

**FINAL ENVIRONMENTAL IMPACT REPORT**  
**FOR THE**  
**PROPOSED MURRIETA OAKS PROJECT**  
**(SP 98-102)**  
**SCH No. 99031094**

Prepared by:

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May 2000

**CITY COUNCIL RESOLUTION NO. 00-754**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MURRIETA  
CERTIFYING THE ENVIRONMENTAL IMPACT REPORT AND ADOPTING A  
STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE MURRIETA OAKS  
SPECIFIC PLAN**

WHEREAS. Section 65450 of the Government Code allows cities to adopt a Specific Plan for the physical development of a specified area or property; and

WHEREAS. the California Environmental Quality Act (CEQA), as amended (Sections 21000 through 21177 of the Public Resources Code). requires that prior to the approval of any project the Lead Agency shall consider the potential impacts and effects of said project, consider alternatives to the project, and identify mitigation measures necessary to reduce or eliminate the impact of the project on the environment; and

WHEREAS. the City of Murrieta is the Lead Agency for the Murrieta Oaks Specific Plan project and has prepared an Environmental Impact Report (EIR) for the Murrieta Oaks Specific Plan in accordance with the provisions of CEQA and the CEQA Guidelines prepared by the Office of Planning and Research; and

WHEREAS. the City of Murrieta issued a Notice of Preparation on March 30, 1999; and

WHEREAS. a number of comments were received concerning the scope and content of the EIR for the Murrieta Oaks Specific Plan and were used to guide the preparation of the EIR; and

WHEREAS. the EIR was available for public review and comment from March 13, 2000 through April 26, 2000; and

WHEREAS. the City received letters with comments and concerns about the content of the EIR for the Murrieta Oaks Specific Plan; and

WHEREAS. the EIR for the Murrieta Oaks Specific Plan identified a number of significant impacts relating to aesthetics, air quality, biological resources, geology and soils, wildland hazardous fires, landform alteration, land use, noise, schools and traffic/circulation, and:

WHEREAS. the EIR determined that a number of significant impacts could be mitigated and reduced to a level of insignificance for the following: landform alteration, traffic and circulation, geology, noise, utilities and aesthetics:

WHEREAS, a public hearing was conducted by the Planning Commission on May 24, 2000 to consider EIR; and

WHEREAS, the City has provided a copy of the Response to Comments to all Responsible Agencies, as provided in State law.

**NOW, THEREFORE, THE CITY COUNCIL FOR THE CITY OF MURRIETA DOES HEREBY RESOLVE AS FOLLOWS:**

**SECTION 1 Findings on the Final EIR for the Murrieta Oaks Specific Plan:**

**A. Aesthetics**

The analysis in the Draft and Final EIR indicates that implementation of the proposed project would result in the following significant impacts:

1. The existing character of the property would change from a natural viewshed to a largely developed urban residential landscape, comparable to neighboring developments.
2. Although the ridge lines, the dominant physical features, would be unaltered and retained in open spaces, the flatter elevations of the property would be graded and developed and would be visible from the east along Interstate-215 and from the north along Clinton Keith Road.

The Final EIR concludes that the following policies, regulations, and mitigation measures would reduce the potentially significant impacts identified above to a less than significant level:

1. Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.
2. Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.
3. A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6 to 8 ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.

4. Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts.

## B. Air Quality

The analysis in the Draft and Final EIR indicates that implementation of the proposed Murrieta Oaks development would result in the emissions of pollutants during project construction and subsequent to occupation of the homes.

1. Emission of reactive organic compounds (ROC) would exceed the significance criteria due to the use of exterior and interior paints.
2. By 2002, emissions of NO<sub>x</sub> would exceed significance criteria; emissions of ROC would exceed significance criteria beginning in 2003.

The Final EIR concludes that the following mitigation measures would reduce air quality impacts to the lowest level possible:

### Construction Emissions.

ROC emissions from painting and other architectural coatings, including asphalt, should be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.

2. While projected construction emissions of PM<sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust should be followed. Project construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.
3. Exposed surfaces and haul roads must be watered twice daily.
4. Speeds on unpaved roads must be reduced to 15 miles per hour or less.
5. Construction and mobile equipment must be properly maintained.

### Occupancy Emission.

1. Measures should be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.

## C. Biological Resources

The analysis in the Draft and Final EIR indicates the project would result in the following significant environmental impacts:

1. 40.25 acres of chamise chaparral, and 37.4 acres of *Ceanothus crassifolius* chaparral would be lost.
2. Approximately 73.1 acres of ruderal habitat would be impacted.
3. A total of 37.1 acres of coastal sage scrub and 2.3 acres of disturbed coastal sage scrub would be impacted.
4. The project will result in the loss of 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acre of riparian forest, and 0.04 acres of mulefat scrub).
5. The project would result in the loss of four individual coast live oak trees and one canyon live oak.
6. The project will impact 0.29 acre of Corps-defined wetlands and 0.73 acre of Waters of the U.S. Approximately 2.62 acres of habitat under Fish and Game jurisdiction would be impacted.

The Draft and Final EIR concludes that the following mitigation measures would reduce significant impacts to below a level of significance.

1. Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space.
2. Because the coastal sage scrub habitat does not support sensitive species such as the California gnatcatcher, a 1:1 mitigation ratio would be acceptable. The project will impact 37.17 acres (including disturbed coastal sage) and will retain 7.63 acres of coastal sage on-site. Thus, the project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.
3. Because the Quino Checkerspot Butterfly has not been found on the site, the habitat is assumed not to be occupied by this species. Mitigation for unoccupied quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants. In its quino survey report, LSA (1999) identified approximately 4.2 acres of suitable habitat on-site.
4. The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, and 2.99 acres of riparian

forest) in open space, providing mitigation at a 1.3:1 ratio.

5. The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters. Similarly, a Streambed Alteration Agreement must be made with the California Department of Fish and Game. The project will create 1.31 acres of habitat to mitigate for Corps-defined wetlands and Waters of the U.S. An additional 3.93 acres of riparian habitat such as oak woodland will be created to meet the mitigation required by the Department of Fish and Game. The habitat creation will be done in Drainage "A" and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat.
6. In accordance with the City's Tree Preservation Ordinance (Section 16.42 of the Murrieta Municipal Code), a Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required by the ordinance:

"When the trees to be removed are associated with a proposal for development, the appraised value of the removed trees shall be applied to increasing the amount of landscaping within the proposed project or by planting minimum 24-inch box trees of equal value within City rights-of-way or public parks."

#### D. Geology and Soils

The analysis in the Draft and Final EIR indicates that the Proposed Murrieta Oaks project would result in the following significant impacts:

1. Development of the project would require removal of undocumented fill, topsoil, alluvium, older alluvium and any colluvium or slopewash prior to fill placement to a depth of .5 to 13 ft. If the compacted artificial fill along the western site boundary is found suitable to support the additional fill load for structures proposed for the project, the upper 1 to 3 ft of existing compacted fill would also be removed.
2. The highly weathered areas of gabbro and granodiorite would require removal as well. This could adversely affect the stability of the slope by increasing the potential for rock falls caused by earthquakes, slides or slumps.
3. In places where the excavation into the bedrock reaches below 10 -17 ft, it is expected that very heavy ripping and/or blasting would be needed as these are the areas where the rock is most resistant.

The following standard engineering practices must be incorporated into the project in

order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction.

1. Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.
2. Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.
3. Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.
4. Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.

#### E. Hazards

The analysis in the Draft and Final EIR indicates the following significant impact would occur with project implementation:

1. Some portions of the Murrieta Oaks project would be exposed to potential wildland fire hazards

The Draft and Final EIR conclude that the following mitigation measures would reduce significant wildland fire hazard impacts to below a level of significance:

1. Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created.
2. Access to the fuel modification zones shall be provided at a maximum of every 1,500 ft.
3. All high fire hazard plant species shall be removed.
4. Tree branches shall be pruned up 6 ft.
5. Plant material shall be pruned to a height of 18 inches.
6. Manufactured slopes shall be planted with Fire Protection District List B and C recommended species.
7. Trees shall be placed at a distance of three times their mature diameter.

8. Large shrubs shall be planted at 20 ft on center.

F. Landform Alteration

The analysis in the Draft and Final EIR indicates the following significant impacts would occur with project implementation:

1. The proposed project would require 1,400,000 cu yds of balanced cut (82.5 acres) and fill (106.9 acres) over a total of 178.45 graded acres.

