

ATTACHMENT "B"



ENVIRONMENTAL CHECKLIST FORM

1. Project title: In-Shape Health Club and Shopping Center
2. Lead agency name and address: City of Antioch
P.O. Box 5007
Antioch, CA 94531-5007
3. Contact person and phone number: Tina Wehrmeister
(925)779-7038
4. Project location: The northeast side of Lone Tree Way, approximately 50 feet north-west of Dallas Ranch Road / Eagleridge Drive (APN: 072-012-084)
5. Project sponsor's name and address: In-Shape Health Clubs, Inc.
1016 E. Bianchi Rd., Suite A-23
Stockton, CA 95210
6. General plan designation: Neighborhood/Community Commercial
7. Zoning: Planned Development
8. Description of project: Proposal to develop an 186,000 s.f. shopping center including a 60,000s.f. health club on an approximately 18-acre site.
9. Surrounding land uses and setting: The project site is vacant and has been subject to regular disking for the purpose of weed and fire suppression. The site is surrounded by the following:
North: East Bay MUD easement, recreational trail, and single family homes
South: Lone Tree Way (major arterial roadway)
East: single family homes
West: vacant site with entitlements for a business park development
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.) State Department of Fish and Game.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

J. Wehmaster

Signature

12/10/04

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project is not located within a scenic view corridor.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is not located within a state scenic highway.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The proposed project will not result in the degradation of the existing visual character of the site and its surroundings. The site is denude of trees, rock outcroppings, and any other scenic resource. This project is subject to Design Review Board approval as per the Municipal Code. The Design Review Board will review the architecture, landscaping, and overall design of the project in addition to views of the site and improvements from adjoining properties.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: This project is required to comply with the Antioch Municipal Code, section 9-5.1715, which states that lighting shall not shine directly onto an adjacent street or property.				
2. AGRICULTURE RESOURCES:				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X

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Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
Discussion: 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. This site is not currently used as farmland and is not zoned for agricultural use.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There is no agricultural zoning or Williamson Act contract governing the proposed site.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: This site is not designated as Farmland on the Contra Costa County map of Important Farmlands and the site is not in close proximity to agricultural uses which could be potentially impacted by this project. The site is surrounded by urban development.				
3. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The San Francisco Bay Area Air Basin is currently non-attainment for ozone (state and federal ambient standards) and PM10 (state ambient standard). While air quality plans exist for ozone, none exists (or is currently required) for PM10. 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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: Construction activities associated with the proposed project would generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would temporarily affect local air and regional air quality. Dust emission during periods of construction would increase particulate concentrations at neighboring properties. The BAAQMD CEQA Guidelines include a list of feasible dust control measures. With the implementation of these measures, air pollutant emissions				

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from construction activities are considered by the BAAQMD to be less than significant.				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: Construction of the project will attract new vehicle trips that could generate emissions pollutants of regional concern. 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 or PM10. It is not expected that the site would exceed this threshold. Project impacts on air quality would be less than significant.				
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: Construction of the project would modify traffic volumes on the local street network, changing carbon monoxide levels along roadways used by project traffic. However, traffic levels from the project would not be expected to exceed thresholds of significance for pollutant concentrations.				
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: During construction, various diesel-powered vehicles and equipment in use on the site would create odors. These odors will be temporary, and are not likely to be noticeable beyond the project boundaries.				
4. 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 U.S. Fish and Wildlife Service?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
Discussion: Reconnaissance level surveys of the project site were conducted in January and February 2004 by Kleinfelder. In January, burrowing owl pellets and white wash were observed on site. In February, a single burrowing owl was observed at the project boundary however, the survey was not able to conclude whether or not the project site contains active burrows. Construction of the project and associated disturbance could result in direct Burrowing Owl mortality, destruction of occupied burrows, loss of fertile eggs or nestlings, or could otherwise lead to nest abandonment. The loss of owls, nests, or occupied habitat constitutes a significant impact. Implementation of the mitigation measures listed below would reduce impacts on Burrowing Owls to a less-than-significant level.				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>Mitigation 4-a.1: During project construction, no activities, including grading or other construction work, shall proceed within 250 feet of breeding owls during the nesting season, defined as February 1 - August 31.</p> <p>Mitigation 4-a.2: During the non-nesting season (defined as September 1 - January 31) and prior to any construction on the site, the project sponsor shall complete a survey within the project's impact areas including areas on the East Bay Municipal Utility District easement which may experience disturbance during construction. If owls are found within the project area during the non-nesting season, a qualified ornithologist, in consultation with regulatory agencies, could evict any owls within 250 feet of construction zones and other associated impact areas, to avoid mortality of any owls or destruction of occupied burrows. If breeding owls are found on the site during the nesting season (February 1 - August 31), no activity within 250 feet shall be allowed until an ornithologist has determined all young have fledged. Any eviction activities shall be dependent on a signed Mitigation Agreement (MA) between the project sponsor and CDFG. If owls are known to have nested or been resident on the project site within three years prior to site alteration, the project sponsor shall comply with the off-site habitat compensation measures described in Mitigation 4-A.3, below.</p> <p>Mitigation 4-a.3: If occupied burrows are present at the project site the project applicant shall compensate for the loss of suitable burrowing owl nesting and foraging habitat present on the project site. CDFG recommends that 6.5 acres of mitigation be required for a pair or single owl. To implement this mitigation measure, CDFG recommends that the City of Antioch require the applicant to establish a conservation easement or purchase credits at an approved mitigation bank for the loss of burrowing owl habitat.</p> <p>Prior to the issuance of a grading permit for the project, the applicant shall post a performance bond with the City guarantying that they will either establish a conservation easement for burrowing owls on a suitable parcel (approved by CDFG) or purchase the required amount of credits (one credit equals one acre) at the Haera Wildlife Conservation Bank in eastern Alameda County (just south of I-580), which is certified as a mitigation bank by CDFG.</p>				
<p>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 US Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Discussion: See discussion under 4a.</p>				
<p>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?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Discussion: There are no wetlands present at the project site.</p>				

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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?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
Discussion: See discussion under 4a.				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not conflict with any local policies or ordinances protecting biological resources.				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There are no adopted plans applicable to the project site.				
5. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No known historical resources are known to exist at the project site or in the immediate vicinity.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: See 5a above.				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No known paleontological or unique geologic features are known to exist on or in the immediate vicinity of the site.				

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d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There are no known interment sites in the project vicinity or site.				
6. 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? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: There are no known active earthquake faults that traverse the project site or the immediate vicinity. The design of improvements would comply with the requirements of the Uniform Building Code, the standard practices of the Structural Engineers Association of Northern California, and the requirements of the City of Antioch which will largely mitigate structural damage to buildings caused by ground shaking. The project site is not expected to be impacted by landslides.				
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: Grading and site preparation activities could expose soils and increase the potential for erosion during construction. A program of erosion control measures will be implemented through the City's grading permit conditions and through the Storm Water Pollution Prevention Plan required by state law.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Discussion: The risk of soil instability at the project site is minimal. The design of improvements would comply with the requirements of the City of Antioch.				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discussion: Following the requirements of the Uniform Building Code would largely mitigate structural damage to buildings caused by expansive soils. The design of improvements would comply with the grading design requirements of the City of Antioch.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The site is served by public sewer.				
7. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: There would not be any use of hazardous materials or hazardous situations created as a result of the proposed 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: See 6a above.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discussion: The project is within a quarter mile of an existing school however, there would not be any use of hazardous materials or hazardous situations created as a result of the proposed project.				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is not included on the State Department of Toxic Substances Control's Hazardous Waste and Substances Site List (Cortese List).				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The subject site is not located near a public use airport.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The subject site is not located near a private airstrip.				
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed project would not impair or interfere with emergency response plans.				
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There is no potential for wildland fire on this site.				
8. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The proposed project would not violate any water quality standards. The project will comply				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 (SWPP) which addresses both construction and operation activities.				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed project would not substantially deplete or interfere with groundwater supplies. The project will comply with all applicable Regional Water Quality Control Board standards.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed project will not substantially alter the existing drainage pattern of the area.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The proposed project will increase the amount of impervious surface area at the site. Proposed site improvements will be required to properly contain and discharge all storm waters per the requirements of the City of Antioch and the Contra Costa County Flood Control District.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The capacity of existing or planned stormwater drainage systems will not be exceeded. See 8a and 8d above.				
f) Otherwise substantially degrade water	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
quality?				
Discussion: See 8a, d, and e above.				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is not located in a 100-year flood hazard area.				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is not located within a 100-year flood hazard area.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is not located in an area that would be impacted by failure of a levee or dam.				
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There is no significant risk of a seiche, tsunami, or mudflow event at the project site.				
9. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not physically divide an established community.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site is designated Neighborhood / Community Commercial in the Antioch General Plan and has a Planned Development zoning designation. The Planned Development will be amended to allow the proposed development.				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There are no habitat conservation plans or natural community conservation plans within the vicinity of the site.				
10. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There are no known mineral resources located at the project site.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: See 10a above.				
11. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The project will not generate any noise in excess of state/local standards and as anticipated in the current General Plan analysis. The project will generate a temporary increase in noise due to construction activities however, due to this activity's temporary nature, it is not considered significant. The project is required to comply with the City's ordinance regarding construction activity noise.				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: There may be a temporary increase in vibration due to construction activities. However, due to this activity's temporary nature, it is not considered significant.				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Discussion: The project is not expected to substantially increase ambient noise levels in the project vicinity.				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: See 11a and 11b above.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed site is not located within an airport land use plan or within two miles of a public airport.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed site is not located within an airport land use plan or within two miles of a private airstrip.				
12. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will serve the existing population and will not induce population growth.				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project site does not currently contain housing.				
c) Displace substantial numbers of people, necessitating the construction of	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
replacement housing elsewhere?				
Discussion: See 12b, above.				
13. PUBLIC SERVICES				
a) 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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	X
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	X	X
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project may increase the demand for fire and police protection. However, it is anticipated that any increased demand would be considered less than significant.				
14. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not increase the use of park facilities.				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project does not include or require public recreation facilities.				
15. TRANSPORTATION/TRAFFIC -- Would the project:				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: The traffic study conducted for the project estimates the project will have several impacts on the street system which will require mitigation. The analysis found that the James Donlon Blvd./Ridgerock Rd./Lone Tree Way intersection will operate below acceptable thresholds during the near-term condition. The project is already participating in Lone Tree Assessment District 27 which will fund the necessary improvements to this intersection.				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>
Discussion: Several planned and programmed regional roadway and transit improvements are identified in Contra Costa Transportation Authority's "The 2000 Update: Contra Costa Countywide Comprehensive Transportation Plan". Many of these improvements are designed to accommodate future growth. The proposal would not restrict future transit improvements or exceed County standards.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not impact air traffic patterns.				
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
Discussion: A portion of the proposed project is located along a curve in Lone Tree Way. The project will be required to incorporate longer deceleration lanes and other design features to eliminate any potential site distance problems at driveways and intersections. Mitigation measures are discussed in detail in the attached Mitigation and Monitoring Program for In Shape Health Club and Shopping Center.				
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No.				
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The proposed project provides adequate parking.				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: Development of the proposed project would not affect alternative transportation programs. The project will be required to include bicycle racks. Bike lanes already exist in the project area.				
16. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No new facilities are required.				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: No new facilities are required.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: Adequate existing supplies available from water provider.				
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: There is adequate capacity to serve the project.				

Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project is served by a landfill with sufficient capacity to accommodate the project's solid waste disposal needs.				
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: All applicable requirements will be met.				
17. 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?	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>
Discussion: The project has the potential to impact burrowing owls which may occur on the site. This impact is reduced to less than significant with the mitigation incorporated in section 4a of this document.				
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not have cumulatively significant impacts.				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X
Discussion: The project will not have a substantial adverse effect on humans.				

MITIGATION MONITORING AND REPORTING PROGRAM

In-Shape Health Club and Shopping Center

City of Antioch

IMPACTS	MITIGATION MEASURE	RESPONSIBLE PARTY	TIMING	IMPLEMENTED DATE	IMPLEMENTED INITIALS
<p><u>Impact 4a:</u> Biological Resources</p>	<p><u>Mitigation 4-a.1:</u> During project construction, no activities, including grading or other construction work, shall proceed within 250 feet of breeding owls during the nesting season, defined as February 1 - August 31.</p>	<p>Project Proponent, to be verified by the Community Development Department.</p>	<p>As necessary</p>		
<p><u>Impact 4a:</u> Biological Resources</p>	<p><u>Mitigation 4-a.2:</u> During the non-nesting season (defined as September 1 - January 31) and prior to any construction on the site, the project sponsor shall complete a survey within the project's impact areas including areas on the East Bay Municipal Utility District easement which may experience disturbance during construction. If owls are found within the project area during the non-nesting season, a qualified</p>	<p>Project Proponent, to be verified by the Community Development Department.</p>	<p>Prior to issuance of grading permits</p>		

IMPACTS	MITIGATION MEASURE	RESPONSIBLE PARTY	TIMING	IMPLEMENTED DATE	IMPLEMENTED INITIALS
	<p>ornithologist, in consultation with regulatory agencies, could evict any owls within 250 feet of construction zones and other associated impact areas, to avoid mortality of any owls or destruction of occupied burrows. If breeding owls are found on the site during the nesting season (February 1 – August 31), no activity within 250 feet shall be allowed until an ornithologist has determined all young have fledged. Any eviction activities shall be dependent on a signed Mitigation Agreement (MA) between the project sponsor and CDFG. If owls are known to have nested or been resident on the project site within three years prior to site alteration, the project sponsor shall comply with the off-site habitat compensation measures described in Mitigation 4-A.3, below.</p>				
<p>Impact 4a: Biological Resources</p>	<p>Mitigation 4-a.3: If occupied burrows are present at the project site the project applicant shall compensate for the loss of suitable burrowing owl nesting and foraging habitat present on the project site. CDFG</p>	<p>Project Proponent, to be verified by the Community Development Department</p>	<p>Prior to issuance of grading permits</p>		

IMPACTS	MITIGATION MEASURE	RESPONSIBLE PARTY	TIMING	IMPLEMENTED DATE	IMPLEMENTED INITIALS
	<p>recommends that 6.5 acres of mitigation be required for a pair or single owl. To implement this mitigation measure, CDFG recommends that the City of Antioch require the applicant to establish a conservation easement or purchase credits at an approved mitigation bank for the loss of burrowing owl habitat.</p> <p>Prior to the issuance of a grading permit for the project, the applicant shall post a performance bond with the City guarantying that they will either establish a conservation easement for burrowing owls on a suitable parcel (approved by CDFG) or purchase the required amount of credits (one credit equals one acre) at the Haera Wildlife Conservation Bank in eastern Alameda County (just south of I-580), which is certified as a mitigation bank by CDFG.</p>				
<p>Impact <u>4b</u>: Biological Resources</p>	<p>See Mitigation 4-a.1 through 4-a.3.</p>				

IMPACTS	MITIGATION MEASURE	RESPONSIBLE PARTY	TIMING	IMPLEMENTED	
				DATE	INITIALS
Impact <u>4d:</u> Biological Resources	See Mitigation 4-a.1 through 4-a.3.				
Impact <u>14a:</u> Transportation/ Traffic	<u>Mitigation 14a.1:</u> As a condition of project approval, the developer will be required to construct a longer southbound left turn lane from Lone Tree Way into the project entrance to provide better deceleration and storage.	Project Proponent, to be verified by the Community Development Department	At time of project approval		
Impact <u>14a:</u> Transportation/ Traffic	<u>Mitigation 14a.3:</u> As a condition of project approval, the developer will be required to construct a right turn deceleration lane into the project's main signalized entrance on Lone Tree Way.	Project Proponent, to be verified by the Community Development Department	At time of project approval		
Impact <u>14a:</u> Transportation/ Traffic	<u>Mitigation 14a.4:</u> As a condition of project approval, the developer will be required to locate the southernmost driveway on Lone Tree Way, which is located on a curve, in such a way as to provide adequate sight distance. The developer will also be required to construct a deceleration lane for this driveway.	Project Proponent, to be verified by the Community Development Department	At time of project approval		
Impact <u>14a:</u>	<u>Mitigation 14a.5:</u> As a condition of	Project Proponent,	At time of		

IMPACTS	MITIGATION MEASURE	RESPONSIBLE PARTY	TIMING	IMPLEMENTED DATE	INITIALS
Transportation/ Traffic	project approval, the developer will be required to construct a bus turnout on Lone Tree Way near the south property boundary to allow buses to safely pull in and out of traffic.	to be verified by the Community Development Department	project approval		

Traffic Impact Study – Draft Report

LONE TREE SHOPPING CENTER ANTIOCH, CA

March 16, 2004

Prepared for:

In-Shape Health Clubs, Inc.

