INITIAL STUDY
and
MITIGATED NEGATIVE DECLARATION

for the

WILLIAMSON RANCH PLAZA PROJECT
PHASES 3 & 4

FILE NOS. PD-00-2
UP-00-15/A

CITY OF ANTIOCH

AUGUST 2000

VOLUME I OF II
TEXT AND APPENDICES A AND B

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PROJECT DATA

1. Project Title:	Williamson Ranch Plaza, Phases 3 and 4
2. Lead Agency Name and Address:	City of Antioch Department of Community Development Third and 'H' Streets P.O. Box 5007 Antioch, CA 94531-5007
3. Contact Person/Phone Number:	Nina Oshinsky 925/779-7035
4. Project Location:	North side of Lone Tree Way between Hillcrest Avenue and Deer Valley Road in southeast Antioch.
5. Project Sponsor's Name/Address:	Taylor Properties 1425 River Park Drive, Suite 201 Sacramento, California 95815-4508
6. General Plan Designation:	General Plan: Neighborhood/Community Commercial; Office. Southeast Specific Plan: Community Commercial; Office Commercial.
7. Zoning:	Planned Development District (PD).
8. Description of Project:	Construction of 105,500 sq. ft. of retail/office/commercial in 7 buildings on a 9.1-acre site. (See Section *I. Description of the Proposed Project* for more detail.)
9. Surrounding Land Uses/Setting:	North: Flood control channel, single-family residential, neighborhood park. East: Undeveloped commercial parcel, Wal-Mart. South: Lone Tree Way, Mokelumne Aqueduct (underground), historic ranch complex., single-family residential. West: Prewett Family Park. (See Section *I. Description of the Proposed Project*)
10. Other Agency Approvals:	U.S. Army Corps of Engineers: Authorization for filling of wetlands under Section 404 of the Clean Water Act. California Department of Fish and Game (CDFG): Administration of Fish and Game Code requirements for mitigation of impacts to the burrowing owl.

10. Other Agency Approvals (Cont'd):

Regional Water Quality Control Board (RWQCB):
1) Water quality certification under Section 401 of the Clean Water Act;
2) Administration of General Permit for Stormwater Discharges Associated with Construction Activity.

INTRODUCTION

This Initial Study has been prepared by the City of Antioch as Lead Agency in conformance with the California Environmental Quality Act (CEQA) of 1970, and the CEQA Guidelines, as amended, to inform public decision-makers and the public of the environmental effects of the projects that they propose to approve or carry out.

This Initial Study has been prepared as supporting documentation for the adoption of a Mitigated Negative Declaration as CEQA clearance for the proposed project. Although a project may result in potentially significant impacts, CEQA provides for the adoption of a Mitigated Negative Declaration where the project is amended or mitigation measures are incorporated into a project which avoid the impacts or reduce the potential impacts to less-than-significant levels. This is provided for in Section 15070 of the CEQA Guidelines, as follows:

> **§15070. Decision to Prepare a Negative Declaration or Mitigated Negative Declaration.** A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:
> a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
> b) The initial study identifies potentially significant effects, but:
> 1) Revisions to project plans or proposals made by, or agreed to by the applicant before the proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
> 2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

This Initial Study includes technical studies as appropriate to provide the necessary documentation that mitigation measures included in the project will reduce the project effects to a point where clearly no significant effects would occur. These technical studies are included as appendices to the Initial Study and their findings are set forth in the impact discussion section of the Initial Study.

As required under Section 21081.6 of the Public Resources Code, a Mitigation Monitoring and Reporting Program will be adopted for this project to ensure compliance with the mitigations required for this project. The Mitigation Monitoring and Reporting Program for this project is set forth in Appendix B of the Initial Study.

Previous Environmental Documents

The project site is located in the Southeast Antioch Planning Area. This is a comprehensively planned area comprising approximately 5,862 acres which is planned for the ultimate development of approximately 14,585 residential units, along with commercial uses and public facilities such as schools, parks and recreation centers. The planning document which governs development in Southeast Antioch is the *Southeast Antioch Area General Plan/Specific Plan Study*, which was adopted by the City Council in 1982. The environmental impact report for the Southeast Specific Plan is entitled *Southeast Antioch Area General Plan Study, Antioch, California - Report 3, Part B: Final Environmental Impact Report for Planning Subarea II: Southeast Antioch* which was certified on January 26, 1982. This EIR is hereby

incorporated into this Initial Study by reference. This document is available for review at the City of Antioch Community Development Department (Third and 'H' Streets) during normal business hours.

Williamson Ranch Plaza, Phases 1 and 2, adjacent to the project site on the east, was approved for 250,000 square-feet of retail commercial development by the Antioch City Council on June 23, 1998. The Mitigated Negative Declaration for those earlier phases of the project was adopted by the City Council on the same day.

I. DESCRIPTION OF THE PROPOSED PROJECT

A. SITE DESCRIPTION

The 9.1-acre project site is located in southeast Antioch on the north side of Lone Tree Way, approximately 1,700 feet west of Hillcrest Avenue. Downtown Antioch is located four miles northwest and the Brentwood city limits are located two miles southeast (see Figures 1 and 2). The nearest freeway access is at the Highway 4/Hillcrest Avenue interchange located three miles northwest.

The eastern 3.3 acres of the site are designated 'Neighborhood/Community Commercial' in the Antioch General Plan, and are zoned 'Planned Development District (PD).' The western 5.8 acres are designated 'Office' in the Antioch General Plan, and are zoned PD. The site is part of a larger 31.6-acre property that extends east to Hillcrest Avenue (see Figure 3). The remaining 22.5 acres of the overall property comprise Phases 1 and 2 of the project which were approved for retail commercial development by the Antioch City Council in June 1998. The eastern portion of Phase 1 is occupied by a Wal-Mart store constructed pursuant to that development approval. Pending developments in Phases 1 and 2 include an Orchard Supply Hardware, Jack-in-the-Box, and 6,000 square feet of retail shops.

The site is bounded on the north by a flood control channel constructed by the Contra Costa County Flood Control and Water Conservation District (FCWCD), and on the south by the East Bay Municipal Utility District's (EBMUD) Mokelumne Aqueduct, which runs underground along the westerly portion of the site frontage (see Figure 4). The aqueduct right-of-way appears as an open space strip along the north side of Lone Tree Way, and includes a meandering pedestrian/bicycle path.

The site is essentially flat, with ground elevations ranging from approximately 125 to 130 feet above mean sea level (MSL), and there are no structures present. A swale runs through the central portion of the site in an east-west direction. There are two temporary FCWCD flood control ditches running north-south through the western portion of the site which convey storm drainage to the larger flood control channel which parallels the northern boundary of the site.

Surrounding land uses in the area consist mainly of single-family residential, park, school and neighborhood commercial uses. Land uses to the north across the flood control channel include the Parkside single-family residential neighborhood, with a neighborhood park (Knoll Park) located opposite the northeast corner of the site. To the east, on Phase 1 of the project is a Wal-Mart store, which is adjacent to a 7-Eleven/Citgo at the northwest corner of Hillcrest Avenue and Lone Tree Way. Land uses across Hillcrest Avenue to the northeast include a single-family residential neighborhood, and to the east is a vacant commercial site fronting on Lone Tree Way and Hillcrest Avenue (site of the proposed WinCo plaza). To the southeast across Lone Tree Way is a community park which includes the historic Williamson Ranch complex, beyond which is the Williamson Ranch residential community. To the south, the land use consists solely of single-family residential fronting onto Lone Tree Way. Immediately to the west is the Prewett Family Park and a PG&E high voltage power line. A 10-inch gas transmission pipeline, operated by Equilon Pipeline Company, crosses Lone Tree Way within the PG&E power line easement just west of the project site. Deer Park High School is located 0.2 miles west on Lone Tree Way, and the Deer Valley Plaza is located 0.7 miles west.

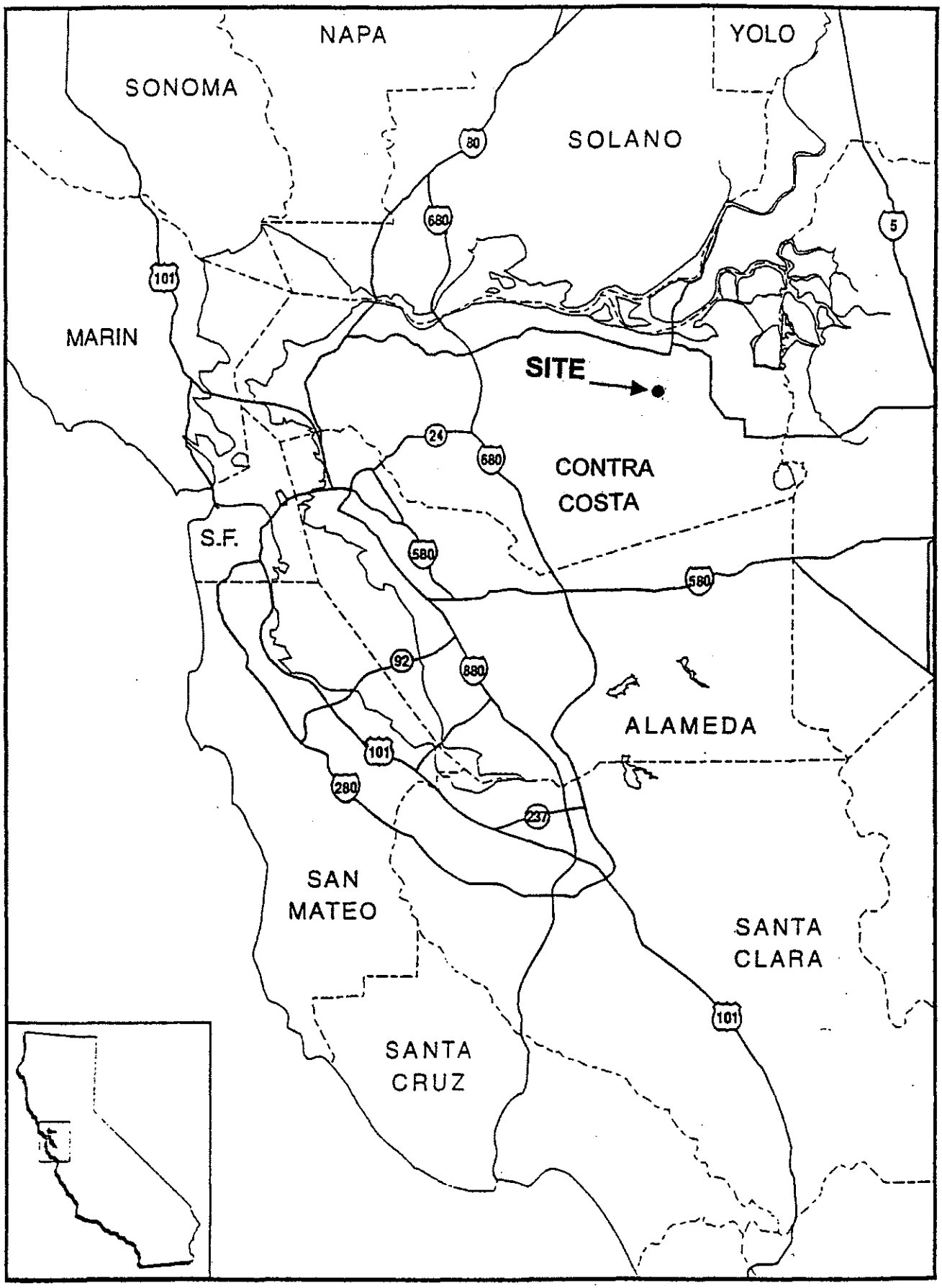


FIGURE 1
REGIONAL LOCATION

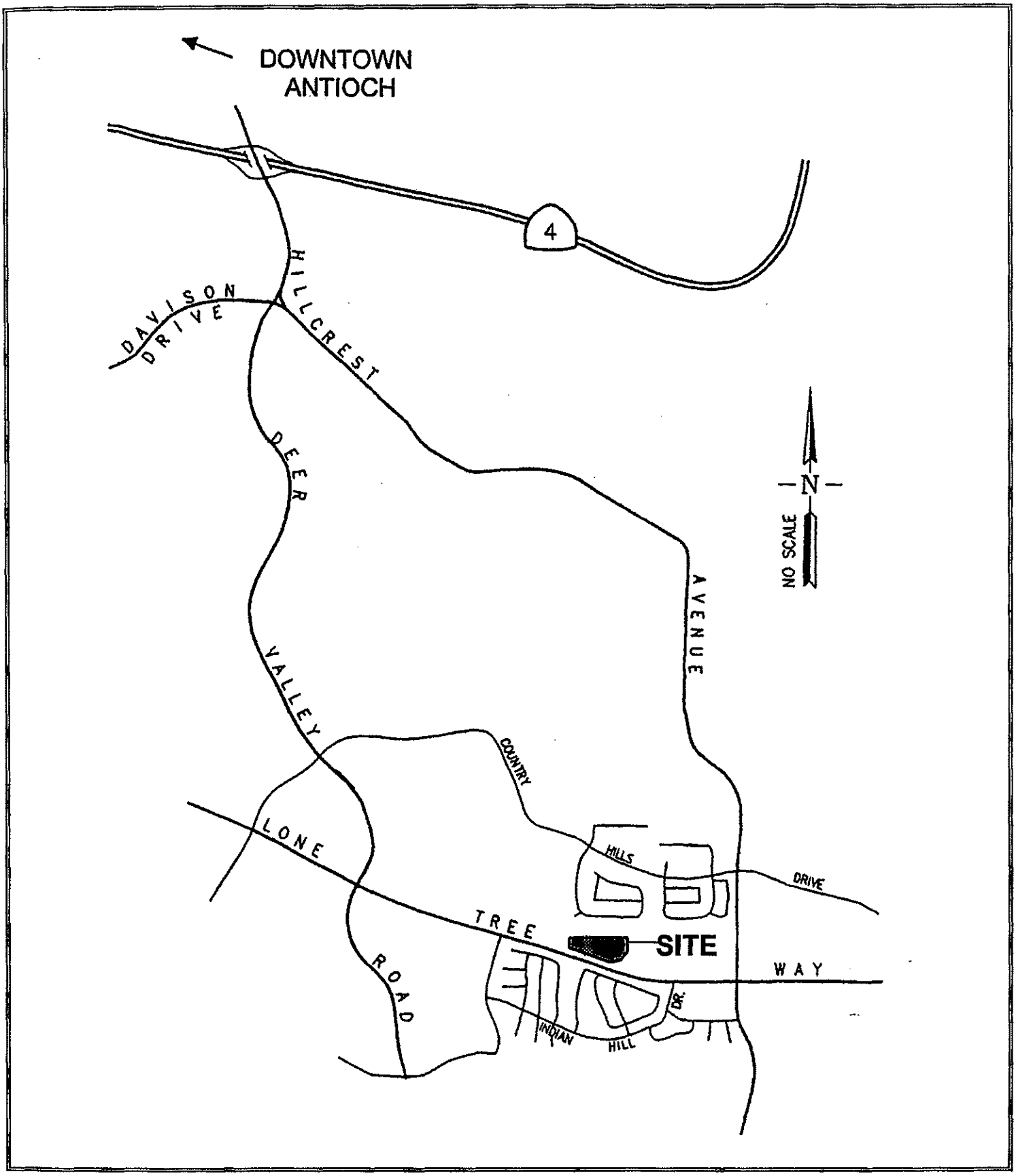
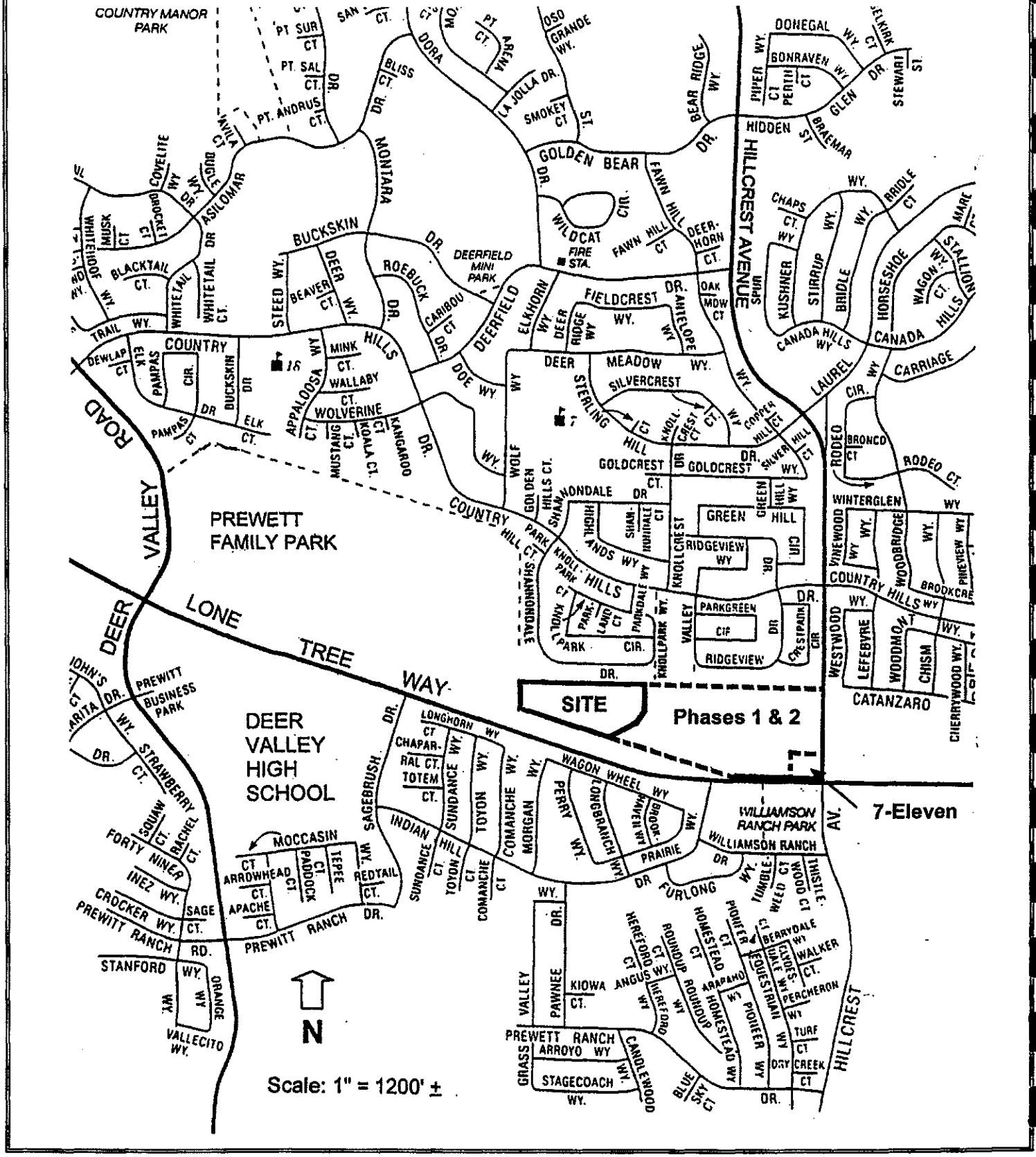


FIGURE 2
SITE LOCATION

PMC
PACIFIC MUNICIPAL CONSULTANTS



SOURCE: CSAA

FIGURE 3
SITE VICINITY

PMC
PACIFIC MUNICIPAL CONSULTANTS

It should be noted that Phase 2 of the project was extended westward into an area that was formerly part of Phase 3, by a lot line adjustment approved the City in July, 2000. This 0.85-acre area forms a narrow irregularly-shaped strip of land along the eastern site boundary, as shown in Figure 4. The land uses planned within this lot line adjustment area are approved as part of Phase 2, and are part of the 250,000 square-foot floor area allocation approved for Phases 1 and 2. The traffic, noise, and air quality impacts (which are based on square footage) of the development of the lot line adjustment area are therefore covered under the Initial Study prepared for Phases 1 and 2 in 1998. However, since the lot line adjustment area was not physically within Phase 1 and 2 at the time the previous Initial Study was prepared, the subject Initial Study includes an evaluation of physical impacts of the lot line adjustment area for the topics of geology and soils, biological resources, and archaeology. Although the lot line adjustment area is not, strictly speaking, within the proposed project, the physical impacts associated with the development of that area are addressed in the Initial Study since they would not otherwise be covered.

B. PROJECT DESCRIPTION

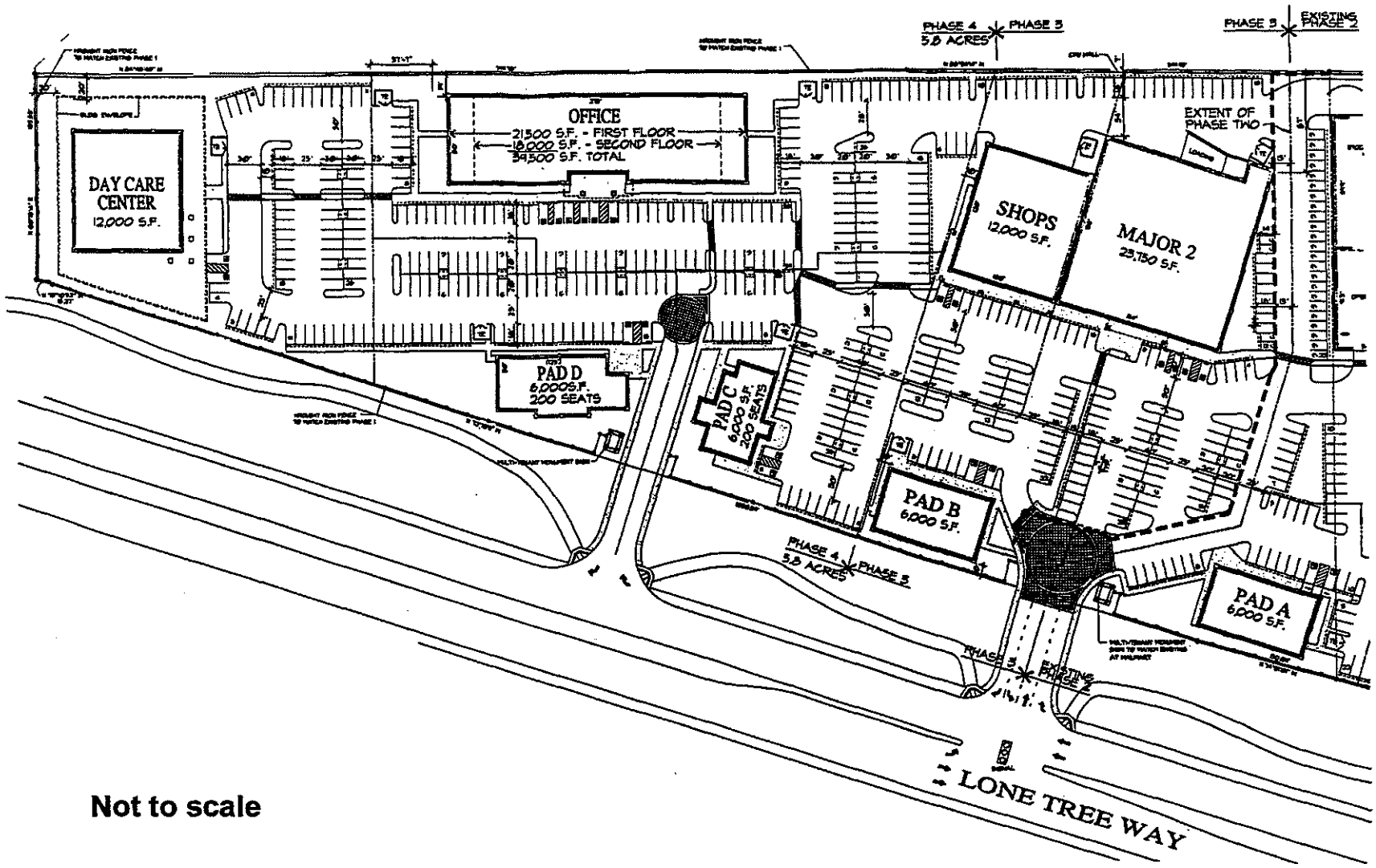
Land Use

The proposed project is a commercial complex with a gross floor area of 105,500 square feet intended to serve the retail, office, day care, and restaurant needs of southeast Antioch (see Figures 4 and 5). The proposed site plan for the project consists of seven separate buildings, including a major retail tenant, a building with shops, a professional and medical office building, a day care center, and three pads suitable for restaurant or retail use. The specific uses, number of buildings, and site design may be adjusted, as appropriate, in final site design in accordance with the Planned Development standards and permitted uses, and conditions of approval. Table 1 provides a breakdown of square footage per building proposed in Phases 3 and 4.