The Draft and Final EIR conclude that the following mitigation measures would reduce the significant impacts to below a level of significance:

1. Grading shall be minimized on slopes, ridges, and canyons.
2. Contour grading techniques shall be used wherever possible.
3. Cut and fill shall be balanced on-site.
4. Excess soil shall be used on-site.
5. All grading and drainage system plans shall be prepared under the direction of a licensed Civil Engineer.
6. Slope variation and undulation shall be followed wherever possible to retain natural contours.
7. Existing dominant landforms shall be retained and incorporated into the project design.

G. Land Use

The analysis in the Draft and Final EIR indicates the following significant land use impacts would occur with project implementation:

1. Land use incompatibilities would occur between those portions of the project adjacent to Interstate-215 and Clinton Keith Road, and the eastern portions of the project north of Clinton Keith Road.
2. Significant land use incompatibilities could occur between Interstate-215 and those lots adjacent to it.

The Draft and Final EIR concludes that all land use incompatibilities can be mitigated to below a level of significance by:

1. Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.
2. Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.

#### H. Noise

The analysis in the Draft and Final EIR, indicates that construction of the project would result in the following significant environmental impacts:

##### Traffic Generated Noise.

1. A considerable portion of the proposed development would be located between the 65 dBA CNEL contour and the roadways, and some residences would be located between the 70 dBA CNEL and the roadways.

##### Construction Generated Noise.

1. Noise would be generated during project site preparation, grading, and construction. Construction noise levels typically average 85-90 dB  $L_{eq}$  at a distance of 50 ft from the equipment for short periods of time during site preparation and grading. Following site preparation, noise levels are anticipated to average 65-75 dB  $L_{eq}$  at a distance of 50 ft.

The Draft and Final EIR concludes that the following mitigation measures would reduce significant impacts to below a level of significance:

1. The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.
2. Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.
3. When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and

interior noise levels.

4. The City's noise standards for residential air conditioning shall be incorporated into development requirements.

#### I. Schools

The analysis of the Draft and Final EIR concludes that the following significant impacts to schools would occur with project implementation:

At build out, the project would add approximately 438 new students to the Murrieta Valley Unified School District.

The Draft and Final EIR concludes that the following mitigation measure would reduce significant impacts to schools to below a level of significance:

1. The applicant would pay a developers fee of \$2.24 per square foot of habitable living space.

#### J. Traffic/Circulation

The Draft and Final EIR indicates that the following significant traffic impact would occur with project implementation:

1. The proposed project will contribute approximately 3300 vehicles westerly on Clinton Keith Road, and 2100 vehicles easterly on Clinton Keith Road per 24-hour period.

The Draft and Final EIR concludes that the following mitigation measures would reduce significant traffic impacts to below a level of significance:

1. Installing traffic signals at the intersection of Clinton Keith Road and Greer Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.
2. Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

#### K. Cultural Resources (Added by City Council June 20, 2000)

Although the Final EIR determined that CA-RIV-3056 did not meet the criteria for significance pursuant to CEQA, the Developer, in order to address concerns raised by the Pechanga Band, has agreed to the following:

1. Prior to the issuance of a Grading Permit, the Developer shall make arrangements with the Pechanga Band to have native American monitors present during grading activities. The Native American monitors shall be compensated by the Developer.
2. Prior to the issuance of a Grading permit, the Developer shall make a good faith effort to enter into a Pre-Excavation Agreement, which is mutually acceptable to both the Developer and the Pechanga Band, which will address any accidental discoveries of cultural resources and human remains uncovered during grading activities.

## SECTION II. Statement of Overriding Considerations

The EIR has identified significant and unavoidable adverse impacts that would result from the implementation of the proposed project. Section 15093(b) of the State CEQA Guidelines provides that when the decision of the public agency (Lead Agency) allows the occurrence of significant adverse effects that are identified in the EIR but are not at least substantially mitigated, the agency must state in writing the reasons to support its action based upon the Final EIR and on information in the record. The City Council recognizes that significant adverse unavoidable impacts could result from implementation of the proposed project. With implementation of the mitigation measures recommended in the Final EIR, the following environmental effect may remain significant:

- A. Construction of the project would result in contribution of pollutants to the atmosphere, adding air pollutants with other cumulative projects in the vicinity, which will further degrade air quality in the region.

Having considered the unavoidable adverse impacts of the proposed Murrieta Oaks Specific Plan, the City Council hereby determines that no additional feasible mitigation is available to further reduce this impact, and that the remaining unmitigated impact is acceptable based on the overriding considerations outlined below.

**The City Council hereby adopts a Statement of Overriding Considerations, as follows:**

Having evaluated the benefits of development of the site subject to the proposed Murrieta Oaks Specific Plan against potential, unavoidable, adverse impacts, the City hereby determines that the benefits of the project outweigh the potential, unavoidable,

adverse effects, based on the following overriding considerations:

- A. All feasible mitigation has been proposed to reduce or avoid potentially significant impacts identified in the EIR, and no additional feasible mitigation is available to further reduce significant impacts.
- B. The adoption of the proposed Murrieta Oaks Specific Plan is considered to be vital to the future well-being of the City and its citizens, consistent with the City's vision of residential, commercial, and community serving uses expressed in the General Plan.
- C. Project development is essential for orderly and balanced development of the City and the City's attempts to enhance revenue sources while controlling the negative effects of growth and development. Fiscal benefits associated with the project provide revenue necessary for the City to continue to maintain a high level of law enforcement, fire protection, recreation, and other public services for its residents and business interests.
- D. The Murrieta Oaks Specific Plan enables the continued orderly growth and development of the City by providing infrastructure improvements needed to create vital links in the transportation and circulation system, and for the orderly extension of utilities.
- E. The proposed Murrieta Oaks Specific Plan is consistent with the City's Land Use Element, Circulation Element, and Housing Element and the general goals and policies, as promulgated in the City's adopted General Plan.
- F. Implementation of the proposed Murrieta Oaks Specific Plan will provide a number of benefits to the City, including opportunities for additional employment, a range of housing for a growing population, facilities for connecting and providing improvements to the local circulation system, protection of important natural, historic and biological resources through a permanent open space dedication program and enhanced revenues for public services.
- G. The proposed Murrieta Oaks Specific Plan is the product of a thorough planning

and public comment process that involved approximately two years of plan formulation and multiple public hearings providing for public input and comment.

SECTION III.

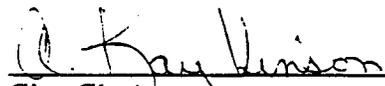
The City finds that, to the extent that any impacts attributed to the Murrieta Oaks Specific Plan remain unmitigated, such impacts are acceptable in light of the overriding social, economic, and other considerations that will result from development of the project. As a result, the City finds that the benefits of the project outweigh the unmitigated impact that may result, and hereby adopts a Statement of Overriding Considerations for impacts to air quality, public services, biological resources and aesthetics/visual.

SECTION IV. The City Clerk shall certify the adoption of this Resolution.

PASSED, APPROVED AND EFFECTIVE this 20th day of June, 2000.

Attest:

  
Mayer

  
City Clerk

STATE OF CALIFORNIA:

} SS

COUNTY OF RIVERSIDE:

I, A. Kay Vinson, City Clerk of the City of Murrieta, California, DO HEREBY CERTIFY that the Resolution 00-754 was duly and regularly adopted by the City Council of the City of Murrieta, California, at a meeting thereof held on the 20th day of June, 2000 by the following vote:

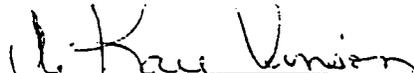
AYES: Enochs, Ostling, van Haaster, Youens and Seyarto

NOES: **None**

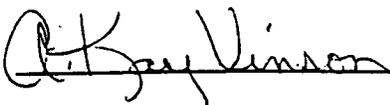
ABSENT: **None**

ABSTAIN: **None**

(Seal)

  
\_\_\_\_\_  
Murrieta City Clerk

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of Murrieta, California, this 20<sup>th</sup> day of June, 2000

  
\_\_\_\_\_  
City Clerk

## INTRODUCTION TO THE FINAL EIR

This Final Environmental Impact Report (FEIR) for the proposed Murrieta Oaks project complies with all criteria, standards, and procedures of the California Environmental Quality Act (CEQA) of 1970 (California Public Resources Code, Sections 21000 *et seq.*), and the City's implementation guidelines. As directed by Section 15132 of the CEQA Guidelines, this FEIR includes the chapters listed below:

Chapter A: Executive Summary, including an impact and mitigation measure summary.

