of solid waste per week.

320 units x 39 pounds/week = 12,480 estimated pounds of solid waste

VII. SPECIAL DISTRICTS

The proposed project will affect two special districts - the Woodbridge Irrigation, which has a canal along the east property line of the project, and the Woodbridge Fire Protection District.

The W.I.D. will be affected in several ways. First, the W.I.D. will be providing surplus canal water to fill and maintain the project lake. The developer has an agreement with the W.I.D. to utilize district water during years when the W.I.D. has a surplus of water after all their agricultural commitments have been met. The developer will be assessed to some agreed upon fee for the water. This agreement may require a State permit because of water right contracts.

Secondly, because the W.I.D. canal is an open ditch, the District is concerned with possible accidents involving their canal. They have requested that the developer be required to construct a 6' chainlink fence along the project boundary adjacent to the canal. The fence would serve as a barrier between the project and the canal. This could be done as part of the requirements of the project approval or as a condition of the subdivision map. This would have to be approved by the City of Lodi.

Finally, the property will be detached from W.I.D. once the property is annexed to the City of Lodi.

The Woodbridge Fire Protection District will be affected by having the subject property detached from their District. The City of Lodi will take over fire protection responsibility once the property is annexed to the City. The District is concerned with the loss of property tax funds which are lost when property is removed from their District. The W.F.P.D. and other special districts are experiencing financial problems as a result of Proposition No. 13.

VIII. HISTORIC AND ARCHEOLOGICAL SITE

There are no sites or buildings on the subject property that are designated as historical landmarks by any federal, state or local agencies. The nearest recorded landmarks are in the community of Woodbridge, 1-1/2 mile to the north.

Although there are no recorded archeological surveys of the site, it is doubtful that there are any archeological sites on the property. Known Indian sites in the Lodi area are usually located along the banks of the Mokelumne River, two miles to the north.

The property has been extensively cultivated for many years. There is no record of any items of antiquity ever being unearthed on the site. Additionally, the extensive digging and plowing to cultivate the vineyards and the trenching to install irrigation lines would have destroyed any archeological material.

If, during construction, some article of possible archeological interest should be unearthed, work will be halted and a qualified archeologist called in to examine the findings.

IX. ENVIRONMENTAL ASSESSMENT

A. ENVIROMENTAL IMPACTS

The main environmental impact of the proposed project will be the loss of the 52.6± acres of prime agricultural land. The project parcel is made up of Hanford Sandy Loam which is rated as a Class I soil for agricultural production. It is a soil type particularly well suited for the production of grapes in the Lodi area.

If the proposed project is approved, the removal of the vineyards and the construction of structures will terminate further use of the land for agriculture.

Urbanization of the subject parcel may affect the continued agricultural operation on adjacent parcels. The presence of residential and commercial structures may restrict or limit normal farming operations on adjacent agricultural lands. The use of certain pesticides and herbicides may be restricted by state regulations, particularly next to residential areas. Cultivation and harvesting operations may result in complaints from residents concerning noise and dust. Agricultural operations adjacent to urbanized areas may also be subject to an increased amount of trespassing and vandalism.

The proposed project will increase traffic on Lower Sacramento Road and possibly other streets in the area. The project is estimated to generate 2,510± vehicle trips per weekday when fully developed.

The increase in vehicular traffic will produce additional air pollution in the immediate area of the project. The project-generated pollution will have a localized affect on air quality, but will not significantly affect the overall air quality of San Joaquin County. Based on a worst-situation case, vehicular traffic generated by the development would increase overall air pollutants by 4/10 of 1%.

The project will be located adjacent to Lower Sacramento Road, a high noise traffic route. The project will have residential units that will fall within areas that exceed 60 decibles of noise. The 60 decible level is generally considered the acceptable level for noise in a residential unit.

The project will generate an estimated 274 additional school-aged children. The addition of these students would adversely affect the LUSD and its ability to provide adequate classroom space. The LUSD has filed a Declaration of Impaction that states that the schools are at maximum capacity and that new students cannot be guaranteed classroom space.

B. MITIGATION MEASURES

If the Filley Ranch project is approved and constructed, the 52.6 acres of prime agricultural land will be removed from further agricultural use. There is no practical way to mitigate this impact. The property has been within the general plan area for the City of Lodi for many years and has been designated for residential development.

The additional traffic generated by the project can be mitigated by careful design of the project circulation system. Eliminating private access onto Lower Sacramento Road will reduce traffic hazards and congestion.

The residential parcels should have their street access off of interior streets and not on Lower Sacramento Road.

Additionally, the project street design will be required to provide for adequate future access to properties to the south. This will allow for north-south traffic movement between Vine Street and Kettleman Lane.

The problem of high noise levels along Lower Sacramento Road and its impact on residential structures can be mitigated in two ways. First, construction of a sound wall along the roadway will partially shield the residential units and reduce the noise levels by approximately 10 dBA. Second, the design and placement of the residential units can further reduce the noise levels. Those structures immediately adjacent to the roadway will require special noise insulation that could include double glazed windows, extra wall insulation, caulking of all pipe and electrical wire holes cut in the walls, etc. Additionally, limiting the first row of houses to single story structures will make the same barrier more effective.