TABLE 1

DETAILED LAND USE

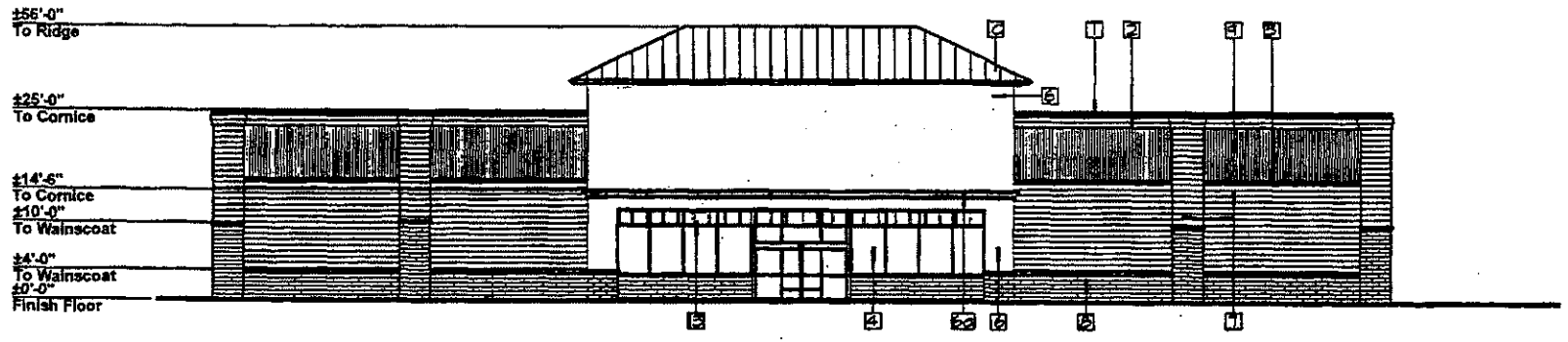
PARCEL/BUILDING (per Figure 4)	PARCEL AREA (Acres)	BUILDING AREA (Sq. Ft.)
Phase 3	3.3 ac.	
Major 2 (Retail)		24,000 s.f.
Shops (Retail)		12,000 s.f.
Pad B (Retail)		6,000 s.f.
Phase 4	5.8 ac.	
Office/Medical		39,500 s.f.
Pad C (Restaurant/Retail)		6,000 s.f.
Pad D (Restaurant/Retail)		6,000 s.f.
Day Care Center		12,000 s.f.
TOTALS	**9.1 ac.**	**105,500 s.f.**



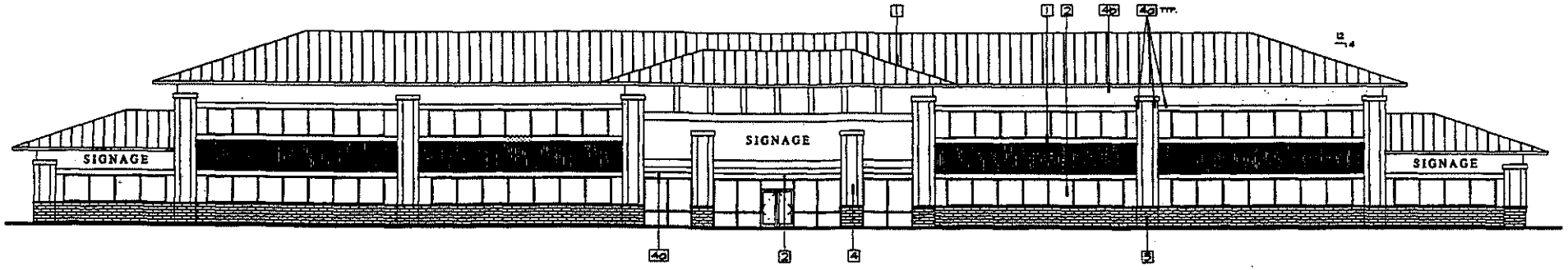
SOURCE: RAUSCHENBACH, MARVELLI, BECKER

FIGURE 4
SITE PLAN

PMC



Major Retail



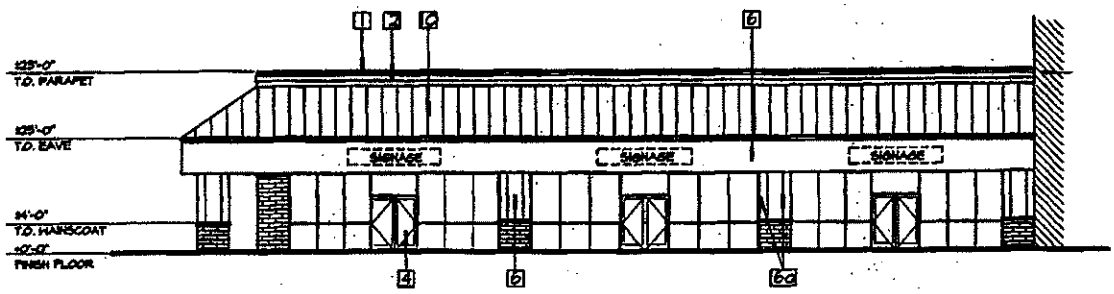
Office/Medical Building

Not to scale

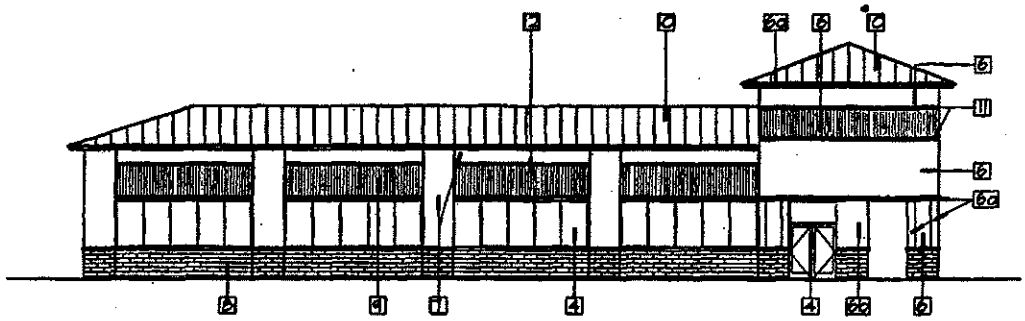
SOURCE: RAUSCHENBACH, MARVELLI, BECKER

FIGURE 5A
BUILDING ELEVATIONS

PMC
PACIFIC MUNICIPAL CONSULTANTS



Shops Adjacent to Major Retail



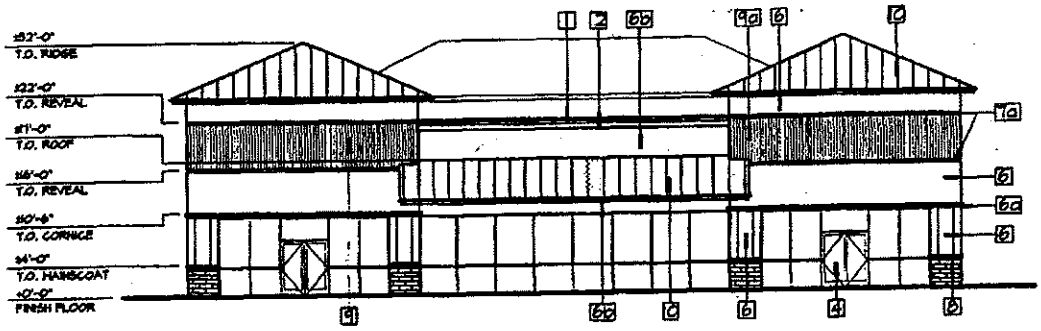
Day Care Center

Not to scale

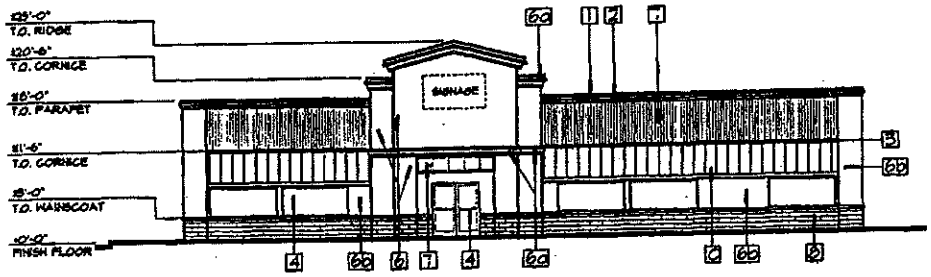
SOURCE: RAUSCHENBACH, MARVELLI, BECKER

FIGURE 5B
BUILDING ELEVATIONS

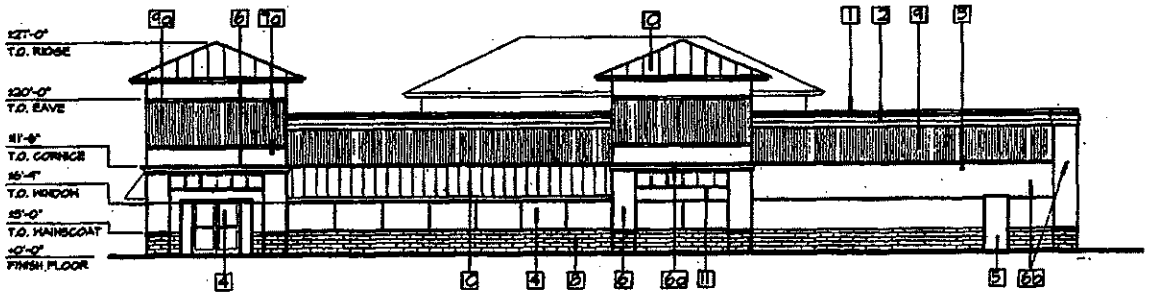
PMC
PACIFIC MUNICIPAL CONSULTANTS



Pad 'B'



Pad 'C' - Restaurant



Pad 'D' - Restaurant

SOURCE: RAUSCHENBACH, MARVELLI, BECKER

FIGURE 5C
BUILDING ELEVATIONS

PMC
PACIFIC MUNICIPAL CONSULTANTS

Principal access to the project will be from a fully-signalized entrance off Lone Tree Way west of Indian Hill Drive. The second entrance, located further west, will provide limited right-in, right-out access only. In addition, access will be available through Phases 1 and 2 from the signalized entrance at Lone Tree Way and Indian Hill Drive, and the right-in right-out entrance off Hillcrest Avenue, pursuant to cross access easements to be executed with Phase 1 and 2 owners.

The architectural theme for the center will continue the 'Prairie' style of Frank Lloyd Wright approved for Phases 1 and 2. The landscape plan includes planting of trees and shrubs along all site boundaries and extensive tree planting throughout the parking areas. An eight-foot high masonry wall will be constructed along the portion of rear site boundary adjacent to the major retail building. An eight-foot high wrought iron fence matching the fence in Phase 1 and 2 will be installed along the remainder of the northern boundary and along the western site boundary, with a three-foot high wrought iron fence following the southern boundary along Lone Tree Way. In addition, the project will provide landscaping in EBMUD right-of-way. This landscaping will consist of shrubs and groundcovers but not deep rooted trees which could have an impact on the aqueduct.

Most buildings will be single story except for the office/medical building which will be two stories. It is anticipated that the maximum heights of most buildings will be approximately 36 feet at the roof ridges, except for the office/medical building which will have a maximum height of 37.5 feet at the roof ridge. In most cases, building heights will be 25 feet or lower.

Major signage located at the two project entrances off Lone Tree Way will consist of monument signs no higher than 20 feet above ground level. The locations of individual tenant signs will be confined to the building facades of each tenant space.

The project (Phases 3 and 4) will include 491 parking spaces, which is 78 spaces fewer than required by the City's parking standards for the uses proposed. Phase 3 has a shortfall of 53 spaces while Phase 4 has a shortfall of 25 spaces under the requirements. However, Phase 2 includes 90 more spaces than required, resulting in an overall surplus of 12 parking spaces when Phases 2, 3 and 4 are considered together. The applicant proposes to implement a reciprocal easement agreement for shared parking among Phases 2 through 4. This agreement will be executed pursuant to a Use Permit for Shared Parking requested as part of the subject application package. Since the project as a whole includes sufficient parking to meet the City's parking requirements, the shared parking agreement will satisfy the City's parking requirements with respect to Phases 3 and 4.

Mokelumne Aqueduct

EBMUD's Mokelumne Aqueduct runs along the site frontage within a right-of-way approximately 115 feet wide. The aqueduct consists of three large diameter pipes which convey raw water from the Mokelumne River watershed in the Sierra foothills to the Walnut Creek Filter Plant and the San Pablo, Briones and Upper San Leandro Reservoirs to the west.

The two project entrances off Lone Tree Way will cross the Mokelumne Aqueduct right-of-way. Due to the sensitivity of the aqueduct pipes, the entry drives will be constructed of 5.5-inch thick asphalt-concrete over a 7.5-inch layer of reinforced concrete over 6 inches of aggregate base rock. This design was used at the aqueduct crossing for the entrance to Phase 1 and 2 of the project at Indian Hill Drive to the east, and at

the entrance to the Prewett Family Park to the west. The project proponents will obtain an access easement from EBMUD for these entrances.

Site Grading

Site preparation will involve grading the entire site, including filling of the existing drainage ditches, swale, and depressions. It is estimated that 16,400 cubic yards of dirt will be moved, with grading to be balanced on-site.

Site Drainage and Utilities

Storm drainage from the project will be collected by an on-site storm drainage system and discharged at three outfall locations along the flood control channel along the north site boundary. Most of the storm drainage from Phases 3 and 4 will be conveyed east to Phase 2 where the storm drains will join the existing system which discharges to the flood control channel just east of the Phase 2/Phase 3 boundary. Drainage from the western portion of Phase 4 will be collected in two independent storm drains which will each discharge to the flood control channel. The two north-south drainage ditches traversing the western portion of Phase 4 will be undergrounded within existing 30-foot easements of the Contra Costa County Flood Control and Water Conservation District. The western-most easement will be realigned to the east to avoid the day care center, while the easterly easement will remain in its current location. The new drainage pipes within these easements will continue to convey drainage flows from the area south of Lone Tree Way through the site to the flood control channel. No site drainage will enter these District drainage conveyance pipelines.

Domestic water service to the site will be provided by the City of Antioch from its existing 16-inch water main in Hillcrest Avenue to the east via existing water lines in Phases 1 and 2. Sanitary sewer service will be provided by the City of Antioch Sanitation District from its existing 18-inch sewer main in Lone Tree Way near the corner of Hillcrest Avenue. Electric power, natural gas and telephone service will be extended to the site from the existing joint trench in Hillcrest Avenue.

Off-Site Improvements

The project sponsors will contribute proportionately to the funding of the new traffic signal to be installed at the main entrance to the Phase 3 and 4 west of Indian Hill Drive. In addition, although the project does not result in significant level of service impacts at any intersections in the near term, it will contribute to cumulatively significant level of service impacts at Lone Tree Way and Hillcrest Avenue, and at Lone Tree Way and Deer Valley Road in the year 2010. Therefore, the City will assess a fee to cover the project's proportionate share of improvements to maintain acceptable service levels at these intersections in the long term. These fees will be payable prior to the issuance of the first building permit for the project. The details of the required improvements are discussed in Section *IV. O. Transportation/Traffic*.

C. PROJECT APPROVALS

Discretionary Approvals

The following discretionary approvals will be required for the project:

City of Antioch
- Final Development Plan
- Master Use Permit
- Design Review
- Use Permit for Shared Parking

U.S. Army Corps of Engineers (USACE)
- Authorization for filling of Corps' jurisdictional wetlands under Section 404 of Clean Water Act (see Section *IV. D. Biological Resources*).

California Department of Fish and Game (CDFG)
- Administration of Fish and Game Code Sections 3503 and 3513 for possible impacts to nesting burrowing owls (see Section *IV. D. Biological Resources*).

Regional Water Quality Control Board (RWQCB)
1) Water quality certification under Section 401 of the federal Clean Water Act (see Section *IV. D. Biological Resources*).
2) Administration of General Permit for Stormwater Discharges Associated with Construction Activity (see Section *IV. H. Hydrology and Water Quality*).

Additional Approvals

East Bay Municipal Utilities District (EBMUD)
- Granting of an access easement over the Mokelumne Aqueduct for project entrances off Lone Tree Way.

Contra Costa Flood Control and Water Conservation District (CCCFCWCD)
- Replace and realign the two existing flood control ditches running north-south through the western portion of the site with underground pipes, and realign the easements for these flood control facilities.

D. PENDING PROJECTS IN THE VICINITY

An application is currently pending for a commercial retail/office project on a 17.4-acre site at the northeast corner of Lone Tree Way and Hillcrest Avenue, to the east of the subject project. The proposed project includes a WinCo Foods store (93,000 square feet), and two office buildings (79,000 square feet) for a total floor area of 172,000 square feet. The traffic generation and related air quality and noise emissions from the proposed WinCo project were considered in the impact evaluations for the subject project. No other major developments are currently proposed in the project vicinity.

II. DESCRIPTION OF THE ENVIRONMENTAL SETTING

A. AESTHETICS

The visual character of the project vicinity is one of former rangeland in the midst of a transition to urban uses as Southeast Antioch is built out. Some of the rural atmosphere is retained in the nearby hills that frame the developing areas in the lower lying areas.

Located near the corner of two arterial roads, and largely surrounded by suburban development, the project site retains little of its former rural character. The aesthetics of the site have also been diminished by the high level of site disturbance and the excavation of drainage ditches. Although the visual quality of the site is low, it provides a relatively level area that creates a feeling of open space and allows public views through the site and beyond from Lone Tree Way and from the adjacent Prewett Family Park to the west. The openness of the site provides the residents of the dwellings immediately to the north with views from their second floor windows. These views currently include the disturbed project site, the existing development on the south side of Lone Tree Way, and the hills beyond. The quality of these views is relatively low and cannot be characterized as scenic.

B. AIR QUALITY

The following discussion of existing air quality conditions is based on the report *Air Quality Impact Analysis for the Williamson Ranch Plaza Project Phases 3 & 4* prepared by Donald Ballanti in June 2000. The full air quality report is contained in Appendix C of this Initial Study.

Air Pollution Climatology

Antioch is located on the south side of the San Joaquin River delta east of the Carquinez Straits. Its location between the greater Bay Area and the Central Valley has a great influence of the climate and air quality of the area.

The Antioch area has a relatively low potential for air pollution given the persistent and strong winds typical of the area. These winds dilute pollutants and transport them away from the area, so that emissions released in the Antioch area may influence air quality in the Sacramento and San Joaquin valleys. Antioch's location downwind of the greater Bay Area also means that pollutants from other areas are transported to Antioch.

Ambient Air Quality Standards

Both the U. S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 2 identifies the major criteria pollutants, characteristics, health effects and typical sources.

The federal and California state ambient air quality standards are summarized in Table 3 for important pollutants. The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempt to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and PM_{10}.

TABLE 2

MAJOR CRITERIA POLLUTANTS

Pollutant	Characteristics	Health Effects	Major Sources
Carbon Monoxide	Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	•Impairment of oxygen transport in the bloodstream. •Aggravation of cardiovascular disease. •Fatigue, headache, confusion, dizziness. •Can be fatal in the case of very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	Reddish-brown gas that discolors the air, formed during combustion.	•Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, industrial processes, fossil-fueled power plants.
Sulfur Dioxide	Sulfur dioxide is a colorless gas with a pungent, irritating odor.	•Aggravation of chronic obstruction lung disease. •Increased risk of acute and chronic respiratory disease.	Diesel vehicle exhaust, oil-powered power plants, industrial processes.
PM_{10}	Solid and liquid particles of dust, soot, aerosols and other matter which are small enough to remain suspended in the air for a long period of time.	•Aggravation of chronic disease and heart/lung disease symptoms.	Combustion, automobiles, field burning, factories and unpaved roads. Also a result of photochemical processes.

Source: Donald Ballanti

Ambient Air Quality

Antioch is within the nine-county Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) does not operate an air quality monitoring site in Antioch, but does operate an air quality monitoring site a few miles to the west in Pittsburg and a few miles to the east on Bethel Island. A summary of air quality data from these monitoring sites is shown in Table 4. Data is shown for the years 1996-1998.

Table 4 shows that the federal ambient air quality standards for most criteria pollutants are met. Concentrations of ozone do, however, exceed the more stringent state standard. Concentrations of PM_{10}, although not measured in Pittsburg, also exceed the state standard in most of the Bay Area.

TABLE 3

FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour 8-Hour	0.12 PPM 0.08 PPM	0.09 PPM --
Carbon Monoxide	8-Hour 1-Hour	9.0 PPM 35.0 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide	Annual 1-Hour	0.05 PPM --	-- 0.25 PPM
Sulfur Dioxide	Annual 24-Hour 1-Hour	0.03 PPM 0.14 PPM --	-- 0.05 PPM 0.5 PPM
PM_{10}	Annual 24-Hour	50 $\mu g/m^3$ 150 $\mu g/m^3$	30 $\mu g/m^3$ 50 $\mu g/m^3$
$PM_{2.5}$	Annual 24-Hour	15 $\mu g/m^3$ 65 $\mu g/m^3$	-- --
Lead	30-Day Avg. Month Avg.	-- 1.5 $\mu g/m^3$	1.5 $\mu g/m^3$ --

Source: Donald Ballanti
PPM = Parts per Million
$\mu g/m^3$ = Micrograms per Cubic Meter

Attainment Status and Regional Air Quality Plans

The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas." Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

The Bay Area had previously attained all federal standards. In June 1998, the U.S. Environmental Protection Agency reclassified the Bay Area from "maintenance area" to nonattainment for ozone based on violations of the federal standards at several locations in the air basin. This reversed the air basin's reclassification to "maintenance area" for ozone in 1995. Reclassification required an update to the region's federal air quality plan, which was adopted on June 16, 1999.

TABLE 4

AIR QUALITY DATA FOR PITTSBURG AND BETHEL ISLAND, 1996-1998

Pollutant	Standard	Station	Days Over Standard in:		
			1996	1997	1998
Ozone	Federal 1-Hour	Pittsburg Bethel Island	1 1	0 0	0 0
Ozone	State 1-Hour	Pittsburg Bethel Island	11 6	0 1	4 10
Carbon Monoxide	State/Fed. 8-Hour	Pittsburg Bethel Island	0 0	0 0	0 0
PM_{10}	Federal 24-Hour	Pittsburg Bethel Island	- 0	- 0	- 0
PM_{10}	State 24-Hour	Pittsburg Bethel Island	- 1	- 2	- 2

Source: Donald Ballanti

Under the California Clean Air Act, Contra Costa County is a nonattainment area for ozone and PM_{10}. The county has either achieved attainment or is unclassified for other pollutants.

The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or provide for adoption of "all feasible measures on an expeditious schedule." The Act also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours or other measures which reduce the number or length of vehicle trips.

Sensitive Receptors

The BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to located. These land uses include residences, school playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. Existing residential neighborhoods are located to the north of the project site, and residential areas are also located south of Lone Tree Way. A high school is located less than one-half mile west of the site.

C. BIOLOGICAL RESOURCES

The following discussion is based on the biological study prepared for the project by EIP Associates in June 2000, which is contained in Appendix D of this Initial Study.

Plant Communities/Wildlife Habitats

Three habitat types were observed and identified on the project site: non-native annual grassland, drainage ditches, and seasonal pond. These habitat types are described below.

Non-native Annual Grassland

Most of the project site supports non-native annual grassland. Common species associated with this vegetation community that were observed on the project site include field mustard, yellow star-thistle, wild radish, American vetch, and rip-gut brome. In addition, a small stand of Russian thistle occurs in the northeast corner of the project site. Other species, such as wild oats, ryegrass, bull thistle, and gumplant, occur throughout the project site in smaller numbers or stands. The project site has received substantial cut and fill and appears to have been disked periodically. These human-associated disturbances to the on-site soils have resulted in a vegetation community that consists of annual grasses and ruderal (weedy) species that are relatively tolerant of disturbance.

The non-native annual grassland on the project site also contains a swale that traverses the site in an east-west direction from the eastern site boundary (see Figure 2 in Appendix D). This swale has been disked and possibly as a consequence of this action supports the same species (with the exception of gumplant) that are found in the adjacent areas outside of the swale. In addition, this swale may be a human-made feature that was designed to assist in draining adjacent portions of the site.

Drainage Ditches

The project site has two drainage ditches that traverse the site from south to north where they empty into an off-site flood control canal that supports a thick stand of broad-leaved cattail. Both ditches receive stormwater drainage from the developments located south of the project site across Lone Tree Way. The westernmost ditch has a single corrugated metal pipe (CMP) that discharges water into the ditch, while the easternmost ditch has three 24-inch concrete pipes that discharge water. Both ends of these ditches have been stabilized and reinforced with rock and concrete to prevent washout. The dominant plant species within the westernmost ditch is broad-leaved cattail. The portion of this latter ditch that is nearest to the CMP also supports a small number of willows and an ornamental landscape species. The easternmost ditch supports umbrella-sedge and gumplant.