Chapter B: Comment letters received during the 45-day Public Review period and responses by the City of Murrieta to public comments on the draft EIR.

Chapter C: Modifications to the draft EIR pursuant to Section 15088(c) of the CEQA Guidelines.

Chapter D: The Mitigation Monitoring and Reporting Program, as required by Section 21081.6 of the Public Resources Code and supported by Section 15091(a)(1) of the CEQA Guidelines. When making Findings that change or alter, or which have been incorporated into the project that mitigate or avoid significant environmental effects, the City of Murrieta, as the CEQA Lead Agency is required to adopt a reporting or monitoring program. The program ensures compliance with these changes or conditions of approval during project implementation.

The draft EIR (DEIR) for the proposed Murrieta Oaks project (SCH No. 99031094), and associated Technical Appendices are included with this submittal.

A Notice of Preparation (NOP) identifying the scope of issues for the EIR was issued by the City of Murrieta for public review March 30, 1999. Ten (10) comments on the project were received during the NOP review period. The NOP is included in Appendix A of the draft EIR. The 45-day public review period for the draft EIR extended from March 12, 2000 to April 25, 2000. The draft EIR was circulated to Responsible public agencies. Ten (10) copies of the draft EIR were sent to the State Clearinghouse along with the required Notice of Completion (NOC). Notices of the availability of the draft EIR were published in the local newspaper at the same time. The draft EIR was made available for review at the City's Planning Department.

A total of six public comment letters were received during the CEQA review periods for the draft EIR. Copies of these letters along with written responses to each comment are included in Chapter B of the Final EIR. The Murrieta Planning Commission and City Council will consider whether to certify the Final EIR as complete and in compliance with CEQA. If the project is approved, a Notice of Determination (NOD) will be filed with the State Clearinghouse and the County Clerk.

**CHAPTER A**  
**EXECUTIVE SUMMARY**

**CHAPTER A**  
**EXECUTIVE SUMMARY**

**I. PROJECT DESCRIPTION**

The California Environmental Quality Act (CEQA) requires an environmental assessment of all governmental discretionary actions defined as projects. Actions which could result in significant physical impacts to the environment require the preparation of an environmental impact report (EIR).

The application for the proposed Murrieta Oaks project (99031094) has been filed with the City of Murrieta. The project proposes a Specific Plan (SP 98-102). The City of Murrieta solicited comments regarding potential environmental effects from responsible agencies and individuals by use of a Notice of Preparation. The comments received in response to the Notice of Preparation and the Initial Study determined the scope of analysis for this EIR.

The Murrieta Oaks project includes approximately 260 undeveloped acres located in the northeastern portion of the City of Murrieta, in southwestern Riverside County. Approximately 250 acres are located at the southwest corner of Interstate-215 and Clinton Keith Road, with an additional 10 acres located north of Clinton Keith Road. The property is situated in Township 7 South, Range 3 West of the USGS 7.5' Murrieta quadrangle, and is identified by Assessor's Parcel Numbers 956-280-01 and 956-280-11.

The proposed Murrieta Oaks project objective is to provide a quality single-family residential community while retaining assets of the existing environment. This objective would be met by developing a project that offers a low dwelling unit density consistent with both the neighboring single family and the rural/non-urban character of surrounding areas, by clustering homes within the flatter portions of the site, creating substantial amounts of open space, and by preserving the central ridge line of the property as well as the majority of large drainage courses and associated oak-woodland areas found on the property.

The Murrieta Oaks application includes a vesting Tentative Map and a Specific Plan for the property.

Tentative Map. The Tentative Map proposes a maximum 560-unit single-family detached residential development. The units would be part of four individual residential neighborhoods comprising a total of 100.8 acres. The Murrieta Oaks project would be designed with an overall density of 2.2 dwelling units (du) per acre; minimum lot size would be 7,200 sq ft. Development would be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line. A small part of the project would be located north of Clinton Keith Road, with development limited to the western portion of that parcel.

The Tentative Map would set aside 65.25 acres of natural open space and 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park). It also provides for an elementary school site (10.00 acres) and designates a 5-8 ft-wide multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas. The open space areas would be owned and maintained by the City of Murrieta.

Specific Plan. The Specific Plan identifies the four residential neighborhoods that would be created in a series of eight phases (Figure III-4) - the Creekside Neighborhood (a maximum of 129 lots on 32.33 acres); the Highland Neighborhood ( a maximum of 187 lots on 50.11 acres); the Ridge View Neighborhood (a maximum of 111 lots on 32.27 acres); and the Lowland Neighborhood (a maximum of 133 lots on 39.07 acres; Figure III-5). Property setbacks would comply with the single-family residential development standards established in the City's General Plan except that side setbacks will be 5 ft. Dwellings would be limited to a maximum height of 35 ft. Project backbone infrastructure would be installed in the initial phase of implementation.

Sound attenuating walls constructed of 6-to-8 ft high splitface block and planted with vines would be located along Clinton Keith Road and Interstate-215 where residential lots abut these roadways. Six-ft high collector street and community walls constructed of splitface block would be erected along those interior areas of the project where portions of residential lots lie adjacent to streets. Some project walls of masonry and tubular steel 6 ft in height would be constructed with consideration given to the architecture of surrounding neighborhoods, and would be located next to open space to allow visual access to these areas. The Specific Plan would also identify approximately 41.27 acres of right-of-way for a looping collector roadway and interior residential streets.

Grading Plan. The grading plan calls for 1,400,000 cubic yards (cu yds) of grading, with a balance of cut and fill on-site. The plan would emphasize the preservation of significant existing topographic features, selectively cluster development on the flatter portions of the site, and replicate the slopes and characteristics of natural landforms during the grading process.

Landscape Plan. The project would incorporate plant species that are already well established in Murrieta and would include a variety of trees and shrubs historically found in the area, both native and non-native. The landscape concept would be defined by six areas linked together by landscaped corridors along primary roadways and in the open space areas.

## II. ENVIRONMENTAL ANALYSIS

### A. AESTHETICS

**Impact.** Implementation of the proposed project would change the existing character of the property from a natural viewshed to a largely developed urban residential landscape, comparable to neighboring developments. Although the ridge lines, the dominant physical features, would be unaltered and retained in open spaces, the flatter elevations of the property would be graded and developed and would be visible from the east along Interstate-215 and from the north along Clinton Keith Road (see Figure IV-A-1). The preserved ridgelines would break up the short-range views of residential development along Interstate 215 (44% of the frontage along the 215 will be in preserved hillside). The Highland Neighborhood (northern-most) will have an additional 50' setback from the Interstate Highway and interchange. The effect of the Murrieta Oaks development would be to extend the existing residential views outward to these main roadways. Visual impacts would also occur from more distant vantage points to the south, in the general area of Los Alamos Road and Interstate-215, where the existing long-range views of natural terrain would be replaced by views of rooftops with only the most prominent hilltops remaining.

**Mitigation.** Mitigation measures developed to reduce impacts to below a level of significance include:

- Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.
- Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.
- A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6 to 8 ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.
- Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts.

## B. AGRICULTURAL RESOURCES

**Impact.** Ultimate implementation of the proposed project would result in the development of 560 residential units, and would result in the loss of 1.5 acres of Class II soils. Because the Williamson Act contract has expired, there would be no conversion of property from agriculture to suburban land uses.

**Mitigation.** No significant impacts are associated with implementation of this project; therefore, no mitigation measures are required.

## C. AIR QUALITY

**Impact.** Implementation of the proposed Murrieta Oaks development would result in the emissions of pollutants during project construction and subsequent to occupation of the homes. Principle sources of pollution during construction would be gaseous and particulate emissions from construction equipment. After construction, the major sources of emissions would be generated by occupants' vehicles, and to a lesser degree, by water heaters, fireplaces, and landscape maintenance equipment. A vehicle trip generation rate of 9.57 trips per dwelling unit was used to determine project vehicle emissions.

Construction Emissions. Construction emissions were calculated for the proposed project using the URBEMIS7G computer program. Analysis assumptions included that the project would begin in 2000 and would be completed in five years; that construction would occur at a constant rate over the five years; and that one-fifth of the total home construction (113 houses) would occur during each of the five years. Estimated construction emissions would not exceed the SCAQMD significance criteria for NO<sub>x</sub>, CO, or PM<sub>10</sub>; emission of reactive organic compounds (ROC) would exceed the significance criteria due to the use of exterior and interior paints.