Prepared by:

Kimley-Horn and Associates, Inc.



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INTRODUCTION

Kimley-Horn and Associates, Inc. was retained by In-Shape Health Clubs, Inc. to prepare a traffic study for the proposed Lone Tree Shopping Center in Antioch, CA. The Lone Tree Shopping Center site is proposed to be located adjacent to Lone Tree Way between the intersections of James Donlon Boulevard/Bluerock Road and Dallas Ranch Road/Eagleridge Drive.

This traffic study was prepared based on discussions with, and criteria set forth by, the City of Antioch and Contra Costa Transportation Authority (CCTA). The purpose of this study is to address the traffic and transportation effects of the proposed development in order to assist the project sponsor and the City in project planning and determining conditions of approval for the project.

Study Methodology

Planning Conditions

For intersections in Antioch, projections of future traffic volumes referenced in this analysis are those prepared by RBF Consulting as contained in the Bluerock Business Center Draft EIR July 2003, adjusted by Kimley-Horn where appropriate.

Development Conditions

The Lone Tree Shopping Center traffic study was based on the following development conditions:

- Existing conditions – Based on current traffic counts, existing roadway geometry, and existing development conditions.
- Near-term total traffic conditions – Based on existing traffic volumes, traffic added by other approved near-term developments, and traffic generated by the proposed Lone Tree Shopping Center. Includes roadway improvements anticipated to be completed before or at the same time as the Lone Tree Shopping Center.
- Cumulative long-term conditions without the project – Based on 2020 traffic forecast data without the Lone Tree Shopping Center. Includes roadway improvements anticipated to be completed by the year 2020.
- Cumulative long-term conditions plus the project – Based on 2020 traffic forecast data with the Lone Tree Shopping Center. Includes roadway improvements anticipated to be completed by the year 2020.

Operating Conditions and Criteria

The Antioch General Plan adopted November 2003 states that where feasible, signalized intersections along design arterial roadways, including routes of regional significance, should provide better service than the minimum standards set forth in Measure C and the Growth Management Element. Thus, where feasible, the City will strive to maintain a “High D” level of service ($v/c = 0.85-0.89$) within regional commercial areas and at intersections within 1,000 feet of a freeway interchange.

In addition, Contra Costa Transportation Authority (CCTA) classifies several streets including Lone Tree Way, Deer Valley Road, and James Donlon Boulevard as routes of regional significance. As such, intersections along the routes require analysis utilizing Growth Management Program procedures outlined in CCTA Technical Procedures, September 17, 1997. The CCTA Technical Procedures require the use of CCTALOS software to determine intersection operation levels based on the Intersection Capacity Utilization (ICU) methodology. The methodology describes the operation of an intersection in terms of Level of Service (LOS) based on corresponding volume to capacity v/c ratio. Levels of service are represented by a letter scale from LOS A to LOS F, with LOS A representing the best performance and LOS F representing the poorest performance under significantly congested conditions. Unlike the City’s objective to “strive” for a “High D” where feasible, CCTA set maximum levels of congestion for routes of regional significance such as intersections along Lone Tree Way. According to the CCTA requirements, LOS E (i.e. v/c up to 1.00) is an acceptable level of traffic operation at intersections on the routes of regional significance.

Unsignalized intersections are not specifically covered in the General Plan or CCTA requirements; however, in harmony with the intent of the General Plan, this report considered a “High D” level of service (LOS) to be an acceptable level of operation at unsignalized intersections. Unsignalized intersections were evaluated using Highway Capacity Manual methodology which bases LOS on average delay per vehicle.

Based on Antioch and CCTA requirements, traffic analysis to determine level of service was completed using CCTALOS software at signalized intersections and Highway Capacity Software (HCS) at unsignalized intersections. Vehicle queuing at signalized intersections was determined using Synchro software. HCS and Synchro software platforms are based on the methodology of the *Highway Capacity Manual*. CCTALOS software is based on the Intersection Capacity Utilization (ICU) methodology.

Table 1 relates the operational characteristics associated with each level of service category for both signalized and unsignalized intersections.



Table 1 – Intersection Level of Service Definitions

Level of Service	Description	Signalized (Intersection volume to capacity ratio v/c)	Unsignalized (Avg. control delay per vehicle sec/veh.)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream	≤ 0.6	≤ 10
B	Stable traffic. Traffic flows smoothly with few delays.	0.61 – 0.70	> 10 – 15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	0.71 – 0.80	> 15 – 25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	0.81 – 0.90	> 25 – 35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	0.91 – 1.00	> 35 – 50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	> 1.00	> 50

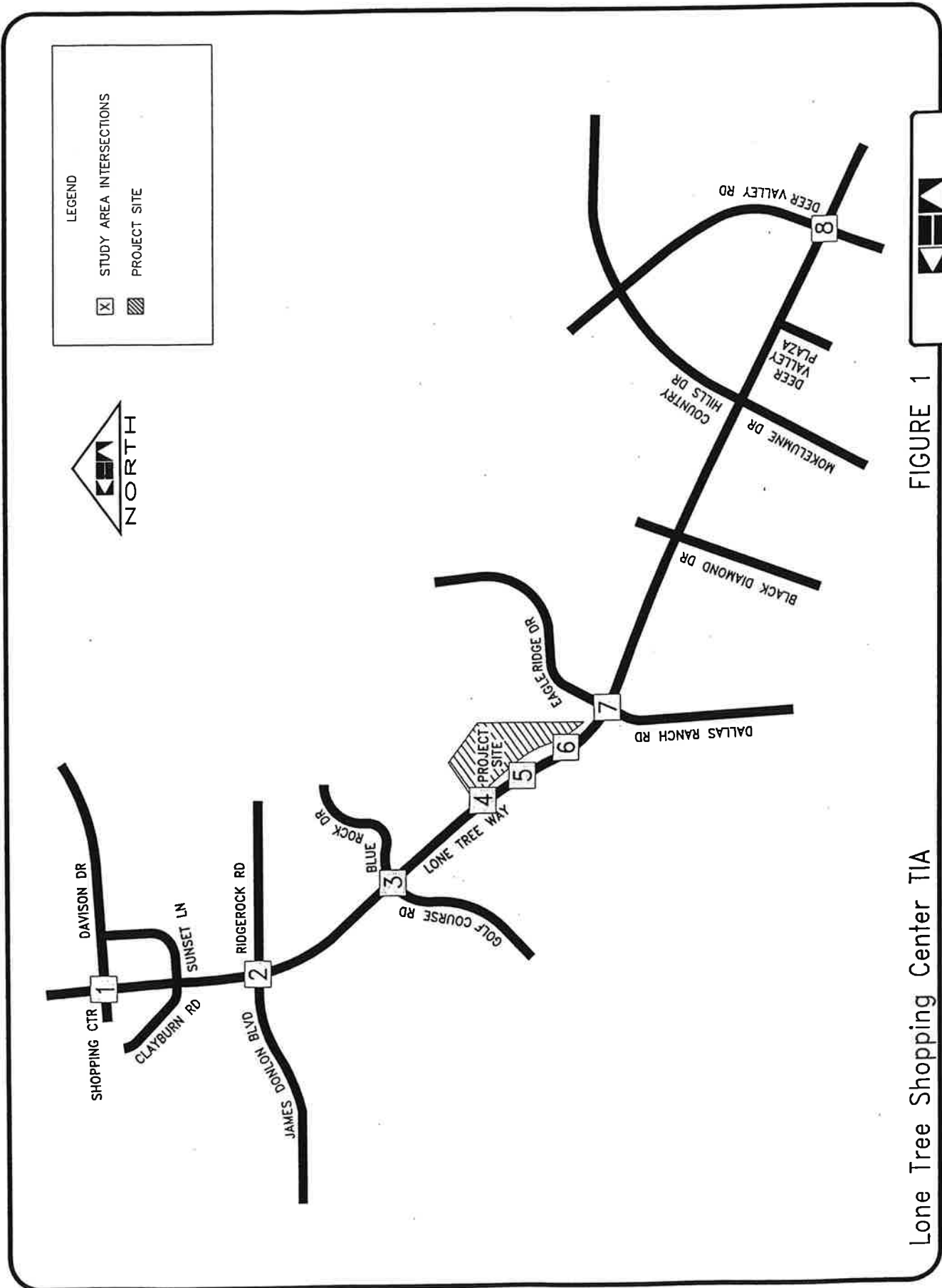
Sources: Contra Costa Transportation Authority Technical Procedures 1997 and Transportation Research Board, *Highway Capacity Manual 2000*, National Research Council, 2000.

Land Use, Site, and Study Area Boundaries

The Lone Tree Shopping Center is proposed to be located on approximately 18 acres on the east side of Lone Tree Way between the intersections of James Donlon Boulevard/Bluerock Road and Dallas Ranch Road/Eagleridge Drive. **Figure 1** illustrates the project location with respect to nearby streets in the City of Antioch.

Existing and Proposed Site Uses

The Lone Tree Shopping Center parcel is generally level, similar to the surrounding terrain. The site is currently vacant with existing residential near the rear property line of the parcel. **Figure 2** shows the proposed layout of the shopping center. Immediately north of the project is Parcel D of the proposed Bluerock Business Center.



LEGEND

- X STUDY AREA INTERSECTIONS
- ▨ PROJECT SITE



Kimley-Horn and Associates, Inc.

FIGURE 1

Lone Tree Shopping Center TIA
PROJECT LOCATION + STUDY INTERSECTIONS

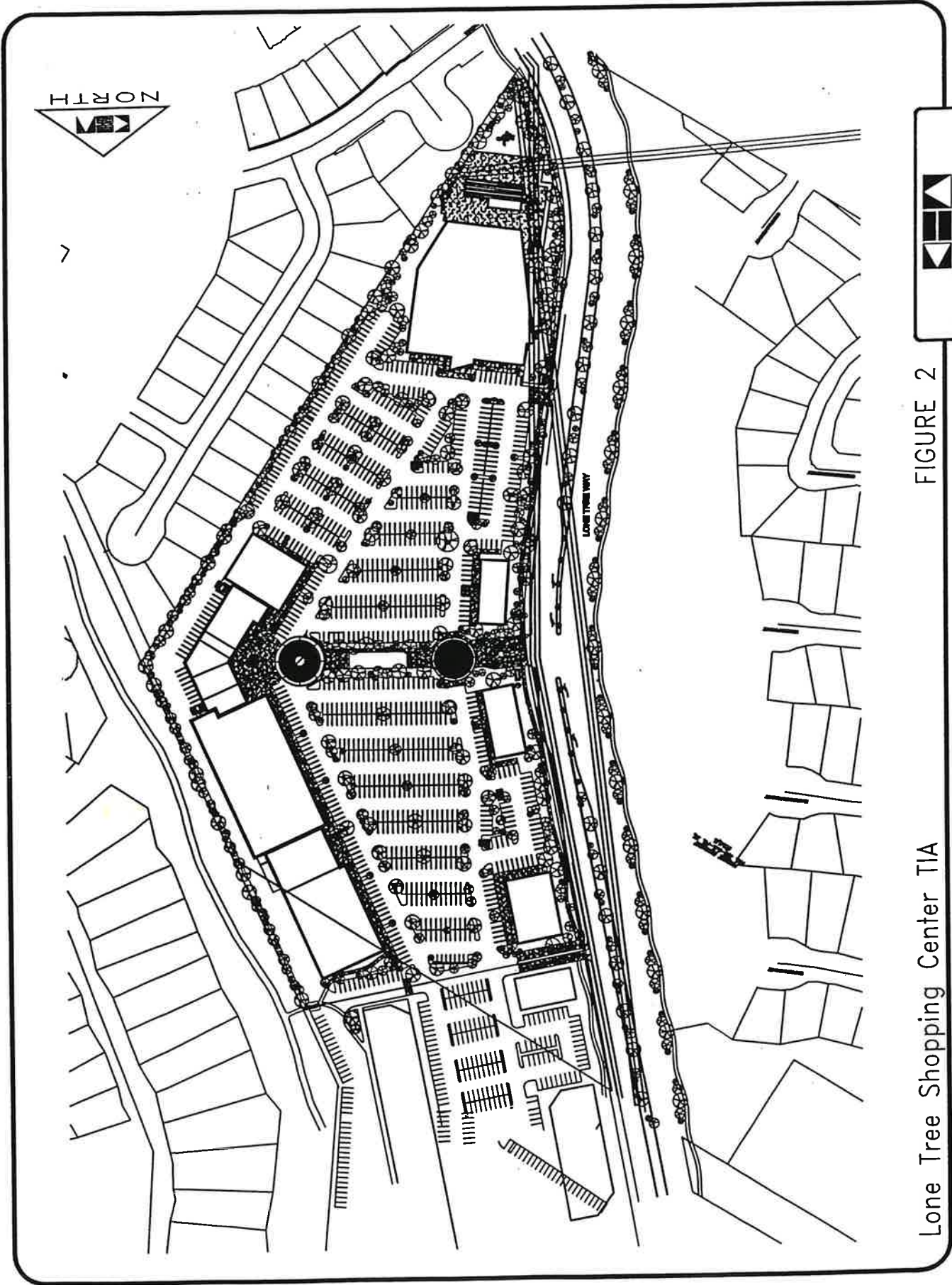


FIGURE 2

Lone Tree Shopping Center TIA
PROPOSED PROJECT SITE PLAN

The site plan for the Lone Tree Shopping Center as shown in **Figure 2** consists of a 60,000 square foot health club, approximately 101,000 square feet of retail shopping center uses, two restaurants totaling 14,000 square feet, and a 10,000 square foot medical/dental office. Total floor area is approximately 185,000 square feet with the retail spaces located near the back of the site and the health club, restaurants, and medical/dental office all located at the front of the site adjacent to Lone Tree Way.

The shipping/receiving areas for the retail spaces are located at the rear of the buildings.

Parking spaces are located in the center and front of the parcel and include approximately 961 stalls, for a ratio of 5.2 stalls per 1,000 square feet of building area.

Existing and Proposed Uses in Vicinity of Site

Much of the land area surrounding the project site is currently vacant. However, when developed, it will contain a mixture of commercial, retail, office and residential uses as identified in the Bluerock Business Center Draft EIR. According to the DEIR, the Bluerock project will be constructed in 5 main phases and is expected to be completed in approximately 8 years from start of construction.