Seasonal Pond

A seasonally inundated depression (less than 8 inches deep) occurs along the western boundary of the project site (see Figure 2 in Appendix D). This depression contained standing water during the February 24, 2000 survey by EIP Associates. Much of the inundated substrate was bare and supported no vegetation at the time of the survey. However, barley, ryegrass, and gumplant were observed to provide some cover within the pond. It is apparent that the soils containing the depression have been disked within the last several months and any previous vegetation change between the boundary of the pond and adjacent

upland is not discernible. The only macroinvertebrates that were observed in this pond included mosquito larvae and Daphnia, while the only vertebrate species observed using the pond were a pair of mallards.

Wildlife

The non-native annual grassland on the project site provides habitat for a small number of urban-tolerant wildlife species. Water is at least irregularly available in the two on-site drainage ditches and the flood control channel located immediately north of the project site. In addition, the project site provides foraging habitat for species that typically feed on grassland seeds and insects. Wildlife species observed on the project site include American crow, song sparrow, red-winged blackbird, killdeer, mourning dove, western meadowlark, and western burrowing owl. In addition, sign of raccoon (tracks along the drainage ditches), coyote (scat), California vole (burrows and runways), and Botta pocket gopher (mounds) were also observed on the project site. Each of these species are relatively common in annual non-native grassland.

The small stand of broad-leaved cattail that is associated with the western-most ditch is not extensive enough to support species that typically utilize this vegetation (e.g., nesting red-winged blackbirds). As a consequence, the greatest value associated with the ditches on the project site is that they sometimes provide a source of water or temporary cover for some species.

Special-Status Species

This section addresses the potential for special-status plant and animal species that have been documented in the project vicinity to occur on the project site. For the purposes of this document, special-status species include taxa that: (1) are listed or proposed for listing as threatened or endangered under the state or federal Endangered Species Acts; (2) are identified as candidates for listing under the state or federal Endangered Species Acts; (3) are designated as Species of Special Concern by the California Department of Fish and Game; (4) are designated as Federal Species of Concern by the U.S. Fish and Wildlife Service; (5) are identified as rare, threatened, or endangered by the California Native Plant Society (CNPS); or (6) meet the definition of rare or endangered under Section 15380 of the California Environmental Quality Act. The federal and state statutes and regulations governing special-status species are discussed in detail in the biological report in Appendix D of this Initial Study.

Special-Status Plants

The California Natural Diversity Data Base (CNDDB) and CNPS inventories list 24 special-status plant taxa that have been documented from within five miles of the project site. These species include large-flowered fiddleneck, Mt. Diablo manzanita, Suisun marsh aster, San Joaquin saltbush, heartscale, big tarplant, soft bird's-beak, dwarf downingia, Contra Costa wallflower, diamond-petaled California poppy, Diablo helianthella, Congdon's tarplant, Brewer's western flax, rose-mallow, Delta tule pea, Contra Costa goldfields, Mason's lilaeopsis, Delta mudwort, showy madia, Antioch Dunes evening primrose, bearded popcorn-flower, blue skullcap, rayless ragwort, and caper-fruited tropidocarpum. However, only two of these species occur in the habitats that are represented on the project site. These are the large-flowered fiddleneck, a federally- and state-listed endangered species, and the diamond-petaled California poppy which is a federal species of concern. The flowering period of large-flowered fiddleneck is April to May, while diamond-petaled California poppy blooms from March to June. A focused field survey for these species was conducted by EIP biologists on May 2, 2000, and no evidence that either of these species occur on the project site was found.

Special-Status Wildlife

Review of the CNDDB identified 14 special-status wildlife taxa that have been documented within five miles of the project site. EIP biologists also identified three additional taxa, not identified by the CNDDB, that could occur on the project site. Each of these special-status wildlife taxa was initially evaluated to determine if the project site provides suitable habitat. Taxa that would not occur on the project site due to the absence of suitable habitat were eliminated from further consideration. These species include California black rail, California red-legged frog, curved-foot hygrotus diving beetle, giant garter snake, molestan blister beetle, Sacramento perch, salt-marsh harvest mouse, and San Joaquin dune beetle.

For the remaining wildlife taxa identified by the CNDDB additional information on range, habitat requirements, and seasonal distribution in Contra Costa County was collected to evaluate the likelihood of occurrence of each animal on the project site. Specific utilization of habitat on the project site (i.e., occasional or long-term, breeding/nesting, foraging, temporary roosting, or incidental occurrences) was also considered. Based on this evaluation, a total of nine special-status wildlife taxa were preliminarily determined to have the potential to exist on the project site. These species include western burrowing owl, vernal pool fairy shrimp, California tiger salamander, western pond turtle, white-tailed kite, northern harrier, loggerhead shrike, San Joaquin pocket mouse, and San Joaquin kit fox. The burrowing owl was the only special-status wildlife taxa observed on-site. However, based on field observations, the project site was found to contain potentially suitable habitat for all of the remaining species except the California tiger salamander. These species may occasionally use the non-native grassland of the project site as an extension of the habitat (i.e., grassland) that is located northwest of the site. These species are further discussed below along with conclusions as to their likely occurrence on the project site.

Western Burrowing Owl (Federal listing status: Species of Special Concern; State listing status: Species of Special Concern): The burrowing owl is a small owl that utilizes the burrows of other animals (particularly California ground squirrels) as nest sites and resting cover. It occurs in a variety of low, open vegetation communities associated with grasslands and deserts. It is a relatively urban tolerant species and often persists in areas that are adjacent to substantial residential, commercial, or industrial development as long as burrows and sufficient foraging habitat are available. Data suggests that a minimum of approximately four acres of suitable foraging habitat are required to support a pair of burrowing owls. In addition, the vegetation must remain low or this species becomes subject to high predation rates. Burrowing owls have been recorded previously on the Phases 1 and 2 of the project site. In addition, a single burrowing owl was observed on the project site by EIP biologists on February 24, 2000. Additional sign of burrowing owls that was observed during this survey included urates, pellets, and owl feathers at the mouth of several burrows. The locations of on-site burrows with signs of burrowing owl are shown on Figure 2 in Appendix D.

Vernal Pool Fairy Shrimp (Federal listing status: Threatened; State listing status: None). The vernal pool fairy shrimp occurs in small seasonally-inundated swales, depressions, or basins in grasslands where they may be present from early December to early May (only while the habitat is inundated). The crustaceans die when the water evaporates or becomes lethally warm, but the species persists in these wetland features as cysts (i.e., resting eggs) during the remainder of the year when the features are dry. Reconnaissance-level searches for this species on the project site did not document the species. However, given the species' ephemeral nature (i.e., hatching to maturation, egg-laying, and death can occur in as little as three weeks), it could occur in the swale or seasonal pond located on the site without having been present at the time of

the one-day survey. The project site has been highly disturbed due to the historic agricultural operations, deposition of excavation spoils associated with the flood control channel and the Mokelumne Aqueduct, and more recent disking for weed abatement and fire prevention. However, vernal pool fairy shrimp sometimes occur in a variety of "human-made" water features (e.g., toe drainage of railroad berms, inundated tire tracks, shallow basins created during grading, etc.). Therefore, a follow-up survey for this species was conducted on May 19, 2000 by May Consulting Services. The survey, which involved collection and processing of dry soils from the seasonal swale, was conducted to search for cysts of vernal pool fairy shrimp. No evidence of cysts of this species was documented. (For further detail see the report by May Consulting Services in Appendix D.) It should be noted that wet season surveys within the eastern-most portion of the seasonal swale were conducted by LSA Associates during the winter/spring of 1998 and no evidence of federally-listed vernal pool crustaceans was found.

California Tiger Salamander (Federal listing status: Species of Concern; State listing status: Species of Special Concern): The California tiger salamander occurs within grassland and oak savannah habitats of the Central Valley and valleys and plains of coastal Central California. The species utilizes seasonal water bodies (typically large or deep vernal pools) as natal ponds where adults are typically found from December to February. The larvae develop in these seasonal wetlands and eventually transform to adults late in the spring. Seasonal water bodies must generally persist for more than approximately 90 days to allow adequate time for development and transformation and be suitable as natal ponds. In addition, these water bodies must be free of predatory fishes. During the remainder of the year this species typically inhabits underground retreats in burrows constructed by small mammals. It is unlikely that this species occurs on the project site given the lack of appropriate natal ponds either on or immediately adjacent to the site. In addition, the ecological isolation created by surrounding urban development (residential housing, roadways, and flood control canals) suggests that the upland habitat is also only marginally suitable. The species is therefore not expected to occur on the project site.

Western Pond Turtle (Federal listing status: Species of Concern; State listing status: Species of Special Concern): The western pond turtle inhabits ponds, ditches, lakes, and slow-moving streams, sloughs, and rivers. It requires available basking sites, upland egg-laying sites, and water that is deep enough to provide refuge and foraging opportunities. The only aquatic habitat provided by the project site is associated with the seasonal pond and drainage ditches. None of these features provides habitat that is sufficient to support this species. Ditches are occasionally utilized by this species when they contain water. However, the ditches on the project site are shallow, only contain water irregularly, provide little if any refuge or basking sites, and are not located adjacent to high-quality habitat that could provide a source of individuals that could occasionally use these features. Therefore, this species is not expected to occur on the project site.

White-tailed Kite (Federal listing status: none; State listing status: fully protected species): The white-tailed kite typically occurs in grasslands, oak savannah, or valley and coastal marshes where it forages for vertebrates or insects (it often feeds primarily on California vole). This species may occur in the area as nesting or wintering species. The white-tailed kite requires relatively tall, dense-topped trees as nest sites. This species is unlikely to nest on the project site due to the lack of appropriate nest sites. However, it may occasionally utilize the site as foraging habitat (especially since a larger, more contiguous area of grassland habitat is located immediately northwest of the project site. Therefore, the white-tailed kite may occur on the project site as a rare and irregular visitor.

Northern Harrier (Federal listing status: none; State listing status: Species of Special Concern): The northern harrier typically occurs in grasslands, oak savannah, or valley and coastal marshes where it

forages for vertebrates or insects. This species may occur in the area as nesting or wintering species. The northern harrier nests on the ground in deep grass. This species is not likely to nest on the project site due to the lack of appropriate nest sites. However, it may occasionally utilize the site as foraging habitat (especially since a larger, more contiguous area of grassland habitat is located immediately northwest of the project site. Therefore, the northern harrier may occur on the project site as a rare and irregular visitor.

Loggerhead Shrike (Federal listing status: Species of Concern; State listing status: Species of Special Concern): The loggerhead shrike occurs as a nesting and wintering species in grasslands, oak savannah, and other open woodland or shrub habitats of California. The species typically requires open vegetation communities where it can forage for large insects, lizards, and small birds (occasionally). It prefers to nest in small trees or shrubs with extremely dense cover. The species is unlikely to occur on or immediately adjacent to the project site as a nesting species due to disturbance from urban land uses and the lack of appropriate nest trees. However, it would be expected to occur as a wintering species where it would be a rare and irregular visitor.

San Joaquin Pocket Mouse (Federal listing status: Species of Concern; State listing status: none): San Joaquin pocket mouse is typically found in sparse annual grassland where the soils are friable and allow for easy burrowing. The project site provides annual grassland, but the soils are relatively heavy clay soils that are not conducive to burrowing. In addition, the history of disturbance on the project site from disking reduces the likelihood that the taxa occurs on the project site. The species is therefore not expected to occur on the site.

San Joaquin Kit Fox (Federal listing status: Endangered; State listing status: Threatened): The San Joaquin kit fox occurs in sparse San Joaquin Valley grasslands and other open vegetation communities where it typically hunts during the night and rests in excavated underground burrows during the day. No evidence of burrows that were suitable for use by San Joaquin kit fox were found on the project site. In addition, the nearest known documented occurrences are approximately 2.2 to 4.5 miles from the project site at the Black Diamond Mines Regional Preserve. Due to the project site's isolation from other habitat known to support the kit fox, lack of evidence to suggest it occurs on-site, and the level of adjacent human development and activity, it is unlikely that the species occurs on the project site.

Jurisdictional Waters of the United States

Under Section 404 of the federal Clean Water Act, the U.S. Army Corps of Engineers (Corps) has authority to regulate activities that could discharge fill or dredge material or otherwise adversely modify wetlands or other waters of the United States (for a detailed discussion see the biological report in Appendix D). Water features occurring on the project site that may be subject to the jurisdiction of the Corps include the two drainage ditches, swale, and seasonal pond. The drainage ditches are human-made features that were excavated in upland to convey stormwater drainage to the Contra Costa canal system. The westernmost ditch is estimated to be approximately 170 feet long and averages 25 feet wide, while the easternmost ditch is estimated to be approximately 280 feet long and averages 3 feet wide. Both features receive stormwater drainage from pipelines that originate south of Lone Tree Way. These features contain plant species that are often typical of wetlands (particularly freshwater marsh), but would cease to support these species if the source of water was redirected to another conveyance. Because these features are human-made, have been excavated from upland, and continue to be used for the purpose that they were constructed, the Corps will be unlikely to assume jurisdiction.

The swale that wanders west to east through the central portion of the project site is estimated to be approximately 900 feet in length and ranges between 9 and 35 feet wide. Delineation and geo-referencing (with a global positioning system unit) by EIP biologists of the feature's boundaries determined that it is approximately 0.387 acres in area. This feature meets all three necessary parameters (i.e., wetland vegetation, hydric soils, and hydrology) to qualify as jurisdictional waters of the United States. However, given that the project site was historically used for agriculture, the swale may have been created to improve the drainage of the site and may not be a natural feature. Lastly, a portion of this feature that extends beyond the eastern boundary of the project site was delineated by LSA Associates in 1998 in connection with Phases 1 and 2 of the Williamson Ranch Plaza. The Corps' verification of the delineation determined that the swale does comprise 'waters of the United States' and is therefore subject to the Corps' jurisdiction under the Clean Water Act. (A copy of the Corps' verification letter, dated September June 26, 2000, is contained in Appendix D.)

The seasonal pond is located along the western boundary of the project site. Although it is an extension of a larger ponded area (estimated 0.1 to 0.2 acres) that extends onto the site from west of the project boundary, the portion of the pond that is located on the project site is only approximately 0.05 to 0.06 acres in size and generally occurs within approximately 15 feet of the western project boundary. This shallow pond (less than 8 inches deep) appears to inundate from precipitation and stormwater sheet flow and supports little vegetation. However, barley, ryegrass, and gumplant were observed within the ponded area. Additional study of the seasonal pond by EIP biologists on May 2, 2000 determined that it does not support wetland vegetation and does not meet the three necessary parameters to qualify as jurisdictional waters of the United States. The Corps will therefore not exert jurisdiction over this feature.

D. CULTURAL RESOURCES

The following discussion of cultural resources is based on the report *Archaeological Survey of Proposed Williamson Ranch Plaza - Phase 3 & 4* prepared by William Self Associates in February 2000. The archaeological report is contained in Appendix E of this Initial Study.

The project site lies within an area of Antioch that was determined to have a low sensitivity for archaeological resources according to cultural resources studies undertaken in conjunction with the preparation of the Southeast Specific Plan. The archaeological records search conducted by William Self Associates indicated that there are no previously discovered archaeological resources within the project site or in the immediate area. The field reconnaissance survey of the site also found no evidence of historic or prehistoric resources.

The nearest recorded cultural site is the Williamson Ranch (CA-CCO-532H), a recorded historic site which is located 1,000 feet southeast of the project site across Lone Tree Way.

E. GEOLOGY AND SOILS

The following discussion of geologic site conditions is partially based on the geotechnical report prepared for the project by Ninyo & Moore in April 2000, and partially based on the 1982 EIR prepared on the Southeast Antioch Specific Plan (which is incorporated into this Initial Study by reference). The geotechnical report is contained in Appendix F of this Initial Study, and the Specific Plan EIR is available for review at the City of Antioch Community Development Department (Third and 'H' Streets) during normal business hours.

General Site Conditions

The project site is located in the Lone Tree Valley which is a relatively flat alluvial valley in an area of rolling hills. The site is covered with a layer of fill ranging in depth from 3 to 5 feet, which is underlain by Quaternary alluvium and claystone bedrock of the Kreyenhagen Formation. The site soils consist entirely of Pescadero clay loam which is subject to slow surface runoff and ponding. The depth to groundwater ranges from approximately 3 to 8 feet below the ground surface.

Faults and Seismicity

The project site is located on the eastern fringe of the seismically active San Francisco Bay Region. Two known faults have been mapped to the west of the project site -- the Antioch and Davis faults. The Antioch fault traverses the area on a northwest-southeast axis approximately one mile west of the project site. This fault is considered seismically active. The most severe earthquake recorded along the Antioch fault occurred in 1899 with a Richter magnitude of 4.9. Data suggest that the Antioch fault could produce a maximum earthquake of magnitude 6.6. The Davis fault traverses the area on a north-south axis approximately one-half mile west of the project site. However, the exact location and seismic activity of the Davis fault is less certain than the Antioch fault. The active Greenville fault, located approximately eight miles southwest, could generate a magnitude 6.9 earthquake.

Geologic Hazards

Fault Rupture

The site is not located in an state-designated Earthquake Fault Zone, and there is no evidence of any fault trace passing through or immediately adjacent to the project site. Therefore, the potential for surface fault rupture at the site is low.

Ground Shaking

Strong ground shaking can be expected at the site during moderate to severe earthquakes in the general region. The most significant event likely to affect the site is a magnitude 6.9 earthquake on the Greenville fault, which is located approximately eight miles to the southwest of the site.

Liquefaction

Ground failure due to liquefaction occurs in areas where saturated, sandy loose soils can liquefy during shaking or cyclic loading, such as imposed by earthquakes. This results in the soil losing its shear strength as it essentially transforms to a liquid state (similar to quicksand), thereby causing sudden differential settlement of structures located above the liquefied soil. The greatest potential for liquefaction exists in non-cohesive soils such as sand and silt that are saturated by relatively high groundwater. Due to the cohesive nature of the subsurface clay soils, the potential for liquefaction and dynamic settlement during strong ground shaking are considered low.

Expansive Soils

The project site is covered with moderately expansive clay. Soils with expansion potential tend to undergo volume change with variations in moisture content. Expansive soils can cause damage to structures, particularly light buildings and pavements.

F. HAZARDS AND HAZARDOUS MATERIALS

The following discussion of potential on-site environmental hazards is based on the *Phase I Environmental Site Assessment* prepared for the site by ADR Environmental Group in August 1999. The text of the Phase I report is contained in Appendix G of this Initial Study.

On-Site Conditions

The project site is vacant and completely absent of structures. Based on its review of available records and data bases, a site inspection, and an interview with a person knowledgeable about the site, ADR found no evidence or other information that would indicate possible site contamination as a result of previous or existing uses of the site.

Off-Site Conditions

The data base search by ADR found no recorded sites of hazardous materials spills, leaks or other hazardous environmental conditions within 0.5 miles of the project site. Likewise, the site inspection by ADR of surrounding properties found no indications of possible hazardous environmental conditions. Therefore, it is highly unlikely that that soil and/or groundwater at the site is subject to contamination from off-site sources.

G. HYDROLOGY

The following discussion of existing site drainage conditions is based on the hydrology report prepared by Robert A. Karn & Associates in May 2000, which is contained in Appendix H of this Initial Study.

Under natural conditions, the project site drains to the southeast. However, the construction of the flood control channel along the northern property line resulted in the deposition of excess spoils on adjacent lands

to the east which obstructed natural drainage patterns. Consequently, much of the existing site storm water currently ponds on the site and percolates through the existing soils and/or evaporates over time.

Since the flood control channel along the northern site boundary is up-gradient of most of the site, very little site drainage flows directly into the channel. There are two tributary drainage ditches that run south-north through the western portion of the site. These were constructed by the Contra Costa County Flood Control District as temporary facilities to convey stormwater from lands south of Lone Tree Way to the flood control channel. The drainage ditches are subject to agreements with the landowner that they would be abandoned at such time as an underground storm drain system is installed to carry the existing drainage to the primary flood control channel along the north site boundary.

The estimated volume of storm water run-off from the existing vacant 9.1-acre site is estimated to be 3.9 cubic feet per second (cfs) for the 10-year storm and 5.6 cfs for the 100-year event. Site runoff was estimated using the Rational Method.

H. LAND USE AND PLANNING

General Plan

The General Plan designations on the site include 'Neighborhood/Community Commercial' on the eastern 3.3 acres of the site, and 'Office' on the western 5.8 acres. The City of Antioch Southeast Specific Plan, which is a component of the City's General Plan, designates the area around the intersection of Lone Tree Way and Hillcrest Avenue as the community-scale office and retail commercial node for the Southeast Specific Plan area. The project site is located within that node and is designated 'Community Commercial' and 'Office Commercial' consistent with the General Plan designations. The Community Commercial designation permits a range of retail and service establishments including department stores, drug stores, grocery stores, convenience stores, restaurants, cafes, gas stations, hotel/motels, professional offices, athletic clubs, day care centers, etc. The permitted uses in the Office Commercial designation include "businesses not engaged in retail sales, such as medical laboratories, pharmacies, employment agencies, accountants, attorneys, etc." However, the overall General Plan 'Office' designation for this area allows retail as a secondary use to major office development. Since the General Plan is controlling in instances where there is a conflict or inconsistency between the General Plan and the Specific Plan, retail uses would be permitted as specified in the General Plan. Development standards for both the Community Commercial and Commercial Office designations include landscaping, lighting and fencing requirements, and in particular indicate the need for buffer areas adjacent to residential areas.

Existing Land Use

The project site is currently vacant of structures and is absent of tree cover except for a small stand of willows near the southwest corner of the site. A swale runs through the central portion of the site in an east-west direction. In addition, there are two temporary FCWCD flood control ditches running north-south through the western portion of the site which convey storm drainage to the larger flood control channel which parallels the northern boundary of the site (see below).

Adjacent to the site on the north is the primary flood control channel for the area, constructed by the Contra Costa County Flood Control and Water Conservation District (FCWCD). Adjacent to the site on the south is EBMUD's Mokelumne Aqueduct, which consists of three large diameter pipes running underground along the site frontage (see Figure 4). The aqueduct right-of-way is up to 115-feet wide and appears as an unlandscaped open space strip along Lone Tree Way. It also includes a meandering pedestrian/bicycle path.

Surrounding land uses in the area consist mainly of single-family residential, park, school and neighborhood commercial uses. Land uses to the north across the flood control channel include the Parkside single-family residential neighborhood, with a neighborhood park (Knoll Park) located opposite the northeast corner of the site. To the east, on Phase 1 of the project is a Wal-Mart store, which is adjacent to a 7-Eleven/Citgo at the northwest corner of Hillcrest Avenue and Lone Tree Way. Land uses across Hillcrest Avenue to the northeast include a single-family residential neighborhood, and to the east is a vacant commercial site fronting on Lone Tree Way and Hillcrest Avenue (site of the proposed WinCo plaza). To the southeast across Lone Tree Way is a community park which includes the historic Williamson Ranch complex, beyond which is the Williamson Ranch residential community. Directly to the south, the land use consists solely of single-family residential fronting onto Lone Tree Way. Immediately to the west is the Prewett Family Park and a PG&E high voltage power line. A 10-inch gas transmission pipeline, operated by Equilon Pipeline Company, crosses Lone Tree Way within the PG&E power line easement just west of the project site. Deer Park High School is located 0.2 miles west on Lone Tree Way, and the Deer Valley Plaza is located 0.7 miles west.

I. NOISE

The following discussion of existing noise conditions is based on the report *Williamson Ranch Plaza Phases III and IV Environmental Noise Study* prepared by Illingworth & Rodkin in August 2000, which is contained in Appendix I of this Initial Study.

Background Information on Acoustics and Noise Measurement

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing. On this scale, noise at zero decibels is barely audible, while noise at 120 to 140 decibels is painful and may cause hearing damage.

Noise measurement equipment includes an electrical filter to reflect the fact that human hearing is less sensitive to low and very high frequencies than sound frequencies in the mid-range. The sound levels measured in this manner are called A-weighted sound levels and are expressed as dBA.

Since environmental sound levels vary over time, noise levels are described by various statistical noise descriptors that correspond to varying time periods. Thus the noise levels exceeded during 10 percent of the time are expressed as L_{10}, with noise levels exceeded 50 percent of the time expressed as L_{50}, and so on. The L_{eq} is the average A-weighted noise level during a specified period of time.

Since the sensitivity to noise increases during the evening and at night (because excessive noise interferes with the ability to sleep), 24-hour descriptors have been developed that incorporate artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level, CNEL*, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 pm to 10:00 pm) and a 10 dB penalty added to nighttime (10:00 pm to 7:00 am) noise levels. The *Day/Night Average Sound Level,* L_{dn} is essentially the same as CNEL, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period.

For a detailed background discussion of environmental noise, see the noise study in Appendix I.