Operations Emissions. During the first year of occupancy, 2001, operations emissions from vehicles and ROC sources (hair spray, deodorant, etc.) would not exceed the SQAQMD significance criteria. Emissions sources increase, however, as the number of occupants rises in subsequent years. By 2002, emissions of NO<sub>x</sub> would exceed significance criteria; emissions of ROC would exceed significance criteria beginning in 2003.

**Mitigation.** The following measures shall be incorporated into the project design to reduce significant air quality impacts to the lowest level possible:

### Construction Emissions.

- ROC emissions from painting and other architectural coatings, including asphalt, should be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.

- While projected construction emissions of PM<sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust should be followed. Project construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.
- Exposed surfaces must be watered twice daily.
- All haul roads must be watered twice daily.
- Speeds on unpaved roads must be reduced to 15 miles per hour or less.
- Construction and mobile equipment must be properly maintained.

#### Occupancy Emission.

Measures should be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.

### **D. BIOLOGICAL RESOURCES**

**Impact.** The project would result in the loss of 40.25 acres of chamise chaparral, and 37.4 acres of *Ceanothus crassifolius* chaparral. The project will retain 44.05 acres of chaparral habitats on the ridgeline which will be left in open space. Approximately 73.1 acres of ruderal habitat would be impacted. A total of 37.1 acres of coastal sage scrub and 2.3 acres of disturbed coastal sage scrub would be impacted.

The project will also result in the loss of 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acre of riparian forest, and 0.04 acres of mulefat scrub). The project would also result in the loss of four individual coast live oak trees and one canyon live oak.

The project will impact 0.29 acre of Corps-defined wetlands and 0.73 acre of Waters of the U.S. Approximately 2.62 acres of habitat under Fish and Game jurisdiction would be impacted.

**Mitigation.** Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space.

Because the coastal sage scrub habitat does not support sensitive species such as the California gnatcatcher, a 1:1 mitigation ratio would be acceptable. The project will impact 37.17 acres (including disturbed coastal sage) and will retain 7.63 acres of coastal sage on-site. Thus, the project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.

Because the quino checkerspot has not been found on the site, the habitat is assumed not to be occupied by this species. Mitigation for un-occupied quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants. In its quino survey report, LSA (1999) identified approximately 4.2 acres of suitable habitat on-site.

The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, and 2.99 acres of riparian forest) in open space, providing mitigation at a 1.3:1 ratio.

The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters. Similarly, a Streambed Alteration Agreement must be made with the California Department of Fish and Game. The project will create 1.31 acres of habitat to mitigate for Corps-defined wetlands and Waters of the U.S. An additional 3.93 acres of riparian habitat such as oak woodland will be created to meet the mitigation required by the Department of Fish and Game. The habitat creation will be done in Drainage "A" and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat.

In accordance with the City's Tree Preservation Ordinance (Section 16.42 of the Murrieta Municipal Code), a Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required by the ordinance:

"When the trees to be removed are associated with a proposal for development, the appraised value of the removed trees shall be applied to increasing the amount of landscaping within the proposed project or by planting minimum 24-inch box trees of equal value within City rights-of-way or public parks."

## E. CULTURAL RESOURCES

**Impact.** One of the historic sites (CA-RIV-4906H) mapped within the project area was actually located west of the property; it has been destroyed by development, and this project would not affect it. The other historic site, CA-RIV-4905H, is located within open space Lot E. Due to its location within an open space lot the site would not be subject to direct impacts from project development.

A small portion of the prehistoric site, CA-RIV-3056, would be preserved in open space Lot M. The majority of the site would be destroyed by improvements within Lot K and residential development surrounding Lot M.

**Mitigation.** Because no significant impacts have been identified to archaeological resources, no mitigation measures are necessary from an archaeological standpoint. Representatives of the Pechanga Band of Luiseño Mission Indians have requested that a Native American monitor be on-site during grading activities to ascertain that no impacts to cultural resources occur; this request shall be honored.

## F. GEOLOGY AND SOILS

**Impact.** Development of the project would require removal of undocumented fill, topsoil, alluvium, older alluvium and any colluvium or slopewash prior to fill placement to a depth of .5 to 13 ft. If the compacted artificial fill along the western site boundary is found suitable to support the additional fill load for structures proposed for the project, the upper 1 to 3 ft of existing compacted fill would also be removed.

The highly weathered areas of gabbro and granodiorite would require removal as well. This could adversely affect the stability of the slope by increasing the potential for rock falls caused by earthquakes, slides or slumps.

Design cut, fill-over-cut, fill, and natural slopes are considered grossly stable as designed.

In places where the excavation into the bedrock reaches below 10 -17 ft, it is expected that very heavy ripping and/or blasting would be needed as these are the areas where the rock is most resistant.

Liquefaction, which can occur when certain saturated soils are shaken during an earthquake, is extremely unlikely due to the lack of near surface groundwater, the proposed subdrains, complete soil/alluvium removals, and the high in-place density of the gabbro and granodiorite bedrock.

**Mitigation.** Geologic observation during the grading process would identify potential boulder and rock fall areas that may be created by site grading. Stabilization fills, rock

bolting or debris catchment areas are possible mitigation measures to be evaluated on a case by case basis.

The following standard engineering practices must be incorporated into the project in order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction. Detailed geotechnical recommendations are given in Appendix E.

- Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.
- Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.
- Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.
- Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.

## **G. HAZARDS**

**Impact.** Fire Hazard Some portions of the Murrieta Oaks project would be exposed to potential wildland fire hazards (see Figure IV-G-1). Such areas would be subject to fuel modification improvements, which would include reduction of fuel volume, planting of approved low-fuel ground covers and shrubs, and limited irrigation of areas adjacent to structures. Brush clearance would be permitted in fuel maintenance zones, but mass grading would not. The areas of the Murrieta Oaks project identified as fuel management zones would be owned and maintained by the City of Murrieta.

Toxic Materials Based on the results of the site assessment, implementation of the proposed project would not result in the exposure of residents to residual hazardous or toxic materials relating to previous uses of the land.

**Mitigation.** The following mitigation measures would reduce impacts to below a level of significance.

### Fire Hazard Mitigation Measures

- Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created.

- Access to the fuel modification zones shall be provided at a maximum of every 1,500 ft.
- All high fire hazard plant species shall be removed.
- Tree branches shall be pruned up 6 ft.
- Plant material shall be pruned to a height of 18 inches.
- Manufactured slopes shall be planted with Fire Protection District List B and C recommended species.
- Trees shall be placed at a distance of three times their mature diameter.
- Large shrubs shall be planted at 20 ft on center.

## H. HYDROLOGY

**Impact.** Unless impounded on-site, rainfall on a given area will: infiltrate the soil and “soak in” to the ground, run off, or evaporate in place. Evaporation is insignificant on the project area except for minor rain events.

Development of open land almost always results in greater hardscape, which leads to less absorption of rain and increased runoff. Simultaneously, a development that reduces the steepness of a site or the length of some slopes can allow greater absorption of rain in the non-hardscape areas (lawns, landscaping). Because the slopes are less steep or shorter, the runoff flows more slowly, and has more time to be absorbed by the soil.

The introduction of impervious surfaces with roadways, driveways, and houses would increase the amount of urban runoff during rainstorms. Petroleum products from vehicular traffic and parking and household fertilizers and pesticides would be introduced into the runoff, with the great majority in the runoff in the first storm of the season. These pollutants can impact water quality.

Project design has incorporated measures to prevent these potential impacts. The existing Basin A-1 will be modified and its runoff diverted to a different culvert. Basins A-2 through A-9 will be modified to Developed Condition Basins F-1 through F-8; each will flow through an existing culvert under I-215. The proposed grading of the site has been adjusted such that the runoff exiting each of these Developed Basins will be at or below the amount of runoff under presently existing conditions.

Three Developed Condition Basins, S-1, S-2, and N, have been designed to incorporate flood detention structures to control excess storm runoff. Site design and grading will allow excess runoff -- amounts projected to be greater than under existing conditions -- from the

areas of Basins A-1 through A-9 to these flood detention areas.

The existing Basin A-10 drains to a small ditch adjacent to existing off-site residences. Project design evaluation included concerns that these existing residences are inadequately protected from potential flooding. To eliminate these concerns, all runoff from the area of existing Basin A-10 will be diverted to Developed Condition Basins S-1 and S-2, which contain flood detention structures. No runoff from the project will be placed in the small ditch adjacent to the offsite properties.

The onsite existing Basin B-5 will become Developed Condition Basin N. A detention basin will be placed north of Clinton Keith Road to receive the outflows of Basins B-2 and B-3, and deliver them under Clinton Keith Road in one culvert, to the existing open channel. Flows entering from offsite Basin B-1 will be run in a pipe to join this open channel. Runoff from offsite Basin B-4 will continue in its existing channel.