The impact of the additional students on the LUSD has been at least partially mitigated by the signing of an agreement between the developer and the school district. The agreement provides for the payment of an agreed upon amount of money for each residential unit to help pay for additional classroom space.

The fees would be paid directly to the LUSD if the City-imposed "bedroom fee" is ruled unconstitutional by the courts. If the "bedroom fee" is ruled constitutional, the developer will pay the "bedroom fee" and will not be required to pay any additional monies. In either case, the LUSD will receive a payment from the development.

Additionally, there is a countywide task force working on the problem of school financing. This task force has begun to generate recommendations for both short and long-term solutions to the problems faced by LUSD and other school districts in the county.

C. ALTERNATIVES TO THE PROJECT

The principle alternative to the proposed project would be a "no build" alternative. This would maintain the existing agricultural use of the land and eliminate the adverse impacts resulting from the proposed project.

The other alternative would be a different type of project. This could involve a different combination of land uses, i.e., more single family/ less attached housing or less residential/some commercial, etc.

Ultimately, the second alternative would not significantly change the impacts resulting from the project. The primary impact, the loss of agricultural land, would result regardless of the project mix. The other impacts, traffic, air quality, noise and school children would change slightly according to the mix, but not enough to make a significant difference.

D. IRREVERSIBLE AND LONG TERM IMPACTS

The loss of agricultural land will be an irreversible and long-term impact. Once the land is developed with homes and businesses, there is little likelihood that the land will ever be used for agricultural purposes.

E. CUMULATIVE IMPACTS

A project will have a cumulative impact on the loss of agricultural land. In the past year, a 90± acre development, Lakeshore Village, was approved and is under development. Additionally, there were various residential, commercial and industrial projects that removed perhaps another 200± acres of agricultural land in the past several years. It is expected that additional requests for development projects will be made in the current year and in the future.

Unfortunately, all land in and around the City of Lodi is designated prime agricultural land. The entire area surrounding the city is in agricultural use. Almost every development, large or small, must utilize agricultural land. There are no non-prime soil non-agricultural parcels around Lodi. The residential, commercial and industrial requiremens of the city and its residents necessitate urbanization of agricultural land.

The other significant cumulative impact is the impact on the LUSD. LUSD estimates place the number of new students generated by developments in Lodi and North Stockton at 5,000 students in the next few years. These students place a strain on the District's ability to provide classroom space, particularly in light of the fiscal problems facing schools.

Currently, developers both in Lodi and in Stockton have been working with the LUSD to provide funds for additional classroom space. This will help alleviate some of the short-term problems facing the schools.

F. GROWTH-INDUCING IMPACTS

The installation of various public utilities, particularly storm drainage, will encourage development of the area. If the concept of the private lake/storm drainage basin proves successful, it is likely that other developments in the area will consider the same approach. This would open the entire area up for development.

It must be noted, however, that the area is within the planning area of the city and has been designated for low density residential development for many years. The entire area east of the project property is completely developed.

G. ENERGY CONSERVATION

Structures in the project will be constructed to meet State of California Energy Standards. The standards include such things as window area, insulation, energy efficient appliances, etc.

A majority of the lots in the project have a north-south orientation. This orientation provides the best adaptability for both passive and active solar design. The developer could also offer various solar design packages as part of the construction of the homes.

C O M M E N T S

WOODBRIDGE IRRIGATION DISTRICT

OFFICE AT WOODBRIDGE, CALIFORNIA

DIRECTORS
FRANK GOLDMAN
President
S. C. WORTLEY
Vice-Pres.
JOE COSTAMAGNA
Director
MABLE HALL
Secretary of the Board

JAMES C. HANSON
Engineer

JONES, LANE, WEAVER & WEBSTER
Attorneys

OFFICERS
MRS. MABLE HALL
Treasurer
MRS. MABLE HALL
Administrative Officer
Superintendent

18777 N. LOWER SACRAMENTO ROAD • TELEPHONE LODI (209) 369-6808

LODI, CALIFORNIA 95240

April 23, 1981

City of Lodi
PlanningDepartment
221 West Pine Street
Lodi, California 95240

Attention: Mr. David Morimoto

In re: EIR NO. 81-2
Project Title: Filley Ranch Development

Dear Mr. Morimoto:

We have received your Notice Of Preparation concerning the proposed development by applicant Ron Thomas of the 52.6 acre Filley Ranch. We note that the easterly line of the proposed subdivision borders the South Branch of the District's Main Canal. This particular canal is a continuation of the canal that was described to you in our accompanying letter of April 23, 1981, regarding Project Title: Kennedy Ranch, (EIR-81-1); and said canal at the Filley Ranch Project also is approximately 50-feet in width and carries water at a depth of 6-feet or more.

Likewise, the placing of a high density subdivision immediately adjacent to our canal creates an undesirable situation; and here again, the District Board opposes the formation of the subdivision as delineated on the tentative map, (Tract No. 1722).

In the event that the subdivision is, in fact, made, then we would respectfully request that your department insist, as a condition thereto, that an impenetrable barrier be provided by the sudivider along his property line separating the subdivision from the Woodbridge Irrigation District right of way. We would suggest that the minimum means of accomplishing this result would be by the use of a 6-foot cyclone fence set in concrete, and without gates or other openings leading to the canal.