City of Antioch Noise Guidelines

The City of Antioch, in its Noise Element of the General Plan, contains an overall goal and supporting policies related to noise and land use planning. These guidelines are used to assess the compatibility of a particular land use with the noise environment at the site where it would be located. A particular site, depending on its noise exposure, could be considered "Normally Acceptable," "Conditionally Acceptable", "Normally Unacceptable," or "Clearly Unacceptable" for a particular land use. "Normally Acceptable" noise levels assume that buildings are of normal conventional construction. "Conditionally Acceptable" noise levels require that a detailed analysis of noise reduction requirements be performed and needed noise insulation features be included in the design of a project. New construction or development would generally be discouraged under "Normally Unacceptable" noise levels; however, if new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. New construction or development should generally not be undertaken under "Clearly Unacceptable" noise levels.

Office buildings, business commercial, and professional land uses are considered "Normally Acceptable" for sites exposed to noise levels below 70 CNEL, "Conditionally Acceptable" when exposed to noise levels between 70 and 77 CNEL, and "Normally Unacceptable" when exposed to noise levels above 77 CNEL

Existing Noise Environment

The only significant source of environmental noise affecting the project site and surrounding land uses is vehicular traffic on the local street network. Noise sensitive receptors in the site vicinity which could potentially be affected by operational noise generated by the project include the residences located to the north of the site across the flood control channel.

Other sensitive receptors which could be affected by noise generated by project traffic include the existing residential neighborhoods along Hillcrest Avenue and Lone Tree Way. Existing noise levels along Hillcrest Avenue are 71 to 72 dBA CNEL (at 50 feet from the roadway centerline), and along Lone Tree Way are 68 to 69 dBA (at 50 feet from centerline).

Noise measurements taken in the neighborhood to the north and adjacent to the flood control channel indicate that the CNEL is 56 dBA under current conditions. This noise environment is typical of a residential setting located in the vicinity of major arterial streets. While noise levels are relatively high close to the roadway, the distances at which residences are located from Lone Tree Way are sufficient to provide lower noise levels in the residential outdoor use areas. The nearest homes are also shielded from traffic noise from Lone Tree Way by a six-foot high masonry wall located along their southern property lines.

J. TRANSPORTATION/TRAFFIC

The following discussion of existing traffic conditions is based on the report *Traffic Impact Assessment for the Williamson Ranch Plaza Project Phases 3 and 4* prepared by Dowling Associates in July 2000. The full text of the traffic report is contained in Appendix J of this Initial Study.

Local Circulation System

Local access to the site is provided by Lone Tree Way and Hillcrest Avenue which are the major arterial streets in Southeast Antioch. Hillcrest Avenue runs north-south through the project area and connects with Highway 4 to the north, while Lone Tree Way extends westerly and ultimately connects with Highway 4 south of downtown Antioch. Regional access from Highway 4 is primarily provided by Hillcrest Avenue. Lone Tree Way is a major east-west arterial with a median, four travel lanes, bicycle lanes and left-turn pockets at all major intersections.

Level of Service Methodology

The Contra Costa Transportation Authority level of service (CCTALOS) method was used to determine the peak-hour level of service (LOS) at the study intersections. The categories of LOS range from "A" to "F". In accordance with the City's General Plan level of service polices, if the LOS is "D" or better, the impacts are considered less than significant. For LOS worse than "D", the impacts are considered significant and require mitigation to insure that level of service "D" or better conditions are maintained.

The LOS is related to the volume-to-capacity ratio during the peak-hour operation of the impacted intersection. The volume-to-capacity ratio (v/c) is the sum of all critical movements divided by the capacity of the movements over the entire peak-hour. In general, v/c ratios cannot physically be greater than 1.00 unless the lane capacity assumptions are too low. Also, if future demand projections are considered for analytical purposes, a ratio greater than 1.00 might be obtained, indicating that the projected demand would exceed the capacity. Table 5 provides the definitions for the various level of service categories used in the traffic study.

Existing Levels of Service

In consultation with City staff, the following eight intersections were identified for analysis in the traffic study. The intersection locations are shown in Figure 6.

1. Lone Tree Way at Indian Hill Drive;
2. Lone Tree Way at Deer Valley Road;
3. Lone Tree Way at Hillcrest Avenue;
4. Hillcrest Avenue at Deer Valley Road/Davidson Avenue;
5. Hillcrest Avenue at the eastbound Highway 4 ramps;
6. Hillcrest Avenue at the westbound Highway 4 ramps;
7. Lone Tree Way at Access #2 (between Pads A and B); and
8. Lone Tree Way at Access #1 (between Pads C and D).

TABLE 5

LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	V/C Ratio	Description
A	> 0.60	Free-flow conditions; no signal phases fully utilized; no congestion.
B	0.61-0.70	Nearly free-flow, with occasional flow restrictions within groups of vehicles; occasional signal phases fully utilized; little or no congestion.
C	0.71-0.80	Stable operation. Drivers may feel restricted with groups of vehicles; some signal phases fully utilized, and some vehicles may have to wait through more than one signal phase, moderate congestion.
D	0.81-0.90	Approaching unstable flow, with dense groups of vehicles; most signal phases fully utilized, and some delays may be substantial; heavy congestion.
E	0.91-1.00	Unstable flow, with nearly all signal phases fully utilized, and substantial delays; long queues of vehicles may develop; very heavy congestion.
F	< 1.00	Force-flow conditions; all signal phases utilized. Substantial delays, long queues; actual volumes handled may be less than 100 percent of capacity due to jammed conditions.

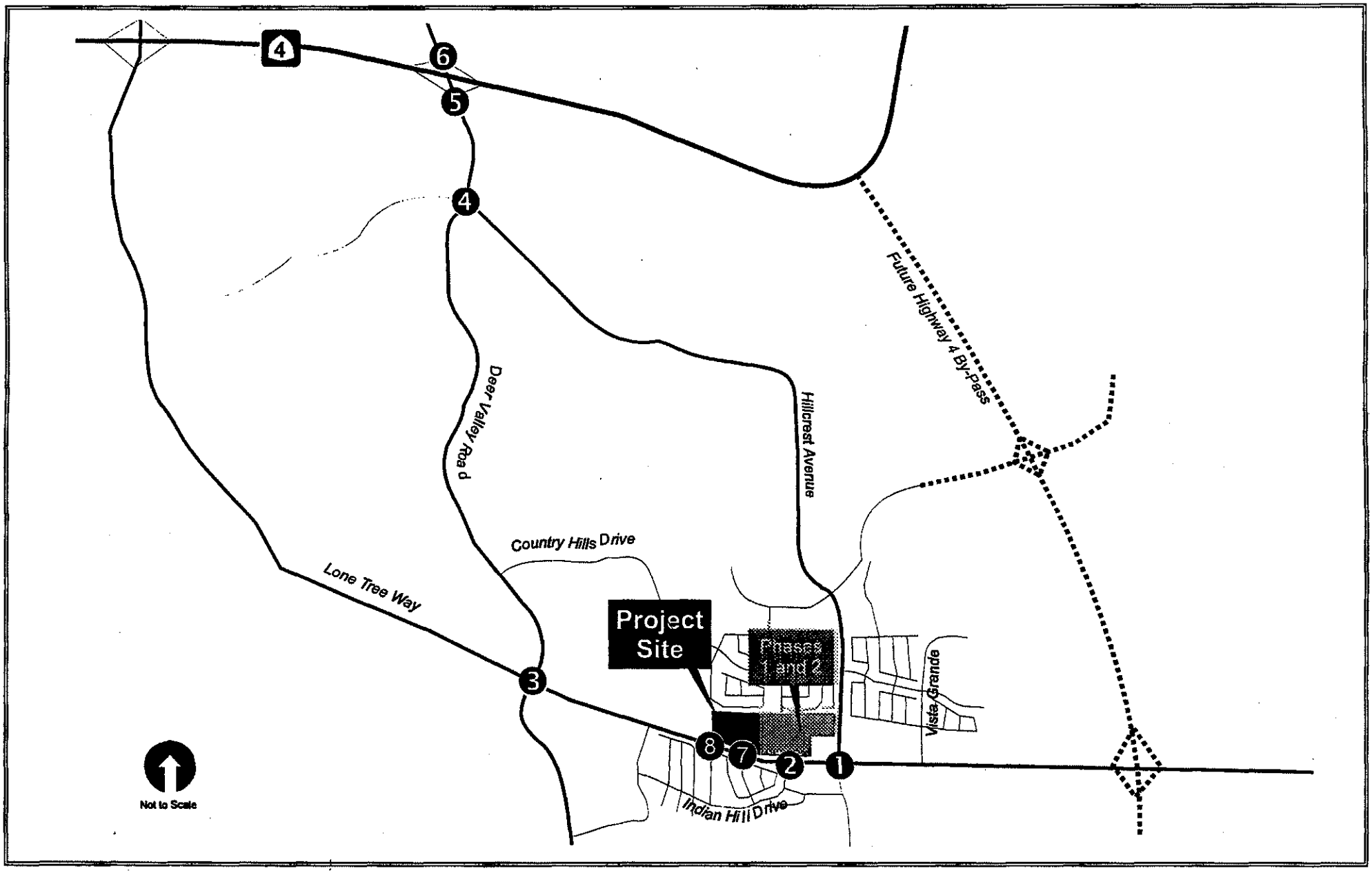
Source: Transportation Research Board, 1980.

Table 6 shows the existing AM and PM peak-hour levels of service at the analysis intersections. The LOS calculations include traffic from the nearby Wal-Mart and 7-Eleven. All intersections operate at LOS C or better during the AM and PM peak hours.

TABLE 6

EXISTING PEAK-HOUR LEVELS OF SERVICE

Intersection	AM Peak Hour	PM Peak Hour
Lone Tree Way at Deer Valley Road	A (0.57)	A (0.56)
Lone Tree Way at Indian Hill Drive	A (0.27)	A (0.28)
Lone Tree Way at Hillcrest Avenue	A (0.53)	B (0.61)
Hillcrest Avenue at Deer Valley Road/Davidson Avenue	A (0.41)	A (0.58)
Hillcrest Avenue at Highway 4 eastbound ramps	A (0.56)	C (0.72)
Hillcrest Avenue at Highway 4 westbound ramps	B (0.64)	A (0.57)
Lone Tree Way at Access #2	Does not exist.	Does not exist.
Lone Tree Way at Access #1	Does not exist.	Does not exist.



SOURCE: DOWLING ASSOCIATES

FIGURE 6
STUDY INTERSECTIONS

PMC

III. ENVIRONMENTAL CHECKLIST

This checklist was used to identify potential environmental impacts which could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist.

An asterisk (*) placed next to an item indicates that item is discussed in further detail in the subsequent evaluation of potential impacts.

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
A. AESTHETICS Would the project:					
a) Have a substantial adverse effect on a scenic vista?	❑	❑	■*	❑	1
b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	❑	❑	❑	■*	1
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	❑	❑	■*	❑	1,4,5,6
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	❑	❑	■*	❑	5
B. AGRICULTURE RESOURCES Would the project:					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance ('Farmland'), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	❑	❑	❑	■*	7
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	❑	❑	❑	■*	2, 3
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use?	❑	❑	❑	■	1
C. AIR QUALITY Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	❑	❑	■*	❑	8
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	❑	■*	❑	❑	8

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	❑	❑	■*	❑	8
d) Expose sensitive receptors to substantial pollutant concentrations?	❑	❑	■*	❑	8
e) Create objectionable odors affecting a substantial number of people?	❑	❑	❑	■	8
D. BIOLOGICAL RESOURCES Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	❑	■*	❑	❑	9, 10
b) Have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?	❑	❑	❑	■*	9
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but, not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	❑	■*	❑	❑	9
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	❑	❑	❑	■	9
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	❑	❑	❑	■	1
f) Conflict with the provisions of an adopted Habitat Conservation Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	❑	❑	❑	■	9
E. CULTURAL RESOURCES Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines?	❑	❑	■*	❑	11

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the State CEQA Guidelines?	❑	■*	❑	❑	11
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❑	❑	❑	■	11
d) Disturb any human remains, including those interred outside of formal cemeteries?	❑	❑	❑	■	11
F. GEOLOGY AND SOILS Would the project:					
a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	❑	❑	■*	❑	12, 13
ii) Strong seismic ground shaking?	❑	■*	❑	❑	12
iii) Seismic-related ground failure, including liquefaction?	❑	❑	■*	❑	12
iv) Landslides?	❑	❑	❑	■*	1
b) Result in substantial soil erosion or the loss of topsoil?	❑	■*	❑	❑	1
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	❑	❑	❑	■*	12
d) Be located on expansive soil, creating substantial risks to life or property?	❑	■*	❑	❑	12
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	❑	❑	❑	■	1
G. HAZARDS AND HAZARDOUS MATERIALS Would the project:					
a) Create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials?	❑	❑	❑	■	1
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	❑	❑	❑	■*	1, 14

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	❑	❑	❑	■	1, 14
d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	❑	❑	❑	■*	14
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	❑	❑	❑	■	1
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	❑	❑	❑	■	1
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	❑	❑	❑	■	1
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands?	❑	❑	❑	■	1
H. HYDROLOGY AND WATER QUALITY Would the project:					
a) Violate any water quality standards or waste discharge requirements?	❑	❑	■*	❑	1, 2
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	❑	❑	❑	■*	1
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	❑	■*	❑	❑	15
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	❑	❑	■*	❑	15

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	❑	■*	❑	❑	15
f) Otherwise substantially degrade water quality?	❑	❑	❑	■	1
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?	❑	❑	❑	■	13
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	❑	❑	❑	■*	13
i) Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	❑	❑	❑	■	13
j) Result in inundation by seiche, tsunami, or mudflow?	❑	❑	❑	■	1
I. LAND USE AND PLANNING Would the project:					
a) Physically divide an established community?	❑	❑	❑	■*	1
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❑	❑	❑	■*	16, 17
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	❑	❑	❑	■*	2
J. MINERAL RESOURCES Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❑	❑	❑	■	1
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❑	❑	❑	■	1
K. NOISE Would the project:					
a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	❑	■*	❑	❑	18

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
b) Expose persons to or generate excessive groundborne vibration or groundborne noise levels?	❑	❑	❑	■	1, 18
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	❑	❑	■*	❑	18
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	❑	❑	■*	❑	18
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	❑	❑	❑	■	1
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels	❑	❑	❑	■	1
L. POPULATION AND HOUSING Would the project:					
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	❑	❑	■*	❑	1
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	■	1
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	■	1
M. PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
a) Fire protection?	❑	❑	■*	❑	19
b) Police protection?	❑	❑	■*	❑	20
c) Schools?	❑	❑	❑	■	1
d) Parks?	❑	❑	❑	■	1
e) Other public facilities?	❑	❑	❑	■	1

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
N. RECREATION Would the project:					
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❑	❑	❑	■	1
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❑	❑	❑	■	1
O. TRANSPORTATION/TRAFFIC Would the project:					
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	❑	❑	■*	❑	21
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	❑	❑	■*	❑	21
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❑	❑	❑	■	1
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❑	❑	❑	■	21
e) Result in inadequate emergency access?	❑	❑	❑	■	21
f) Result in inadequate parking capacity?	❑	❑	■*	❑	1, 21
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	❑	❑	❑	■	2
P. UTILITIES AND SERVICE SYSTEMS Would the project:					
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	❑	❑	■*	❑	22
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	❑	■	22

ENVIRONMENTAL CHECKLIST	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact	Inform-ation Source(s)
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	❑	❑	■*	❑	1, 15
d) Have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements are needed)?	❑	❑	❑	■*	22
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	❑	❑	❑	■*	22
f) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?	❑	❑	❑	■*	23
g) Violate any federal, state, and local statutes and regulations related to solid waste?	❑	❑	❑	■	23
Q. MANDATORY FINDINGS OF SIGNIFICANCE					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	❑	❑	■*	❑	1
b) Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	❑	❑	■*	❑	1
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	❑	❑	❑	■*	1

DETERMINATION

On the basis of this initial evaluation:

a) I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared ..... ❑

b) I find that although the proposed project could have an effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared..... ■

c) I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required ..... ❑

d) I find that the proposed project MAY have significant effect(s) on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed..... ❑

e) I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects: 1) have been analyzed adequately in an earlier EIR pursuant to applicable standards; and 2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the project, so NO ADDITIONAL ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION will be prepared ..... ❑

Signature	Print Name
For	Date

CHECKLIST REFERENCES

1. Professional judgement and expertise of the environmental specialist preparing this assessment, based upon review of the site and surrounding conditions, as well as review of the project plans and discussions with City staff.

2. Oshinsky, Nina, Associate Planner, City of Antioch Department of Community Development, *Personal Communication with Bert Verrips, PMC*, various dates in 2000.

3. Schardt, Kathleen, Taylor Properties, *Personal Communication with Bert Verrips, PMC*, various dates in 2000.

4. Rauschenbach, Marvelli, Becker Architects, *Phases 3 and 4 Preliminary Landscape Plan, Williamson Ranch Plaza*, May 15, 2000.

5. Rauschenbach, Marvelli, Becker Architects, *Williamson Ranch Plaza Development Standards*, April 2000.

6. Rauschenbach, Marvelli, Becker Architects, *Williamson Ranch Plaza Sign Criteria*, April 2000.

7. U.S.D.A. and California Department of Conservation, *Contra Costa County Important Farmlands* (Map), 1996.

8. Donald Ballanti, *Air Quality Impact Analysis for the Williamson Ranch Plaza Project Phases 3 and4*, June 2000.

9. EIP Associates, *Williamson Ranch Biological Resources Assessment*, June 2000.

10. May Consulting Services, *Analysis of Soil Samples for the Presence of Federally Listed Large Branchiopods, 9.9-acre Parcel, Antioch*, May 19, 2000.

11. William Self Associates, *Archaeological Survey of Proposed Williamson Ranch Plaza Phases 3 and 4, Antioch, Contra Costa County*, February 2000.

12. Ninyo and Moore., *Geotech Evaluation, Lone Tree and Hillcrest, Antioch, California*, April 2000.

13. City of Antioch, *Final EIR - Southeast Antioch Area General Plan/Specific Plan Study for Planning Subarea II: Southeast Antioch*, January 1982.

14. ADR Environmental Group, *Phase I Environmental Site Assessment for the Proposed 14.86 Acre Commercial Complex, NWC of Lone Tree Way and Hillcrest Avenue, Antioch, California*, August 1999.

15. Robert A. Karn & Associates, *Hydrology/Hydraulics Review - Williamson Ranch Plaza Phases 3 and 4*, May 2000.

16. City of Antioch, *City of Antioch General Plan 1988-2000*, November 1994 printing.

17. City of Antioch, *City of Antioch Southeast Specific Plan*, August 1982.

18. Illingworth & Rodkin, Inc., *Williamson Ranch Plaza Phases III and IV, Antioch, California, Environmental Noise Study*, August 2000.

19. Lewis, Bill, Chief of Engineering, Contra Costa County Fire Protection District, *Personal Communication with Bert Verrips, PMC*, June 20, 2000.

20. Schwitters, Kitt, Captain, Antioch Police Department, *Personal Communication with Bert Verrips, PMC*, June 15, 2000.

21. Dowling Associates, Inc., *Traffic Impact Assessment for the Williamson Ranch Plaza Project Phases 3 and 4*, July 2000.

22. Bernal, Ron, Assistant City Engineer, City of Antioch Department of Public Works, *Personal Communication with Bert Verrips, PMC*, June 15, 2000.

23. Argente, Jim, Pleasant Hill Bayshore Disposal, *Personal Communication with Bert Verrips, PMC*, June 22, 2000.

IV. DISCUSSION OF ENVIRONMENTAL IMPACTS

Note: All mitigation measures identified below have been incorporated into the project or agreed to by the project sponsor.

A. AESTHETICS

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less-than-Significant Impact.

The project site is visible for distances of up to ½ mile from ridgelines in the vicinity. However, these views are not considered to have particular scenic value since they are dominated by recent suburban development. The project will not have a substantial adverse affect on a scenic vista.

b) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact.

There are no designated scenic highways or routes in the project vicinity. The views along Lone Tree Way and Hillcrest Avenue in the project vicinity have relatively low visual quality, and the site does not contain rock outcroppings or significant trees. The project site is located approximately 1,000 feet northwest of the Williamson Ranch complex, a recorded historic site located on the south side of Lone Tree Way east of Indian Hill Drive. Due to the construction of Lone Tree Way as a four-lane arterial road, and the urban development of the areas immediately adjacent to the ranch, the integrity of the original context of the ranch complex has not been retained. The proposed project would have no direct impact on the Williamson Ranch complex and would have no further impact on the visual quality of the ranch context.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less-than-Significant Impact.

The proposed project will result in the conversion of the site from a vacant parcel to a commercial center. This will represent a noticeable change to residents in the vicinity, to motorists along Lone Tree Way, and to users of the adjacent Prewett Family Park adjacent to the west. The potential visual effects of the project will be minimized by the following: landscaping along the site perimeter and throughout the site; the use of natural colored and textured building materials; limitations on the height and bulk of buildings; use of a distinctive architectural style for design aesthetics and visual unity; and limitations on the number, location and size of signs.

The nearest residents to the north will no longer have open views across the site from their second floor windows. These views currently include the disturbed project site, the existing development on the south side of Lone Tree Way, and the hills beyond. The quality of these views is relatively low and cannot be characterized as scenic. The existing flood control channel will provide a substantial visual buffer between the nearest residents and the rear of the commercial center. For the most part, building heights will be 25 feet or lower, with maximum height of roof ridges reaching 36 feet in some places, and up to 37.5 feet for the office/medical building. Also, since the residential properties to the north are approximately five feet higher in elevation than the project site, the perceived building profiles will be slightly lower. Thus the buildings will generally have a low profile when viewed from the north across the flood control channel. In addition, the northern site boundary of the project will be fenced with a combination of open and opaque fencing, and planted with trees and shrubs to provide a continuous landscaped edge and soften the built forms of the commercial center. In this context, it is important to note that project site has long been planned by the City of Antioch for commercial development and is an integral element of the Southeast Specific Plan. It was never intended to provide permanent open space. (See Section *IV. I. Land Use and Planning* for a discussion of the privacy issue relative to the north-facing windows on the second floor of the office/medical building.)

The aesthetics along the project frontage will be enhanced by the presence of the right-of-way for EBMUD's Mokelumne Aqueduct, which will provide an open space buffer 115 feet wide and will maintain the sense of openness along this segment of Lone Tree Way. In addition, the aqueduct right-of-way will be planted with shrubs and groundcovers in conjunction with the project, to further enhance the aesthetic quality of the project frontage. The project will not substantially degrade the visual character or quality of the site and its surroundings.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-Significant Impact.

The proposed shopping center will add a new light source to the area. The primary objective of the project lighting concept is to create a safe environment for nighttime movement of vehicles and pedestrians, while avoiding glare and adverse impacts to surrounding properties. Light fixtures at the perimeter of the center will use light cutoff shields to reduce unwanted illumination of adjacent streets or nearby properties. The facades of the commercial buildings will be directly illuminated but these lights will be focused so that off-site light and glare will be avoided. Therefore, the lighting introduced by the project would not adversely affect views in the area.

Conclusion: The project would not result in significant aesthetic impacts.

B. AGRICULTURAL RESOURCES

Would the project:

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

No Impact.

The project site is not designated as 'Farmland' on the Contra Costa County map of Important Farmlands as compiled by the USDA and the California Department of Conservation. The Pescadero clay loam, which comprises the on-site soil series, is not classified as Class I or II prime agricultural soils by the USDA Natural Resources Conservation Service. The project site was historically used for cattle grazing but has not been in agricultural use for a number of years.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact.

No lands on the site or in the immediate vicinity are zoned for agricultural use. There are no Williamson Act Land Conservation Contracts in effect on the project site or in the immediate vicinity.

Conclusion: The project would not result in significant impacts to agricultural resources.

C. AIR QUALITY

The following discussion of air quality impacts is based on the report *Air Quality Impact Analysis for the Williamson Ranch Plaza Project Phases 3 & 4* prepared by Donald Ballanti in June 2000. The full text of the air quality report is contained in Appendix C of this Initial Study.

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less-than-Significant Impact

The San Francisco Bay Area Air Basin is currently non-attainment for ozone (state and federal ambient standards) and PM_{10} (state ambient standard). While air quality plans exist for ozone, none exists (or is currently required) for PM_{10}. The Draft San Francisco Bay Area Ozone Attainment Plan for the 1-Hour National Ozone Standard is the current ozone air quality plan required under the federal Clean Air Act. The state-mandated regional air quality plan is the Bay Area '97 Clean Air Plan. These plans contain mobile source controls, stationary source controls and transportation control measures to be implemented in the region to attain the state and federal ozone standards within the Bay Area Air

Basin. The project would not conflict with any of the growth assumptions made in the preparation of these plans nor obstruct implementation of any of the proposed control measures contained in these plans.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less-than-Significant with Mitigation Incorporated.

Construction activities associated with the project would generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air and regional air quality. This impact is potentially significant, but normally mitigable.