Site Access

Access to the Lone Tree Shopping Center is proposed from three driveways as shown in **Figure 2**. The main driveway will be located on Lone Tree Way approximately 1210 feet north of the Dallas Ranch Road/Eagle Ridge Drive intersection. A traffic signal is already at the location of the proposed main driveway and will permit full access to and from the site. A second driveway is planned for Lone Tree Way approximately 460 feet south of the main access and a third driveway is planned for approximately 550 feet north of the main driveway. The second and third driveways will operate as right in/out only. Furthermore, the northern-most driveway will share a common access with Parcel D of the Bluerock Business Center.

According to the site plan it is proposed that the south project access have a 150 foot deceleration lane and a 120 foot acceleration lane at the driveway. The north project access is also proposed to have a 150 foot deceleration lane. No deceleration or acceleration lanes are shown on the site plan for the main project access but a bus bay is included near the main access.

Intersections Included in Analysis

The proposed project will generate new vehicular trips that will increase traffic volumes on the nearby street network. To assess changes in traffic conditions associated with the project, the following intersections, illustrated in **Figure 1**, were selected by the City of Antioch for evaluation in this traffic study:

Lone Tree Way at:

1. Davidson Drive
2. James Donlon Boulevard/Ridgerock Road
3. Golf Course Road/Bluerock Drive
4. North Project Driveway
5. Main Project Driveway
6. South Project Driveway
7. Dallas Ranch Road/Eagleridge Drive
8. Deer Valley Road

EXISTING CONDITIONS

Existing Roadway Network

Below is a description of the principal roadways included in this study.

Lone Tree Way

Lone Tree Way is an arterial roadway that joins Antioch with the City of Brentwood. Through the project study area, Lone Tree Way is a four-lane divided roadway with a landscaped median, left turn bays, wide shoulders, and restricted parking. Shoulders are designated as Class II bike lanes. In the future, the road will be widened throughout the study area to three through lanes in each direction. The speed limit on Lone Tree Way is posted at 45 mph in the study area.

Davidson Drive

Davidson Drive is a four-lane roadway with raised landscaped median, left turn bays, and Class II bike lanes on the shoulders. The speed limit on Davidson Drive is posted at 35 mph in the study area.

James Donlon Boulevard

James Donlon Boulevard is a four-lane arterial with raised landscaped median and left turn bays. Class II bike lanes are striped on the shoulder. The speed limit on James Donlon Boulevard is posted at 35 mph in the study area.

Ridgerock Road

Ridgerock Road is a two-lane collector with a section of raised landscaped median near Lone Tree Way. Class II bike lanes are striped on the shoulder. The speed limit on Ridgerock Road is posted at 25 mph in the study area.

Bluerock Drive

Bluerock is a two-lane collector with a section of raised landscaped median near Lone Tree Way. Class II bike lanes are striped on the shoulder at the intersection with Lone Tree Way. The speed limit on Bluerock Drive is posted at 25 mph in the study area.

Golf Course Road

Golf Course Road is a two-lane collector with a section of raised landscaped median near Lone Tree Way. Class II bike lanes are striped on the shoulder at the intersection with Lone Tree Way. The speed limit on Golf Course Road is posted at 35 mph in the study area.

Dallas Ranch Road

Dallas Ranch Road is a four-lane roadway with landscaped median, left turn bays, and Class II bike lanes on the shoulders. The speed limit on Dallas Ranch Road is posted at 25 mph in the study area.

Eagleridge Drive

Eagleridge Drive is a four-lane roadway with landscaped median, left turn bays, and Class II bike lanes on the shoulders. The speed limit on Eagleridge Drive is posted at 25 mph in the study area.

Deer Valley Road

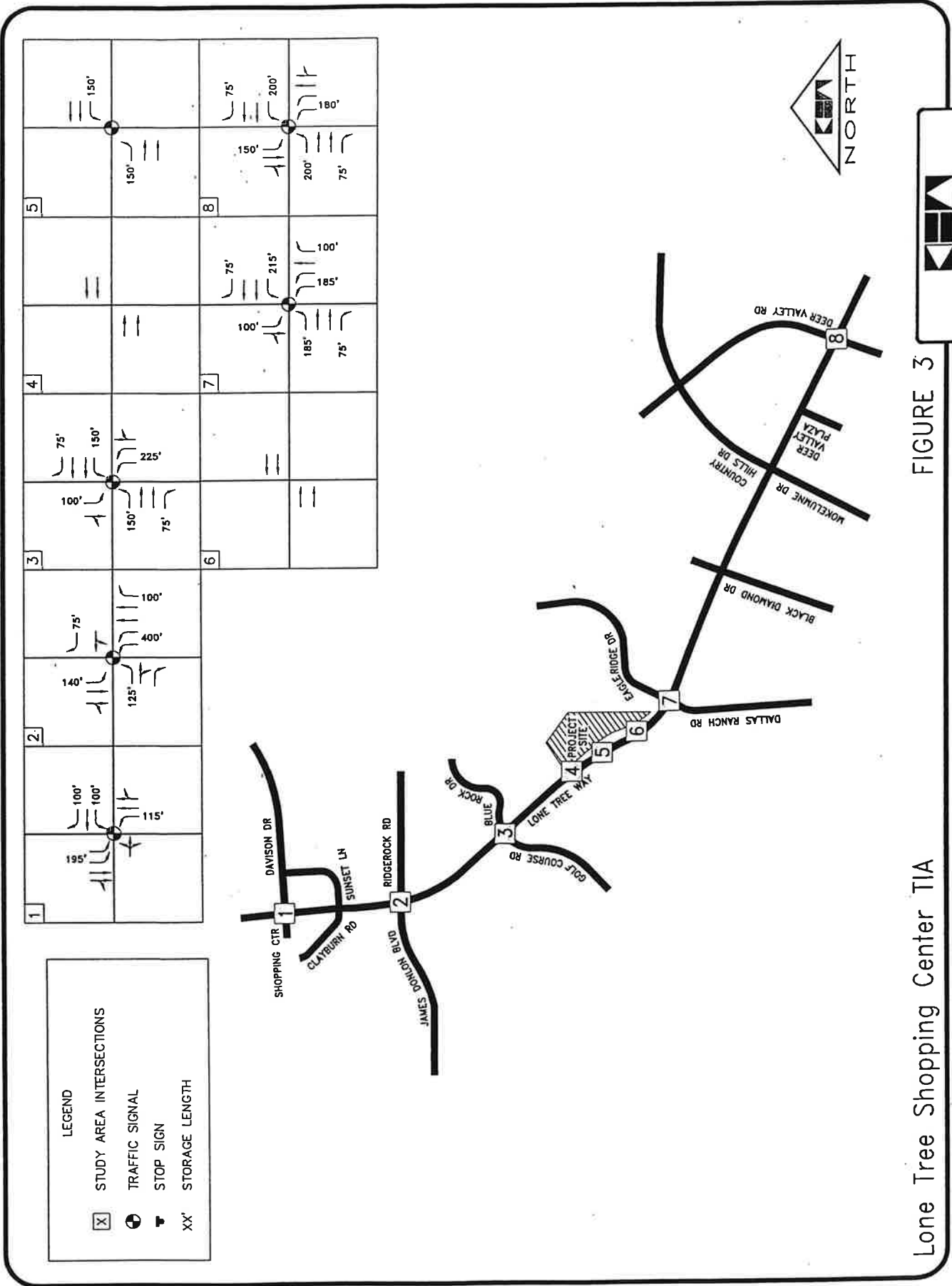
Deer Valley Road is a four-lane divided roadway with a landscaped median, left turn bays, wide shoulders, and restricted parking. Shoulders are designated as Class II bike lanes. The speed limit on Deer Valley Road is posted at 45 mph in the study area.

Existing Lane Configurations and Traffic Control

Existing intersection lane configurations and traffic controls are illustrated in **Figure 3**. Traffic signals in the study area are located at all study intersections with the exception of the Lone Tree Way intersections at the north and south project driveways which will operate as right in/out only. These two study locations will function as stop-controlled intersections for the project driveway approaches.

Existing Traffic Turning Movement Volumes

Weekday intersection turning movement volumes were collected at project study area intersections in January 2004 and are shown in **Figure 4**. Volumes were collected during the AM and PM peak periods of the day. Traffic volume data sheets are available in the **Appendix**.



LEGEND

[X]	STUDY AREA INTERSECTIONS
⊕	TRAFFIC SIGNAL
▼	STOP SIGN
XX'	STORAGE LENGTH

1	2	3	4	5
6	7	8		

Lone Tree Shopping Center TIA
 EXISTING LANE GEOMETRY AND TRAFFIC CONTROL

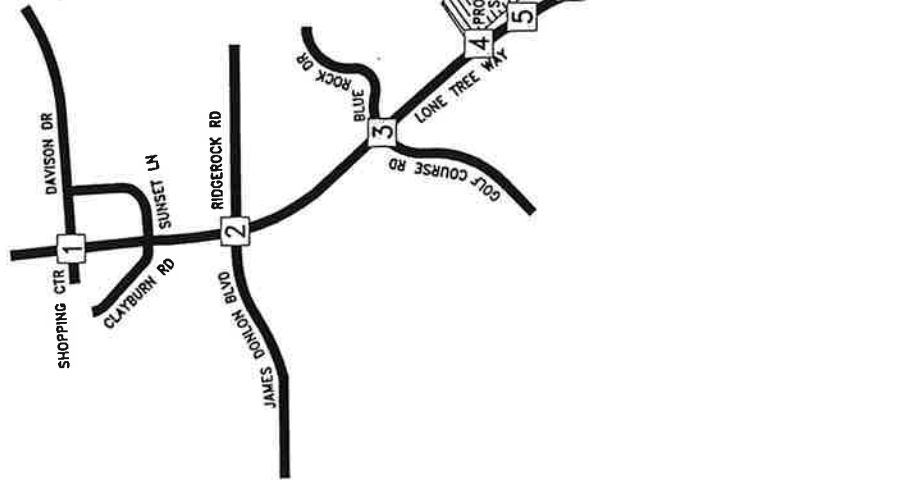
FIGURE 3

Kimley-Horn and Associates, Inc.

LEGEND

STUDY AREA INTERSECTIONS
 XX (YY) AM (PM) TRAFFIC VOLUMES

1	228 (309) 653 (869) 31 (39)	253 (174) 43 (70) 176 (150)	39 (71) 630 (955) 205 (181)	78 (51) 102 (66) 3 (8)	18 (15) 66 (30) 24 (5)	9 (11) 1524 (864) 31 (35)	0 (0)	0 (0) 1564 (1010)	5 0 (0) 891 (1612)	1564 (1010) 0 (20)
2	35 (76) 12 (100) 29 (79)	66 (147) 983 (698) 32 (85)	160 (244) 32 (175) 506 (1314)	10 (12) 988 (714) 1006 (576)	15 (24) 870 (1547) 169 (404)	23 (43) 124 (23) 469 (269)	0 (0)	891 (1612)	0 (0) 891 (1612)	1564 (1010)
3	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)
4	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)
5	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)
6	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)
7	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)
8	31 (39)	32 (85)	506 (1314)	1006 (576)	169 (404)	469 (269)	0 (0)	891 (1612)	0 (0)	1564 (1010)



Kimley-Horn and Associates, Inc.

FIGURE 4

Lone Tree Shopping Center TIA
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES

B38

Existing Pedestrian and Bicycle Facilities

Sidewalks are present at all study intersections but are not continuous for the entire length of Lone Tree Way. In undeveloped areas of Lone Tree Way there are no sidewalks. As individual parcels are developed such as the Lone Tree Shopping Center, sidewalks will be added. Class II bike lanes are present on all streets in the study area.

Existing Transit Service

Tri-Delta Transit provides bus service in Antioch. Route 380 and route 392, which use Lone Tree Way, pass directly adjacent to the project site and provide convenient connections to many locations in the city and connections to other local and regional transit routes. Route 388 which passes through the intersection of Lone Tree Way and Golf Course Drive is also within ¼ mile walking distance to the project site. Transit serving the site operates on a frequency of 30 minutes in the weekday and 60 minutes on the weekend.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

Project Trip Generation

AM, PM and daily vehicular trips for the proposed Lone Tree Shopping Center were developed based on trip generation rates contained the Institute of Transportation Engineer's publication *Trip Generation, 7th Edition*. This manual is a standard reference used by jurisdictions throughout the country and is based on actual trip generation studies at numerous locations in areas of various populations.

The trip generation rates for the health club, retail stores, restaurants and dental offices were all based on square feet of gross floor area as the independent variable.

Although the Lone Tree Shopping Center is expected to create a specific number of vehicle trips, many of the trips will already be on the road and will likely stop as they pass by the site. Thus, a portion of the retail and restaurant trips will be attracted from Lone Tree Way as they pass from their origin to their ultimate destination. These will not be new vehicle trips but are considered to be pass-by trips.

A pass-by reduction was applied to the project trip generation to determine the net new trips expected to be produced by the Lone Tree Shopping Center parcel. Pass-by factors were derived from the Institute of Transportation Engineers *Trip Generation Handbook, March 2001*.

Table 2 summarizes the results of the trip generation analysis and the pass-by reduction for the site.

Table 2 – Site Trip Generation

LAND USE	Trips						
	Daily*	AM Peak Hour*			PM Peak Hour		
	Total	Entering	Exiting	Total	Entering	Exiting	Total
Fitness Club (60,000 sq. ft.)	1976	31	42	73	124	119	243
Shopping Center (101,000 sq. ft.)	4,337	63	41	104	182	197	379
Medical/Dental Office (10,000 sq. ft.)	361	20	5	25	10	27	37
High Turnover Restaurants (14,000 sq. ft.)	1780	84	77	161	93	60	153
Subtotal	8,454	198	165	363	409	403	812
Shopping Center Pass-by Reduction	N/A	N/A	N/A	N/A	62	67	129
High Turnover Restaurant Pass-by Reduction	N/A	N/A	N/A	N/A	40	26	66
Net New Vehicle Trips	8,454	198	165	363	307	310	617

* Note: Daily and AM pass-by reduction factors were not available from the current Trip Generation Handbook; however, daily and AM trips for the site are expected to be lower than shown in the table due to a pass-by reduction.

As seen in Table 2 the Lone Tree Shopping Center is expected to generate 363 new trips in the AM and 617 new trips in the PM peak hour.

Project Trip Distribution and Assignment

Because of the nature of the development, most customers to the Lone Tree Shopping Center are expected to travel from nearby locations in Antioch, with few trips originating in Pittsburg, Brentwood, and Oakley.

A project distribution was developed based on distributions prepared in previous traffic reports, existing traffic count information, and the general orientation of population sources to the site. **Figure 5** shows the traffic distribution assumed in this traffic report.

Based on the assumed trip distribution, new vehicle trips generated by the Lone Tree Shopping Center traffic were assigned to the street network as shown in **Figure 6**. **Figure 7** shows the pass-by trips expected at the project driveways.