A second detention basin will be incorporated into Developed Condition Basin N. This will be associated with the open channel near the western boundary of the site.

No flooding impacts would be expected with the proposed project.

## I. LANDFORM ALTERATION

**Impact.** The proposed project would require 1,400,000 cu yds of balanced cut (82.5 acres) and fill (106.9 acres) over a total of 178.45 graded acres. Hillside portions of the property (those areas with a slope of over 50 percent) would be left in their natural state; adjacent areas would be contour graded. The maximum height cut on-site would be 97 ft, located on Lot 423 in the southern portion of the property.

All cut material would be redeposited on-site. The majority of the fill would be placed in the southern, northeastern, and central western portions of the property. The overall grading per acre is 5,511 cu yds.

**Mitigation.** Implementation of the following mitigation measures would reduce impacts to below a level of significance:

- Grading shall be minimized on slopes, ridges, and canyons.
- Contour grading techniques shall be used wherever possible.
- Cut and fill shall be balanced on-site.
- Excess soil shall be used on-site.
- All grading and drainage system plans shall be prepared under the direction of a

licensed Civil Engineer.

- Slope variation and undulation shall be followed wherever possible to retain natural contours.
- Existing dominant landforms shall be retained and incorporated into the project design.

## J. LAND USE

**Impact.** The Tentative Map would develop up to 560 single-family residential lots on 260 acres, along with associated infrastructure. No change in land use designation is needed for the project, which is presently designated as SP (Specific Plan) 1 by the General Plan.

A 5.13-acre neighborhood park, located in the north central portion of the project, near Clinton Keith, has been set aside to meet the City's recreation requirement, which calls for the dedication of 5.0 acres of active use parkland per 1,000 population. A 10.00-acre elementary school site adjacent to the park has been requested by the Murrieta Valley Unified School District. The project would also provide 65.25 acres of natural open space and 44.35 acres of modified open space including an associated passive use trail system.

Compatibility. The project would have a density of 2.2 du/net ac, which is within the density allowance for the SP (Specific Plan) land use designation of 2.1-5.0 du/ac as specified in the Murrieta Municipal Code (Title 16.06). The project would be compatible with the existing single-family residential subdivisions located to the south and west, with rural residences to the north, and with future single-family residences located to the east, across Interstate-215. It would also be compatible with the designated open space area to the southwest, by linking it to planned natural open space within the project. The portion of the project located north of Clinton Keith Road would be located near an area designated for Regional Commercial use, but since these proposed lots are clustered at the western end of the parcel, the resulting open space on the east would provide a buffer between the lots and the potential future commercial use. Land use incompatibilities would occur between those portions of the project adjacent to Interstate-215 and Clinton Keith Road, and the eastern portions of the project north of Clinton Keith Road.

The project is located in a portion of the City which is characterized by single-family residences and open space. Its agricultural usage ended with the termination of its Williamson Act contract. The proposed project is consistent with other residential uses in the area and no adverse impacts to land use would result. The proposed commercial uses to the northeast and to the east across I-215 are not immediately adjacent to the project or would be buffered from these areas by City code requirements and would not represent adverse impacts. However, significant land use incompatibilities could occur between Interstate-215 and those lots adjacent to it.

**Mitigation.** All potential land use incompatibilities can be mitigated to below a level of significance by:

- Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.
- Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.

## K. NOISE

**Impact. Traffic Generated Noise.** The FHWA Traffic Noise model was used to calculate traffic noise levels. Based on an average speed of 50 miles per hour on Clinton Keith Road, the 70 dBA CNEL noise contour would be located approximately 140 ft from the center of the road; the 65 dBA CNEL noise contour would be 350 ft from the center of the road. Using an average speed of 70 miles per hour, on Interstate-215 the 70 dBA CNEL noise contour was about 525 ft from the center of the freeway; the 65 dBA CNEL noise contour was 1100 ft from the center.

As shown in Figure IV-K-2 , a considerable portion of the proposed development would be located between the 65 dBA CNEL contour and the roadways, and some residences would be located between the 70 dBA CNEL and the roadways.

**Project Generated Noise.** Noise generated on the project site would be typical of residential neighborhoods. Such noise might include children playing, dogs barking, trash removal and landscape maintenance equipment noise. The project would not be anticipated to generate noise levels in excess of 50 dBA at the property boundaries during the day, or 45 dBA at night.

**Construction Generated Noise.** Noise would be generated during project site preparation, grading, and construction. Construction noise levels typically average 85-90 dB  $L_{eq}$  at a distance of 50 ft from the equipment for short periods of time during site preparation and grading. Following site preparation, noise levels are anticipated to average 65-75 dB  $L_{eq}$  at a distance of 50 ft. All construction shall be performed between 7 am and 7 pm and would comply with the construction standards required by City's noise ordinance.

**Mitigation.** Implementation of the following mitigation measures would reduce impacts to below a level of significance:

- The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.

- Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.
- When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and interior noise levels.
- The City's noise standards for residential air conditioning shall be incorporated into development requirements.

## L. PUBLIC FACILITIES

**Impact. Police Services.** Development of the Murrieta Oaks project would introduce 560 single-family residences into Murrieta, increasing the need for police services and increasing response times. Response times to the project would exceed the City's standard.

**Fire Protection and Emergency Medical Services.** Construction of the Murrieta Oaks project would increase demand for fire protection and emergency medical services, but adequate response time could be provided under most conditions (Allen, personal communication, 1999).

**Library Services.** Development of the Murrieta Oaks Project would introduce 560 single-family residences into the City of Murrieta increasing the demand for library services.

**Water Service.** In order for water service to be provided to the proposed project, a new water distribution system has been proposed. The following water distribution system was designed by the EMWD and Crosby, Mead, Benton & Associates. A one-million gallon reservoir tank would be constructed to the north of Murrieta Oaks at the end of Linnel Lane. The existing Upper Las Brisas I & II Water Storage Facility would fill the proposed new tank. A new booster pump station, rated at 560 gallons per minute (GPM), would be built at the Water Storage Facility. Water being pumped by the new booster pump station to the 1 MG tank would travel in a 12" transmission main across the Murrieta Oaks project to Clinton Keith Road and then along Clinton Keith to McElwain Road where the water main would increase in diameter to 24" to the end of Linnel Lane.

Potable water and fire fighting water would be delivered to the residential areas of the project by smaller water mains in the streets to be constructed as the project is built out. These local distribution mains would tap directly into the transmission main at appropriate points. The preparation of the final engineering plans would determine the sizes and capacities and would be in conformance with EMWD standards.

**Wastewater Collection.** In order for wastewater collection to be provided to the site, the

following sewage system has been proposed by EMWD and Crosby, Mead, Benton & Associates.

Because of the northeast-southwest trending ridge line in the property, it has been proposed that a Sewer Lift Station be built at the lowest point on the northern end of the project. From the Lift Station a Force Main would carry effluent to the top of the watershed ridge where it would go into the proposed 15" gravity sewer main. Existing mains within Las Brisas Road and Hancock Avenue have limited capacity so an offsite sewer trunk main would be constructed. The diameter of the proposed sewer trunk main would be 15" and would carry wastewater from the proposed project to the EMWD collection network and the EMWD treatment facilities.

**Mitigation.** While the project incrementally affects public facility services, impacts are mitigated by payment of developer fees, increased revenues to the City from property tax and long-term sales tax paid by new consumers. Payment of public facilities fees provides a feasible mitigation measure for reducing impacts of residential projects such as Murrieta Oaks.

Construction of the proposed water system infrastructure and proposed sewer system would create no significant impacts; therefore, no mitigation measures are required.

## **M. RECREATION**

**Impact.** The Murrieta Oaks project is proposing to include a 5.13 acre active use neighborhood park, which would include a practice soccer field, a softball field, two half court basketball courts, a tot lot, and picnic facilities. The project also includes 65.25 acres of natural open space, 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park) and designates a multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas. The parkland and open space would be deeded to the City of Murrieta, which, through the Community Service District, would be responsible for liability and maintenance.

With open space allotments of 7.33 active use acres and 109.6 passive use acres, the project would provide approximately 105.23 acres more recreational land than is required by the City's General Plan. Allotted active parkland, which consists of the 5.13 active use park and the 2.2-acre trail system totals 7.33 acres, exceeding the Quimby Act active use parkland requirement of 5.5 acres by 1.83 acres.