Construction activities over the period of project build-out would temporarily affect local air quality for a period of months, causing a temporary increase in particulate dust and other pollutants. Dust emission during periods of construction would increase particulate concentrations at neighboring properties.

Impact: Construction and grading for the project would generate dust and exhaust emissions that could adversely affect local and regional air quality. (*Potentially Significant Impact*)

The BAAQMD CEQA Guidelines include the following list of feasible dust control measures. With the implementation of these measures, air pollutant emissions from construction activities are considered by the BAAQMD to be less than significant.

Mitigation: The following construction practices would be required during all phases of construction within the project site:

- Water all active construction areas at least twice daily.
- Water or cover stockpiles of debris, soil, sand or other materials that can be blown by the wind.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- Limit traffic speeds on unpaved roads to 15 mph.

(Less-than-Significant Impact with Mitigation)

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

Less-than-Significant Impact

Development of the site would attract new regional vehicle trips that would generate emissions pollutants of regional concern. The URBEMIS-7G program was used to calculate emissions from all trips to or from the project. Daily emissions associated with project vehicle use are shown in Table 7. Pollutants shown include reactive organic gases (ROG) and oxides of nitrogen (NO_X)(two precursors of ozone), and PM_{10} (particulate matter, 10 micron).

The BAAQMD has established thresholds of significance for pollutants of regional concern. A project is considered to have a significant regional air quality impact if it would result in an emissions increase of 80 pounds per day for ROG, NOx (both ozone precursors) or PM_{10}. As shown in Table 7, project emissions are below the BAAQMD thresholds for all three pollutants. Therefore, project impacts on regional air quality would be less-than-significant.

TABLE 7

PROJECT EMISSIONS OF POLLUTANTS OF REGIONAL CONCERN, IN POUNDS PER DAY

	Reactive Organic Gases (ROG)	Nitrogen Oxides (NO_X)	PM_{10}
Project Emissions	36.9	59.0	18.9
BAAQMD Threshold	80.0	80.0	80.0

Source: Donald Ballanti

d) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact.

The project would modify traffic volumes on the local street network, changing carbon monoxide levels along roadways used by project traffic. Concentrations of this pollutant are related to the levels of traffic and congestion along streets and at intersections.

A screening form of the CALINE-4 computer simulation model was applied to two intersections near the project site - Lone Tree Way/Deer Valley Road and Lone Tree Way/Hillcrest Avenue. The intersections were selected on the basis of Level of Service. BAAQMD CEQA Guidelines identify intersections operating at LOS D or worse as potential carbon monoxide "hotspots" that should be analyzed. The Lone Tree Way/Hillcrest Avenue intersection is predicted to operate at LOS D under project conditions and at LOS F under cumulative (2010) conditions (before mitigation). The Lone

Tree Way/Deer Valley Road intersection is predicted to operate at LOS F under cumulative (2010) conditions, before mitigation (see Section *IV. O. Transportation/Traffic*).

The results of the CALINE-4 modeling for the two intersections, under four scenarios, are shown in Table 8, on the next page.

The concentrations in Table 8 are to be compared to the state and federal ambient 1-hour air quality standards of 20 PPM and 35 PPM. Predicted 8-hour concentrations in Table 8 are to be compared to the state and federal 8-hour standards of 9 PPM.

The proposed project would increase concentrations by up to 0.1 part per million, but concentrations for all scenarios would remain below the state and federal ambient air quality standards. Therefore, the impact of the project upon local carbon monoxide concentrations would be less-than-significant.

TABLE 8

WORST-CASE CARBON MONOXIDE CONCENTRATIONS AT SELECTED INTERSECTIONS IN PARTS PER MILLION

Intersection	Existing (2000)		Background (2000)		Background + Project (2000)		Cumulative + Project (2010)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Lone Tree Way/ Deer Valley Road	8.4	5.9	8.4	5.9	8.4	5.9	7.2	5.0
Lone Tree Way/ Hillcrest Avenue	8.3	5.8	8.4	5.9	8.5	5.9	7.2	5.0
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0	20.0	9.0

Source: Donald Ballanti

Since the project will not result in localized exceedances of carbon monoxide standards as discussed above, sensitive receptors in the vicinity such as any elderly residents would not be adversely affected by the project emissions.

e. Create objectionable odors affecting a substantial number of people?

Less-than-Significant with Mitigation Incorporated.

During construction, the various diesel-powered vehicles and equipment in use on the site would create odors. These odors are not likely to be noticeable beyond the project boundaries.

The proposed project includes restaurants that would release cooking exhausts. Reaction to cooking odors varies widely with individuals. Some people find them objectionable, while others find them pleasant. The strength of cooking odors is also highly dependent on weather conditions. Restaurant cooking odors have, in other cities in the Bay Area, been the subject of complaints. A potential for odor nuisance would appear to exist during light wind conditions.

Impact: The restaurant uses in the project could release cooking exhausts which could result in noticeable odors beyond the project boundaries. (*Potentially Significant Impact*)

Mitigation: The ventilation system for each restaurant should be designed to provide odor control through mechanical dilution of odors. Conditions of project approval should provide that the City can require the installation of a filtration system for odor control should odor complaints be received that are traceable to a restaurant. (*Less-than-Significant with Mitigation*)

Conclusion: Construction-related emissions associated with the project are potentially significant; however, with the implementation mitigations identified above, the potential air quality impacts of the project during construction would be reduced to less-than-significant levels. Emissions related to project operation, including emissions of pollutants of regional concern (ozone precursors and PM_{10}) or carbon monoxide, would not be significant. The potential odor impacts resulting from restaurants within the project would be reduced to less-than-significant levels with the implementation of mitigations identified above.

D. BIOLOGICAL RESOURCES

Would the project:

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

Less-than-Significant with Mitigation Incorporated.

The following discussion of potential biological impacts is based on the biological resources report prepared by EIP Associates in June 2000, which is contained in Appendix D of this Initial Study.

Special-status Plants

No special-status plant species were observed on the site, and they are not likely to occur on the site because of the extent of site disturbance. Due to the absence of special-status plants on the site, potential impacts are not expected.

Special-status Wildlife

Apart from the burrowing owl, no evidence of special-status wildlife species was found on the project site. The potential impacts to the burrowing owl are discussed below, along with appropriate mitigation measures.

Burrowing Owl

The western burrowing owl has been documented to occur on the project site. Therefore, the proposed project would impact burrowing owl and the species' habitat if it is constructed.

Impact: Construction activity associated with the project could cause direct mortality to burrowing owls by crushing under heavy equipment or burial in burrows, or could indirectly affect individuals through increased disturbance resulting in nest abandonment. (*Potentially Significant Impact*)

Mitigations: The following mitigations are specified to prevent impacts to burrowing owls:

- The applicant, in consultation with the California Department of Fish and Game (CDFG), shall conduct a pre-construction survey within the phases of the project site that are scheduled for grading and construction. The survey shall be conducted by a qualified biologist to determine if burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, if burrowing owls are found on the project site, the following mitigation measure shall be required.

- If burrowing owls are present, the applicant shall avoid all potential burrowing owl burrows that may be disturbed by project construction during the breeding season between March 1st and July 15th (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 300-foot non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season. (*Less-than-Significant Impact with Mitigation*)

Based on approval by the CDFG, pre-construction and non-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project-related disturbance (such as grading). Burrowing owls may be passively excluded from burrows in the construction area by placing one-way doors in the burrows according to current CDFG protocol. The one-way doors must be in place for a minimum of three days. All burrows that may be occupied by burrowing owls, regardless of whether they exhibit signs of occupation, must be cleared. Burrows that have been cleared through the use of the one-way doors shall then be closed or backfilled to prevent owls from entering the burrow. The one-way doors shall not be used more than two weeks before construction to ensure that owls do not recolonize the area of construction.

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

No Impact.

The site has been extensively altered by past grading and filling, and does not include any sensitive natural communities. The human-made swale and drainage ditches present on the site do not comprise riparian habitat and have minimal habitat value.

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

Less-than-Significant with Mitigation Incorporated.

The project site includes approximately 0.387 acres of wetlands which are subject to the permit jurisdiction of the U.S. Army Corps of Engineers. These wetlands are located in the seasonal swale feature which meanders through the center of the site from east to west.

Impact: The project would result in the filling of 0.387 acres of jurisdictional wetlands. (*Potentially Significant Impact*)

Mitigation: Filling of the jurisdictional wetland will require authorization from the U.S. Army Corps of Engineers under Nationwide Permit 39, which will require the submittal of a preconstruction notification (PCN) to the Corps, along with a mitigation plan that addresses wetland impacts. It is expected that since the impacts would be minor, wetland replacement at a 1:1 ratio would be acceptable, with mitigation to occur at an off-site location within the region. The filling of the on-site jurisdictional wetlands could only be undertaken upon approval of the mitigation plan by the Corps and water quality certification from the Regional Water Quality Control Board. (*Less-than-Significant Impact with Mitigation*)

Conclusion. With the implementation of the above mitigations, the potential biological resources impacts of the project would be reduced to less-than-significant levels.

E. CULTURAL RESOURCES

The following discussion of cultural resources is based on the report *Archaeological Survey of Proposed Williamson Ranch Plaza - Phase 3 & 4* prepared by William Self Associates in February 2000. The archaeological report is contained in Appendix E of this Initial Study.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines?

Less-than-Significant Impact.

The nearest recorded historic site is the Williamson Ranch complex located 1,000 feet southeast of the project site across Lone Tree Way. Due to the construction of Lone Tree Way as a four-lane arterial road, and the urban development of the areas immediately adjacent to the ranch, the integrity of the original context of the ranch complex has not been retained. The proposed project would have no direct impact on the Williamson Ranch complex and would have no further impact on the visual quality of the ranch context.

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the State CEQA Guidelines?

Less-than-Significant with Mitigation Incorporated.

As discussed under 'Environmental Setting,' there are no known archaeological resources on the site or in the vicinity. Although the site is within an area of low sensitivity for cultural resources, there is always a possibility that such resources could be discovered during grading or excavation for the project.

Impact: Excavation and grading for the project could result in disturbance of previously undiscovered cultural deposits that may be buried at the project site. (*Potentially Significant Impact*)

Mitigation: Should any previously undiscovered historic or prehistoric resources be found during construction, work shall stop in the vicinity of the find until such time as the resource can be evaluated by a qualified archaeologist and appropriate mitigations implemented, as determined by the City of Antioch. (*Less-than-Significant Impact with Mitigation*)

Conclusion: With the implementation of the above mitigations, the potential archaeological impacts of the project would be reduced to less-than-significant levels.

F. GEOLOGY AND SOILS

The following discussion of geologic impacts is based on the geotechnical report prepared for the project by Ninyo & Moore in April 2000. The geotechnical report is contained in Appendix F of this Initial Study.

Would the project:

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

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

Less-than-Significant Impact.

There are no known active or inactive earthquake faults that traverse the project site or the immediate vicinity. Therefore, the potential for fault rupture at the site is very low.

ii) Strong seismic ground shaking?

Less-than-Significant with Mitigation Incorporated.

Impact: Strong ground shaking expected at the site during a moderate to severe earthquake could potentially result in severe damage to project buildings and other structures. *(Potentially Significant Impact)*

Mitigation: Structural damage to buildings caused by ground shaking would be largely prevented by following the requirements of the Uniform Building Code (UBC). The design of improvements would comply with the seismic design requirements of the City of Antioch and would be in accordance with the standard practices of the Structural Engineers Association of Northern California. *(Less-than-Significant Impact with Mitigation)*

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact.

The site is covered with cohesive clay soils which are not susceptible to liquefaction. Therefore, the potential for impacts due to liquefaction is low.

iv) Landslides

No Impact.

The site is essentially flat and is therefore not susceptible to landslides.

b) Erosion, unstable soil conditions?

Less-than-Significant with Mitigation Incorporated.

The erosion hazard for the on-site soils is generally low due to the high clay content and flatness of the native terrain.

Impact: Grading and site preparation for the project would expose soils and increase the potential for erosion during construction. (*Potentially Significant Impact*)

Mitigation: A comprehensive program of erosion control measures would be implemented through the City's grading permit conditions and through the Storm Water Pollution Prevention Plan (SWPPP) required by state law (see *H. Hydrology and Water Quality* for detailed provisions). (*Less-than-Significant Impact with Mitigation*)

The specific measures to control erosion and sedimentation are described in Section *VI. H. Hydrology and Water Quality.*

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

No Impact.

The essentially flat project site is located on clay soils and is not susceptible to landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Be located on expansive soil, creating substantial risks to life or property?

Less-than-Significant with Mitigation Incorporated.

The project site is covered with highly expansive clay. Soils with expansion potential tend to undergo volume change with variations in moisture content. Expansive soils can cause damage to structures, particularly light buildings and pavements.

Impact: Expansive soils on the site could potentially cause damage to on-site structures and foundations. (*Potentially Significant Impact*)

Mitigation: Potential damage due to expansive soils will be prevented by implementing the site preparation, drainage and foundation design recommendations of the geotechnical engineer. (*Less-than-Significant Impact with Mitigation*)

The geotechnical report recommends that building footings and the outer 15 feet of slabs-on-grade be placed on a non-expansive soil layer at least two feet thick. Interior slabs-on-grade and interior column footings should be placed on a one-foot thick layer of non-expansive fill.

To prevent moisture from reaching the clay soils adjacent to building foundations, positive surface drainage would be provided to direct surface water and roof runoff away from foundations and floor slabs. All water from roof drains would be directed to closed conduits that are connected to suitable locations well away from the building foundations.

Conclusion: With the incorporation of the above mitigations, the potential geologic and soils impacts of the project would be reduced to less-than-significant levels.

G. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

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

No Impact.

None of the commercial retail uses at the shopping center would involve the use of substantial quantities of hazardous materials. Although the office/medical building may involve the use of biohazardous materials, these materials would be handled in the manner prescribed by law and would not create a significant hazard to the public or the environment.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would the project result in a safety hazard for people residing or working in the project area?

No Impact.

According to the Phase I Site Assessment prepared for the site by ADR Environmental Group in August 1999 (which is contained in Appendix G of this Initial Study), there are no known or suspected sources of hazard to the public or the environment on the project site or in the vicinity.

Conclusion: The project would not result in significant impacts with respect to hazards and hazardous materials.

H. HYDROLOGY AND WATER QUALITY

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less-than-Significant Impact

The project will not violate any water quality standards. As discussed in items 'c' and 'e' below, the project would comply with the nonpoint discharge requirements under the National Pollutant Discharge Elimination System (NPDES) program through preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) which addresses both construction and operational activities.

Project wastewater would be conveyed to the Delta Diablo Wastewater Treatment Facility, located just west of Antioch on the San Joaquin River. The treatment plant is currently meeting all state and federal wastewater discharge requirements.

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

Less-than-Significant with Mitigation Incorporated.

The project would potentially result in water quality impacts from erosion generated during the construction, and from nonpoint source pollutants generated after the project is operational. The potential nonpoint source water quality impacts are discussed under item 'd.' The potential water quality impacts during construction are discussed below.

The project would require grading and earthwork potentially resulting in erosion and downstream sedimentation. The potential for soil erosion would be greatest during and immediately following grading when finished grades are unvegetated.

Discharge of hydrocarbons and other toxic substances can also occur during the construction phase if fuels, oils or wastewater from equipment washing or sanitary facilities leak or are spilled. These pollutants can potentially be carried by runoff to downstream waterbodies.

> *Impact:* During grading and construction, erosion of exposed soils and pollutants from equipment may result in water quality impacts to downstream waterbodies. (*Potentially Significant Impact*)

In October 1992, the State of California issued a blanket National Pollutant Discharge Elimination System (NPDES) Permit applicable to all new construction. However, owners of properties five acres or larger must file a Notice of Intent (NOI) to comply with the general NPDES permit and must also prepare a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must address water quality mitigation for both the construction and post-construction periods, and include provisions for monitoring of discharges to stormwater systems. The SWPPP is to be kept on-site during construction, and is to be updated each year as site development proceeds. The state has published a set of Best

Management Practices (BMPs) for both construction and post-construction periods. The developer is responsible for identifying the appropriate BMPs to be implemented in coordination with the City of Antioch and the Regional Water Quality Control Board (RWQCB).

Mitigation: Practices to be implemented to minimize water quality impacts during the grading and construction phase would include but not be limited to the following:

- Exposed soils would be stabilized by the end of October of any given year by revegetating disturbed areas or applying hydromulch with tetra-foam or other adhesive material.
- Runoff from areas of exposed soils would be conveyed to siltation basins to provide for the settling of eroded sediments.
- Storm drain inlets would be protected with hay bales or silt fences.
- Streets subject to construction activities would be regularly swept with a wet sweeper.
- Measures would be implemented to prevent runoff of fuel, oil, lubricants and solvents from areas used for construction vehicle and equipment storage, washing and maintenance. This would include the containment of temporary storage and service areas with dikes. (*Less-than-Significant Impact with Mitigation*)

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

Less-than-Significant Impact.

The following discussion of drainage impacts is based on the hydrology report prepared by Robert A. Karn & Associates in May 2000, which is contained in Appendix H of this Initial Study.

The proposed commercial project will cover the majority of the site with building and asphalt parking areas. Rainfall that percolates into the ground under current conditions will leave the site as storm runoff after the project is complete. For the 10-year storm, flow rates from the site will increase from 3.9 cfs under existing conditions to 13.8 cfs under post-development conditions, an increase of 9.9 cfs. For the 100-year event, flow rates from the site will increase from 5.6 cfs under existing conditions to 20.4 cfs under post-development conditions, an increase of 14.8 cfs. The project drainage will be collected by a storm drain system designed to convey the project runoff generated by the project to the existing flood control channel along the northern site boundary. The underground storm drainage system has been designed to accommodate the 10-year event, as required by the County of Contra Costa. Storm water from events exceeding the 10-year event will be conveyed overland across the site to the flood control channel along the northern site boundary. The final site grades have been designed to facilitate this overland release to the north. The existing flood control channel was designed to accommodate the flood flows generated in the project vicinity under developed conditions. The increased runoff from the project during storm events will add incrementally to the total volume of water in the San Joaquin River. In absolute terms, this increment will be insignificant relative to

existing flows in the river. Therefore, the project will not result in drainage impacts or increased downstream flooding potential.

Under current conditions, the project site includes two flood control ditches operated by the Contra Costa County Flood Control and Water Conservation District to convey public stormwater runoff from areas south of Lone Tree Way through the project site to the flood control channel that parallels northern site boundary. As part of the project, these ditches will be replaced with underground pipes of adequate capacity. These drainage conveyance pipelines will be independent of the project storm drainage system and will receive no drainage from the project site. Therefore, the project will not reduce the capacity of these flood control facilities

e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less-than-Significant with Mitigation Incorporated.

Storm Drain Capacity

As discussed under item 'd' above, the stormwater runoff generated by the project would be discharged to the existing flood control channel which parallels the northern site boundary. This channel was designed to accommodate the flood flows generated in the project vicinity under developed conditions. Therefore, the project will not result in drainage impacts or increased downstream flooding potential.

Surface Water Pollution

The project would result in potential surface water pollution during construction and after project completion. Potential erosion and siltation impacts are discussed under item 'c' above. Post-construction water quality impacts are discussed below.

The introduction of vehicles to the site would result in the accumulation of hydrocarbon byproducts and heavy metals on paved areas, which would be flushed into the storm drain system, particularly with the first heavy rains (i.e., "first flush"). The parking lot would also tend to accumulate debris which could be carried into the storm drain system. Unless controlled, these urban pollutants would contribute to cumulative nonpoint contaminant loads in downstream drainages and waterbodies.

Impact: After completion, the project would generate urban nonpoint contaminants which would potentially be carried in stormwater runoff to downstream waterbodies. (*Potentially Significant Impact*)

Mitigation: To prevent downstream nonpoint source pollution, the project storm drainage system will provide for pre-treatment of site runoff through installation of underground sand/oil separators, inlet filters and/or other measures, as required by the City of Antioch to minimize any water quality impacts. Regular parking lot cleaning would also remove much of the accumulated materials and debris. (*Less-than-Significant Impact with Mitigation*)

As required by state law, a Storm Water Pollution Prevention Plan will be prepared for the project prior to grading. The SWPPP will address water quality mitigation for both the construction and post-

construction periods, and include provisions for monitoring of discharges to stormwater systems. (See item 'c' above for further discussion.)

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact.

The site is not susceptible to flooding during major storm events. The nearest areas prone to flooding during the 100-year event are lands along both sides of Lone Tree Way commencing easterly approximately ½ mile east of the project site.

Conclusion: With the implementation of the above mitigations, the potential hydrology and water quality impacts of the project would be reduced to less-than-significant levels.

I. LAND USE AND PLANNING

Would the project:

a) Physically divide an established community?

No impact.

The project is an integral part of the City of Antioch Southeast Specific Plan, and in effect represents the continuation of the creation of a commercial node which will provide the planned focal point for the surrounding community. Therefore, it will unify and tie the community together rather than divide it.

Land Use Compatibility

The project would be compatible with all adjacent and surrounding land uses. The project would comprise the extension of the commercial uses to the east within a unified site plan with a consistent design theme. The project would not be incompatible with the adjacent arterial road to the south, nor with the single-family residential uses on the opposite side of Lone Tree Way. The project would not be incompatible with the public park to the west.

The project would not be incompatible with the existing residential neighborhood to the north, although the project could result in potential noise and visual impacts to the nearest residences to the north, as summarized below and discussed in detail in Sections *IV. A. Aesthetics* and *K. Noise.* In addition, the two-story office/medical building in the north-central area of the project site could pose privacy issues to the neighbors directly to the north across the flood control channel. This impact would be partially reduced by the 130 feet of distance separation (measured from the north facade of the office/medical building to the south facades of the nearest residences) provided by the intervening flood control channel, the setback area for the office/medical building, and the residential rear yards. In addition, partial visual screening would be provided by the existing solid fences along the rear property lines of the residences. However, without additional screening, the people on the second floor of the

office/medical building would still have views across to the rear yards and windows of the nearest residences to the north.

Impact: The existing residences directly north of the planned office/medical building would be subject to privacy impacts from the second floor windows on the north side of the office/medical building. (*Potentially Significant Impact*)

Mitigation: To block northward views from the second floor of the office/medical building, the project landscape plans should include tree planting along the northern site boundary in this location. The plantings should be sufficient to provide full visual screening of views toward the residences to the north. (*Less-than-Significant Impact with Mitigation*)

Aesthetics

From an aesthetics standpoint, the project would affect the southward views available from the second floor windows of the first row of dwellings to the north. These views currently include the disturbed project site in the foreground, with the existing development on the south side of Lone Tree Way and the hills beyond. The quality of these views is relatively low and cannot be characterized as scenic. The maximum building height will 37.5 feet at the office/medical building and most roof lines will be 25 feet or lower, so the buildings will generally have a low profile when viewed from the north across the flood channel. These new buildings will block much of the existing views except where there are gaps between the buildings. However, given the low quality of the existing views, this impact is not considered significant.

The existing flood control channel will provide a substantial visual buffer between the nearest residents and the rear of the project buildings. In addition, the northern site boundary of the project will be fenced with a combination of open and opaque fencing, and planted with landscape trees and shrubs to provide a continuous landscaped edge and soften the built forms of the commercial center. In this context, it is important to note that project site has long been planned by the City of Antioch for commercial development and is an integral element of the Southeast Specific Plan. The site was never intended to provide permanent open space.

The aesthetics along the project frontage will be enhanced by the presence of the right-of-way for EBMUD's Mokelumne Aqueduct, which will provide an open space buffer 115 feet wide and will maintain the sense of openness along this segment of Lone Tree Way. In addition, the aqueduct right-of-way will be planted with shrubs and groundcovers in conjunction with the project, to further enhance the aesthetic quality of the project frontage.

The visual quality of the project would also be enhanced by the planting of trees and shrubs along the site perimeter and throughout the site, the use of natural colored and textured building materials, limitations on the height and bulk of buildings, use of a distinctive architectural style for design aesthetics and visual unity, and limitations on the number and size of signs. (For a detailed discussion of potential visual impacts, see Section *IV. A. Aesthetics.*)

The primary noise source of concern is the loading areas associated with the major retail building in the northeast portion of the site. Since the loading area would be located on the north side of the building, the noise from truck loading could result in disturbance to the closest residents to the north, although trucking loading would not be permitted at night. Other noise sources generated by the project could include mechanical equipment, parking lot cleaning, and noise associated with the day care center. The noise generated at the project site would be reduced by the distance separation provided by the 90-foot flood control channel that runs between the project and the nearby residences, by the existing masonry wall along the rear of the residential lots, and by the 8-foot high masonry wall to be constructed along the northern site boundary. (For a detailed discussion of potential noise impacts of the project, see Section *IV. K. Noise.*)

Potential Impacts to Mokelumne Aqueduct

The two project entrances off Lone Tree Way will require driveway crossings over EBMUD's right-of-way for the Mokelumne Aqueduct. This facility consists of three large diameter underground pipes that convey raw water from the Sierra foothills to EBMUD's storage and treatment facilities to the west. The project will obtain an access easement from EBMUD for these entrances. Due to the sensitivity of the aqueduct pipes, the entry drive will be constructed of 5.5-inch thick asphalt-concrete over a 7.5-inch layer of reinforced concrete over 6 inches of aggregate base rock. This design was used at the aqueduct crossing for the Phase 1 and 2 project entrance to the east and at the adjacent Prewett Family Park to the west, and is expected to be sufficient to avoid physical impacts to the aqueduct.