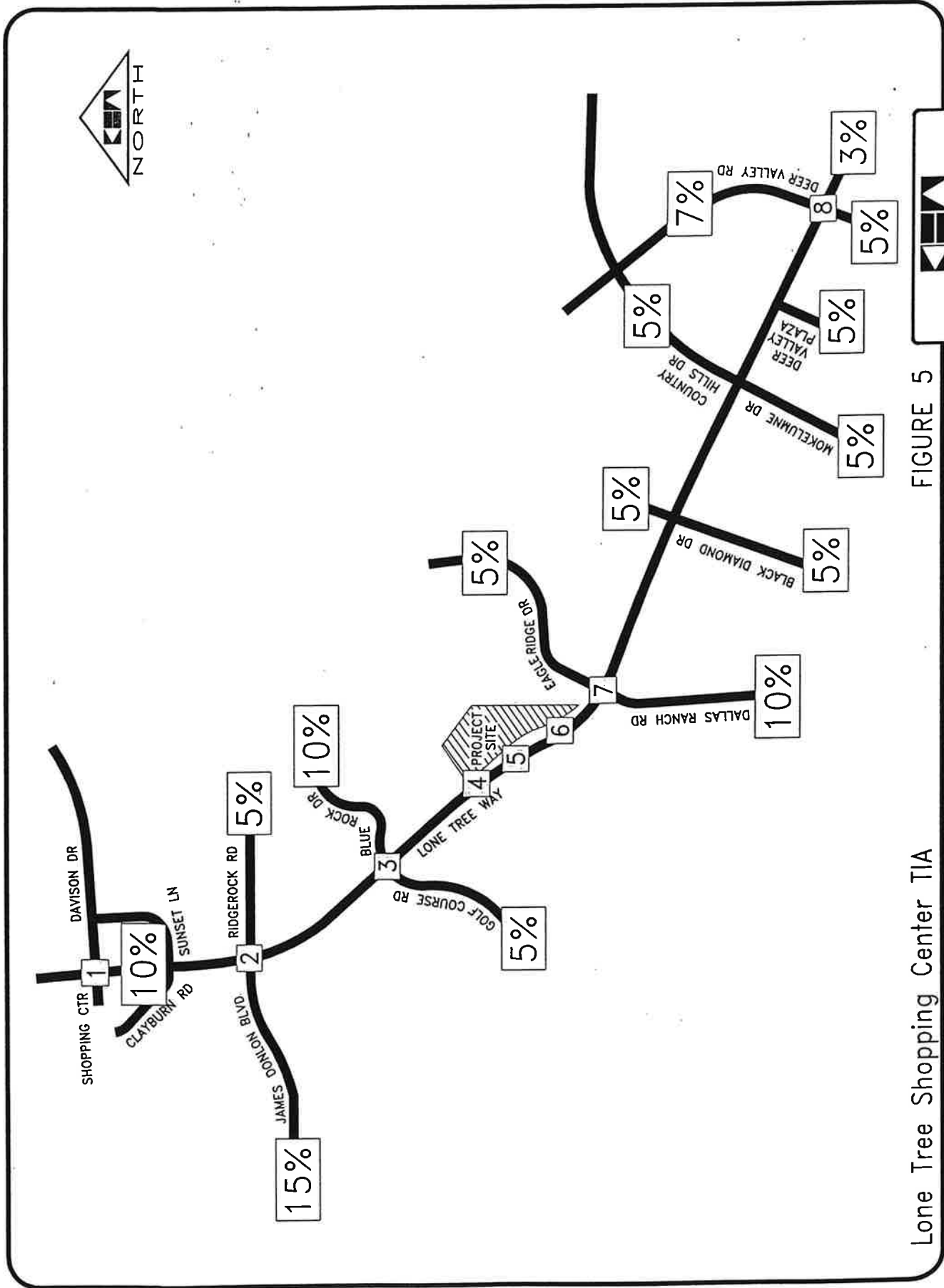
NEAR-TERM CONDITIONS

Near-Term Lane Configurations and Traffic Control

Shortly before the start of this traffic study, the City of Antioch implemented traffic signal coordination improvements along Lone Tree Way and added a second northbound left turn lane at the intersection of Lone Tree Way/James Donlon Boulevard/Ridgerock Road. Aside from the recent improvements, no further roadway or intersection changes are assumed in the near term except at the project driveways. According to the site plan it is proposed that the south project access have a 150 foot deceleration/right turn lane and a 120 foot acceleration lane. The north project access is also proposed to have a 150 foot deceleration/right turn lane. **Figure 8** illustrates the roadway geometry and traffic control assumed to be in place at the time the Lone Tree Way Shopping Center is completed.

Nearby Near-Term Development Projects

The Bluerock Business Center adjacent to the Lone Tree Shopping Center is in various stages of planning and development. Some portions of the Bluerock project will ultimately be developed before or roughly the same time as the shopping center. These portions represent projects that need to be considered in the near-term analysis of this traffic study.



Kimley-Horn and Associates, Inc.

FIGURE 5

Lone Tree Shopping Center TIA
PROJECT TRIP DISTRIBUTION

LEGEND

☒ STUDY AREA INTERSECTIONS

XX (YY) AM (PM) TRAFFIC VOLUMES

1	0 (0) 18 (31) 0 (0)	10 (15) 8 (15) 18 (31) 25 (47)	3	17 (31) 51 (93) 8 (16)	4	2 (12) 11 (6) 53 (116)	5	91 (221) 53 (116)	81 (151) 19 (-2)
	0 (0) 0 (0)	20 (31) 30 (46)	60 (92)	10 (15) 89 (184)	89 (184)		89 (184) 0 (-46)		
			19 (54)	17 (68) 81 (151)	10 (15) 80 (121)		14 (22)	6 (9)	
			91 (221)		8 (16) 65 (37) 17 (9)		12 (6) 5 (25) 8 (14)	10 (15)	

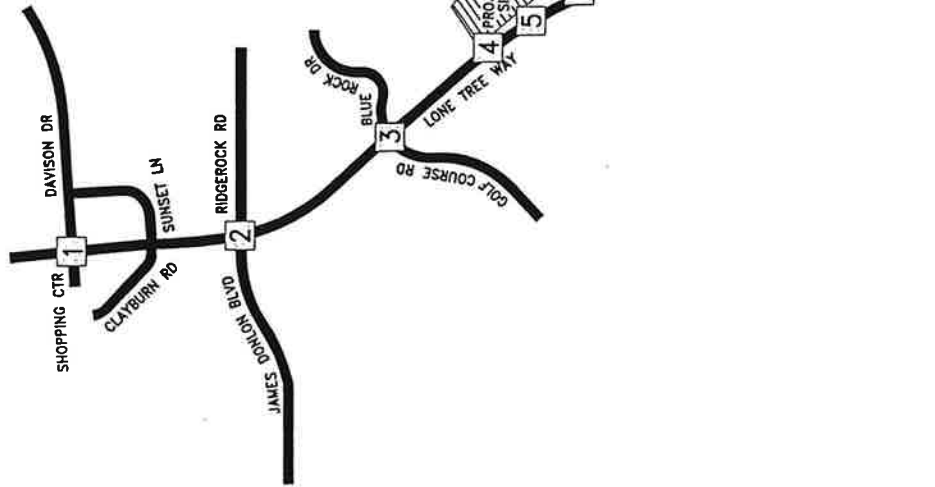


FIGURE 6

Lone Tree Shopping Center TIA

PROJECT GENERATED TRAFFIC VOLUMES



Kimley-Horn and Associates, Inc.

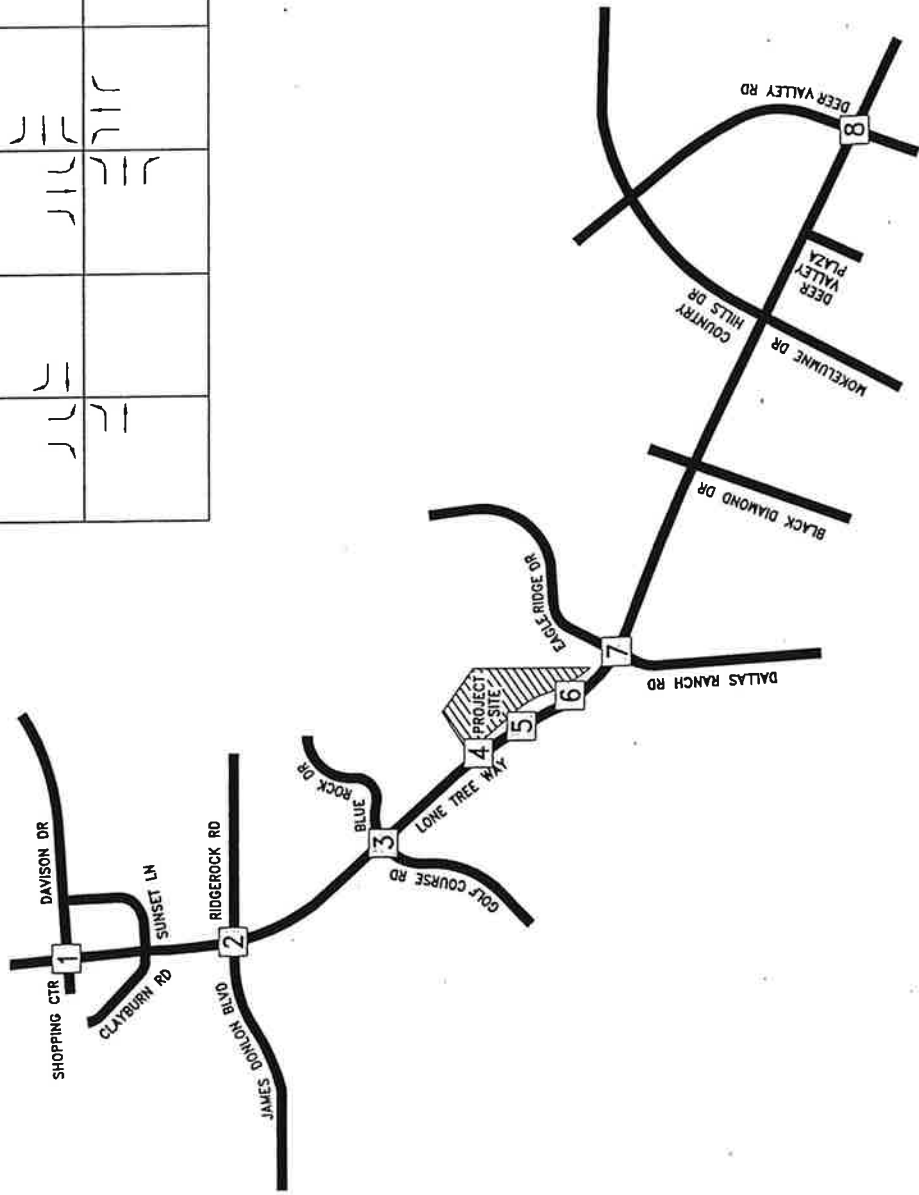
243

LEGEND

[X] STUDY AREA INTERSECTIONS

XX (YY) AM (PM) TRAFFIC VOLUMES

1	2	3	4	5
[X]	[X]	[X]	[X]	[X]
			0 (51) 0 (42)	0 (56) 0 (-56)
[X]	[X]	[X]	0 (46) 0 (-46)	[X]
6	7	8		
[X]	[X]	[X]	[X]	[X]
[X]	[X]	[X]	[X]	[X]



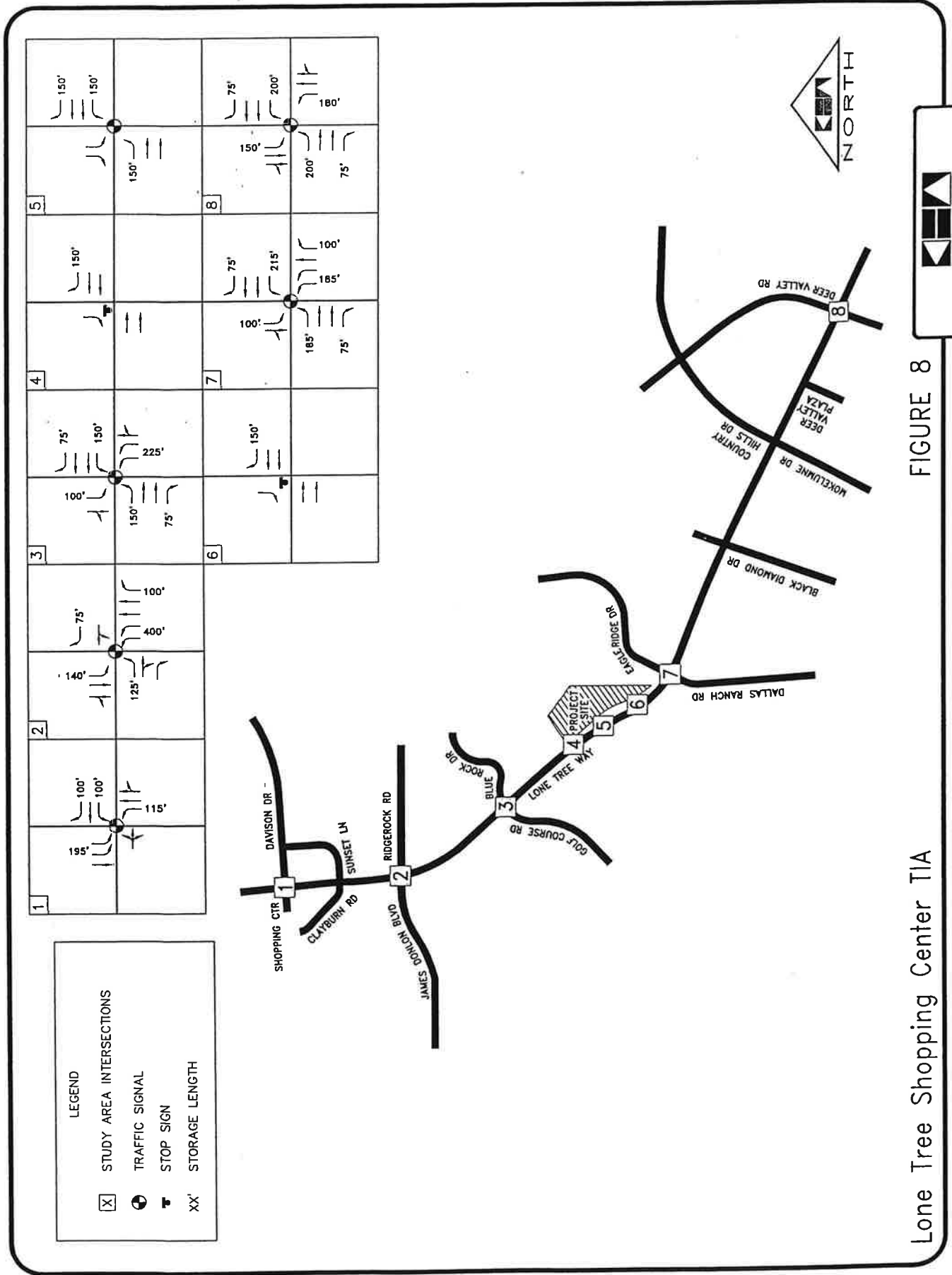
Lone Tree Shopping Center TIA

PROJECT PASS-BY TRAFFIC VOLUMES

FIGURE 7



Kimley-Horn and Associates, Inc.



Kimley-Horn and Associates, Inc.

FIGURE 8

Lone Tree Shopping Center TIA

NEAR-TERM LANE GEOMETRY AND TRAFFIC CONTROL

Near-term projects identified by the City of Antioch and Kimley-Horn, and through review of traffic studies prepared by others, include the following:

1. Bluerock Business Center - Parcel A Up to 240 multi-family dwelling units located near the northwest quadrant of the Lone Tree Way/Golf Course Road/Bluerock Drive intersection. Assumed to be fully completed at the time of the Lone Tree Shopping Center.
2. Bluerock Business Center – Parcel B/D Office building A of approximately 30,000 square feet to be located on either Parcel B or D per the DEIR. For purposes of the Lone Tree Way Shopping Center traffic study the building was assumed to be located on Parcel D near the southeast quadrant of the Lone Tree Way/Golf Course Road/Bluerock Drive intersection. Assumed to be completed at the time of the Lone Tree Shopping Center.
3. Bluerock Business Center – Parcel C Commercial/retail development located near the southwest quadrant of the Lone Tree Way/Golf Course Road//Bluerock Drive intersection. Includes a gas station, 9,000 square feet of specialty retail, and 6,000 square feet of restaurant uses.

Figure 9 shows the approximate location of the nearby near-term development projects.