**Mitigation.** Implementation of the active and passive parkland improvements proposed by the project and payment of the Developer Impact Fee to the City for parks and recreation would reduce impacts to recreation to below a level of significance and no further mitigation measures would be required. An agreement for the park shall be in place prior to issuance of the building permit for the 201<sup>st</sup> dwelling unit, and park construction shall begin at that

time. If the elementary school is constructed before the 201<sup>st</sup> unit building permit is issued, the park shall be built in conjunction with the construction of the school.

## **N. SCHOOLS**

**Impact.** Construction of the Murrieta Oaks project would introduce 560 single-family residences into the Murrieta Valley Unified School District. Applying the generation rate of 0.4024 elementary students per single-family dwelling, the project would increase the enrollment at Tovashal Elementary by 225 students. The generation rate of 0.1809 middle school students per single-family dwelling would increase enrollment at Thompson Middle School by 101 students. The generation rate of 0.2004 high school students per single-family dwelling would increase enrollment at Murrieta Valley High School by 112 students. At buildout, the project would add approximately 438 new students to the Murrieta Valley Unified School District.

In addition, the Murrieta Valley Unified School District has indicated interest in purchasing land adjacent to the neighborhood park for an elementary school site. The school, which would be planned as a separate project under CEQA, would be very similar to Tovashal School. The adjacent park/school locations would allow for shared use of the playfields and possibly other facilities.

**Mitigation.** The applicant would pay a developers fee of \$2.24 per square foot of habitable living space. Payment of these fees would reduce impacts to below a level of significance and would provide mitigation of impacts to schools.

## **O. TRANSPORTATION/TRAFFIC**

**Impact.** All of the project traffic will take its access from Clinton Keith Road. The project has been designed to have two major access points, one aligning with Greer Road, and one matching the future alignment of McElwain Road. An additional minor access point will be available for the 29 units proposed north of Clinton Keith Road, in the way of a right-in, right-out only intersection with Clinton Keith Road. The raised median on Clinton Keith Road will prevent left turns in or out of the project at this point.

The proposed project will contribute approximately 3300 vehicles westerly on Clinton Keith Road, and 2100 vehicles easterly on Clinton Keith Road per 24-hour period.

Peak hour analyses found the morning peak hour will carry 114 vehicles into the project, and 336 vehicles out of the project. The evening peak carries 390 vehicles into the project, and 216 vehicles out. The maximum peak hour demand on the system, therefore, is the 390 vehicles seeking to enter the project in the p.m. peak hour time frame.

Analyses of levels of service (LOS) were done for five key street intersections with Clinton Keith Road:

- California Oaks Road
- Greer Road
- McElwain Road
- Southbound I-215 ramp
- Northbound I-215 ramp

Analyses were done under four scenarios:

- Existing conditions
- Existing conditions plus Murrieta Oaks
- Projected conditions in Year 2015 without Murrieta Oaks
- Projected conditions in Year 2015 with Murrieta Oaks

Analyses of the intersections of Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road are not applicable under Existing Conditions, as there is no traffic from Murrieta Oaks to consider. All other intersections are operating under LOS A, B, or C.

With the proposed project added, all intersections continue to operate at LOS A or B. With 2-way stop signs in place, the Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road intersections are projected to operate at LOS A.

A seemingly anomalous LOS improvement exists for the northbound I-215 ramp from Clinton Keith Road. The present LOS is C, while with the proposed project the LOS is projected at B. This is a result of a change in Traffic Control Type, as the intersection will be changed from a 2-way stop to an all-way stop by the time of project buildout.

All intersections are projected to operate at LOS A or B, with the exception of Clinton Keith Road/California Oaks Road, which is projected to operate at LOS C in the p.m. peak hour period, with or without the Murrieta Oaks Project.

The intersection of Clinton Keith Road/McElwain Road is projected to operate at LOS A at all times without the project. The a.m. peak is projected to operate at LOS B with the Murrieta Oaks Project.

Year 2015 projections require assumptions be made:

- The arterial street network in the project area will be built out to assumed levels by Year 2015.
- The I-215 interchange with Clinton Keith Road will be built out to ultimate capacity by Year 2015, to include

Three moving lanes for through traffic in each direction.

Double left turn lanes from Clinton Keith Road onto I-215.

At least two lanes on the I-215 exit ramps.

As of May, 1999, the Clinton Keith Road interchange with I-215 was in the final stages of a study for the approval of a Caltrans *Project Study Report*.

The inclusion of the school/park site would not reduce the LOS of any of the intersections analyzed, based on the following:

- The proposed project with the school/park site has fewer dwelling units (560) than that assumed in the Traffic Technical Report (600).
- The proposed school will have peak-hour traffic at different times than the normal peak hour traffic generated by the project. The starting times will be after the "normal" peak hours, and the dismissal time is before those peak hours. The impact will be intense traffic within the immediate vicinity of the school for approximately one-half hour in the morning and fifteen minutes in the afternoon, but this traffic will occur outside of the overall peak hours for project traffic.
- No significant impacts are projected for traffic with the Murrieta Oaks Project, as LOS is maintained within the City standards

No significant impacts are projected due to project traffic on the I-15 interchanges with Winchester Road or Rancho California Road, given the small contribution made by project traffic.

**Mitigation.** Project traffic impact mitigation measures shall consist of:

- Installing traffic signals at the intersection of Clinton Keith Road and Greer Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

- Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

## **P. UTILITIES/SERVICE SYSTEMS**

**Impact. Electric Service.** Southern California Edison has indicated that service can be provided to the Murrieta Oaks project. Other than increasing demand for electricity, which can be met, the project would have no impacts on electric service.

**Gas Service.** Southern California Gas Company has indicated that service to the Murrieta Oaks project can be provided. Other than increasing demand for gas, which can be met, the project would have no impacts on gas service.

**Telephone Service.** General Telephone Electronics has stated that telephone service could be provided to the project; therefore no impacts to telephone service are anticipated.

**Cable Television Service.** Development of the Murrieta Oaks project would most likely increase the demand for cable television service. As this service can be provided by Media One, no negative impacts to cable service are expected.

**Solid Waste Disposal Service.** The proposed project is estimated to have 1,992 residents meaning 19,920 pounds of waste would be generated daily by the project. This waste would be taken to any one of three area landfills. USA Waste Management has indicated that service can be provided to the project. Other than increasing demand for solid waste disposal, which can be met, the project would have no impacts on solid waste disposal service.

**Mitigation. Electricity, Gas, Telephone, Cable Television, and Solid Waste Disposal Service.** No impacts to these services are associated with implementation of this project, therefore no mitigation measures are required.



## IMPACTS AND MITIGATION SUMMARY

Impacts	Mitigation	Significance After Mitigation
<p><u>Aesthetics</u> (see page 29)</p> <ol style="list-style-type: none"> <li>1. Viewshed change</li> <li>2. Views from Clinton Keith Road</li> <li>3. Views from I-215</li> </ol>	<p>Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.</p> <p>Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.</p> <p>A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6-8-ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.</p> <p>Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts.</p>	<p>Mitigated to below a level of significance</p>