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

No Impact.

The project land uses are consistent with the uses allowed in the Antioch General Plan and zoning ordinance, as well as the Southeast Specific Plan. The retail and restaurant uses planned for the eastern portion of the site are consistent with the uses permitted under the 'Neighborhood/Community Commercial' General Plan designation applicable to that portion of the site. The professional and medical office uses, day care center, and restaurants planned for the western portion of the site are consistent with the 'Office' General Plan designation applicable to that portion of the site. The project is also in conformance with the development standards of the Southeast Specific Plan including the standard that specifies a buffer area for the commercial uses where they are adjacent to a residential area. This standard is met by planned landscaping along the northern site boundary, and is further enhanced by the existing flood control channel that parallels the northern site boundary and provides a separation of approximately 90 feet between the nearest residential lots and the project site.

b) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No impact.

There are no habitat conservation plans or natural community conservation plans in the vicinity which include or affect the project site. However, the project may be subject to the jurisdiction of several resource agencies due to the potential presence of wetlands and burrowing owls, as discussed below.

Since the site contains wetland features which are subject to the jurisdiction of the U.S. Army Corps of Engineers, the project will be subject to wetland mitigation requirements under Section 404 of the Clean Water Act (see Section *IV. D. Biological Resources* for detailed discussion).

Due to the presence of state-protected burrowing owls on the site, the project will be subject to the requirements California Department of Fish and Game regarding the mitigation of possible impacts to this species (see Section *IV. D. Biological Resources*) for detailed discussion.

For water quality protection, the project would be subject to the National Pollutant Discharge Elimination System (NPDES) permit process administered by the Regional Water Quality Control Board (RWQCB). This would involve the implementation of adequate erosion control measures during grading and construction, as specified in a Storm Water Pollution Prevention Plan (SWPPP) to be prepared for the project (see Section *IV. H. Hydrology and Water Quality*).

Conclusion: With the incorporation of the above mitigations, the potential land use impacts resulting from the project would be reduced to less-than-significant levels.

K. NOISE

Would the project:

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

Less-than-Significant with Mitigation Incorporated.

The following discussion of potential noise impacts is based on the report *Williamson Ranch Phase III and IV Environmental Noise Study* prepared by Illingworth & Rodkin in August 2000, which is contained in Appendix I of this Initial Study.

Significance Criteria

According to CEQA, a significant noise impact would result if noise levels increase substantially at noise-sensitive land uses (e.g., residences). A substantial increase in noise levels would occur if the project resulted in an increase of 3 dBA or greater at noise-sensitive land uses where noise levels already exceed 60 dBA CNEL, or an increase in noise levels of 5 dBA or greater where future noise levels would remain below 60 dBA CNEL.

Construction noise impacts are treated somewhat differently because they are temporary. Significant noise impacts would result from construction if noise levels are sufficiently high to interfere with speech, sleep, or

normal residential activities. Construction hourly noise levels received at noise-sensitive land uses above 60 dBA during the daytime and 55 dBA at night would be considered significant.

Compatibility of the Proposed Project with the On-site Noise Environment

The project site is currently subject to noise generated by traffic on Lone Tree Way. Current average 24-hour noise levels on the site exceed 70 dBA CNEL along the Lone Tree frontage, and would be considered "Conditionally Acceptable" under the City's Noise Element of the General Plan. However, the proposed uses are considered to be non-noise sensitive land uses. The only noise-sensitive land use proposed would be the outdoor play areas associated with the day care center. At this time, the specific locations of these play areas is unknown. Assuming that the play areas would be located on the north side of the proposed day care building and at the greatest possible distance from Lone Tree Way, where they would be partially or wholly screened from roadway noise by the building, future noise levels would be considered "Normally Acceptable" for the affected land use. Standard building construction would be expected to adequately reduce noise inside the proposed structures. As a result, the on-site noise environment due to traffic would be generally acceptable for the types of land uses proposed and would not result in a significant impact.

Impact: Depending on its location, the outdoor play area associated with the day care center could be subject to unacceptable noise levels from traffic on Lone Tree Way. *(Potentially Significant Impact)*

Mitigation: The outdoor play area should be located to the north of and behind the day care building. Alternative designs which meet the noise reduction objective may also be considered, subject to review by an acoustical engineer. *(Less-than-Significant Impact with Mitigation)*

Off-Site Noise Impacts of Project-Generated and Cumulative Traffic

Traffic generated by the project would increase the average 24-hour noise level (CNEL) by approximately 1 to 2 dBA over existing levels along Hillcrest Avenue and Lone Tree Way. Noise levels along Deer Valley Road would increase by 0 to 1 dBA as a result of project traffic. Since existing noise levels along these roadways are greater than 60 dBA, a 3 dBA increase would be considered "significant" (see 'Significance Criteria' above). Since project-generated traffic would increase noise levels along vicinity streets by less than 3 dBA, project traffic would not result in significant off-site roadside noise impacts.

General growth in the area expected by 2010, without the project, will cause noise levels to increase by about 2 decibels along Lone Tree Way and Hillcrest Avenue north of Lone Tree Way, and by about 8 decibels along Hillcrest Avenue south of Lone Tree Way. With the project, cumulative traffic noise increases will be about 3 decibels along Hillcrest Avenue, north of Lone Tree Way, and 8 decibels along Hillcrest Avenue, south of Lone Tree Way. Noise levels along Lone Tree Way are expected to increase by about 2 to 3 decibels without the project by 2010, and by about 3 to 5 decibels with the project. Along Deer Valley Road, noise levels are expected to increase by about 2 decibels by the 2010, with or without the project. The project's contribution to the cumulative noise levels along these roadways would range from 0 to 2 decibels, at most. This would not represent a substantial or 'considerable' contribution to cumulative noise levels.

Project Operational Noise Impacts on Nearby Residential Areas

On-site noise sources associated with the project would include: 1) parking lot activity, 2) delivery truck activity, 3) loading dock activity, 4) on-site trash enclosures, 5) mechanical equipment, 6) parking lot cleaning activities; and 7) noise generated by the operation of the day care center.

The estimated noise generated by each of these project activities, and associated environmental impacts, are described below:

1) Parking Lot Activity. Major noise sources in the plaza parking lot would include, in order of magnitude, the sounds of moving vehicles, the starting of engines, door slams, and human voices. The proposed parking areas nearest to the residential neighbors would be located about 120 feet south of the southern facades of existing residences across the flood control channel. The major portion of the parking area would be at least 200 to 300 feet away and screened by intervening buildings of the project. The sound of a passing car at 15 mph typically ranges from 45 to 55 dBA at 120 feet (note: all noise levels are for exterior noise). The noise of an engine start is similar. Door slams create noise levels lower than engine starts. The hourly average noise level (CNEL) resulting from all of these noise-generating activities in a busy commercial center parking lot could range from 40 to 45 dBA at 200 feet from the path of the vehicles. Sounds of parking lot activity during project operational hours would occasionally be heard within the backyards of the nearest residences, but noise levels would not be substantially above existing levels. Noise impacts resulting from parking lot activity would be less than significant.

2) Delivery Truck Movements. Loading docks are proposed along the northern facade of the major retail building in Phase 3 at a distance of 160 feet from the southern facades of the nearest residences. Noise generated by delivery trucks at this location would depend primarily on the type of truck and frequency of deliveries. It is not known at this time which retailer will occupy the major retail building.

Trucks would be circulating within about 140 feet of the southern facades of the nearest residences. Maximum noise levels generated by diesel trucks pulling in and out of loading docks would range from 60 to 70 dBA at a distance of 140 feet. Maximum noise levels generated by diesel vans and gasoline-powered panel delivery trucks range from 50 to 60 dBA at a distance of 140 feet. Truck refrigeration equipment generates a maximum noise level of 69 to 72 dBA at a distance of 140 feet.

Deliveries and unloading for the major retail store by larger (and louder) diesel trucks pulling in and out of the docks could occur daily. Smaller truck and van deliveries could also occur daily. Some of these deliveries could be anticipated in the more noise-sensitive nighttime or early morning hours. Intermittent noise events related to truck delivery movements during the daytime would not result in a substantial increase in the overall noise environment. The impact of daytime truck noise would be less than significant. The noise of truck movements at night may substantially increase nighttime noise at nearby residences and cause sleep disturbance. This impact is potentially significant. The project includes an eight-foot high masonry wall along the site boundary north of the major retail building. Along with the existing six-foot high masonry wall along the rear of the residential properties to the north, this would provide some noise attenuation. However, the nighttime noise impact from delivery truck movements would not be reduced to less-than-significant levels by these walls.

Impact. The noise of truck movements at night may substantially increase nighttime noise at nearby residences and cause sleep disturbance. (*Potentially Significant Impact*)

Mitigation. Prohibit truck deliveries, including movements, engine idling, engine starts, operation of refrigeration equipment, etc., on the north side of the buildings between 10:00 PM and 7:00 AM. (*Less-than-Significant Impact with Mitigation*)

3) Loading Dock Activity. In addition to the truck movements to and from the project loading docks, there is concern that loading activities at the docks themselves would also generate adverse noise impacts. Maximum noise levels generated by more traditional loading docks are typically caused by the banging and clanging of metal containers and loud voices. Maximum noise levels at loading docks of traditional design typically range between 60 and 70 dBA at 150 feet.

The project site plan (Figure 4) depicts the loading dock of the major retail store as the rubberized gasket type. This type of loading dock is designed so that larger delivery trucks must back up to a rubber gasket against the opening of the building, with all unloading done directly into the building. The rubber gasket type of loading dock provides a tight connection between the truck and the building specifically for noise abatement purposes, and field visits to these facilities have indicated that little loading noise escapes into the community from this loading dock type. Also, the site plan shows a noise barrier (i.e., 8-foot masonry wall) along the project boundary north of the major retail building, which would provide additional noise screening.

Impact: Loading dock activity at the north side of the project could result in noise impacts to existing residences to the north. (*Potentially Significant Impact*)

Mitigation: To reduce potential noise impacts from loading dock activity, the project tenants will be required to use the 'rubber gasket' type loading dock and provide a noise barrier along the northern project boundary to provide line-of-sight noise screening from the existing residences to the north. In addition, all activities at the loading docks shall be prohibited between the hours of 10:00 PM and 7:00 AM. (*Less-than-Significant Impact with Mitigation*)

4) Trash Enclosures and Pick-up. Trash enclosures would be located throughout Phases 3 and 4 of the project, the nearest of which would be located approximately 130 feet from the nearest residences. At this distance, the occasional noise generated when the occasional dumpster lid is dropped would be audible, but the short duration and infrequent occurrence of this noise source would not increase noise levels significantly at the nearest receptors. Trucks picking up the dumpsters during the daytime would similarly not cause a disturbance to the nearest neighbors. However, nighttime dumping of trash or pick-up could cause sleep disturbance.

Impact: Nighttime dumping of trash or pick-up from the trash enclosures along the north side of the project may cause sleep disturbance at the nearest residences north of the project site. (*Potentially Significant Impact*)

Mitigation: Prohibit dumping of trash or pickup of trash dumpsters along the north side of the project site between 10:00 PM and 7:00 AM. In addition, the masonry wall proposed along the eastern portion of the north site boundary shall be extended from its proposed eastern terminus westward to a point 20 feet west of the eastern facade of the office/medical building, and a new section of masonry wall shall be constructed westerly from a point 20 feet west of the west facade of the office/medical building to the western site boundary. (*Less-than-Significant Impact with Mitigation*)

5) Mechanical Equipment. Mechanical equipment typically includes heating, ventilating, air conditioning, and refrigeration equipment. Noise typically generated by rooftop mounted mechanical equipment varies significantly depending upon the equipment type and size. Project mechanical equipment specifics have not been determined at this stage of project design. However, based on measurements made at other similar commercial centers and large supermarkets in the region, noise levels of 60 to 70 dBA at 15 feet from external mechanical systems can be anticipated from the project. Noise levels would be reduced due to shielding from the roof and distance to the nearest residences. Therefore, equipment noise levels are expected to be less than 40 dBA at the nearest residences.

Impact: Mechanical equipment noise is not expected to, but could, generate noise level increases of 5 dBA CNEL at the property line of adjacent residences. (*Potentially Significant Impact*)

Mitigation: Prior to issuance of building permits, the applicant shall submit engineering and acoustical specifications for project mechanical equipment demonstrating that the equipment design (types, location, enclosure specifications) will not exceed 45 dBA (L_{eq}-hour) for any residential yards. (*Less-than-Significant Impact with Mitigation*)

6) Parking Lot Cleaning. Typically, the parking area surface at this type of commercial center is periodically cleaned using small mechanical parking lot sweepers and hand-held, back-mounted leaf blowers. The noise from this type of equipment was measured by Illingworth & Rodkin for a noise study conducted for the City of Pleasanton in response to complaints from nearby neighbors of a community shopping center. It was determined that at a distance of 150 feet, the noise of the mechanical parking lot sweeper was not significant. However, the noise generated by the back-mounted leaf blowers was found to be significant. Leaf blower noise from four different tested types ranged from 60 to 70 dBA at a distance of 120 feet. Such equipment would probably be operated on the project site at distances within 120 feet of the nearest residential property line.

Impact: The operation of leaf blowers and mechanical parking lot sweepers in the northern portion of the project site would generate noise levels in excess of 60 dBA. (*Potentially Significant Impact*)

Mitigation: Implement the following restriction as conditions of the project use permit in order to mitigate the impact of noise generated by leaf blowers and mechanical parking lot sweepers on residences to the north of the project site: 'No person shall operate a leaf blower or mechanical parking lot sweeper within 120 feet of the north project boundary between the hours of 10:00 PM and 7:00 AM.' (In addition, noise from these sources will also be mitigated by the extensions of masonry wall described under item 4 above.) (*Less-than-Significant Impact with Mitigation*)

7) Day Care Center Noise Impacts. The proposed day care center will be located at the western end of the project site, approximately 135 feet from the nearest sensitive receptors - the residences to the north across the flood control channel. The noise sources associated with the day care center include traffic noise from vehicles accessing the site, and the sound of children playing in the outdoor play area. (See item '1' above for a discussion of traffic noise impacts upon the day care center.) Noise generated by vehicular traffic accessing the day care center would be similar to noise generated throughout the parking lot of the entire project, and would be generally concentrated during peak morning and afternoon hours when parents would drop off or pick up children. Noise generated by day care center traffic would not result in a significant adverse impact upon adjacent residential areas.

The location of the outdoor play area associated with the day care center has not yet been determined. However, as discussed under item '1' above, it is recommended that the outdoor play area be located on the north side of the day care building, at the greatest possible distance from Lone Tree Way, where it would be partially or wholly screened from roadway noise by the building itself. (Alternative designs which meet the noise reduction objective may also be considered, subject to review by an acoustical engineer.) At this location, the play area would be approximately 135 feet from the nearest residences across the flood control channel to the north. Typically, children play in the outdoor areas between 9 and 11 AM and between 3 and 5 PM. Based on noise measurements taken at other day care centers, average noise levels generated by 30 to 65 children during outdoor play are about 60 to 63 dBA at a distance of 20 to 30 feet from the center of the activity. Noise generated by 100 children could be expected to increase the maximum expected noise level to about 65 dBA. It is unlikely, however, that all children would be outdoors at one time. Maximum noise levels are typically 65 to 70 dBA at this distance, occasionally reaching 73 dBA during the loudest shouts on the elevated play structure. These noise levels would be approximately 15 to 16 decibels lower given the distance separating the day care center and the nearest residences to the north. (The noise levels in the rear yards of these residences would be somewhat further reduced by the existing masonry wall along their rear residential property lines facing the day care center.) Average noise levels generated by the day care center would be about 45 dBA at the nearest noise sensitive receptors, and would be below existing background noise levels generated by traffic along Lone Tree Way. Maximum noise levels would be 55 dBA, and would be similar to noise generated by heavy truck traffic along Lone Tree Way. These maximum noise levels would be short in duration, and would not increase existing noise levels at the nearest residences. In summary, outdoor play at the day care center, assuming worst-case conditions, would not significantly increase the noise environment at the nearest noise sensitive receptors. Therefore, the day care center would not result in a significant noise impact.

There is a potential concern with a cumulative effect of noise from the new skate park located in the adjacent Prewett Family Park and the proposed day care center. The addition of another source of concentrated children at play would increase the potential to occasionally disturb the neighbors. It is difficult to quantify this effect. Because noise levels generated by children at the day care center would be expected to be below ambient levels, there would be no quantitative cumulative impact.

Impact: The noise from children at play on the grounds of the day care center may occasionally disturb the residents to the north. (*Potentially Significant Impact*)

Mitigation: An 8-foot high masonry wall shall be constructed along the northern site boundary from the western site boundary easterly to a point 20 feet east of the west facade of the proposed office/medical building. In addition, a maximum of 60 children shall be permitted in the outdoor play area at any one time. (*Less-than-Significant Impact with Mitigation*)

Construction Noise

Development of each project phase would involve several noise-generating construction activities. The first construction phase would typically involve ground clearing, site grading, development of infrastructure, and paving. Subsequent phases would include site improvements and the construction of the shopping center buildings. The typical range of hourly noise levels during various phases of construction measured at 50 feet from the primary construction activity would range from 67 to 99 dBA (for the equipment expected to be used for this project). Average noise levels above 60 dBA begin interfering with speech communication.

Noise levels at residences nearest to the project would be significantly elevated intermittently during various construction activities. Depending on the phase of construction, associated noise intrusion into residential yards closest to the project site would intermittently interfere with typical residential activities.

Impact: During the noisier periods of construction (grading, excavation, building erection and finishing), noise levels in the closest residences would be significantly elevated, resulting in short-term significant adverse impacts. (*Potentially Significant Impact*)

Mitigation: Reduce project construction noise impacts on nearby residents by incorporating the following conditions in project construction contract agreements:

Construction Scheduling. Limit noise-generating construction activities, including truck traffic coming to and from the site for any purpose, to daytime, weekday, non-holiday hours (7:00 AM to 6:00 PM) unless otherwise approved by the City Engineer.

Construction Equipment Mufflers and Maintenance. Properly muffle and maintain all construction equipment powered by internal combustion engines (i.e., use only mufflers that meet manufacturers' maximum noise specifications).

Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines (i.e., turn off engines when equipment is not in use).

Equipment Location and Shielding. Locate all stationary noise-generating construction equipment, such as air compressors, as far as practical from existing nearby residences and other noise-sensitive land uses. Acoustically shield such equipment.

Quiet Equipment Selection. Select quiet construction equipment, particularly air compressors, whenever possible. Fit motorized equipment with proper mufflers in good working order.

Notification. Notify neighbors located adjacent to the construction site of the construction schedule in writing.

Noise Disturbance Coordinator. Designate a "noise disturbance coordinator" who will be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The applicant should be responsible for designating a noise disturbance coordinator, for posting the phone number, and for providing construction schedule notices). (*Less-than-Significant Impact with Mitigation*)

c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less-than-Significant Impact.

As discussed in item 'a' above, the project would potentially result in substantial permanent increases in noise levels due to delivery truck movements and loading, trash pickup, mechanical equipment noise, and leaf blowers. As discussed, these potential impacts would be reduced to less-than-significant levels by mitigations measures to be incorporated in the project.

d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

As discussed in item 'a' above, the project would potentially result in substantial temporary increases in noise levels due to project grading and construction activity. As discussed, these potential impacts would be reduced to less-than-significant levels by mitigations measures to be incorporated in the project.

Conclusion. With the implementation of the above mitigations, the potential noise impacts resulting from the project would be reduced to less-than-significant levels.

L. POPULATION AND HOUSING

Would the project:

b) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Less-than-Significant Impact.

The project will not result in substantial growth inducement. Commercial retail and office centers and day care centers tend to follow residential development into a growth area and are generally not developed until a sufficient population base exists to provide a viable market for the goods and services offered. In other words they tend to be the product of growth rather than a stimulus for residential growth. However, the new employment opportunities created by the project could attract workers to the area. This could result in a slight increase in housing demand in the area. However, as of May 1, 2000, there were approximately 4,400 residential units remaining to be constructed within the Southeast Antioch Specific Plan area. These planned residential units could accommodate any increase in housing demand resulting from the project.

New development projects can also induce growth through the creation of excess service capacity in urban infrastructure that can in turn accommodate additional development. The project will utilize existing service capacities for sanitary sewer, domestic water service and storm drainage that were installed as part of the comprehensively planned development of the Southeast Antioch area. The project will not necessitate the addition of utility main lines or treatment capacity to accommodate it. The project will not induce further growth in the area either directly or indirectly.

Conclusion: The project would not result in significant population and housing impacts

M. PUBLIC SERVICES

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

a) Fire Protection?

Less-than-Significant Impact.

Fire protection service in the area is provided by the Contra Costa County Fire Protection District. The primary facility that would serve the site is Fire Station 88 located 1.64 miles north at Folsom Street and Hillcrest Avenue. The station has one fire engine and 3 full-time personnel on staff. The response time to the site would be 3 to 3.5 minutes, which is considered acceptable. As the area in the project vicinity develops, a new fire station may be constructed closer to the project site, although there are no specific plans for such a station at this time. The project will not result in the need for additional equipment or personnel, and will not in itself trigger the need of the new fire station. The fire risk posed by the project is very low. The building code requires commercial buildings to be sprinklered which reduces the potential for major fires. In addition, the water system in the area is very good for fire protection. In summary, the project is not expected to significantly affect fire service in the area, and will not result in the need for new facilities which could in turn result in impacts.

b) Police Protection?

Less-than-Significant Impact.

Police protection for the site would be provided by the Antioch Police Department. Although the police administration building is located in downtown Antioch, responses to calls would be made by beat officers on patrol. Response time would depend on the location of the patrol car at the time and the priority of the call in terms of threat to life or property. In general, the types of businesses planned for the project would result a relatively low rate of calls for service. However, the project would result in some increase in calls, primarily for shoplifting. In addition, the increased traffic resulting from the project could affect response times in the area. Overall, the project would not have a significant effect on police services and would not trigger the need for new facilities which may in turn result in impacts.

Conclusion: The project would not result in significant impacts to public services.

O. TRANSPORTATION/TRAFFIC

Would the project:

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

Less-than-Significant with Mitigation Incorporated.

The following analysis of project traffic impacts is based on the report *Traffic Impact Assessment for the Williamson Ranch Plaza Project Phases 3 and 4* prepared by Dowling Associates in July 2000. The full text of the traffic report is contained in Appendix J of this Initial Study.

The impacts of the project were evaluated under two conditions: existing plus approved (2000), and cumulative (2010).

Existing Plus Approved Levels of Service

Traffic generated by the approved but unbuilt portions of Phases 1 and 2 of the Williamson Ranch Plaza project were added to the existing traffic to produce a set of existing-plus-approved traffic volumes. Table 9, on the next page, shows the AM and PM levels of service at the analysis intersections for the existing-plus-approved condition. All intersections operate at level of service (LOS) A, except for Hillcrest Avenue at Highway 4 eastbound ramps which operates at LOS C during the PM peak hour.

Existing/Approved Plus Project Levels of Service

It was calculated that the project (Phases 3 and 4) would generate about 306 AM and 593 PM peak-hour trips. The current project for Phases 3 and 4 generates more traffic than was anticipated in the 1998 traffic report for Phases 1 and 2. However, the traffic associated with Phases 1 and 2 is lower than was estimated in the previous report. The entire Williamson Ranch Plaza (Phases 1 through 4) generates less traffic at full buildout than was projected in the 1998 traffic report.

To evaluate the project impacts on levels of service, the project-generated traffic (from Phases 3 and 4) was added to the existing-plus-approved traffic to determine the AM and PM peak-hour levels of service at each of the study intersections. As shown in Table 9, the levels of service at all of the study intersections is acceptable under the existing/approved plus project condition. Therefore, the project results in no level of service impacts and no traffic mitigations are required for the project.

Year 2010 Cumulative Levels of Service

The year 2010 traffic projections were developed using the East County Traffic Model as provided by the Contra Costa County Transportation Authority. The Highway 4 by-pass was assumed to be constructed with interchanges along the by-pass at all major arterial streets.