Very truly yours,

WOODBRIDGE IRRIGATION DISTRICT

Mable Hall

Mable Hall
Secretary of the Board

RECEIVED
APR 27 1981
COMMUNITY DEVELOPMENT DEPARTMENT

WOODBRIDGE
RURAL FIRE PROTECTION DISTRICT
400 EAST AUGUSTA STREET
TELEPHONE (209) 369-1945

LEONARD N. ORTIZ
Fire Chief
HENRY J. WRIGHT
Assistant Chief

POST OFFICE BOX 186
WOODBRIDGE, CALIF 95258

April 27, 1981

City of Lodi
Mr. David Morimoto
221 West Pine Street
Lodi, California 95240

Dear Mr. Morimoto:

The proposed annexation of the Filley Ranch Development would require a rezoning and specific project approval, even though it conforms to the Lodi General Plan.

The Woodbridge Fire Department hates to see any loss of agricultural land to residential development. It is felt there are enough projects pending without the premature annexation of this agricultural land.

The loss of tax revenue to the County and this Fire District will be noted.

Sincerely,

Leonard N. Ortiz
Fire Chief

LNO:sb

cc: LAFCO
Files

6 6

June 26, 1981

Mr. David Morimoto
City of Lodi
221 W. Pine Street
Lodi, California

Reference: Draft E.I.R. 81-2 Filley Ranch

Dear David:

Please find the following comments relative to the above referenced:

(1) Pg. iii - first paragraph - The proposed project does not include any commercial uses.

(2) Pg. 4 - first paragraph - There exists a separate report on the Filley Ranch which should be referred to and added to the "List of Resource Publications".

(3) Pg. 6 - fifth paragraph under the heading entitled "A. Storm Drainage" - the word date in the third line should be lake.

(4) Pg.11 - third paragraph under the heading entitled "A. Environmental Impacts" - The Filley Ranch property as well as others lying adjacent to or near the existing subdivisions, homes, church and commercial buildings are already subject to the potential affects of urbanization and the development of this parcel would seem to have little, if any, impact on said potential affects.

(5) Pg.12 - last paragraph - The agreement between LUSD and the developer includes a provision that the developer will comply with any City of Lodi adopted solutions put forth by the County Task Force in addition to paying the bedroom fee direct to LUSD.

Thank you for the opportunity to comment.

Sincerely,

Ronald B. Thomas

RECEIVED
JUN 26 1981
COMMUNITY DEVELOPMENT DEPARTMENT

R. THOMAS DEVELOPMENT, INC.
1209 WEST TOKAY ST., SUITE 7/LODI, CA 95240 • P.O. BOX 8-28/LODI, CA 95241 • PHONE (209) 334-5521

C O M M E N T S

Lodi Recreation And Parks Department

FILLEY RANCH SITE

Cannot see any real problems with the plan. There is sufficient open space either City of school around the project area to take care of needs. The proposed plan by the developer looks good; their proposed open space, if properly developed, will be adequate. Hopefully the developer will consider play equipment and barbecue space with the proposed open space development. A nice shade structure covering the barbecue area would be a welcome facility for the user until trees are able to supply needed shade.

Generally, plan looks good.

UTILITY DEPARTMENT

CITY OF LODI-221 WEST PINE STREET • LODI, CALIFORNIA 95240 • PHONE 334-5634

TO Community Development Department.

DATE June 30, 1981

SUBJECT Filley Ranch Draft E.I.R.

The proposed development will have no adverse effect on the Utility Department and its ability to provide electric service in this area.

BY Hans Hansen

REPLY

DATE

RECEIVED
JUN 30 1981
COMMUNITY DEVELOPMENT DEPARTMENT

SIGNED

Form N-8113 © The Drawing Board, Inc., Box 303, Dallas, Texas

INSTRUCTIONS TO SENDER: 1. KEEP YELLOW COPY. 2. SEND WHITE AND PINK COPIES WITH CARBON INTACT.

INSTRUCTIONS TO RECEIVER: 1. WRITE REPLY. 2. DETACH STUB. KEEP PINK COPY, RETURN WHITE COPY TO SENDER.

EBMUD

EAST BAY MUNICIPAL UTILITY DISTRICT

July 13, 1981

Community Development Department
City of Lodi
221 W. Pine Street
Lodi, California 95240

Attention: Mr. David Morimoto

Re: Comments on Draft EIR 81-1 and 81-2

Gentlemen:

This District recently received copies of Draft EIRs 81-1 (Kennedy Ranch) and 81-2 (Filley Ranch), each of which concerns a proposed project that has a recreational lake which may be filled with water supplied by the Woodbridge Irrigation District. There is a potential question about this use of water under WID's water rights. We have discussed this matter with a representative of WID who will forward copies of the agreements between WID and the various developers to this District for review.

Thank you for the opportunity to comment on the two EIRs.