Nearby Near-Term Project Vehicle Trips

An estimate of trips generated by the nearby projects expected to be completed before or at the same time as the Lone Tree Shopping Center was obtained from information provided by the City of Antioch and the Bluerock Business Center Draft EIR. To the extent data was available, traffic volumes for these projects were used directly from the published traffic information. For Parcel C no report was readily available; therefore, Kimley-Horn estimated trip generation and assigned Parcel C trips to project intersections based on the distribution contained in the Bluerock Business Center study. **Figure 10** summarizes the vehicle trips associated with the nearby, near-term development projects. Selected traffic data related to these projects is contained in the **Appendix**.

Existing Plus Nearby Near-Term Developments Plus Lone Tree Shopping Center Project

Existing traffic volumes and vehicle trips from nearby, near-term projects were combined with trips expected to be generated by the Lone Tree Shopping Center. **Figure 11** illustrates total near-term turning movement volumes at the study intersections.

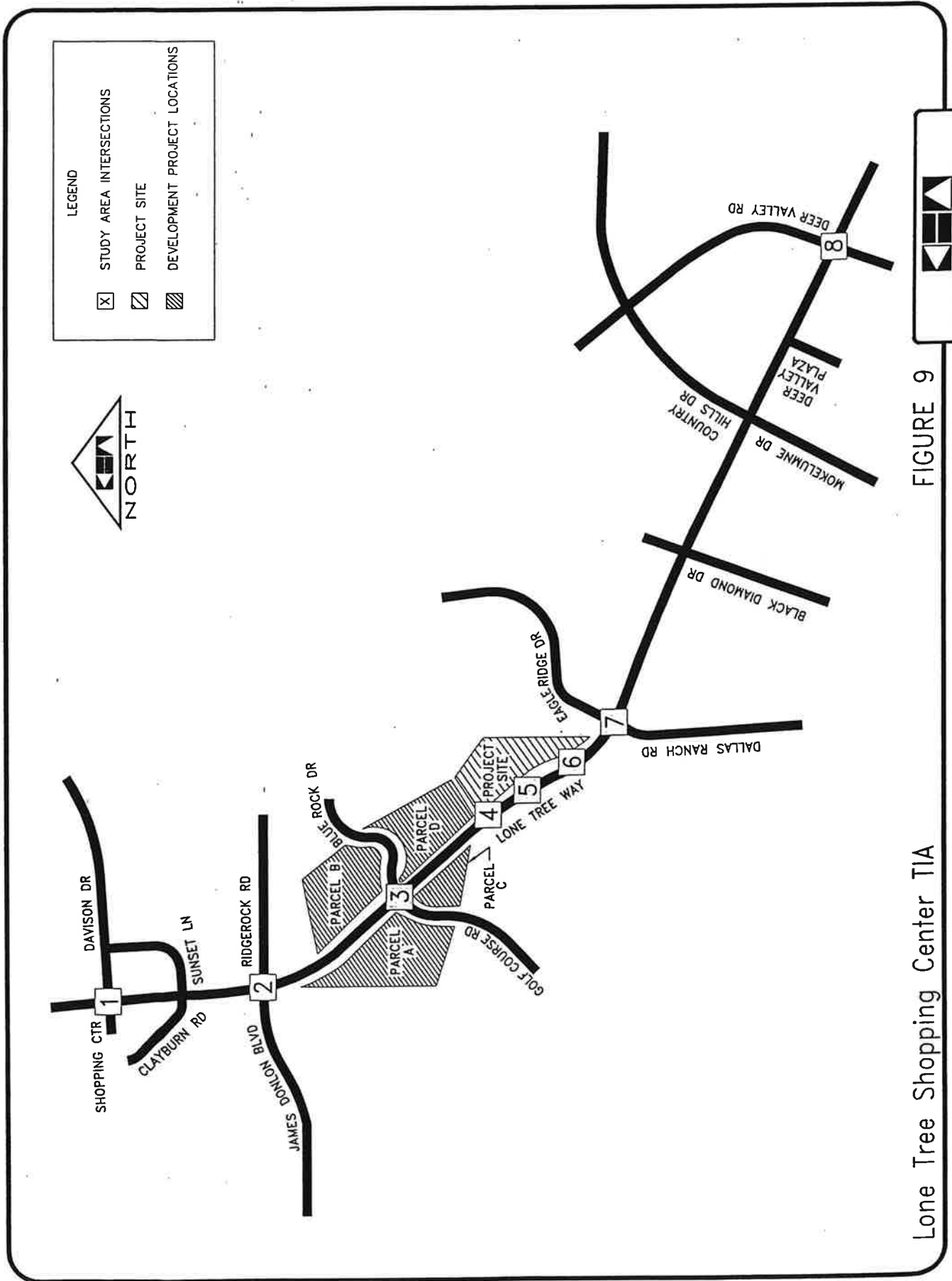


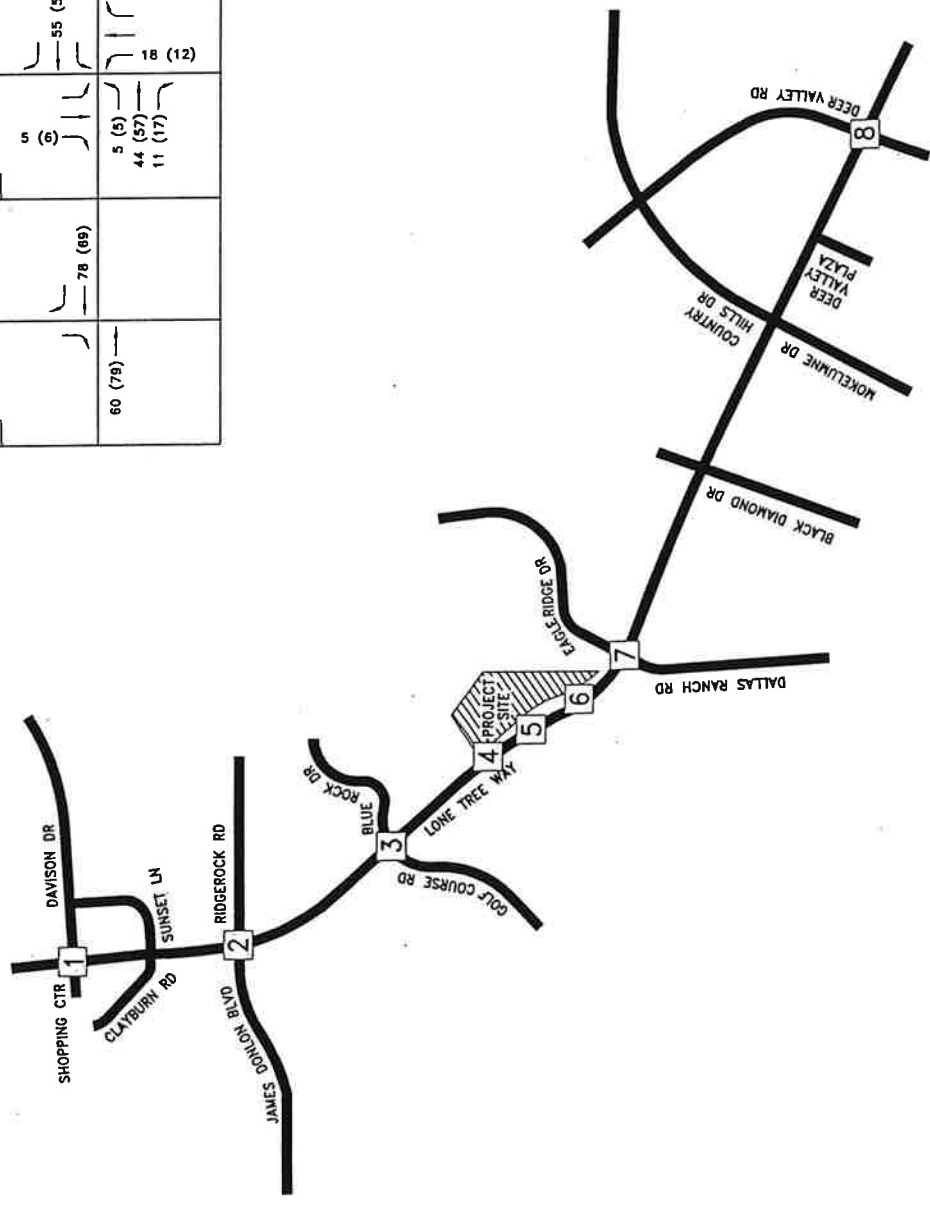
FIGURE 9

Lone Tree Shopping Center TIA

NEARBY NEAR-TERM DEVELOPMENT PROJECT LOCATIONS

LEGEND
 [X] STUDY AREA INTERSECTIONS
 XX (YY) AM (PM) TRAFFIC VOLUMES

1	48 (83)	1 (5)	49 (88)	5 (6)	10 (5) 3 (6)	21 (9) 57 (60)	78 (69)	5	78 (69)
2	5 (3) 81 (65)	17 (27)	5 (5) 86 (68) 25 (20)	5 (6)	10 (5) 7 (22) 30 (34)	53 (57) 10 (5) 29 (31)	60 (79)	80 (79)	78 (69)
3	1 (5)	5 (3) 81 (65)	5 (5) 86 (68) 25 (20)	5 (6)	10 (5) 7 (22) 30 (34)	53 (57) 10 (5) 29 (31)	60 (79)	80 (79)	78 (69)
4									
5									
6									
7									
8									



Kimley-Horn and Associates, Inc.

FIGURE 10

Lone Tree Shopping Center TIA
 NEARBY NEAR-TERM DEVELOPMENT PROJECT TRAFFIC VOLUMES

LEGEND

STUDY AREA INTERSECTIONS

XX (YY) AM (PM) TRAFFIC VOLUMES

1	228 (309) 721 (983) 31 (39)	253 (174) 43 (70) 178 (155)	39 (71) 690 (1074) 205 (181)	76 (51) 102 (68) 18 (29)	37 (47) 76 (41) 27 (14)	26 (20) 1596 (1001) 96 (100)	980 (1796)	11 (6) 1617 (1028)	89 (184) 891 (1566)	91 (221) 53 (116)	81 (151) 1583 (1008) 0 (20)
2	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)
3	228 (309) 721 (983) 31 (39)	253 (174) 43 (70) 178 (155)	39 (71) 690 (1074) 205 (181)	76 (51) 102 (68) 18 (29)	37 (47) 76 (41) 27 (14)	26 (20) 1596 (1001) 96 (100)	980 (1796)	11 (6) 1617 (1028)	89 (184) 891 (1566)	91 (221) 53 (116)	81 (151) 1583 (1008) 0 (20)
4	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)
5	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)
6	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)
7	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)
8	35 (76) 12 (100) 29 (79)	71 (150) 1082 (772) 32 (85)	160 (244) 32 (175) 855 (1387)	25 (22) 1092 (791) 1056 (610)	170 (249) 937 (1861) 199 (438)	86 (115) 134 (33) 498 (300)	17 (68) 1645 (1181)	47 (33) 1246 (981) 132 (86)	62 (106) 773 (998) 172 (194)	374 (222) 371 (293) 123 (69)	252 (232) 786 (834) 95 (137)

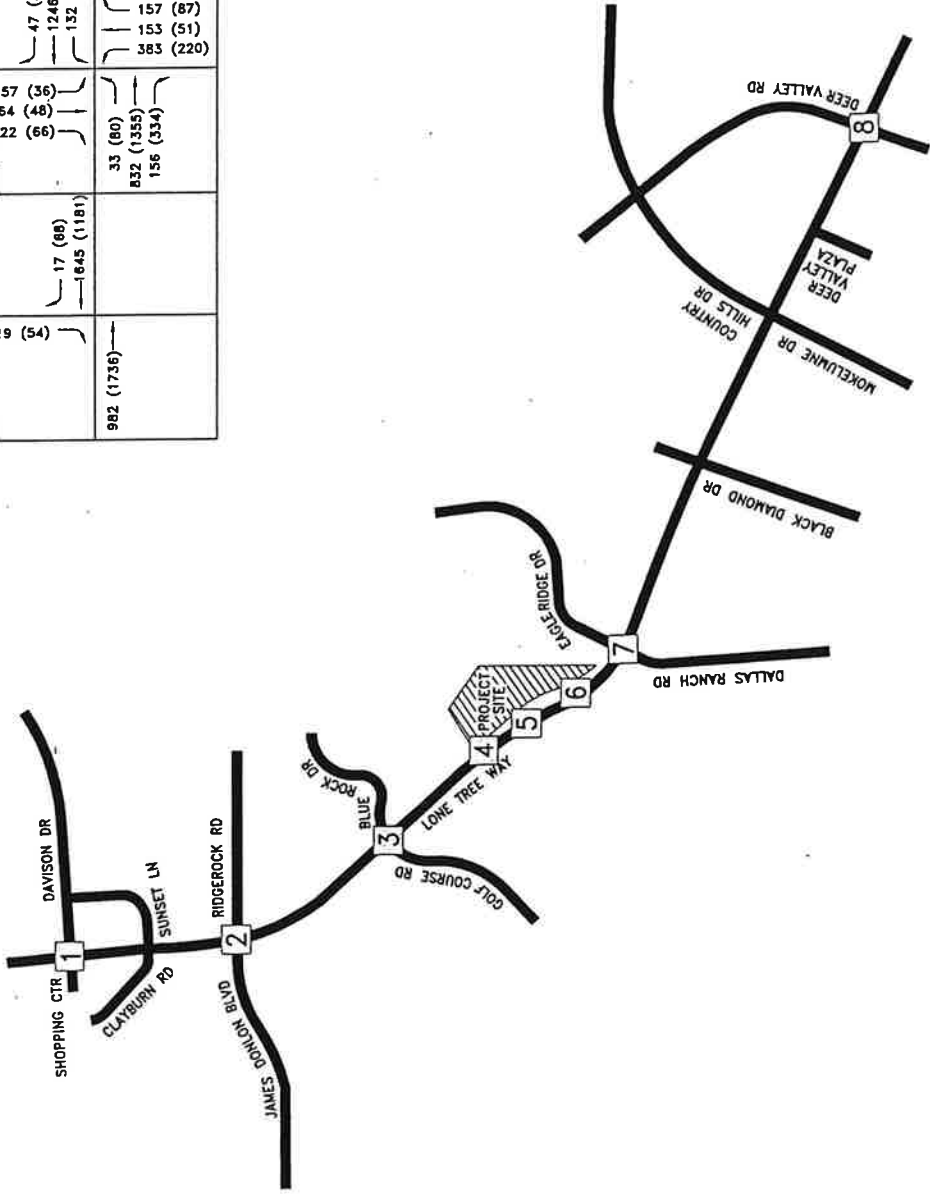


FIGURE 11

Lone Tree Shopping Center TIA
 EXISTING + APPROVED DEVELOPMENT + PROJECT
 TRAFFIC VOLUMES



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LONG-TERM CONDITIONS

Long-Term Lane Configurations and Traffic Control

Additional roadway improvements are expected on Lone Tree Way before the year 2020. According to the General Plan, it is planned that Lone Tree Way will be widened throughout the study area to three through travel lanes in each direction. Adding the additional lanes will increase capacity of Lone Tree Way and help accommodate planned growth and development in the City. Although not in the study area, it is assumed that SR-4 through Antioch will be widened to three lanes in each direction and the SR-4 Bypass will be completed by the year 2020.

Figure 12 illustrates the intersection geometry and traffic control assumed in the long-term analysis.