TABLE 9
YEAR 2000 PEAK-HOUR INTERSECTION LEVEL OF SERVICE

Intersection	Existing + Approved (= Existing + Phases 1 & 2)		Existing + Approved + Project (Phases 3 & 4)	
	AM Pk-Hr	PM Pk-Hr	AM Pk-Hr	PM Pk-Hr
Lone Tree Way at Deer Valley Road	A (0.59)	A (0.60)	B (0.63)	B (0.64)
Lone Tree Way at Indian Hill Drive	A (0.34)	A (0.40)	A (0.38)	A (0.43)
Lone Tree Way at Hillcrest Avenue	B (0.61)	C (0.79)	B (0.64)	D (0.87)
Hillcrest Avenue at Deer Valley Road/Davidson Avenue	A (0.42)	A (0.59)	A (0.43)	A (0.60)
Hillcrest Avenue at Highway 4 eastbound ramps	A (0.57)	C (0.73)	A (0.57)	C (0.74)
Hillcrest Avenue at Highway 4 westbound ramps	B (0.64)	A (0.57)	B (0.65)	A (0.58)
Lone Tree Way at Access #2	Does not exist.	Does not exist.	A (0.37)	A (0.44)
Lone Tree Way at Access #1	Does not exist.	Does not exist.	N/A	N/A

Source: Dowling Associates

Table 10, on the next page, shows the cumulative (year 2010) AM and PM peak-hour levels of service with the Highway 4 by-pass. All of the study intersections operate at level of service D or better during the AM and PM peak hours except for Lone Tree Way/Deer Valley Road and Lone Tree Way/Hillcrest Avenue intersections, which both operate at LOS F during the PM peak hour.

The East County Action Plan includes the widening of Lone Tree Way from four to six lanes. The right-of-way would include space for single left-turn lanes within a center median. The traffic study found that the provision of third travel lanes along Lone Tree Way would not adequately mitigate the LOS impacts of the project. Therefore, alternative mitigation measures are proposed along the Lone Tree Way corridor at each of the impacted intersections. The recommended mitigation measures and resultant levels of service are discussed below. The mitigation measures are needed for the PM peak-hour. The recommended improvements also improve the AM peak-hour levels of service.

The following improvements would mitigate the LOS impacts identified for the cumulative (year 2010) condition:

- At Lone Tree Way and Deer Valley Road, a second southbound left-turn lane must be provided on Deer Valley Road. Therefore, the southbound approach would include: 2 lefts, one through, and one through right-turn lane. This results in level of service D (0.87) during the PM peak-hour.

- At Lone Tree Way and Hillcrest Avenue, provide a second left-turn lane (dual lefts) on both the southbound Hillcrest Avenue and eastbound Lone Tree Way approaches. This results in

LOS C (0.81) for the PM peak hour.

- Install a new signal at the main entrance to Phases 3 and 4 (Orchard Supply Hardware access) including the provision of an eastbound left-turn lane within the center median of Lone Tree Way. The exit from the site should have two lanes - one left and one right-turn lane.

- Design the western-most driveway to allow for only right-turn in and right-turn out movements. If acceptable to EBMUD, construct a deceleration lane for westbound traffic entering the site. The deceleration lane should be designed to City standards and specifications.

TABLE 10

YEAR 2010 AM AND PM PEAK-HOUR LEVEL OF SERVICE

	Cumulative 2010 Without Project		Cumulative 2010 With Project	
Intersection	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Long Tree Way at Deer Valley Road	C (0.78)	E (0.98)	C (0.79)	F (1.02)
Lone Tree Way at Indian Hill Drive	A (0.54)	B (0.65)	A (0.58)	C (0.72)
Lone Tree Way at Hillcrest Avenue	C (0.76)	F (1.09)	C (0.79)	F (1.15)
Hillcrest Avenue at Deer Valley Road/Davidson Avenue	A (0.58)	D (0.82)	A (0.59)	D (0.85)
Hillcrest Avenue at Highway 4 eastbound ramps	B (0.68)	C (0.77)	B (0.68)	C (0.78)
Hillcrest Avenue at Highway 4 westbound ramps	D (0.81)	D (0.83)	D (0.81)	D (0.83)
Lone Tree Way at Access #2	A (0.44)	B (0.55)	A (0.81)	B (0.68)
Lone Tree Way at Access #1	N/A	N/A	N/A	N/A

Source: Dowling Associates

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

As discussed under item 'a,' the project itself would not result in exceedance of LOS standards. Under cumulative conditions in 2010, the intersections at Lone Tree Way and Deer Valley Road and at Lone Tree Way and Hillcrest Avenue would both operate at LOS F without mitigation. However, with the implementation of improvements identified in item 'a,' both of these intersections would operate at acceptable levels of service. The City will assess a fee to cover the project's proportionate share of these improvements, which will be payable prior to the issuance of the first building permit for the project.

c) Result in inadequate parking capacity?

Less-than-Significant Impact.

The project (Phases 3 and 4) will include 491 parking spaces, which is 78 spaces fewer than required by the City's parking standards for the uses proposed. Phase 3 has a shortfall of 53 spaces while Phase 4 has a shortfall of 25 spaces under the requirements. However, Phase 2 includes 90 more spaces than required, resulting in an overall surplus of 12 parking spaces when Phases 2, 3 and 4 are considered together. The applicant proposes to implement a reciprocal easement agreement for shared parking among Phases 2 through 4). This agreement will be executed pursuant to a Use Permit for Shared Parking requested as part of the subject application package. Since the project as a whole includes sufficient parking to meet the City's parking requirements, the shared parking agreement will satisfy the City's parking requirements with respect to Phases 3 and 4.

Conclusion. The project itself does not result in traffic impacts requiring mitigation. In the cumulative (year 2010) condition, significant level of service impacts occur at the Lone Tree Way/Deer Valley Road and Hillcrest Avenue/Lone Tree Way intersections as a result of cumulative traffic volumes including traffic contributed by the project. These cumulative impacts would be reduced through implementation of the roadway improvements recommended, to which the project would contribute its proportionate share.

P. UTILITIES AND SERVICE SYSTEMS

Would the project:

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

Less-than-Significant Impact.

Wastewater generated by the project would be treated at the Delta Diablo Wastewater Treatment Facility, which has sufficient capacity to accommodate flows added by the project. Thus the project will not exceed the wastewater treatment requirements of the Regional Board.

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

Less-than-Significant Impact.

The project will involve the construction of a storm drainage system consisting of storm drain inlets, underground pipelines, and outfalls at the adjacent flood control channel. The installation of the on-site storm drain system would not result in significant impacts. Storm drainage from the project will be discharged at three outfall locations planned along the Contra Costa County Flood Control and Water

Conservation District flood control channel on the north project boundary. The flood control channel and downstream storm drainage and flood control facilities have sufficient capacity to accept increased stormwater runoff from the site after development. The downstream storm drainage and flood control facilities were designed to accommodate the flood flows generated in the project vicinity under developed conditions, including those generated by the project site. The project will not result in the need for new or expanded storm drainage facilities. (See Section *IV. H. Hydrology and Water Quality* for a detailed discussion of site hydrology and drainage.)

d) Have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements needed)?

Less-than-Significant Impact.

Domestic water service to the project would be provided by the City of Antioch from its existing 16-inch water main in Hillcrest Avenue. The local water distribution system has more than enough capacity to serve the project. The water demands for the site were considered in the design of the water supply system for the Southeast Antioch Specific Plan area. As a commercial center, the water demands of the project will be relatively low compared with residential or industrial uses.

The City of Antioch obtains its water supply directly from the San Joaquin River and from the Contra Costa Canal, a facility of the Contra Costa County Water District. The raw water is treated at the City's water treatment plant prior to distribution for domestic use. Treated water quality currently meets or exceeds all state and federal drinking water standards. There are no local or regional water supply constraints which would affect the project, and the project would not require new or expanded water entitlements.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less-than-Significant Impact.

Wastewater generated by the project would be treated at the Delta Diablo Wastewater Treatment Facility, located just west of Antioch along the San Joaquin River. The treatment plant has sufficient capacity to accommodate flows added by the project. Thus the project will not exceed the wastewater treatment requirements of the Regional Board.

Sanitary sewer service to the project would be provided by the City of Antioch Sanitation District from its existing 18-inch sewer main in Lone Tree Way. Commercial uses generate relatively small volumes of wastewater compared to residential or certain industrial uses. Wastewater flows from the project were considered in the design of the sanitary sewer system for the Southeast Antioch Specific Plan area. There is sufficient sanitary sewer capacity to serve the project.

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

Less-than-Significant Impact.

The major portion of solid waste from the Antioch area is disposed of at the Keller Canyon Landfill in Pittsburg which has an estimated remaining life of 60 to 70 years. Solid waste disposal capacity would not pose a constraint to the solid waste disposal needs of the project. Solid waste collection and disposal in the Antioch area is provided by Pleasant Hill Bayshore Disposal which would have no difficulty serving the project.

Conclusion: The project would not result in significant impacts to utilities and service systems.

Q. MANDATORY FINDINGS OF SIGNIFICANCE

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

Less-than-Significant Impact.

As discussed in Section *IV.D. Biological Resources*, the project site is highly disturbed and has little if any habitat value. The removal of on-site burrowing owl habitat and small areas of wetland will be fully mitigated through measures to be implemented in conjunction with the project.

As discussed in Section *IV.E. Cultural Resources*, there are no known cultural resources present on the project site.

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

Less-than-Significant Impact.

As discussed in Sections *IV.C. Air Quality* and *IV.K. Noise*, the project would contribute small increments of noise and air pollution, but the cumulative impacts resulting from the project combined with other planned and foreseeable projects would not be significant.

As discussed in Section *IV.O. Transportation/Traffic*, cumulative traffic generation in the year 2010 would result in degradation of service levels to LOS F at two intersections in the project vicinity. These cumulative impacts can be mitigated through implementation of recommended improvements, for which the project would pay fees in accordance with its proportionate share of the impact.

Due to the nature of the project area as predominantly developed for urban uses, the cumulative impacts to aesthetics, agricultural resources, and historic resources have already occurred and are not

made measurably worse by the development of the project site. Cumulative land use impacts have been avoided or mitigated through the comprehensive land use planning and development of the project area under the Southeast Antioch Specific Plan.

The potentially cumulative geologic, biological, and hazardous materials impacts are mitigated on a project by project basis. Although residual cumulative biological impacts may remain, these do not rise to a level of significance in the project vicinity.

The potentially significant cumulative hydrology and urban service impacts are mitigated through the implementation of comprehensively planned public improvements implemented in conjunction with cumulative development in the project area.

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

Less-than-Significant Impact.

As discussed throughout this document, the project will not result in significant unmitigated impacts, including potential impacts to human beings. As discussed in Sections *IV.C. Air Quality,* and *G. Hazards and Hazardous Materials,* the project will not result in emissions of hazardous materials, nor will it significantly increase air pollution. As discussed in Section *IV.K. Noise*, the potential noise impacts upon the residents to the north will be mitigated by measures to be incorporated into the project. Therefore, the project will not have a substantial adverse effect on human beings, either directly or indirectly.

V. REPORT AUTHORS AND CONSULTANTS

Author

City of Antioch Department of Community Development

Victor Carniglia, Deputy Director of Community Development
Nina Oshinsky, Associate Planner

Consultants

Pacific Municipal Consultants (PMC)
Sacramento, California

Tad Stearn, Principal-in-Charge
Bert Verrips, Project Manager
Jason Chafin, Graphics

ADR Environmental Group
Site Contamination Study
Sacramento, California

Donald Ballanti
Air Quality
El Cerrito, California

Dowling Associates
Traffic Analysis
Oakland, California

EIP Associates
Biological Resources
Sacramento, California

Illingworth & Rodkin
Acoustical Analysis
Fairfax, California

Ninyo and Moore, Inc.
Geotechnical Engineering
Oakland, California

Rauschenbach, Marvelli, Becker
Architecture
Sacramento, California

Robert A. Karn & Associates
Civil and Hydraulic Engineering
Morgan Hill, California

William Self Associates
Archaeology
Orinda, California

APPENDIX A

Notice of Project Application

and Responses

April 21, 2000

SUBJECT: **PD-00-2, UP-00-15/A - WILLIAMSON RANCH, PHASES 3 AND 4**
Expansion of the Williamson Ranch planned development, including use permit and design review approval, for property located at the northwest corner of Lone Tree Way and Hillcrest Avenue.

Attached for your consideration, comment and approval is a copy of the final development plan for this project.

Please forward any comments you may wish to make to this office by May 24, 2000, with a copy to Joe Brandt, Director of Public Works.

A planned development conference will be held at **10 a.m., Thursday, May 25, 2000**, in the second floor conference room. If you wish to attend this preliminary planned development conference, please so indicate in your written comments

Sincerely yours,

VICTOR CARNIGLIA
Deputy Director Community Development

VC/mb

Attachment

PACIFIC GAS & ELECTRIC, Antioch
PACIFIC BELL, San Ramon
CONTRA COSTA WATER DISTRICT, Concord
CONTRA COSTA COUNTY FLOOD CONTROL, Martinez
CONTRA COSTA CO. COMMUNITY DEVELOPMENT DEPT, Martinez
TCI CABLEVISION, Pittsburg
TRI DELTA TRANSIT, Antioch
FEDERAL HOUSING ADMINISTRATION, San Francisco
ANTIOCH UNIFIED SCHOOL DISTRICT, Antioch
POSTAL SERVICE, Antioch
DELTA DIABLO SANITATION DISTRICT, Antioch
BART, Oakland
PACIFIC GAS & ELECTRIC, Concord
B.F.I., Pacheco
CONTRA COSTA COUNTY HEALTH DEPARTMENT, Concord
CONTRA COSTA COUNTY PUBLIC WORKS DEPT., Martinez
EAST BAY M.U.D., Oakland
SOUTHERN PACIFIC, San Francisco
SHELL OIL COMPANY, Carson
CHEVRON U.S.A., INC., Pittsburg
EAST BAY REGIONAL PARKS DISTRICT, Oakland
MUNICIPAL FINANCIAL SERVICES, Temecula
CITY OF BRENTWOOD, Brentwood
SANTA FE RAILWAY, San Bernardino
STAN-PAC, Walnut Creek
MCGILL-MARTIN-SELF, Orinda
OXY USA, INC., Midland TX

TRI DELTA TRANSIT
EASTERN CONTRA COSTA TRANSIT AUTHORITY

801 Wilbur Avenue
Antioch • California 94509
925 • 754-6622
925 • 757-2530 FAX

April 27, 2000

Victor Carniglia
Deputy Director Community Development
City of Antioch
P.O. Box 5001
Antioch CA 94531-5007

Re: PD-00-2, UP-00-15/A Williamson Ranch, Phases 3 & 4.

Dear Mr. Carniglia,

Tri Delta Transit has reviewed the plans for Williamson Ranch, Phases 3 & 4. There is a bus pull out and shelter located on Lone Tree Way. If the plans reflect the bus pull out and shelter remain, the development is transit accessible.

Thank you for the opportunity to comment.

Sincerely,

Steve Ponte
Assistant General Manager

c: J. Brandt

EAST BAY REGIONAL PARK DISTRICT

April 28, 2000

Mr. Victor Carniglia
City of Antioch
Department of Community Development
P.O. Box 5007
Antioch, CA 94531-5007

RE: Williamson Ranch

Dear Victor:

The East Bay Regional Park District received and reviewed the referral for the expansion of the Williamson Ranch. The District supports the public trail along EBMUD's Mokelumne Aqueduct. The District suggests that there should be safe trail crossings at the intersection with the driveways.

The District will not be attending the planned development conference on May 25th. Thank you for the opportunity to comment on this project.

Very truly yours,

Linda J. P. Chavez
Park Planner II

2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605-0381
TEL 510 635-0135 FAX 510 569-4319 TDD 510 633-0460 www.ebparks.org

Chevron

May 2, 2000

Chevron Pipe Line Company
Los Medanos Team
2360 Buchanan Road
Pittsburg, CA 94565
Fax 925 753 2030

DEVELOPMENT PLAN FOR WILLIAMSON RANCH PHASES 3 & 4
PD-00-2, UP-00-15/A
CORNER OF HILLCREST AVE. AND LONE TREE WAY

Mr. Victor Carniglia
Deputy Director Community Development
City of Antioch
P.O. Box 5007
Antioch, CA 94531-5007

Dear Mr. Carniglia:

Chevron has received your letter of notice dated April 21, 2000, together with the **Final Development Plan** for the proposed Williamson Ranch Phases 3 & 4 at the corner of Hillcrest Ave. and Lone Tree Way in Antioch. Please be advised that Chevron Pipe Line Company has no buried pipelines, easements or other facilities in the proposed area of construction that could impact your project. Our buried pipelines and easement are located well west of the area of your project in the vicinity of Lone Tree Way at Deer Valley Road. We appreciate being notified of this project.

Regards,

LARRY WHITEHEAD
RIGHT OF WAY SPECIALIST

WLW/wlw

cc: Mr. Joe Brandt, City Engineer

File: Williamson3&4.doc

REVIEW OF AGENCY PLANNING APPLICATION

EBMUD

THIS IS NOT A PROPOSAL TO PROVIDE WATER SERVICE

The technical data supplied herein is based on preliminary information, is subject to revision and is to be used for planning purposes ONLY.

DATE 5/16/00	EBMUD MAP(S) Not mapped	EBMUD FILE S-6608

AGENCY	AGENCY FILE	
Victor Carniglia, Deputy Director Community Development Department 3rd and H Streets Antioch, CA 94509	PD-00-2, UP-00-15/A WILLIAMSON RANCH, PHASES 3 AND 4	☐ TENTATIVE MAP ☒ DEVELOPMENT PLAN ☐ REZONING/GPA ☐ OTHER

APPLICANT	OWNER
Same as Agency	

DEVELOPMENT DATA

LOCATION: Expansion of Williamson Ranch planned development for property located at the northwest corner of Lone Tree Way and Hillcrest Avenue.

TOTAL ACREAGE 12 ±

NO. OF UNITS	TYPE OF DEVELOPMENT
7	☐ Single Family ☐ Multi-Family Residential ☒ Commercial ☐ Industrial ☐ Other_____

WATER SERVICE DATA

PROPERTY	ELEVATION RANGE OF STREETS	ELEVATION RANGE OF PROPERTY TO BE DEVELOPED
☐ In EBMUD ☐ Requires Annexation		

☐ (_____ALL, _____PART) of development may be served from EXISTING MAIN(S)	☐ (_____ALL, _____PART) of development would be served by MAIN EXTENSION(S)	☐ Water service would require construction of major facilities
LOCATION OF MAIN(S)_____	LOCATION OF EXIST. MAIN(S) _____	☐ RESERVOIR ☐ PUMPING PLANT ☐ TRANSMISSION MAIN ☐ _____ Other

PRESSURE ZONE	SERVICE ELEVATION RANGE	PRESSURE ZONE	SERVICE ELEVATION RANGE

COMMENTS

See attached comments.

FOR INFORMATION REGARDING:

THIS REVIEW	CHARGES & OTHER REQUIREMENTS FOR SERVICE
Contact The EBMUD Water Service Planning Section (510) 287-1084	Contact The EBMUD New Business Office (510) 287-1008

☒ Water Service Planning ☒ New Business Office ☒ ARU	☒ City/~~Town/County~~ ☒ Applicant ☐ Owner

Marie A Valmores

MARIE VALMORES, SENIOR CIVIL ENGINEER
WATER SERVICE PLANNING SECTION

REVIEW OF AGENCY FINAL DEVELOPMENT PLAN FOR WILLIAMSON RANCH

AGENCY: Community Development Department
3rd and H Streets
Antioch, CA 94509

EBMUD FILE: S-6608

AGENCY FILE: PD-00-2, UP-00-15/A – WILLIAMSON RANCH

Thank you for the opportunity to comment on the subject project. East Bay Municipal Utility District (District) has the following comments regarding the proposed project.

IMPACTS ON EXISTING DISTRICT RELATED FACILITIES

EBMUD's Mokelumne Aqueducts, located in an EBMUD right-of-way (in fee), run adjacent to the subject project, Phases 2, 3, and 4. These aqueducts are extremely critical to the operation of EBMUD's water distribution system. Mitigation measures to prevent any impacts to these aqueducts are necessary in the design and construction of the proposed project. The project sponsor should work closely with the District's Aqueduct Section and Real Estate Section for any work within the right of way of these aqueducts.

Attached is a list of the EBMUD requirements (Supplement 1 to Procedure 4.38) that apply to this development. Of special importance are the following Supplement items:

13. No longitudinal encroachments such as drainage ditches; gas, phone, or electrical lines; pipelines, or roads will be permitted. All property line fences must be located completely outside the aqueduct property lines.

16. Street and road crossings constructed on grade shall incorporate protection of the aqueducts. Based on the load carrying capability of the aqueduct, protective measures will be designed by the District or by applicant's licensed engineer to District standards with specific District approval of each design.

17. Traffic control fences or approved barriers shall be installed along each side of the street, road or trail before opening to the public.

18. Temporary construction fences and barricades shall be installed by contractor as directed by the District.

19. Any changes in finished grade must be approved by the Aqueduct section. Earthfills or cuts on adjacent property shall not encroach onto District property except where authorized for vehicular crossings on grade and except where the District determines that there will be no detrimental effect on the aqueducts or their maintenance.

The District is concerned about unfinished items to be completed by the project engineer, Robert A. Karn & Associates, Inc in Phase 1 of the subject project on the District's Right of Way. The District will not approve additional street crossings until the corrections needed from Phase 1 are completed to EBMUD standards.

The District has not received any documentation regarding Phase 2 of the proposed project. It is recommended that the City of Antioch contact the District's Water Production Division, Aqueduct Section for an Encroachment Application as soon as possible if work is intended in Phase 2 in the next six months.

Please contact Cliff Threlkheld of the District's Water Production Division, Aqueduct Section at (209)-463-2463 in advance of any proposed construction to determine conditions for work within right of way and for more information regarding the aqueducts.

Contra Costa County
FLOOD CONTROL
& Water Conservation District

J. Michael Walford
ex officio Chief Engineer

255 Glacier Drive, Martinez, CA 94553-4
Telephone: (925) 313-2000
FAX (925) 313-2333

May 24, 2000

Victor Carniglia
Deputy Director
Community Development
P.O. Box 5007
Antioch, CA 94531-5007

Our File: MS 302-98
x-ref: 3056-06
APN: 056-011-027 (formerly 056-011-019)

Dear Mr. Carniglia:

We have reviewed the application for PD-00-2, UP-00-15/A, Phases 3 and 4 of the Williamson Ranch Project, and submit the following comments:

1. Drainage Area 56 (DA 56) fees for this phase of the project were deferred through a Grant Deed of Development Rights over the 9.99 acre Remainder Parcel shown on the parcel map for minor subdivision 302-98. The Reversionary Condition of the Grant Deed contains a hand-written statement, apparently made by Donald A. Williamson, indicating that a minimum payment of $24,231.98 for the drainage fees for two acres had been made against full payment of the DA 56 fees. However, our records do not show actual receipt of those funds. Please have the developer provide documentation that the payment was in fact made. The District must receive documentation of this payment, and payment of drainage fees for the remaining 7.99 acres, at the rate of $12,115.99 per acre, before development rights revert to the property owner. Please collect $96,806.76 for the remaining 7.99 acres during the development process.

2. Since drainage lines "O", and "P" (the 2-24" lines and the 3-24" lines) were part of the DA 56 plan, actual construction costs for those lines can be credited toward the DA 56 fees. However, the property owner must first contact us regarding our credit/reimbursement policy.

3. The District quitclaimed the areas identified as Flood Control District drainage easements, lines "N", "O", and "P", of the Drainage Area 56 plan, which traverse this site, in June of last year. The easement shown for the 2-24" drainage lines (DA 56 line "P") should reflect the realignment of those lines, and should be dedicated to the City. The easement for the 3-24" lines (DA 56 line "O") should also be dedicated to the City.

We appreciate the opportunity to review plans involving drainage matters and welcome continued coordination. If you have any further questions, please call me at (925) 313-2381.

Very truly yours,

Jim Wilson
Engineer
Flood Control Engineering

JW:jlg
G:\GrpData\FldCtl\CurDev\CITIES\Antioch\MS 302-98\WilliamsonRanch 3-4.doc

Enclosure

c: Joe Brandt, City Engineer, City of Antioch
D.Eckerson, Flood Control
N. Leary, Flood Control
F. Scudero, Accounting APN: 056-011027 (w/enclosure)
Daniel J. Barry, Esq. (w/enclosure)
Baker & McKenzie
2 Embarcadero Center, 24th Floor
San Francisco, CA 94111

MCGILL MARTIN SELF, INC.