Very truly yours,

JBR:RBM:jem

RECEIVED
JUL 14 1981
COMMUNITY DEVELOPMENT DEPARTMENT

MEMORANDUM, City of Lodi, Public Works Department

TO: Community Development Director

FROM: Public Works Director

DATE: August 4, 1981

SUBJECT: Environmental Impact Report for Filley Ranch (EIR 81-2)

This office reviewed the draft EIR for the Filley Ranch Development. Along with the notations made on the attached copy, we are recommending that the following comments also be considered:

1. On page iv under Item 2 of Mitigating Measure, the last sentence should be eliminated and the following inserted:

   "Access to Lower Sacramento Road should be limited as required by the approved Specific Plan. If public street access is approved to Lower Sacramento Road, there should be no break or access through the ultimate center median at this location.

   "Community Drive from northerly boundary of this development to Vine Street should be constructed, by the developer, in conjunction with the development of this parcel."

2. On page 1, the last paragraph under Project Description should be reworded as follows:

   "The proposed project will require the following: Approval of temporary storm drainage retention concept by the City Council; Annexation to the City of Lodi; Granting of a City of Lodi zoning classification of Planned Development (P-D); Approval of the Specific Project Plan and; Approval of the Subdivision Map."

3. On page 2, under Hydraulics, the following sentence should be added to paragraph 3:

   "The location of the existing agricultural well should be shown on the Filley Ranch plan and the future tentative map. Adequate clearance from the well to all sanitary sewer lines shall be maintained and backflow prevention will be required on any water service to the parcel on which the existing well is located."

4. On page 6, the last paragraph under Storm Drainage should be reworded as follows:

   "The proposed lake provides a temporary solution to the storm drainage. At some future date a permanent drainage basin and approximately two miles of major outfall line will be constructed south of the project site. When this is accomplished,

the project lake will then serve only a recreational purpose. Storm water from the project will then be stored in City Basin G-South and will then be discharged into W.I.D. Canal at the Beckman Park pumping station.

"Since the lake will transport runoff from the public streets to the City storm drain system, the lake will be a permanent part of the City system and will be completely encompassed by a public utility easement."

5. General Storm Drainage Comments:

It is proposed that construction of Master Plan storm drain lines, normally a City responsibility, will be paid for by the developer and credited against their Master Storm Drain Acreage fees. Similar to the Grupe Lakeshore Development, the City would not be spending any of their existing master drainage funds towards the new development.

It should be pointed out, however, that this type of development is breaking down the original concept of funding the City's Master Storm Drain System. The original concept was that the City would develop master drainage (i.e., storm drainage basins, major drainage lines 30" and larger, pumping stations, etc.) for area "A" and that the drainage fees collected from area "A" would be used for overall master drainage improvements and/or opening up a new area "B." The new area "B" would be determined by the City Council and would only be made available at such time as area "A" was near completion. What is happening now is that small portions of areas "C," "D" and "E" are being developed independently and the fees collected in these areas are being spent for the master drainage lines needed for their development. Therefore, there is little or no development, or fees collected, in area "A" and there are little or no fees from areas "C," "D," and "E" going into the Master Drain fund for overall master drainage improvements or expanding and improving service to the easterly industrial area (i.e., upgrading Shady Acres pump station, expansion of existing C Drainage Basin, etc.).

The proposed development is requesting to develop out of phase with our Master Drainage Plan. The developer proposes to divert their drainage to the B-1 drainage area similar to the Westdale and Sunwest developments. The attached exhibit shows a portion of the B-1 area, its drainage basin (Vinewood Park) and the Shady Acres pump station which pumps the B-1 area runoff into the W.I.D. canal. The Westdale, Sunwest and Filley areas will ultimately drain to a G South Basin and then to the Beckman Park pump station where their runoffs will be pumped into W.I.D.

The Shady Acres pump station is presently pumping at only 1/2 to 2/3 capacity. Monies have been allocated to redesign this pump station and dollars are being proposed in the 1982-83 fiscal year for its reconstruction.

The operational problem that exists, is that the B-1 drainage area is the only one of the few drainage areas which is fully developed and its pump station into W.I.D. (Shady Acres pump station) is not pumping the design flows. Compounding this problem is the addition of the Westdale area which is temporarily being pumped into the B-1 area and the Sunwest area which is also temporarily being pumped into the B-1 area via the temporary Mills Avenue pump station. Mills Avenue pump station was designed to handle the Sunwest area. The Filley Ranch project is proposing to dispose of their runoff by tying into the Sunwest area and using the Mills Avenue pump station to divert their runoff into the B-1 drainage area. Because of the capacity problems at Shady Acres, we cannot pump out the Sunwest area until the Vinewood Park Basin has been drained. In adding the Filley area to the Sunwest area, the proposed lake could not be drained until the Sunwest area's Vine Street Basin is drained which can't be emptied until the Vinewood Park Basin is drained. Since the development of the Sunwest area, we have experienced critical situations over the last couple of years where the temporary Vine Street Basin was nearly filled, the Vinewood Park Basin had not yet been emptied and new storms were being forecasted. Adding additional drainage to the B-1 drainage area prior to the upgrading of this Shady Acres pump station is not advisable.

6. On page 6, the last sentence under Sanitary Sewer should be reworded as follows:

   "The City's existing sanitary sewer system is <u>not</u> adequate to handle the total sewage from the proposed project. Sufficient grade is not available to drain all sewage to the Lower Sacramento Road trunk line. The area east of Filley Drive is planned to drain south to Highway 12 at Mills Avenue to a future lift station."