<p><u>Air Quality</u> (see page 35)</p> <p>1. Construction equipment gaseous and particulate emissions impacts.</p> <p>2. Occupants vehicles, water heaters, fireplaces, and landscape maintenance equipment.</p> <p>3. Cumulative regional ozone impacts.</p>	<p>ROC emissions from painting and other architectural coatings, including asphalt, shall be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.</p> <p>While projected construction emissions of PM<sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust shall be followed. Project construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.</p> <p>Exposed surfaces must be watered twice daily.</p> <p>All haul roads must be watered twice daily.</p> <p>Speeds on unpaved roads must be reduced to 15 miles per hour or less.</p> <p>Construction and mobile equipment must be properly maintained.</p> <p>Measures shall be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.</p> <p>Measures should be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.</p>	<p>Mitigated to below a level of significance</p> <p>Mitigated as fully as possible, but still regionally cumulatively significant</p>
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<p><u>Biological Resources</u> (see page 45)</p> <p>1. Loss of 40.25 acres of chamise chaparral and 37.4 acres of <i>Ceanothus crassifolius</i> chaparral.</p> <p>2. Loss of 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acre of riparian forest, and 0.04 acres of mulefat scrub).</p> <p>3. Loss of four individual coast live oak trees and one canyon live oak.</p> <p>4. Impacts to 0.29 acre of Corps-defined wetlands and 0.73 acre of Waters of the U.S.</p> <p>5. Approximately 2.62 acres of habitat under Fish and Game jurisdiction would be impacted.</p>	<p>Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space. The project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.</p> <p>Mitigation for un-occupied Quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants.</p> <p>The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, 2.99 acres of riparian forest, and 0.0 acre of mulefat scrub) in open space, providing mitigation at a 1.3:1 ratio.</p> <p>A Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required.</p> <p>The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters.</p> <p>A Streambed Alteration Agreement must be made with the California Department of Fish and Game. Habitat creation will be done in Drainage "A" and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat.</p>	<p>Mitigated to below a level of significance</p>
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<p><u>Geology/Soils</u> (see page 65)</p> <p>1. Project includes areas of undocumented fill, topsoil, alluvium, older alluvium, weathered areas of gabbro and granodiorite, and possibly colluvium, slopewash.</p>	<p>Geologic observation during the grading process would identify potential boulder and rock fall areas that may be created by site grading. Stabilization fills, rock bolting or debris catchment areas are possible mitigation measures to be evaluated on a case by case basis.</p> <p>The following standard engineering practices must be incorporated into the project in order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction.</p> <ul style="list-style-type: none"> <li>• Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.</li> <li>• Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.</li> <li>• Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.</li> <li>• Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.</li> </ul>	<p>Mitigated to below a level of significance</p>
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<p><b>Fire Hazards</b> (see page 71)</p> <p>1. Some portions of the Murrieta Oaks project would be exposed to potential wildland fire hazards.</p>	<p>Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created.</p> <p>Access to the fuel modification zones shall be provided at a maximum of every 1,500 ft.</p> <p>All high fire hazard plant species shall be removed.</p> <p>Tree branches shall be pruned up 6 ft.</p> <p>Plant material shall be pruned to a height of 18 inches.</p> <p>Manufactured slopes shall be planted with Fire Protection District List B and C recommended species.</p> <p>Trees shall be placed at a distance of three times their mature diameter.</p> <p>Large shrubs shall be planted at 20 ft on center.</p>	<p>Mitigated to below a level of significance</p>
<p><b>Landform Alteration</b> (see page 86)</p> <p>1. The proposed project would require 1,400,000 cu yds of balanced cut (82.5 acres) and fill (106.9 acres) over a total of 178.45 graded acres.</p>	<p>Grading shall be minimized on slopes, ridges, and canyons</p> <p>Contour grading techniques shall be used wherever possible</p> <p>Cut and fill shall be balanced on-site</p> <p>Excess soil shall be used on-site</p> <p>All grading and drainage system plans shall be prepared under the direction of a licensed Civil Engineer</p> <p>Slope variation and undulation shall be followed wherever possible to retain natural contours</p> <p>Existing dominant landforms shall be retained and incorporated into the project design</p>	<p>Mitigated to below a level of significance</p>

<p><u>Land Use</u> (see page 96)</p> <p>1. Land use incompatibilities would occur between those portions of the project adjacent to Interstate-215 and Clinton Keith Road, and the eastern portions of the project north of Clinton Keith Road.</p>	<p>Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.</p> <p>Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.</p>	<p>Mitigated to below a level of significance</p>
<p><u>Noise</u> (see page 101)</p> <p>1. Most noise within the project area would be generated by traffic on Clinton Keith Road and Interstate-215.</p>	<p>The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.</p> <p>Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.</p> <p>When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and interior noise levels.</p> <p>The City's noise standards for residential air conditioning shall be incorporated into development requirements.</p>	<p>Mitigated to below a level of significance</p>

<p><u>Recreation</u> (see page 114)</p> <p>1 The proposed project would increase demand on recreational facilities</p>	<p>The project would provide active and passive parkland improvements and shall pay a Developer Impact Fee to the City for parks and recreation.</p>	<p>Mitigated to below a level of significance</p>
<p><u>Schools</u> (see page 116)</p> <p>1. The project would add students to area schools</p>	<p>The applicant would pay a developers fee of \$2.24 per square foot of habitable living space.</p>	<p>Mitigated to below a level of significance</p>
<p><u>Traffic/Circulation</u> (see page 118)</p> <p>1. The project would increase traffic.</p>	<p>Project traffic impact mitigation measures shall consist of:</p> <ul style="list-style-type: none"> <li>• Installing traffic signals at the intersection of Clinton Keith Road and Greer Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.</li> <li>• Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.</li> </ul>	<p>Mitigated to below a level of significance</p>



**CHAPTER B**

**COMMENT LETTERS AND RESPONSES TO COMMENTS**

## CHAPTER B

### COMMENT LETTERS AND RESPONSES TO COMMENTS

During the 45-day review period which commenced March 14, 2000 and ended April 25, 2000, six comments on this EIR were on The Murrieta Oaks project (SCH.99031094). These letters are reprinted in this section along with written responses from the City of Murrieta.

On the following pages, comment letters are provided on the left, with specific comments identified by numbers in the left-hand margin. Responses to comments are provided on the right side of the page, and are numbered to correspond with the comment



Gray Davis  
GOVERNOR

STATE OF CALIFORNIA

Governor's Office of Planning and Research  
State Clearinghouse



Loretta Lynch  
DIRECTOR

April 28, 2000

Roger Scherer  
City of Murrieta  
26442 Beckman Court  
Murrieta, CA 92562-8850

Subject: Murrieta Oaks  
SCH#: 1999031094

Dear Roger Scherer:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on April 27, 2000, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts  
Senior Planner, State Clearinghouse

Enclosures  
cc: Resources Agency

CITY OF MURRIETA

MAY - 3 2000

RECEIVED  
PLANNING DEPT

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044  
916-445-0613 FAX 916-331-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTM

B-2

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 1999031094  
**Project Title** Murieta Oaks  
**Lead Agency** Murieta, City of

**Type** eir **Draft EIR**

**Description** The proposed Murieta Oaks project would provide a quality single-family residential community while retaining assets of the existing environment. An elementary school, park, and picnic rest areas would also be part of the project.

**Lead Agency Contact**

**Name** Roger Scherer  
**Agency** City of Murieta  
**Phone** 909-698-1040, ext. 235  
**email**  
**Address** 26442 Beckman Court  
**City** Murieta  
**State** CA **Zip** 92562-8650  
**Fax**

**Project Location**

**County** Riverside  
**City** Murieta  
**Region**  
**Cross Streets** Clinton Keith Road/I-215  
**Parcel No.** 956-280-01, 9560280-011  
**Township** 7S **Range** 3W **Section** 3 **Base**

**Proximity to:**

**Highways** I-215  
**Airports**  
**Railways**  
**Waterways**  
**Schools** Tovashal, Thompson, MVHS  
**Land Use** Present Land Use: Vacant  
 Current Zoning: Residential  
 General Plan Use: Specific Plan

**Project Issues**

Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Coastal Zone; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Growth Inducing; Landuse; Cumulative Effects; Drainage/Absorption

**Reviewing Agencies**

Resources Agency; Department of Conservation; Department of Fish and Game, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Department of Housing and Community Development; Integrated Waste Management Board; Regional Water Quality Control Board, Region 9; Department of Toxic Substances Control; Native American Heritage Commission; State Lands Commission

**Date Received** 03/14/2000 **Start of Review** 03/14/2000 **End of Review** 04/27/2000



# Western Riverside Council of Governments

County of Riverside, City of Banning, City of Beaumont, City of Calimesa, City of Canyon Lake, City of Corona,  
City of Murrieta, City of Lake Elsinore, City of Moreno Valley, City of Murrieta, City of Norco, City of Perris,  
City of Hemet, City of Lake Elsinore, City of Lake Elsinore, City of Moreno Valley, City of Murrieta, City of Norco, City of Perris,  
City of Riverside, City of San Jacinto, City of Temecula

## CITY OF MURRIETA

MAY - 1 2000

RECEIVED  
PLANNING DEPT.

April 24, 2000

Mr. Roger Scherer, AICP  
City of Murrieta, Planning Department  
26442 Beckman Court  
Murrieta, CA 92562

RE: Comments on the Draft Environmental Impact Report for Murrieta Oaks Specific Plan -  
SCAG No. I2000114.

Dear Mr. Scherer:

Thank you for the opportunity to review and comment on the above-referenced project. The proposed project is considered to be "regionally significant" (CEQA §15206), and as such, subject to Intergovernmental Review (IGR). IGR is the review of regionally significant projects for their consistency with adopted regional plans. Western Riverside Council of Governments (WRCOG) is assisting Southern California Association of Governments (SCAG) in reviewing on their behalf, regionally significant projects located within the western Riverside County subregion. SCAG staff, or the Community, Economic and Human Development Committee as appropriate, concurs in the review comments.