925.988.0170

May 16, 2000

Victor Carniglia
Deputy Director Community Development
Third & H Street
Antioch, CA 94531-5007

Re: PD-00-2, UP-00-15/A – Williamson Ranch, Phases 3 and 4
Northwest Corner of Lone Tree Way and Hillcrest Avenue
(MMS Job #s, 668-SEG, 668-Land and 668-PR)

Dear Victor:

McGill Martin Self, Inc. (MMS), Engineer of Record for the Reassessment District No. 27/31R (RD 27/31R), is commenting on this project in regards to three (3) distinct areas. The first is related to the segregation process for the commercial center; second is in regards to the EBMUD crossings and the impacts to the operational aspects of the maintenance/ pedestrian pathway; and the third is related to the landscape theme and plant palette that has been adopted by City Council for this stretch of Lone Tree Way. These items are presented in greater detail below.

A. Segregation Processing

As you are aware, any division or realignment of land area with a lien amount assigned within the RD 27/31R is required to process an Apportionment Application and provide direction to reallocate liens. It appears that there is a realignment of Assessor's Parcels 056-011-26 and 27 within the Williamson Ranch commercial area. Therefore, the City should require that an Apportionment Application be submitted, along with the appropriate backup data and payment of the appropriate fee to reallocate the liens. Please review the project application and request that the property owner provide the required information.

B. EBMUD Crossings

When preparing the improvement plans for Lone Tree Way, the AD #27 design team had assumed that there would be three (3) EBMUD crossings servicing the Williamson commercial property. These three (3) crossings where tentatively located at Sta. 189+90 (Indian Hill Drive alignment), Sta. 181+60, and Sta. 175+60.. The landscape design of the meandering EBMUD maintenance/pedestrian trail took into consideration these crossings and the pathway was designed with adequate operational and safety access. In addition, the civil engineering improvement plans for Lone Tree Way took into consideration these tentative locations for installation of the required infrastructure and drainage patterns. Please review the operational aspects of the commercial center development and the relationships to Lone Tree Way infrastructure.

The two EBMUD crossings within the Phases 3 and 4 plans raise several concerns about the operational aspects of the maintenance/pedestrian pathway. This pathway is not only part of the pedestrian circulation system, but provides the City and EBMUD with vehicular access for maintenance of the pipelines and the easement area. Therefore, the proposed EBMUD crossing locations to the commercial center may need to be redesigned to handle both the vehicular access and pedestrian trail usage. The City should use the Prewett Family Park and the Deer Valley Road connections as an example of what needs to be incorporated into these crossings. The pedestrian access and continuation of the pathway transitions down to the intersection of Lone Tree Way, while the vehicular maintenance access is separated and gates are provided on both sides.

C. Landscape Theme and Palette

As with the pedestrian pathway, the overall design theme for Lone Tree Way has been established by the City Council. Although the landscape plans have not been provided with this application, it should be noted that the landscaping design needs to reflect the intent of the overall appearance established further to the west along Lone Tree Way.

The overall landscape appearance and theme also relates to the EBMUD easement. MMS on behalf of the City has developed a planting scheme that provides for the transition between Lone Tree Way and the adjacent improvements. Continuation of this established theme should be a part of the Conditions of Approval.

The City may want to consider an additional condition requiring the developer to provide the landscape improvements for the Lone Tree Way right-of-way. Currently, if the commercial development improves only the EBMUD entrances and not the right-of-way, there would be a ten (10') foot strip left unimproved between the back of curb and the edge of right-of-way.

MMS appreciates the opportunity to provide comments on the Williamson Ranch project, Phases 3 and 4. Should you have any questions or need clarification to our comments, feel free to contact us.

Sincerely,
McGILL MARTIN SELF, Inc.

Greg Mattson

Greg Mattson, AICP
Principal Planner

TCW:crk

cc: Ron Bernal, COA
Felicia Dean, MMS
Joe Brandt, COA

EQUILON
PIPELINE COMPANY LLC

P.O. Box 6249
20945 S. Wilmington Avenue (90810)
Carson, Ca 90749-6249

5/15/00

CITY OF ANTIOCH - CITY HALL
Victor Carniglia
Dept of Community Development
Third and "H" Street
P.O. Box 5007
ANTIOCH, CA 94509

Dear Victor Carniglia:

SUBJECT: Your Project, Williamson Ranch, Phases 3 and 4
Equilon's Pipeline(s) Brentwood 10" Gas Line
Equilon's Inquiry Record No 7299
Thomas Brothers Map Book Page 595 Grid J4

Please refer to you correspondence dated 4 /21/00 concerning your subject project. Equilon Pipeline Company, LLC, on behalf of Shell Oil Products Company and Texaco Trading and Transportation, operates and maintains One Active petroleum pipeline(s) in the area of your subject project. Enclosed for your use in planning your project, are drawings Y-3253A,3254,3255 depicting the approximate location of Equilon's facilities.

Based on your submitted plans, we are unable to determine if our facilities are in conflict with your project. The precise location and depth of Equilon's facilities can only be certified by performing exploratory excavations. To arrange for excavations, please contact Project Coordinator (310) 816-2063.

At least 48 hours prior to commencement of construction activities, please contact for field locating and marking of Equilon facilities. This notification is in addition to that required through Underground Service Alert.

If you require additional information, please call
David F. Calderon
Project Coordinator
(310) 816-2063.

Very truly yours,

CITY OF

BRENTWOOD

FAX COVER SHEET
FROM THE COMMUNITY DEVELOPMENT DEPARTMENT:
Phone: (925) 516-5405 Fax: (925) 516-5407

DATE: May 31, 2000

TO: Victor Carniglia, Deputy Director of Community Development
City of Antioch

COPY: Joe Brandt, Director of Public Works
City of Antioch

Nina Oshinsky, Associate Planner
City of Antioch

FROM: Mitch Oshinsky, AICP, Community Development Director
City of Brentwood

SUBJECT: **PD-00-2, UP-00-15/A – WILLIAMSON RANCH, PHASES 3 & 4**

PAGES: Two pages including this cover sheet

Letter as attached.

BRENTWOOD

COMMUNITY DEVELOPMENT DEPARTMENT

May 31, 2000

Victor Carniglia
Deputy Director of Community Development
City of Antioch
P.O. Box 5007
Antioch, CA 94531-5007

Dear Mr. Carniglia:

Thank you for the opportunity to comment on PD-00-2, UP-00-15/A – Williamson Ranch, Phases 3 and 4. Following are the significant issues which we believe Antioch should include in the project and/or analyze:

- Scoping Meeting – Due to the size and proximity of the project to Brentwood, and the potential for significant project impacts to affect Brentwood, we request an early scoping meeting of Community Development and Engineering staff from both cities to coordinate on the scope of the traffic study for the project.
- Traffic – We suggest decleration lanes on Lone Tree at project entries. Please analyze project and cumulative impacts, and develop mitigation measures if needed for Lone Tree Way east into the City of Brentwood.
- Will there be a bike trail on East Bay MUD?
- The single plan we received seems to cut off the site to the east partway through. Is there a continuation of the plan?

Thank you for your consideration of our comments. We look forward to hearing from you on scheduling the scoping meeting. Please call me if you have any questions.

Sincerely,

Mitch Oshinsky, AICP
Community Development Director

cc: Jon Elam, City Manager
John Stevenson, City Engineer
Joe Brandt, Antioch Director of Public Works
Nina Oshinsky, Associate Planner

File: M:\Ant\Brent\Williamsonranch.ltr

104 Oak Street, Brentwood, CA 94513-1396
Community Development - (925) 634-6905 • FAX (925) 516-9857

TOTAL P.02

APPENDIX B

Mitigation Monitoring Program

Prepared by

Pacific Municipal Consultants

August 2000

MITIGATION MONITORING PROGRAM
Williamson Ranch Plaza, Phases 3 and 4

INTRODUCTION

This mitigation monitoring program has been prepared pursuant to Section 21081.6 of the Public Resources Code. This document lists the impacts and mitigation measures identified in the Initial Study, specifies the parties responsible for their implementation, and identifies the point in the approval process when the mitigations are to be implemented.

PROJECT DESCRIPTION

The proposed project is a commercial complex with a gross floor area of 105,500 square feet intended to serve the retail, office, day care, and restaurant needs of southeast Antioch. The proposed site plan for the project consists of seven separate buildings, including a major retail tenant, a building with shops, a professional and medical office building, a day care center, and three pads suitable for restaurant or retail use. The specific uses, number of buildings, and site design may be adjusted, as appropriate, in final site design in accordance with the Planned Development standards and permitted uses, and conditions of approval.

MITIGATION MONITORING PROGRAM

IMPACTS	MITIGATION	MONITORING
A. AESTHETICS		
1. No potentially significant impacts.	1. No mitigation required.	1. None required.
B. AGRICULTURAL RESOURCES		
1. No potentially significant impacts.	1. No mitigation required.	1. None required.
C. AIR QUALITY		
1. Construction and grading for the project would generate dust and exhaust emissions that could adversely affect local and regional air quality. (*Potentially Significant Impact*)	1. The following construction practices would be required during all phases of construction within the project site: • Water all active construction areas at least twice daily. • Water or coverstockpiles of debris, soil, sand or other materials that can be blown by the wind. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep daily (preferably with water sweepers) all paved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets. • Limit traffic speeds on unpaved roads to 15 mph. (*Less-than-Significant Impact with Mitigation*)	1. The Community Development Department shall verify that the construction contract bid documents include detailed measures to reduce construction dust, as specified in the Air Quality Report. The City Department of Public Works grading inspectors shall ensure that the specified dust control measures are implemented.

IMPACTS	MITIGATION	MONITORING
C. AIR QUALITY (CONT'D)		
2. The restaurant uses in the project could release cooking exhausts which could result in noticeable odors beyond the project boundaries. (*Potentially Significant Impact*)	2. The ventilation system for each restaurant shall be designed to provide odor control through mechanical dilution of odors. Conditions of project approval shall provide that the City can require the installation of a filtration system for odor control should odor complaints be received that are traceable to a restaurant . (*Less-than-Significant Impact with Mitigation*)	2. The City Community Development Department shall follow-up on all complaints of restaurant odors and attempt to identify the source of the odor. If the source of the odor is identified, the Community Development Director shall determine whether an exhaust filtration system is required, and if so, shall ensure that such a system is installed as required.
D. BIOLOGICAL RESOURCES		
1. Construction activity associated with the project could cause direct mortality to burrowing owls by crushing under heavy equipment or burial in burrows, or could indirectly affect individuals through increased disturbance resulting in nest abandonment. (*Potentially Significant Impact*)	1. The following mitigations are specified to prevent impacts to burrowing owls: • The applicant, in consultation with the California Department of Fish and Game (CDFG), shall conduct a pre-construction survey within the phases of the project site that are scheduled for grading and construction. The survey shall be conducted by a qualified biologist to determine if burrowing owls are occupying the project site. The survey shall be conducted no more than three weeks prior to grading of the project site. If the survey does not identify burrowing owls on the project site, then no further mitigation would be required. However, if burrowing owls are found on the project site, the following mitigation measure shall be required. (Continued on next page.)	1. Prior to each phase of development, copies of the draft contract, scope of work and schedule for preconstruction surveys, along with proof of CDFG concurrence, shall be submitted to the City Department of Community Development for approval. If burrowing owls are found on-site, any necessary mitigations to prevent impacts to individual owls shall be developed in cooperation with DFG. At the conclusion of each survey, the biologist shall prepare a survey report for submittal to the Department of Community Development and the Department of Fish and Game.

IMPACTS	MITIGATION	MONITORING
D. BIOLOGICAL RESOURCES (CONT'D)		
1. (See preceding page.)	1. (See preceding page.) • If burrowing owls are present, the applicant shall avoid all potential burrowing owl burrows that may be disturbed by project construction during the breeding season between March 1st and July 15th (the period when nest burrows are typically occupied by adults with eggs or young). Avoidance shall include the establishment of a 300-foot non-disturbance buffer zone around any occupied burrows. The buffer zone shall be delineated by highly visible temporary construction fencing. Disturbance of any occupied burrows shall only occur outside of the breeding season. (*Less-than-Significant Impact with Mitigation*)	1. (See preceding page.)
2. The project would result in the filling of 0.387 acres of potential jurisdictional wetlands. (*Potentially Significant Impact*)	2. Filling of the wetland will require authorization from the U.S. Army Corps of Engineers under Nationwide Permit 39, which will require the submittal of a Pre-Construction Notification (PCN) to the Corps, along with a mitigation plan that addresses wetland impacts. It is expected that since the impacts would be minor, wetland replacement at a 1:1 ratio would be acceptable, with mitigation to occur at an off-site location within the region. The filling of on-site jurisdictional wetlands could only be undertaken upon approval of the mitigation plan by the Corps and water quality certification from the Regional Board. (*Less-than-Significant Impact with Mitigation*)	2. Prior to issuance of grading permits for the project, the City Community Development Department shall verify that the U.S. Army Corps of Engineers has authorized filling of the on-site wetland feature.

IMPACTS	MITIGATION	MONITORING
E. CULTURAL RESOURCES		
1. Excavation and grading for the project could result in disturbance of previously undiscovered cultural deposits that may be buried at the project site. *(Potentially Significant Impact)*	1. Should any previously undiscovered historic or prehistoric resources be found during construction, work shall stop in the vicinity of the find until such time as the resource can be evaluated by a qualified archaeologist and appropriate mitigations implemented, as determined by the City of Antioch. *(Less-than-Significant Impact with Mitigation)*	1. The City Community Development Department shall verify that the construction contract bid documents include a provision for contacting a qualified archaeologist in the event cultural materials are encountered. The City Department of Public Works grading inspectors shall ensure that the archaeological mitigation measures are implemented, as necessary.
F. GEOLOGY AND SOILS		
1. Strong ground shaking expected at the site during a moderate to severe earthquake could potentially result in severe damage to project buildings and other structures. *(Potentially Significant Impact)*	1. Structural damage to buildings caused by ground shaking would be largely prevented by following the requirements of the Uniform Building Code (UBC). The design of improvements would comply with the seismic design requirements or the City of Antioch and would be in accordance with the standard practices of the Structural Engineers Association of Northern California. *(Less-than-Significant Impact with Mitigation).*	1. Prior to issuance of building permits, the City Public Works Department shall review the project building plans and construction bid documents to confirm that they comply with current seismic safety codes and standards.

(Continued on next page.)

IMPACTS	MITIGATION	MONITORING
F. GEOLOGY AND SOILS (CONT'D)		
2. Grading and site preparation for the project would expose soils and increase the potential for erosion during construction. (*Potentially Significant Impact*)	2. A comprehensive program of erosion control measures would be implemented through the City's grading permit conditions and through the Storm Water Pollution Prevention Plan (SWPPP) required by state law (see *H. Hydrology and Water Quality* for detailed provisions). (*Less-than-Significant Impact with Mitigation*)	2. The grading plans shall detail the measures necessary to control erosion and sedimentation. Prior to issuance of building permits, the City Building and Public Works Departments shall review the project grading and erosion control plans and construction bid documents to confirm that they include the measures specified in the Initial Study and that they comply with the City's grading ordinance.
3. Expansive soils on the site could potentially cause damage to on-site structures and foundations. (*Potentially Significant Impact*)	3. Potential damage due to expansive soils will be prevented by implementing the site preparation, drainage and foundation design recommendations of the geotechnical engineer. (*Less-than-Significant Impact with Mitigation*)	3. The building plans for the project shall detail the measures necessary to avoid impacts due to expansive soils. Prior to issuance of building permits, the City Building and Public Works Departments shall review the project building plans and construction bid documents to confirm that they comply with current seismic safety codes and standards.
G. HAZARDS AND HAZARDOUS MATERIALS		
1. No potentially significant impacts.	1. No mitigation required.	1. None required.

IMPACTS	MITIGATION	MONITORING
H. HYDROLOGY AND WATER QUALITY		
1. During grading and construction, erosion of exposed soils and pollutants from equipment may result in water quality impacts to downstream waterbodies. (*Potentially Significant Impact*)	1. Practices to be implemented to minimize water quality impacts during the grading and construction phase shall include but not be limited to the following: • Exposed soils shall be stabilized by the end of October of any given year by revegetating disturbed areas or applying hydromulch with tetra-foam or other adhesive material. • Runoff from areas of exposed soils shall be conveyed to siltation basins to provide for the settling of eroded sediments. • Storm drain inlets shall be protected with hay bales or silt fences. • Streets subject to construction activities shall be regularly swept with a wet sweeper. • Measures shall be implemented to prevent runoff of fuel, oil, lubricants and solvents from areas used for construction vehicle and equipment storage, washing and maintenance. This shall include the containment of temporary storage and service areas with dikes. (*Less-than-Significant Impact with Mitigation*)	1. The grading plans for the project shall detail the measures necessary to control erosion and sedimentation. Prior to issuance of building permits, the City Building and Public Works Departments shall review the project grading and erosion control plans and construction bid documents to confirm that they include the measures specified in the Initial Study and that they comply with the City's grading ordinance.
2. After completion, the project would generate urban non-point contaminants which would potentially be carried in stormwater runoff to downstream waterbodies. (*Potentially Significant Impact*)	2. To prevent downstream non-point source pollution, project storm drainage system shall provide for pre-treatment of site runoff through installation of underground sand/oil separators, inlet filters and/or other measures, as required by the City of Antioch to minimize any water quality impacts. Regular parking lot cleaning shall also remove much of the accumulated materials and debris. (*Less-than-significant Impact with Mitigation*)	2. The grading and drainage plans shall be reviewed by the City Public Works Department to ensure that the plans include mitigations for non-point source pollutants as specified in the Initial Study.

IMPACTS	MITIGATION	MONITORING
I. LAND USE AND PLANNING		
1. The existing residences directly north of the planned office/medical building would be subject to privacy impacts from the second floor windows on the north side of the office building. (*Potentially Significant Impact*)	1. To block northward views from the second floor of the office/medical building, the project landscape plans should include tree planting along the northern site boundary in this location. The plantings should be sufficient to provide full visual screening of views toward the residences to the north. (*Less-than-Significant Impact with Mitigation*)	1. The landscaping plans for the project shall detail the planting necessary to avoid privacy impacts to the nearby residences to the north. Prior to issuance of building permits, the City Building and Community Development Departments shall review the project landscape plans to ensure that they include adequate plantings for privacy protection..
K. NOISE		
1. Depending on its location, the outdoor play area associated with the day care center could be subject to unacceptable noise levels from traffic on Lone Tree Way. (*Potentially Significant Impact*)	1. The outdoor play area shall be located to the north of and behind the day care center. Alternative designs which meet the noise reduction objective may also be considered, subject to review by an acoustical engineer. (*Less-than-Significant Impact with Mitigation*)	1. The City Community Development Department shall ensure that the final development plan for the day care center shows the play area on the north side of the building. Any alternative design is shall be subject to Planning staff approval and shall meet the noise reduction objectives as determined by an acoustical engineer.
2. The noise of truck movements at night may substantially increase nighttime noise at nearby residences and cause sleep disturbance. (*Potentially Significant Impact*)	2. Prohibit truck deliveries, including movements, engine idling, engine starts, operation of refrigeration equipment, etc., on the north side of the center between 10:00 PM and 7:00 AM. (*Less-than-Significant Impact with Mitigation*)	2. The City Community Development Department shall ensure that the Tentative Map for the center includes conditions to be placed on the title of each parcel that prohibits nighttime truck deliveries.
3. Loading dock activity at the north side of the project could result in noise impacts to existing residences to the north. (*Potentially Significant Impact*)	3. To reduce potential noise impacts from loading dock activity, the project tenants will be required to use the 'rubber gasket' type loading dock and provide line-of-sight screening from the existing residences to the north. In addition, all activities at the loading docks shall be prohibited between the hours of 10:00 AM and 7:00 AM. (*Less-than-Significant Impact with Mitigation*)	3. The City Building Department shall ensure that the gaskets are included on the building plans, and through inspections shall ensure that they are installed as specified in the Noise Report.

IMPACTS	MITIGATION	MONITORING
K. NOISE (CONT'D)		
4. Nighttime dumping of trash or pick-up from the trash enclosures along the north side of the project may cause sleep disturbance at the nearest residences north of the project site. (*Potentially Significant Impact*)	4. Prohibit dumping of trash or pickup of trash dumpsters along the north side of the project site between 10:00 PM and 7:00 AM. In addition, the masonry wall proposed along the eastern portion of the north site boundary shall be extended from its proposed eastern terminus westward to a point 20 feet west of the eastern facade of the office/medical building, and a new section of masonry wall shall be constructed commencing at a point 20 feet west of the west facade of the office/medical building to the western site boundary. (*Less-than-Significant Impact with Mitigation*)	4. The City Community Development Department shall ensure that the Tentative Map for the center includes conditions to be placed on the title of each parcel that prohibits nighttime trash pickup. The masonry wall shall be subject to City staff inspection and approval.
5. Mechanical equipment noise is not expected to, but could generate, relative noise level increases of 5 dBA CNEL at the property line of adjacent residences. (*Potentially Significant Impact*)	5. Prior to issuance of building permits, applicant shall submit engineering and acoustical specifications for project mechanical equipment demonstrating that the equipment design (types, location, enclosure specifications) will not exceed 45 dBA (L_{eq}-hour) for any residential yards. (*Less-than-Significant Impact with Mitigation*)	5. The City Building Department shall ensure that the building plans include the required enclosures, and through inspections shall ensure that they are installed as specified in the Noise Report.
6. The operation of leaf blowers and mechanical parking lot sweepers in the northern portion of the project site would generate noise levels in excess of 60 dBA. (*Potentially Significant Impact*)	6. Implement the following restriction as conditions of the project use permit in order to mitigate the impact of leaf blower and mechanical parking lot sweeper noise on residences to the north of the project site: 'No person shall operate a leaf blower or mechanical parking lot sweeper within 120 feet of the north project boundary between the hours of 10:00 PM and 7:00 AM.' (In addition, noise from these sources will also be mitigated by the extensions of masonry wall described under item 4 above.) (*Less-than-Significant Impact with Mitigation*)	6. The City Community Development Department shall ensure that the Tentative Map for the shopping center includes conditions to be placed on the title of each parcel that incorporates the restrictions on leaf blowers and mechanical sweepers specified in the Noise Report.

(Continued on next page)

IMPACTS	MITIGATION	MONITORING
	K. NOISE (CONT'D)	
7. The noise from children at play on the grounds of the day care center may occasionally disturb the residents to the north. (*Potentially Significant Impact*)	7. An 8-foot high masonry wall shall be constructed along the northern site boundary from the western site boundary easterly to a point 20 feet east of the west facade of the proposed office/medical building. In addition, a maximum of 60 children shall be permitted in the outdoor play area at any one time. (*Less-than-Significant with Mitigation)*	7. The City Community Development Department shall ensure that the Tentative Map for the center includes a condition to be placed on the title of the day care parcel that limits the number of children permitted in the outdoor play area to 60. The masonry wall shall be subject to City staff inspection and approval.
8. During the noisier periods of construction (grading, excavation, building erection and finishing), noise levels in the closest residences would be significantly elevated, resulting in short-term significant adverse impacts. (*Potentially Significant Impact*)	8. Reduce project construction noise impacts on nearby residents by incorporating the following conditions in project construction contracts: • Construction Scheduling. Limit noise-generating construction activities, including truck traffic coming to and from the site for any purpose, to daytime, weekday, non-holiday hours (7:00 AM to 6:00 PM) unless otherwise approved by the City Engineer. • Construction Equipment Mufflers and Maintenance. Properly muffle and maintain all construction equipment powered by internal combustion engines (i.e., use only mufflers that meet manufacturers' maximum noise specifications). • Idling Prohibitions. Prohibit unnecessary idling of internal combustion engines (i.e., turn off engines when equipment is not in use). • Equipment Location and Shielding. Locate all stationary noise-generating construction equipment, such as air compressors, as far as practical from existing nearby residences and other noise-sensitive land uses. Acoustically shield such equipment. • Quiet Equipment Selection. Select quiet construction equipment, particularly air compressors, whenever possible. Fit motorized equipment with proper mufflers in good working order. • Notification. Notify neighbors located adjacent to the construction site of the construction schedule in writing.	8. The City Community Development Department shall verify that the construction contract bid documents include the construction noise mitigation measures specified in the Noise Report. The Department of Public Works grading inspectors and the Building Department inspectors shall monitor grading and construction to ensure compliance with these requirements.

IMPACTS	MITIGATION	MONITORING
	K. NOISE (CONT'D)	
(See preceding page.)	• Noise Disturbance Coordinator. Designate a "noise disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and would require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule. (The applicant shall be responsible for designating a noise disturbance coordinator, for posting the phone number, and for providing construction schedule notices). (*Less-than-Significant Impact with Mitigation*)	(See preceding page.)
	L. POPULATION AND HOUSING	
1. No potentially significant impacts.	1. No mitigation required.	1. None required.
	M. PUBLIC SERVICES	
1. No potentially significant impacts.	1. No mitigation required.	1. None required.
	O. TRANSPORTATION/TRAFFIC	
1. No potentially significant impacts.	1. No mitigation required.	1. None required.
	P. UTILITIES AND SERVICE SYSTEMS	
1. No potentially significant impacts.	1. No mitigation required.	1. None required.