7. On page 7, under Domestic Water, the last sentence of the first paragraph should be reworded as follows:

   "The City's Water Master Plan <u>does not</u> include a domestic well in this area. However, a 10 inch watermain tie to Mills Avenue may be required in order to obtain reasonable interim fire flows."

8. On page 7, the following should be added to the first paragraph under Traffic Circulation:

   "Community Drive should be extended to Vine Street at this time."

9. On page 7, add the following paragraph after the first paragraph under Traffic and Circulation:

   "The specific plan for Lower Sacramento Road requires a total right-of-way width of 110 feet. This provides for a main thoroughfare having two travel lanes and one emergency parking lane in each direction and also provides for a 22-foot center median. The Specific Plan denies access on the east side of Lower Sacramento Road from Kettleman Lane to Vine Street. The developer is proposing access to Lower Sacramento Road via a public street. This proposed access will require an amendment to the existing Specific Plan. The developer is proposing that all access to the cluster home parcels be taken off of interior streets and not off of Lower Sacramento Road."

10. If the lake concept is approved, a soils report should be prepared prior to the design and construction of said lake.

If you have any questions concerning these comments, please contact me.

Jack L. Ronsko
Public Works Director

Attachments

cc: City Manager
Thomas Development, Inc.
Baumbach & Piazza Civil Engineers

PERSONS OR AGENCIES PROVIDING INFORMATION

R. Thomas Development, Inc.	Ronald Thomas
Lodi Unified School District	
Woodbridge Irrigation District	Mabel Hall
Local Agency Formation Commission	Gerald Scott, Executive Director
Baumbach & Piazza, Civil Engineers, Lodi	
Woodbridge Rural Fire Protection District	Leonard N. Ortiz

APPENDIX

ON-ROAD VEHICLE EMISSION ESTIMATES WORKSHEET

This worksheet was designed as a supplement to the Procedure and Basis for Estimating On-Road Motor Vehicle Emissions document published by the State of California Air Resources Board, January 1980.

The worksheet uses the same formulas and methods to derive estimates of automobile air pollution, only in a simplified manner.

The worksheet consists of a table, broken-down into two parts:

1. Background Data (in the upper portion), available from sources described in the text of the worksheet, and
2. Estimate Results (in the lower portion), as obtained by using the formulas and calculations given in the text.

The text is coded with letters to match the spaces in the table. Calculations are noted with numerals, making formulas easy to find in the text.

Notes

The method for estimation used in the State procedures is best used with projects associated with large areas. County data is given in the text and tables of the document, and regional information is given in terms of air quality basins.

Smaller projects are more difficult to estimate using this procedure, unless locally gathered data is used in place of the standard data given in the text. Caution should be used when data is substituted so as to guarantee accurate results.

Procedure.

Motor vehicles are divided into six catagories for analysis. They are:

1. Light-Duty Passenger Vehicles (LDP)
2. Light-Duty Trucks (LDT) (6,000 lbs. or less gross vehicle weight)
3. Medium-Duty Trucks (MDT) (6,001 - 8,500 lbs. GVW)
4. Heavy-Duty Gasoline Trucks (HDG) (8,500 + lbs. GVW)
5. Heavy-Duty Diesel Trucks (HDD) (8,500 + lbs. GVW)
6. Motorcycles (MCY)

One table should be made up for each of the six classifications of vehicles listed above, requiring six sets of the calculations in this worksheet.

Once all six of the tables have been made (one for each type of vehicle), totals can be calculated for each pollutant.

Following the worksheet table, three summary tables are provided to show the total emission estimates. The final table (bordered) gives a total for each pollutant as estimated using the method described by the State. All numbers in the last three tables are given in units of tons/day.

ON-ROAD VEHICLE EMISSION ESTIMATE WORKSHEET

Space:	Description:
%VT	Percent of vehicle trips (of the total) operating in the cold start or hot start mode. Standard data can be found in Appendix E, "Composite Emissions Factor Summary."
% Ttl	The percent of the total number of vehicles traveling at an average speed of 25.6, 45 or 55 m.p.h. Standard data can be calculated from the information in Table I-1, "Percent VMT by Traffic Condition." Information should be identical for each of the three pollutants listed.
Items A-U	Standard data available in Appendix E, "Composite Emission Factor Summary."
Item V	Average Annual Mileage. Standard data available in Table I-4, p. 18, "Average Annual Mileage and Daily Trips."
Item W	Percent vehicle growth rate. Data available in Table I-3, p. 17.
Item X	1975 In-Use Vehicle Population. This figure is used as a base for calculating current vehicle population, and is available in Table I-2, p. 16.
Item VT	Vehicle Trips per day per vehicle. Standard data available in Table I-4, p. 18.
Item VP; NOTE 1	In-Use Vehicle Population (current). Calculation:

$$N_{year} = N_{1975}\left(1 + \frac{GR}{100}(\text{year} - 1975)\right)$$

Example:

$$N_{1979} = 141{,}455\left(1 + \frac{2.38}{100}(1979 - 1975)\right)$$

$$= 141{,}455\ (1.0952)$$
$$= 154{,}922$$

Item VMT; NOTE 2	Vehicle Miles Traveled. Calculation:

VMT = VP x Item V.