Long-Term Cumulative Forecast (No Project)

Additional development projects in the vicinity of the Lone Tree Shopping Center and surrounding areas are expected to be completed by the year 2020 and form the long-term cumulative traffic condition. The City's travel forecasting model based on land uses consistent with Future Urbanization Area #1 was consulted for use in developing cumulative traffic forecasts. The FUA #1-based forecast was compared with the projections contained in the Bluerock Business Center DEIR. Based on the comparison of forecasts and consistency with existing and anticipated traffic volumes, the City approved the use of the year 2020 forecasts contained in the Bluerock Business Center study. Using the Bluerock Business Center forecast provides consistency with previous development studies and was considered to be conservative because, in general, it was found that the Bluerock study contained forecasted traffic volumes that were as high or higher than those contained in the FUA #1-based model, which had a forecast year of 2030.

Cumulative forecast trips without the Lone Tree Shopping Center project are shown in Figure 13. Selected traffic data related to these projects is contained in the Appendix.

Long-Term Cumulative Forecast Plus Lone Tree Shopping Center

Lone Tree Shopping Center trips were added to the 2020 cumulative forecast. Figure 14 illustrates turning movement volumes at the study intersections under this development condition.

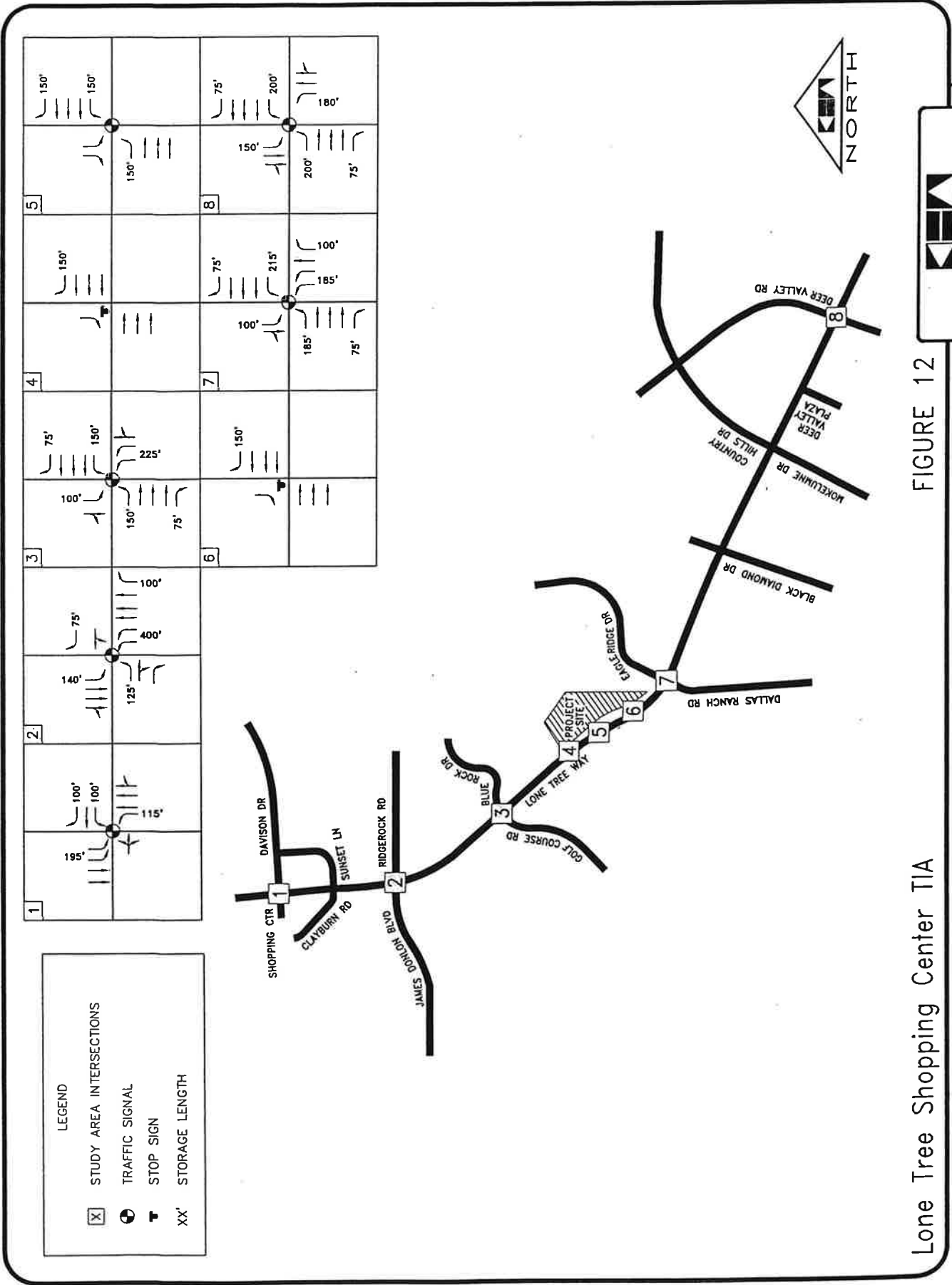


FIGURE 12

Lone Tree Shopping Center TIA

LONG-TERM LANE GEOMETRY AND TRAFFIC CONTROL

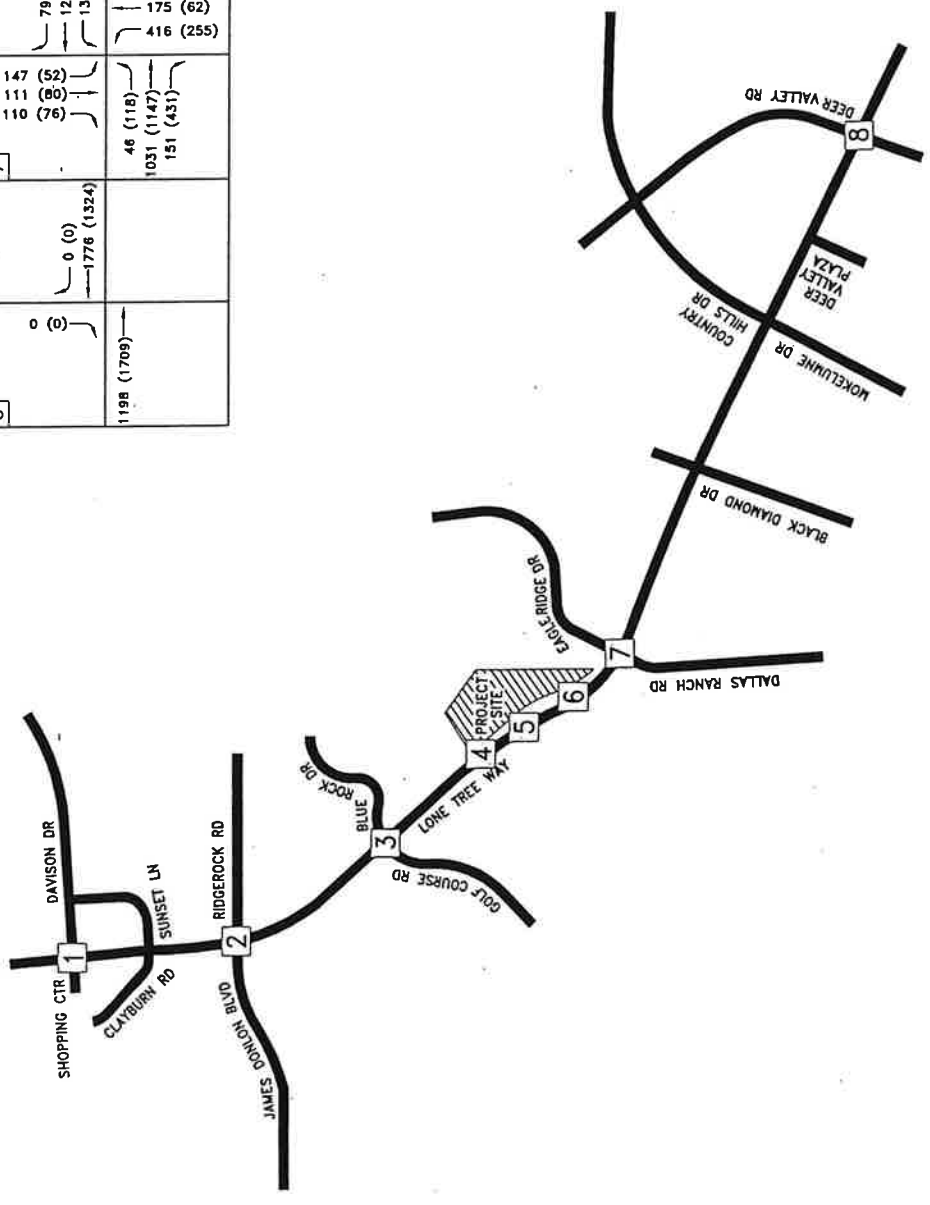
B51

LEGEND

[X] STUDY AREA INTERSECTIONS

XX (YY) AM (PM) TRAFFIC VOLUMES

1	354 (563) 1178 (1203) 47 (46)	356 (180) 119 (141) 317 (183)	107 (79) 939 (1067) 476 (172)	281 (131) 441 (197) 5 (7)	45 (177) 83 (79) 39 (49)	101 (12) 1860 (1220) 38 (47)	1158 (1711)	3 (15)	30 (27) 1746 (1297)	0 (0) 0 (0) 0 (0)	0 (0) 1771 (1319) 5 (5)
2	91 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
3	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
4	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
5	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
6	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
7	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)
8	51 (103) 50 (143) 32 (150)	211 (169) 1600 (1222) 109 (122)	235 (269) 43 (210) 643 (1003)	28 (8) 1381 (1137) 843 (695)	197 (65) 1086 (1468) 319 (553)	27 (66) 199 (65) 586 (353)	1198 (1709)	0 (0) 0 (0)	79 (28) 1250 (993) 130 (147)	552 (324) 493 (367) 51 (64)	123 (139) 607 (425) 519 (247)



Lone Tree Shopping Center TIA

LONG-TERM CUMULATIVE TRAFFIC VOLUMES WITHOUT PROJECT

FIGURE 13

Kimley-Horn and Associates, Inc.

LEGEND

[X] STUDY AREA INTERSECTIONS

XX (YY) AM (PM) TRAFFIC VOLUMES

1	354 (563) 198 (1234) 47 (46)	356 (190) 119 (141) 317 (183)	107 (79) 959 (1098) 476 (172)	281 (131) 441 (197) 15 (22)	197 (65) 148 (1560) 319 (553)	64 (209) 85 (79) 39 (49)	118 (140) 1711 (1248) 44 (52)	5 (27)	41 (33) 1799 (1371)	91 (221) 53 (116)	81 (151) 1790 (1317) 5 (5)
2	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
3	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
4	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
5	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
6	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
7	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)
8	91 (103) 50 (143) 32 (150)	235 (269) 43 (210) 673 (1049)	211 (169) 1618 (1231) 109 (122)	36 (13) 1399 (1146) 868 (705)	1247 (1895)	147 (52) 111 (80) 120 (91)	37 (81) 199 (65) 586 (353)	17 (68) 1857 (1475)	54 (123) 1096 (1184) 168 (440)	94 (189) 1193 (1658)	363 (284) 971 (892) 168 (196)

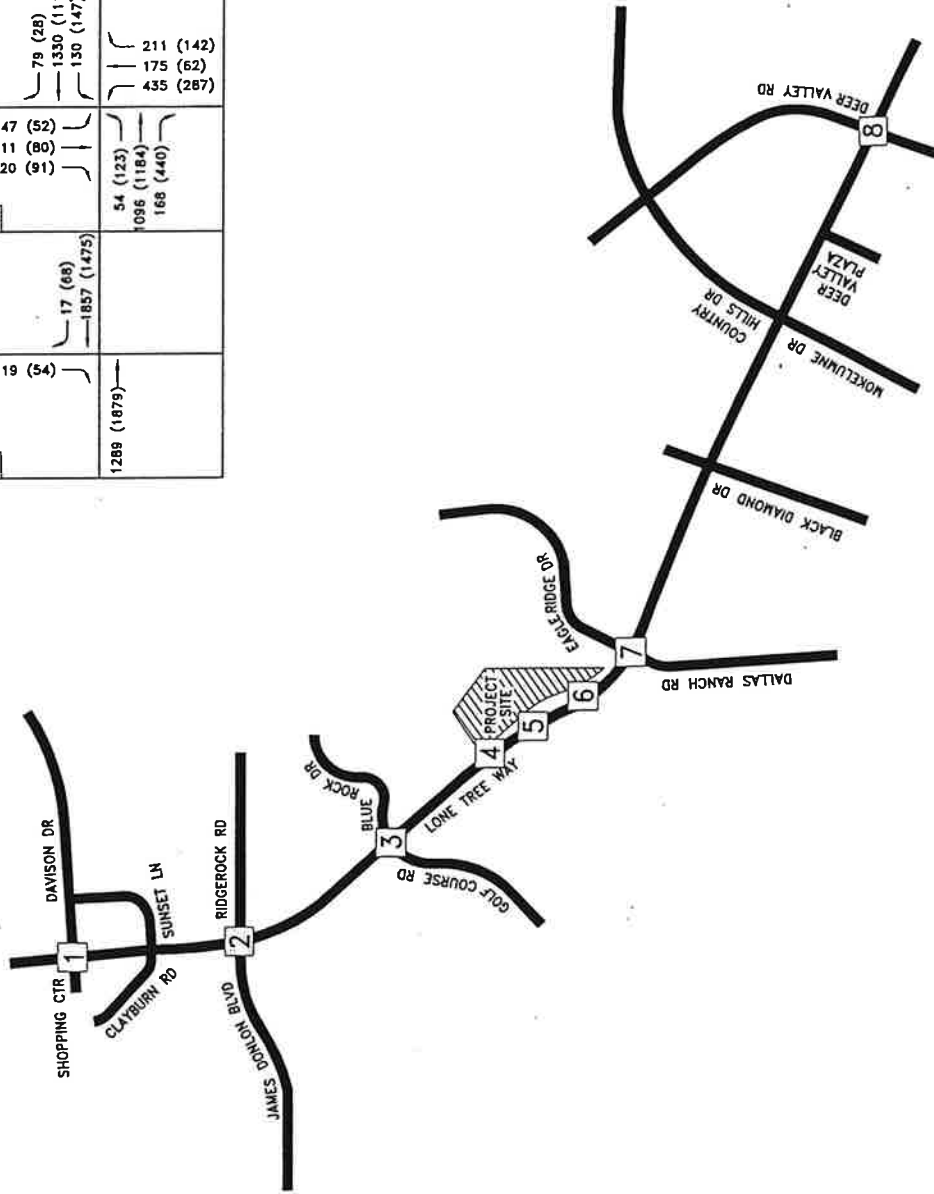


FIGURE 14

Lone Tree Shopping Center TIA

LONG-TERM CUMULATIVE + PROJECT TRAFFIC VOLUMES



Kimley-Horn and Associates, Inc.

NEAR-TERM LOS CONDITIONS AND IMPACTS

Traffic operations were evaluated under the following near-term development conditions:

- Existing traffic conditions
- Total traffic conditions (existing plus traffic from other nearby projects plus Lone Tree Shopping Center traffic)

Results of the analysis are presented in **Table 3**. Additional detail is provided in the **Appendix**.

Existing Traffic Conditions

As seen in the table, existing study area intersections generally operate at Level of Service (LOS) C or better. The exception is the Lone Tree Way/James Donlon Boulevard/Ridgerock Road intersection which operates in the PM at LOS E. LOS E is still within CCTA established thresholds but is the approaching unacceptable operation.

Near Term Traffic Conditions with the Project

Future traffic conditions with planned improvements, with traffic from other planned developments, and with project traffic were evaluated and are shown in **Table 3**.