Items Y-Z, a-o	Vehicle emissions calculations. The data is calculated in three groups: Hot stabilized, Cold Start and Hot Start modes of operation. Separate calculations are made for HC, CO, and NO_x emissions, as described on the following page. After the standard calculations, other hydrocarbon emission calculations are to be made. These are: Diurnal emissions, Hot

Soak Emissions, and Crankcase Emissions, which, in total (combined with the standard HC emissions), equal the "Total Hydrocarbon Emissions", Item 1.

Formulas:

NOTES 3-4. Items Y, Z, a. Hot stabilized emissions are calculated in the same manner for HC, CO and NO_x emissions. Calculation 4 must be completed prior to Calculation 3.

NOTE 4.

EH = 100% Hot Stabilized (gm/mi) x % Ttl @ 25.6mph = y
100% Hot Stabilized (gm/mi) x % Ttl @ 45 mph = x
100% Hot Stabilized (gm/mi) x % Ttl @ 55 mph = w

Sum (w,x,y) = EH

NOTE 3.

EXR = EH x VP x 3.01732 E-09

Calculations:

For Item Y:

(A) 1.727 x (% Ttl @ 25.6 mph) .47 = .81169
(D) 1.121 x (% Ttl @ 45 mph) .08 = .08968
(E) 1.028 x (% Ttl @ 55 mph) .45 = .4626
SUM = 1.36397 (p

(p) 1.36397 x (VMT) 9832400
x 3.01732 E-09 = .040466 tons per day (Y)

For Item Z:

(F) 19.394 x (% Ttl @ 25.6 mph) .47 = 8.64518
(I) 10.473 x (% Ttl @ 45 mph) .08 = .83784
(J) 9.169 x (% Ttl @ 55 mph) .45 = 4.12605
SUM = 13.60907

(q) 13.60907 x (VMT) 9832400
x 3.01732 E-09 = .40375 tons per day (Z)

For Item a:

(K) 1.934 x (% Ttl @ 25.6 mph) .47 = .90898
(N) 2.264 x (% Ttl @ 45 mph) .08 = .18112
(O) 2.514 x (% Ttl @ 55 mph) .45 = 1.1313
SUM = 2.2214

For Item a -- continued:

(a) 2.2214 x (VP) 685400

x 3.01732 E-09 = .0066963 tons per day (a)

NOTES 5-6. Items b-g. Cold Start and Hot Start emissions are calculated in the same way; however, different variables are used. Separate calculations are necessary for HC, CO and NO_x emission estimates. Calculation 6 must be made before Calculation 5.

Formulas:

NOTE 6. EC = 3.59 x %VT x (Cold Starts @ 25.6 mph - 100% Stabilized @ 25.6)

NOTE 5. EX = EC x VT x VP x 1.10132 E-06

Calculations:

For Item b: (%VT for Cold Starts only)

(B) 4.521 - (A) 1.727 = 2.794 (s)

3.59 x (%VT) .482 x (s) 2.794

= 4.8346517 (t)

(t) 4.8346517 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .021832 (b)

For Item c: (%VT for Cold Starts only)

(G) 56.124 - (F) 18.344 = 37.73 (u)

3.59 x (%VT) .482 x (u) 37.73

= 65.287237 (v)

(v) 65.287237 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .29482 (c)

For Item d: (%VT for Cold Starts only)

(L) 2.630 - (K) 1.934 = .696 (w)

3.59 x (%VT) .482 x (w) .696

= 1.2043445 (x)

(x) 1.2043445 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .0054385 (d)

For Item e: (%VT for Hot Starts only)

(C) 2.802 - (A) 1.727 = 1.075 (y)

3.59 x (%VT) .518 x (y) 1.075

= 1.9990915 (z)

(calculation continued on next page)

For Item e — continued:

(z) 1.9790915 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .0090274 (e)

For Item f: (%VT for Hot Starts only)

(H) 22.107 - (F) 18.394 = 3.713 (aa)

3.59 x (%VT) .518 x (aa) 3.713

= 6.9047691 (bb)

(bb) 6.9047691 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .03118 (f)

For Item g: (%VT for Hot Starts only)

(M) 2.462 - (K) 1.934 = .528 (cc)

3.59 x (%VT) .518 x (cc) .528

= .98187936 (dd)

(dd) 98187936 x (VT) 3.92 x (VP) 1046

x 1.10132 E-06 = .0044339 (g)

NOTE 7. Items h-k. Evaporative and Crankcase Emissions.

Formulas:

Diurnal Emissions: DIHC; Hot Soak: HSHC; Crankcase: CCHC.

$DIHC = CEF_{di} \times VP \times 1.10132\ E\text{-}06$

$HSHC = CEF_{hs} \times VP \times 1.10132\ E\text{-}06$

$CCHC = CEF_{cc} \times VP \times 1.10132\ E\text{-}06$

For Item h:

(P) 4.656 x (VP) 1046 x 1.10132 E-06

= .0053636 (h)

For Item i:

(Q) 5.113 x (VP) 1046 x 1.10132 E-06

= .0058901 (i)

For Item k:

(R) 0.019 x (VP) 1046 x 1.10132 E-06

= .00021888 (k)

NOTE 8. Item l. Total hydrocarbon emissions calculation.

Formula:

$THC = EX_{hc} + DIHC + HSHC + CCHC$

(Note 8 -- continued)

Calculation:

(M) .040466

(b) .018832

(e) .0090214

(h) .0031636

(i) .0058961

\+ (k) .0000215555

.0826098 (l)

NOTE 9. Item m. Particulate Matter Emissions.

Formula:

PART = CEF_{pt} x VMT x 3.01732 E-09

Calculation:

(S) .0324 x (VMT) 9832400

x 3.01732 E-09 = .0096123 (m)

NOTE 10. Item n. Oxides of Sulphur (SO_x) Emissions.

Formula:

SO_x = CEF_{so} x VMT x 3.01732 E-09

Calculation:

(U) 0.101 x (VMT) 9832400

x 3.01732 E-09 = .029964 (n)

NOTE 11. Item o. Lead Emissions (Pb).

Formula:

PB = CEF_{pb} x VMT x 3.01732 E-09

Calculation:

(T) 0.022 x (VMT) 9832400

x 3.01732 E-09 = .00065268 (o)

Pollutant	Speed (mph)	% Ttl	100% Hot Stabilized (gm/mile)		Cold Starts %VT= .452		Hot Starts %VT= .515	
HC	25.6	.47	A	1.727	B	4.521	C	2.502
	45	.08	D	1.121				
	55	.45	E	1.028				
CO	25.6	.47	F	18.394	G	42.124	H	22.107
	45	.08	I	10.473				
	55	.45	J	9.119				
NO_x	25.6	.47	K	1.934	L	2.630	M	2.462
	45	.08	N	2.264				
	55	.45	O	2.414				

Evaporative, Crankcase and Particulate CEF (ref: Appendix E)

Diurnal	P	4.626	gm/day	Part. Mat.	S	0.324	gm/mile
Hot Soak	Q	5.113	gm/trip	Lead CEF	T	0.022	gm/mile
Crankcase	R	0.019	gm/mile	SO_x CEF	U	0.101	gm/mile

Vehicle Trips per day	Average Annual Mileage	V	9400	mi
	% Vehicle Growth Rate	W	—	%
VT 342	In-Use Vehicle Popul.-1975	X	—	(1975)

Current Vehicle Usage		Note	Amount	
VP	In-Use Vehicle Population	1	1046	(current)
VMT	Vehicle Miles Traveled	2	9832400	(current year)

Vehicle Emissions		Note		Amount	Units
Hot Stabilized	HC Hot Stabilized	3-4	Y	.040466	tons/day
	CO Hot Stabilized	3-4	Z	.40375	tons/day
	NO_x Hot Stabilized	3-4	a	.025903	tons/day
Cold Start	HC Cold Start	5-6	b	.021832	tons/day
	CO Cold Start	5-6	c	.29482	tons/day
	NO_x Cold Start	5-6	d	.0154385	tons/day
Hot Start	HC Hot Start	5-6	e	.0090274	tons/day
	CO Hot Start	5-6	f	.03118	tons/day
	NO_x Hot Start	5-6	g	.0044339	tons/day
Diurnal Emissions		7	h	.0053636	tons/day
Hot Soak Emissions		7	i	.0058901	tons/day
Crankcase Emissions		7	k	.000021888	tons/day
TOTAL HYDROCARBON EMISSIONS		8	l	.0826009 8	tons/day
Particulate Matter Emissions		9	m	.0096123	tons/day
Oxides of Sulphur (SO_x) Emissions		10	n	.0029964	tons/day
Lead Emissions (Pb)		11	o	.0006268	tons/day

	Hydrocarbons	Carbon Monoxide	Nitrous Oxide
LIGHT-DUTY PASSENGER VEHICLES (LDP)			
Total Hydrocarbons (HC)	l 126.52		
CO – Hot Stabilized		Z 61.747	
Cold Start		c 45.099	
Hot Start		f 4.769	
NO_x – Hot Stabilized			a 10.079
Cold Start			d 0.532
Hot Start			g 0.678
LIGHT-DUTY TRUCKS (LDT)			
Total Hydrocarbons (HC)	l 4583		
CO – Hot Stabilized		Z 26.476	
Cold Start		c 20.590	
Hot Start		f 2.398	
NO_x – Hot Stabilized			a 3.745
Cold Start			d .250
Hot Start			g .249
MEDIUM-DUTY TRUCKS (MDT)			
Total Hydrocarbons (HC)	l 0.666		
CO – Hot Stabilized		Z 3.532	
Cold Start		c 2.096	
Hot Start		f 0.204	
NO_x – Hot Stabilized			a 0.555
Cold Start			d 0.039
Hot Start			g 0.055
SUB-TOTAL of columns	17.881	166.401	16.112

HEAVY-DUTY GAS VEHICLES (HDG)