Based on criteria identified at the beginning of this study, “High D” or better was desirable but LOS E at signalized intersections was considered to be acceptable operation on routes of regional significance. Whereas LOS F (i.e. v/c above 1.0) exceeds CCTA level of service standard and is considered a significant impact. Furthermore, overall operation at unsignalized project driveways at “High D” or better was considered acceptable operation.

With one exception, all intersections will operate within acceptable standards for existing and existing plus approved developments plus project conditions. Under the near term traffic volumes, the Lone Tree Way/ James Donlon Boulevard/Ridgerock Road intersection is expected to exceed acceptable operation and function at LOS F (i.e. v/c of 1.06) in the existing plus approved developments plus project conditions.

The intersection was evaluated further to determine if an improvement is readily available that can mitigate the impact to a less than significant condition. Results of the mitigation evaluation indicated that the operation can be improved to LOS E with the addition of a southbound right turn lane at the intersection. The right turn lane should be approximately 100 feet (plus taper) on Lone Tree Way along the frontage of Parcel A of the Bluerock Business Center.

Traffic operations at all three project driveways are expected to be LOS C or better.

Results of the near-term analysis are included in the **Appendix**.

Table 3 – Existing and Near-Term Level of Service Summary Table

<i>Scenario</i>		<i>Existing</i>		<i>Existing + Approved + Project</i>	
		<i>AM</i>	<i>PM</i>	<i>AM</i>	<i>PM</i>
Peak Period					
Signalized Intersections on Lone Tree Way					
1	Davison Drive	A	A	A	B
2	James Donlon Boulevard/Ridgerock Road	C	E	D	F
3	Golf Course Road/Bluerock Road	B	A	D	B
5	Main Project Driveway	A	A	B	C
7	Dallas Ranch Road/Eagleridge Drive	B	A	B	B
8	Deer Valley Road	B	B	B	B
Two-Way Stop Controlled Intersections on Lone Tree Way					
4	North Project Driveway – Westbound Approach	C	B	C	B
6	South Project Driveway – Westbound Approach	C	B	C	C

LONG-TERM CUMULATIVE LOS CONDITIONS AND IMPACTS

Traffic operations were evaluated under the following long-term development conditions.

- Cumulative long-term conditions without the Lone Tree Shopping Center project
- Cumulative long-term conditions plus the Lone Tree Shopping Center project

Results of the analysis are summarized in **Table 4**. Additional detail is included in the **Appendix**.

Future Cumulative Traffic Conditions without the Project

According to the results of the analysis, all study intersections will operate within acceptable thresholds without the project. These are traffic levels anticipated to occur regardless of the Lone Tree Shopping Center. Acceptable LOS results are based on the assumption that Lone Tree Way is widened to 3 lanes in each direction as identified in the General Plan.

Future Cumulative Traffic Conditions with the Project

Under cumulative traffic conditions with the Lone Tree Shopping Center, there are generally small incremental additions in traffic congestion and delay; however, LOS remains unchanged for most intersections when compared to the cumulative condition without the project. Even with the incremental changes, all locations continue to operate at acceptable levels of service and with a less than significant impact.

Traffic operations at the project driveways are expected to be LOS C or better.

Results of the long-term analysis are included in the **Appendix**.

Table 4 – Long Term Level of Service Summary Table

Scenario	Existing		Long-Term		Long-Term + Project			
	AM	PM	AM	PM	AM	PM		
Peak Period								
Signalized Intersections on Lone Tree Way								
1	Davison Drive		A	A	C	D	C	D
2	James Donlon Boulevard/Ridgerock Road		C	E	E	D	E	E
3	Golf Course Road/Bluerock Road		B	A	C	A	C	A
5	Main Project Driveway		A	A	A	A	A	B
7	Dallas Ranch Road/Eagleridge Drive		B	A	A	A	A	A
8	Deer Valley Road		B	B	D	C	D	C
Two-Way Stop Controlled Intersections on Lone Tree Way								
4	North Project Driveway – Westbound Approach		C	B	C	C	C	C
6	South Project Driveway – Westbound Approach		C	B	C	B	C	C

VEHICLE QUEUING

As congestion increases it is common for traffic at signals and stop signs to form lines of stopped (or queued) vehicles. Queue lengths were determined for each lane and measure the distance that vehicles will backup in each direction approaching an intersection. The 95th percentile queue is calculated by using 95th percentile traffic to account for fluctuations in traffic and represents a condition where 95 percent of the time during the peak period, traffic volumes and related queuing will be at, or less, than determined by the analysis. Average queuing is generally less. Ninety-fifth percentile queuing was checked under the various development conditions. **Table 5** summarizes the results of left turn lanes where queuing may exceed their storage limits.

As seen in the table, several left turn bays are exceeded under projected traffic volumes associated with the various development conditions. In most cases the inadequate queue lengths are not associated with the Lone Tree Shopping Center but are a result of other larger near-term and long-term planned developments.

Queue results also indicate that adequate storage is anticipated at all three project intersections.

The table also indicates that some queue lengths are exceeded by less than a car length. In addition, because of future roadway projects and developments, the anticipated queuing at several intersections varies between the near and long-term.

Table 5 - Queuing Summary
 Long Tree Shopping Center - Traffic Impact Study

Scenarios Analyzed	Turning Movement	Lone Tree Way																				
		Davison Drive Shopping Center		Ridgerock Drive James Donlan Blvd		Blue Rock Drive Golf Course Rd		North Project Driveway		Main Project Driveway		South Project Driveway		Eagleridge Drive Dallas Ranch Rd		Deer Valley Road						
		Link	AM	PM	Link	AM	PM	Link	AM	PM	Link	AM	PM	Link	AM	PM	Link	AM	PM			
Existing	EBL	500	88	287	125	215	353	150	23	16							185	44	92	200	84	131
	WBL	100	228	186	500	151	107	150	52	65							215	215	136	200	143	177
	NBL	115	62	125	400	619	310	225	274	156							185	207	109	180	152	109
	SBL	195	152	169	140	73	106	100	29	32							100	87	63	150	399	266
<u>Near Term</u> Existing + Approved Development + Project Traffic	EBL	500	88	287	125	215	353	150	264	157	180	144	166	185	68	117	200	103	139			
	WBL	100	230	190	500	168	129	150	122	144	150	0	33	215	215	136	200	143	177			
	NBL	115	62	125	400	619	389	225	292	173				185	241	132	180	159	121			
	SBL	195	203	169	140	73	106	100	53	76	500	138	255	100	87	63	150	399	266			
<u>Long Term</u> Cumulative Traffic	EBL	500	202	570	125	361	403	150	239	49				185	92	141	200	197	201			
	WBL	100	492	219	500	762	245	150	62	77				215	212	195	200	292	234			
	NBL	115	180	183	400	422	434	225	381	213				185	276	152	180	306	146			
	SBL	195	287	345	140	190	115	100	61	229				100	194	83	150	715	464			
<u>Long Term</u> Cumulative Traffic + Project Traffic	EBL	500	202	570	125	361	403	150	233	48	180	139	180	185	93	186	200	225	200			
	WBL	100	492	219	500	783	263	150	62	93	150	7	9	215	212	195	200	292	234			
	NBL	115	180	183	400	423	484	225	381	213				185	295	170	180	313	155			
	SBL	195	287	345	140	190	115	100	82	314	500	138	255	100	194	83	150	715	464			



TRAFFIC SERVICE OBJECTIVES

The Contra Costa Transportation Authority (CCTA) and its subsequent Regional Transportation Planning Committees have set various standards in order to measure effectiveness on specific roadways, called Traffic Service Objectives (TSOs). Kimley-Horn is working with the CCTA on the 2003 Traffic Service Objective Monitoring Report. The results included in this section are listed in the draft TSO report, not yet finalized by the CCTA. The only TSO that is designated in the study area is a delay index less than 2.0 along Lone Tree Way, as set forth by the East County Transportation Planning Committee (TRANSPLAN).

The delay index (DI) is a measured result, and is defined as the ratio between the peak travel time and the free flow travel time. The 2003 DI is shown for Lone Tree Way in **Table 6**. Kimley-Horn used the Synchro model developed for this traffic study to determine the increase in peak travel time between the existing condition and the year 2020 condition. Based on our analysis, all segments of Lone Tree Way will meet the TSO requirement through the year 2020, as shown in **Table 6**. It should be noted that the northbound travel time during the AM peak period is expected to slightly improve between the existing and the 2020 condition. This improvement is attributed to the anticipated construction of an additional travel lane in each direction on Lone Tree Way, resulting in three-lanes in each travel direction by the year 2020.

Table 6 - Traffic Service Objectives

Roadway	Free Flow Travel Time (sec)	2003 Measured Peak Period Travel Time (sec)		Increase in Synchro Travel Time to 2020 (sec)		Delay Index	
		AM	PM	AM	PM	AM	PM
Northbound Lone Tree Way	191	309	201	-1.3	16.3	1.6	1.1
Southbound Lone Tree Way	191	280	227	13.8	3.7	1.5	1.2



EVALUATION OF FINDINGS

The analysis found that one intersection will operate below acceptable thresholds during the near-term condition.

The intersection was investigated to determine the role of the project in the projected operating conditions at those intersections. The evaluation disclosed the following:

Under the near-term traffic volumes, the Lone Tree Way/James Donlon Boulevard/Ridgerock Road intersection is expected to exceed acceptable operation and function at LOS F (i.e. v/c of 1.06) in the existing plus approved developments plus project conditions.

The intersection was evaluated to determine if an improvement is readily available that can mitigate the impact to a less than significant condition. Results of the mitigation evaluation indicated that the operation can be improved to LOS E with the addition of a southbound right turn lane at the intersection. The right turn lane should be approximately 100 feet (plus taper) on Lone Tree Way along the frontage of Parcel A of the Bluerock Business Center.

No other locations in the near or long-term were found to operate below acceptable thresholds as identified in this traffic study.

March 9, 2004
File No. 40580/FLORA

Mr. Paul Rothbard
In-Shape City Health Club
1016 East Bianchi Rd.
Stockton, California 95210

Via Facsimile (209) 473-6401

**Preliminary Habitat Assessment for the Proposed In-Shape City Health Club Site,
Lone Tree Way, City of Antioch, Contra Costa County, CA**

Dear Mr. Rothbard:

This letter report documents findings for a preliminary habitat assessment and focused burrowing owl survey conducted by Kleinfelder, Inc. (Kleinfelder) on two separate dates at the proposed In-Shape City Health Club project site in the City of Antioch, Contra Costa County, California (Figure 1). The purpose of the site visit(s) was to provide a preliminary assessment of your property and to advise you as to the presence of sensitive or special-status habitats/communities on-site. Specifically, the investigation addresses the on-site presence of burrowing owl (*Athene cunicularia*) at the subject property. During a previous Phase I Environmental Site Assessment site reconnaissance conducted by Kleinfelder, (Kleinfelder Project No. 22858.P01, dated December 10, 2002) Kleinfelder staff had observed two burrowing owls on-site.

This reconnaissance-level habitat assessment/focused burrowing owl survey and letter report is intended to provide a general overview of the site's current conditions, including vegetation communities and wildlife habitats present and make recommendations for future focused biological surveys, should they be necessary. This report presents the results of Kleinfelder's field investigations.

Project and Site Description

In-Shape City Health Club proposes to construct and operate a commercial health club facility on an approximate 18-acre parcel in eastern Contra Costa County (Figure 2). The site is located on Lone Tree Way near the intersection of Eagleridge Drive, approximately two miles south of Highway 4 in Antioch. The proposed project will consist of a commercial shopping facility with an associated parking area. The site is surrounded by extensively developed residential lands and roadways within an

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agricultural/light commercial setting. The project site is bordered to the east by the Mokelumne public walking trail, and is southeast of Blue Rock Drive and a county fire station. The topography of the site is mostly level, with elevations ranging from approximately 280 to 330 feet above sea level. There is a slight topographical rise at the south end of the property.

Agricultural lands within the project area had been recently disked for fire suppression and left fallow. Such areas are not expected to support significant native vegetation due to the disturbance from disking and the nearly complete lack of vegetation (>95% bare ground) within the site. Along the margins of the site, undisked areas supported scattered ruderal (weedy) species such as: brome grasses (*Bromus* sp.), wild oats (*Avena fatua*), field bindweed (*Convolvulus arvensis*), Russian thistle (*Salsola tragus*), farmer's foxtail (*Hordeum murinum*), ryegrass (*Lolium* sp.) and black mustard (*Brassica nigra*). Properties adjacent to the site consisted of non-native annual grasslands, comprised of the same species and formed the only available foraging area for burrowing owl.

Methods

A reconnaissance-level habitat assessment was conducted by Kleinfelder project biologist Bill Goggin on January 28, 2004. The survey was conducted between the hours of 1100 and 1500. The 18-acre project site was inspected for sensitive-status resources by walking meandering transects approximately 40-feet apart, including a 500-foot radius on adjacent property (where possible).

The parcel was surveyed on foot and visually inspected using 8x42-power binoculars to identify the potential for burrowing owl(s) present on site, or California ground squirrel (*Spermophilus beecheyi*) activity which included a search for active and inactive burrows. A search for evidence of burrowing owl presence, such as pellets, whitewash or feathers, was conducted. Suitable habitat and signs for the burrowing owl was also assessed on adjacent accessible undeveloped lands within a 500-foot radius of the property boundary, as required under the *Staff Report for Burrowing Owl Mitigation* (CDFG 1995). Plant and wildlife species observed or detected by sign were also recorded.

All burrows were inspected for burrowing owl sign (feathers, pellets and whitewash). If burrows were found to be suitable based on the presence of sign and/or burrow size and shape, the location of the burrow was mapped and the presence of and type of animal sign was recorded.

Findings

During the January 28, 2004 site visit, burrowing owl sign was detected on-site and adjacent the subject property (Figure 3). Sign consisted of owl pellets and whitewash found in two separate areas, as well as active ground squirrel colonies (Plate 3B). Active ground squirrel burrows were located in the northern portion of the study area, along a fence line where one of the owl pellets had been detected during Kleinfelder's site evaluation visit. The active ground squirrel colony contained approximately 50-75

potentially suitable burrows that constituted potential habitat for burrowing owl (Plate 3A).

Following the Burrowing Owl Survey Protocol and Mitigation Guidelines "survey efforts should be directed to determining owl presence on the site" (CDFG 1995), if suitable burrows or burrowing owls are detected. In order to address potential presence of burrowing owl on-site a winter-season focused burrowing owl survey was initiated at the project site on the evening of February 9, 2004 to evaluate if suitable habitat (burrows) on-site were currently occupied by burrowing owls. During the initial focused survey event, two biologists from LSA Associates, Inc. were seen on the adjacent property, installing exclusionary one-way doors as part of CDFG-approved passive relocation mitigation for the adjacent undeveloped property (Pers.Comm., Zantinger. 2004). A single burrowing owl (age, sex unknown) was observed during this time, in proximity to the fence line where one-way doors were being installed. Having established burrowing owl presence at the site, Kleinfelder concluded focused survey efforts.

Conclusions and Recommendations

Based on the results from the current habitat assessment and focused survey, burrowing owls have been found to be utilizing the site and may be present in the project area. Presence was detected during the February 9, 2004 site visit and there are known burrowing owl populations in the general vicinity of the parcel. It is not practicable at this time to conclude whether passive relocation conducted by LSA Associates has displaced all burrowing owls from the property and surrounding habitats. Due to the end of the winter-season window for surveying, no additional surveys can be conducted by Kleinfelder until the breeding-season burrowing owl survey window commences on April 15.