		Hydrocarbons	Carbon Monoxide	Nitrous Oxide
Total Hydrocarbons (HC)		1 2.863		
CO -	Hot Stabilized		Z 48.413	
	Cold Start		c —	
	Hot Start		f —	
NO_x -	Hot Stabilized			a 3.040
	Cold Start			d —
	Hot Start			g —

HEAVY-DUTY DIESEL VEHICLES (HDD)

Total Hydrocarbons (HC)		1 .886		
CO -	Hot Stabilized		Z 5.654	
	Cold Start		c —	
	Hot Start		f —	
NO_x -	Hot Stabilized			a 7.667
	Cold Start			d —
	Hot Start			g —

MOTORCYCLES (MCY)

Total Hydrocarbons (HC)		1 .422		
CO -	Hot Stabilized		Z .750	
	Cold Start		c .148	
	Hot Start		f .028	
NO_x -	Hot Stabilized			a .029
	Cold Start			d .001
	Hot Start			g .002

SUB-TOTAL of columns	4.171	54.993	10.739
SUB-TOTAL of previous page	17.881	166.401	16.112
TOTAL EMISSIONS	22.052	221.394	26.851

SUMMARY OF VEHICLE EMISSION ESTIMATES (year 1981)

	SO_x	Particulate Matter	Lead
Light-Duty Passenger Veh.	0.458	1.476	0.100
Light-Duty Trucks	0.157	0.453	0.034
Medium-Duty Trucks	0.025	0.054	0.008
Heavy-Duty Gas Vehicles	0.138	0.394	0.061
Heavy-Duty Diesel Veh.	0.907	0.651	—
Motorcycles	0.002	0.008	0.001
TOTALS	1.687	3.065	0.206
	TOTAL Sulfur Oxides (tons/day)	TOTAL Particulate Matter (tons/day)	TOTAL Lead Emissions (tons/day)

San Joaquin County	22.052	221.394	26.851
	TOTAL Hydrocarbons (tons/day)	TOTAL Carbon Monoxide (tons/day)	TOTAL Oxides of Nitrogen (tons/day)

City of Lodi - 9.9% of S.J.Co.

Filley Ranch - .40 % of City of Lodi

FILLEY RANCH, A GENERAL PARTNERSHIP
P. O. Box B-28
Lodi, California 95241

May 5, 1981

Lodi City Council
221 W. Pine Street
Lodi, California 95240

Reference: Request for your approval to authorize the City Manager to allow the City Staff to continue processing the annexation and tentative map requests we have submitted on the project known as Filley Ranch located adjacent to and south of Sunwest Units 3 and 4.

Gentlemen:

At Mr. Glaves direction, based upon his understanding of past Council policies in the area of the project referenced above, I hereby respectfully request that you authorize completion of the processing as referenced hereinabove.

We feel that we have followed City ordinances in submitting our applications and paying the requested fees and that the processing should be completed as soon as possible.

Should you so desire, I would be most pleased to meet with you on behalf of the owners.

Thank you for your consideration.

Very truly yours,

FILLEY RANCH, a general partnership

By Ronald B. Thomas
Ronald B. Thomas, Partner

cc: Mr. Hank Glaves
Mr. Jack Ronsko

MEMORANDUM, City of Lodi, Public Works Department

TO: City Manager and City Council

FROM: Public Works Director

DATE: October 5, 1981

SUBJECT: Supplemental Data on Filley Ranch

At the Council meeting of September 16, 1981, the City Council deferred action on the certification of the Filley Ranch E.I.R. and requested additional information be submitted describing how the development affects the Master Storm Drainage Fund and what alternate sources for storm drainages are available.

Master Storm Drainage Fund

Based on the development of the whole subdivision (53 acres ±) and the present storm drainage acreage fee ($3210/Ac.), approximately $170,000 would be collected into the Master Storm Drainage Fund. The Filley Ranch Master Drain system would consist of approximately 1200 lineal feet of 36" or 42" storm drain and would cost approximately $50,000. This $50,000 would be spent from the Master Drain Fund and would not be available for other development.

It was pointed out in the E.I.R. that there is not sufficient grade available to drain all of the sewage from the development to the Lower Sacramento Road trunk sewer line. The Master Sewer planning done by staff shows that the easterly third of this development will have to drain south to Highway 12 along the Mills Avenue alignment to a future lift station. It appears economically unfeasible to develop the easterly third of this development, therefore, the actual storm drainage fees which would be collected may only total $110,000.

Alternate Drainage Solutions

Since the ultimate drainage basin for this proposed development has not been constructed, it will be necessary to drain this development into an already developed area, i.e. B-1 area which is ultimately pumped into W.I.D. at Shady Acres or the A-2 area which is pumped into W.I.D. at Beckman Park. Therefore, the drainage solution for the development of this parcel must include another temporary drainage basin or a lake as proposed. The runoff can be discharged into the B-1 area by use of the existing line and pumping station in Vine Street as proposed under the E.I.R., or could be discharged into A-2 area with the installation of approximately two miles of major trunk lines.

Based on existing City policies and past practices, there appears to be no other solution to the drainage of this proposed development.

Please let me know if the Council desires any additional information prior to the certification of the E.I.R. on the proposed Filley Ranch development.

Jack L. Ronsko
Public Works Director
cc: Ronald B. Thomas