In terms of botanical constraints, the site has little to no potential to support federally or state listed special-status plant species based upon the lack of suitable habitat available and the level of disturbance (active disking) within the project area.

- Should local ordinances mandate that you address potential impacts to burrowing owls prior to site development, to conclusively demonstrate that burrowing owls are absent from the property (and immediately adjacent lands) after passive relocation conducted by LSA Associates, Inc. in February, 2004, it would be advisable to conduct a focused (presence/absence) burrowing owl survey prior to ground disturbance, after April 15 (breeding season survey). Burrowing owls are listed by the California Department of Fish and Game as a California Special Concern species and their nesting burrows are considered a protected resource.

In summary, there is potential for burrowing owl to be present either adjacent to, or on the subject site, due to their detected presence on two separate dates by Kleinfelder and there known presence in the vicinity surrounding the site. However, due to the seasonal timing of breeding season, survey dates, the direct presence or absence of burrowing owl after passive relocation efforts have been implemented at the site cannot be confirmed

until conducting a focused burrowing owl survey. The survey will consist of two morning and two evening surveys.

Limitations

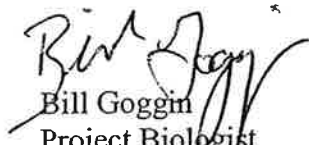
The enclosed biological habitat assessment document does not constitute an official consultation with the State of California, Department of Fish and Game or the United States Fish and Wildlife Service.


Kleinfelder offers a range of assessment, engineering, testing and observation services to suit the varying needs of our clients. Kleinfelder will perform its ecological services in a manner consistent with the standards of care and skill ordinarily exercised by members of the biological sciences profession practicing under similar conditions in the geographic vicinity and at the time the service will be performed. No warranty or guarantee, expressed or implied, is part of the services presented herein.

Should you have any questions concerning the results or recommendations presented within this habitat assessment/focused survey letter, feel free to contact Bill Goggin at (831) 755-7900 or Don D'Amico at (209) 948-1345.

Sincerely,

KLEINFELDER, INC.


Bill Goggin
Project Biologist
Manager


Michael Johnson, J.D.
Environmental Planning Program Group

Attachments

References

Figures

- Figure 1 Regional Vicinity Map
- Figure 2 Site Map
- Figure 3 Habitat Map

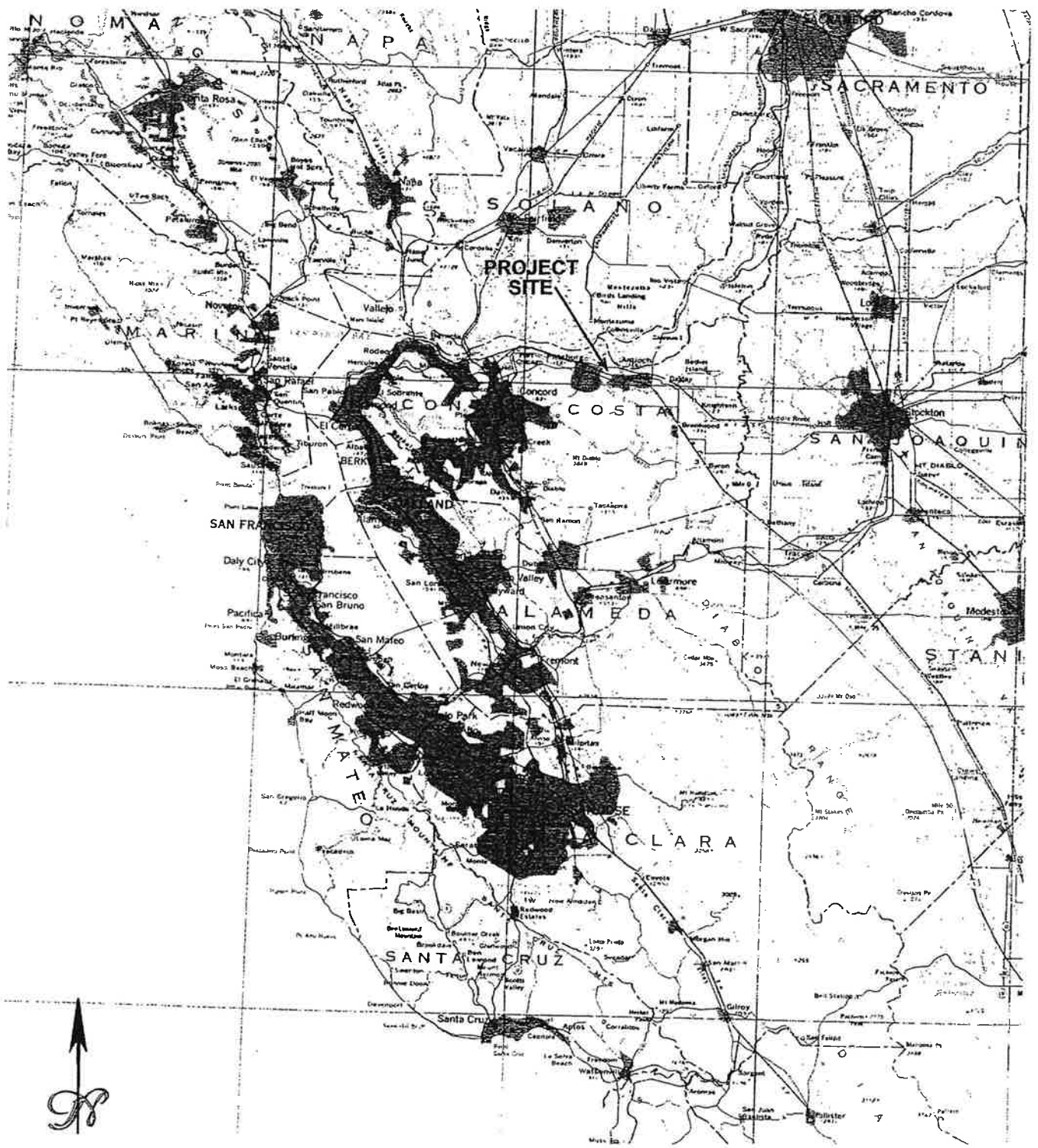
Plates

- Plates 1-3 Site Photos


ATTACHMENT 1

References

- Ball, D. A. et al. 2000. *Weeds of the West*. Western Society of Weed Science. University of Wyoming Press.
- California Department of Fish and Game (CDFG). 1997. Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities. The Resources Agency, Sacramento. Revised August 15.
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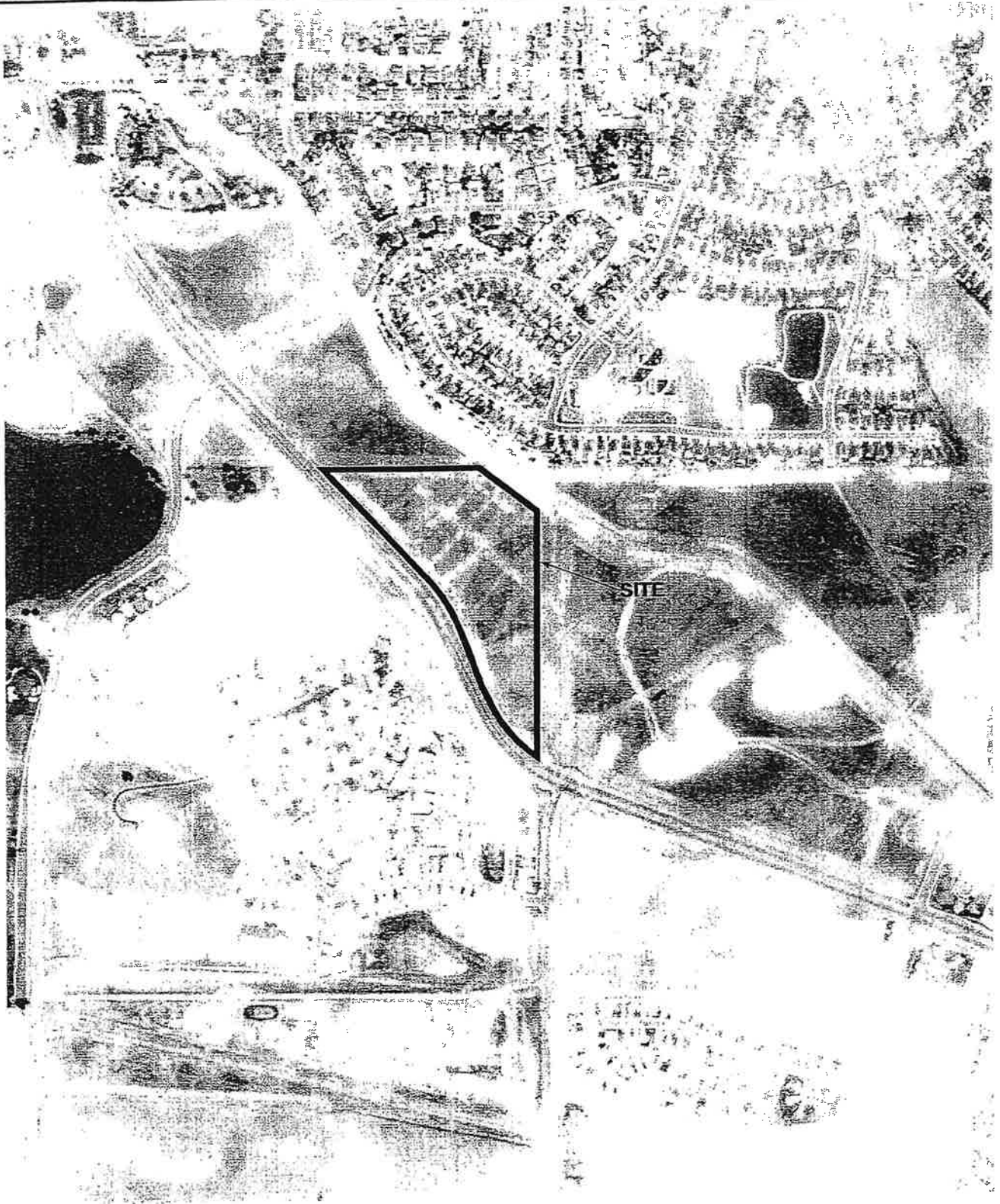
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**REGIONAL LOCATION MAP
 PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE
 LONE TREE WAY NEAR BLUEROCK DRIVE
 ANTIOCH, CALIFORNIA**

FIGURE
1

Bbb



SCALE: 1" = 666'

K KLEINFELDER

**SITE VICINITY MAP
 PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE
 LONE TREE WAY NEAR BLUEROCK DRIVE
 ANTIOCH, CALIFORNIA
 (FROM 1994 AERIAL PHOTOGRAPH)**

FIGURE

2

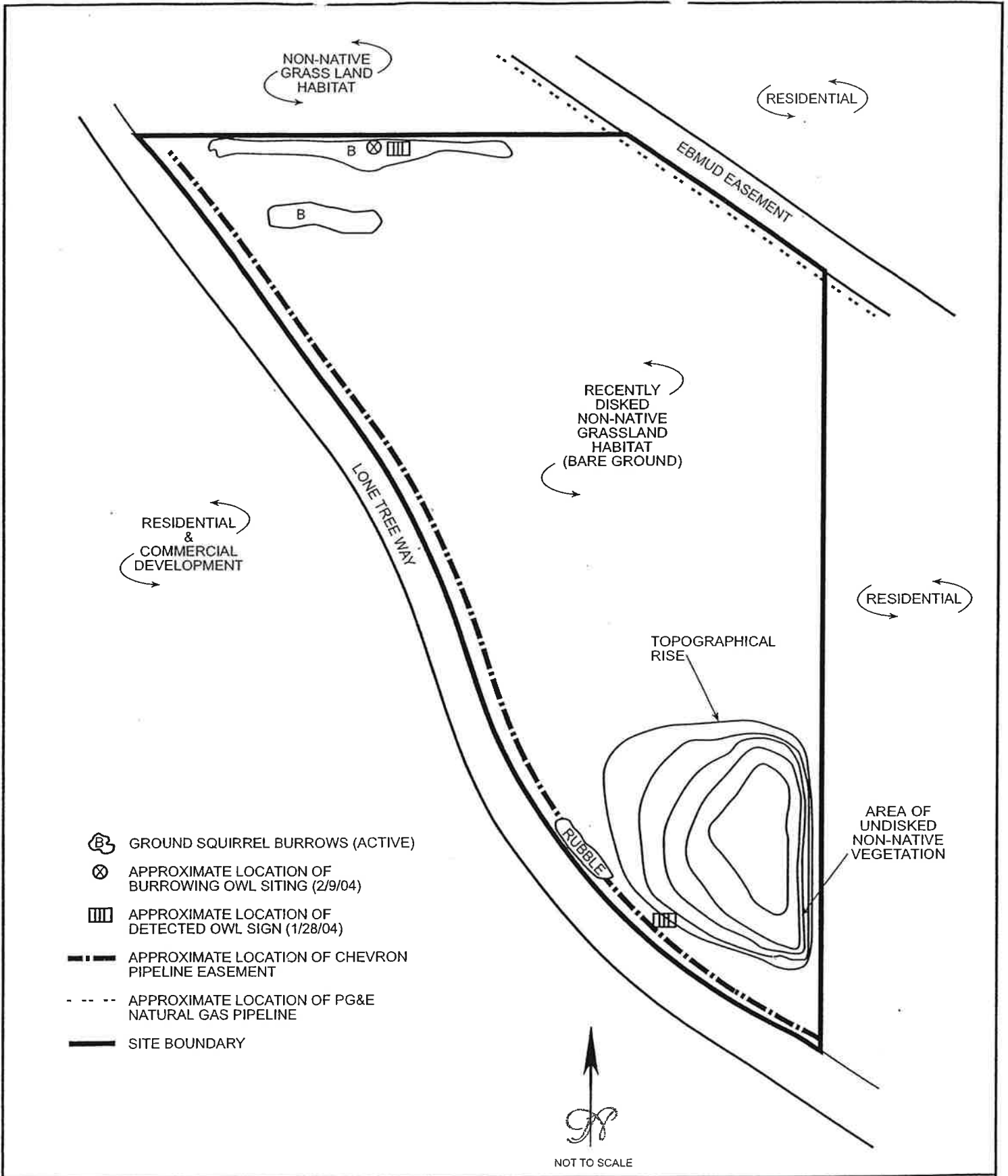
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HABITAT MAP
PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE
LONE TREE WAY NEAR BLUEROCK DRIVE
ANTIOCH, CALIFORNIA

FIGURE
3

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Plate 1A. View of Project Area Looking South.



Plate 1B. View of Project Area Looking North.

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**SITE PHOTOGRAPHS
 PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE
 LONE TREE WAY NEAR BLUEROCK DRIVE
 ANTIOCH, CALIFORNIA**

PLATE

1

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Plate 2A. View of Un-disked Vegetation in Southeast Portion of Project Area.



Plate 2B. View of Project Area Looking East (Residential Development in Background).

 KLEINFELDER	SITE PHOTOGRAPHS PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE LONE TREE WAY NEAR BLUEROCK DRIVE ANTIOCH, CALIFORNIA	PLATE 2
	DATE PRODUCED: 3/4/2004 PROJ. NO.: 40580.FLORA	DATE REVISED: FILENAME: STO4D169.FH9

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Plate 3A. View Looking East of Ground Squirrel Burrows Along Northern Fence Line.



Plate 3B. View of Owl Pellet and Whitewash Found at Project Site.

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SITE PHOTOGRAPHS
 PROPOSED IN-SHAPE CITY HEALTH CLUB PROJECT SITE
 LONE TREE WAY NEAR BLUEROCK DRIVE
 ANTIOCH, CALIFORNIA

PLATE

3

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