The attached policies are a listing of those policies from the WRCOG *Subregional Comprehensive Plan* (SRCP) by which the proposal was reviewed for regional consistency. All policies identified have been determined to be consistent with SCAG's regional plan, the *Regional Comprehensive Plan and Guide* (RCPG).

### GENERAL COMMENTS

- 1 The Draft EIR does not provide analysis of the consistency of the proposed plan with various regional plans including the *Regional Comprehensive Plan and Guide* (RCPG), *Subregional Comprehensive Plan* (SRCP), *Regional Transportation Plan* (RTP), *Sub Regional Non-Motorized Transportation Plan*, *Congestion Management Plan*, *Regional Water Quality Plan*, and the *Air Quality Management Plan* (AQMP). There is also no discussion of the regional setting as required by CEQA § 15125. These discussions should be included in the Final EIR (FEIR).
- 2 Transportation impacts should be mitigated consistent with the RTP. Specifically, the project and cumulative impacts should be analyzed and mitigated with regard to the *Congestion Management Plan* and relative to the level-of-service policies for the subregion. Also, Transportation Control Measures (TCMs), particularly TDM and TSM strategies, should be used to mitigate transportation congestion impacts. The FEIR should contain this consistency discussion. It is noted that there is no TDM consultation with AQMD, RCTC, RTA or Caltrans.
- 3 SCAG's Standing Committee on Implementation (functions currently assumed by the Community, Economic, and Human Development Committee) has consistently stressed that EIR's for similar

1 WRCOG's specific comments listed on the following pages of this letter address the project's consistency or inconsistency with the various regional plans. The responses to these specific comments address the project's compatibility with these plans. Please see Responses to Comments No. 3, No. 12, No. 26, No. 30, No. 35, No. 39, No. 41, No. 45, and No. 46. Also, please note Section C, Modifications to the DEIR

2 Comment noted. Please see Response to Comment No. 1 and 36.

3 The City recognizes the need for jobs/housing balance, and is very active in encouraging and creating job opportunities within the region. In this regard, the City adopted the Golden Triangle Master Plan in March 1999. The Plan encompasses approximately 200 acres and is intended to serve as the City's Central Business District featuring a mix of offices, technology uses, and supporting commercial. Implementation of the Plan will provide a variety of job opportunities, particularly in the professional category.

In addition, the City adopted the Murrieta Retail Corridor Plan in 1995. This Plan encompasses approximately 100 acres of commercial land and has unique provisions to fast-track development, thus encouraging major retailers to locate in the area. The Plan was recognized by the Governor's Office of Planning & Research, the California Association for Local Economic Development, and the American Planning Association as an innovative approach to implement streamlining strategies and create jobs.

As part of its Capital Improvement Plan for FY 99-00, the City is planning to prepare an Industrial Park Master Plan for several hundred acres of currently unimproved industrial land. The Plan is intended to create improved industrial land, coupled with a streamlined permit process in order to stimulate industrial park development, thus creating more job opportunities in the region.

In regard to residential development, the City requires the preparation of Public Facility Financing Plans (PFFP) for all major residential projects. The PFFP identifies the necessary infrastructure and services required for a project, and describes funding mechanisms to ensure that services/infrastructure are phased to coincide with development.

All of the above address the City's continued goal of achieving a better jobs/housing balance.

Projects should address the manner in which the proposed Project will be developed so that provision of service to new housing units or jobs producing commercial, industrial or other uses will be staged or phased to help achieve greater jobs/housing balance within the jurisdiction and the Subregion. The Standing Committee on Implementation has previously expressed the concern that, in housing rich subregions, such as Western Riverside County, the housing will likely be constructed first and the employment producing office buildings, shopping centers, schools or industrial buildings could be built first, and the housing components could be brought in much later, or never. The objective of a phasing or development staging plan would be to encourage the implementation of types of development that would address the jobs/housing balance issue and work toward the reduction of Vehicle Miles Traveled in the early phases or stages of development rather than leaving such uses until later (or allowing indefinite postponement). The FEIR should clearly define development phasing and timing for residential and commercial uses and essential infrastructure.

It is noted that the DEIR lacks any discussion regarding employment or jobs/housing ratios. Consistency with the local Urban Water Management Plan is discussed. Will NPDES permits be required? If so, that should be discussed.

All feasible measures needed to mitigate any potentially negative regional impacts associated with the proposed project should be implemented and monitored, as required by CEQA.

It is noted that within the Menifee/French Valley/Temecula/Murrieta area enormous growth is taking place, with over 72,000 proposed and approved residential units in various Specific Plans and tracts. All of these similar projects will have impacts on air quality and transportation. Please explain why the cumulative impact section of the DEIR discusses only the incremental impact of this specific project relative to SCAG population and housing forecasts. Also, please reply:

Was a certified EIR cumulative impact discussion used for this cumulative analysis? If so, Where is the document available for viewing?

Why was it not incorporated by reference?

What was the geographic scope of that EIR?

Did the EIR adequately address traffic congestion, VMT, daily trips, etc., relative to current and future road capacity?

Did it adequately address cumulative impacts on public services?

The cumulative impact for biology states that this project's replacement program for habitat will reduce project impact to below a level of significance. The statement that it will reduce the "diminishment of regional habitat...to below a level of significance" is misleading. This should be clarified in the FEIR.

Page 40, discusses Air Quality impacts. Mitigation in several places states "should" which is not enforceable mitigation, as required by CEQA. Mitigation must be mandatory.

Page 61, mitigation states that the Pechanga Band of Luiseno Indians have requested that a Native American monitor be on-site during grading operations. Will this request be honored?

It is noted that there are no thresholds of significance identified.

Once again, we appreciate the opportunity to comment on this DEIR. If you have any questions regarding this letter, do not hesitate to contact me or Sandra Paulsen at (909) 787-7985. We would appreciate a copy of the Final EIR, once it becomes available.

Sincerely,

  
Steve Kuddick

4 5 6 7

Please see Response to Comment No. 3 and 12.

Please see Response to Comment No. 39.

Please see the Mitigation Monitoring and Reporting Program checklist provided in Chapter D of the FEIR.

As provisioned by CEQA Section 15130, the Murrieta Oaks DEIR analyzes cumulative impacts using a regional, rather than project specific approach. The analysis and discussion were based on regional information provided by SCAG and by the Western Riverside Council of Governments; the section was not based on a certified EIR, as would have been appropriate if a project specific approach for an analysis had been used.

Cumulative habitat loss in the City of Murrieta is assumed by planned growth and development under the General Plan. The project is providing mitigation for direct impacts per the mitigation ratios developed by the City for similar projects. Thus, the cumulative loss of habitat is not considered significant.

See Response to Comment No. 38.

The request made by the Pechanga Band of Luiseno Indians that a Native American monitor be present during on-site grading operations will be honored.

The City of Murrieta has no adopted thresholds of significance.

**COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE MURRIETA OAKS SPECIFIC PLAN ADJACENT IN THE CITY OF MURRIETA SCAG IGR # I 2000114**

Project Description The project consists of the construction of 560 detached single-family homes on 260 undeveloped acres at the southwest corner of Clinton Keith Road and the I 215 freeway, and 10 acres on the north side of Clinton Keith Road west of the freeway.

SRCP POLICIES RELATED TO GROWTH FORECASTS WRCOG staff comments:

WRCOG prepares growth projections for western Riverside County in the areas of population, housing and employment. Projections are developed with the assistance of local jurisdictions, and through modeling programs such as the *Disaggregate Residential Allocation Model* and the *Employment Allocation Model*. SCAG adopts regional growth projections based on subregional figures to be used in modeling efforts for transportation, air quality, and other regional programs.

GROWTH MANAGEMENT ELEMENT:

SCAG 3.01

- The EIR should discuss whether the project's growth projections are consistent with the population, housing and jobs forecasts for the Western Riverside County subregion.*

WATER RESOURCES ELEMENT:

SCAG 3.03

- Ensure that future growth and development is supported by adequate infrastructure.*
- Establish stable, reliable and secure water supplies of adequate amounts and quality to meet the needs of the existing population and projected growth.*
- Cooperate and coordinate with local responsible wastewater authorities to plan and construct new wastewater treatment and collection facilities on the basis of projected growth forecasts, which are consistent with the protection of*

12

- 1. Housing and population are discussed only in the cumulative impacts section. Employment is not discussed.

13

- 2. Page 105 contains discussion on utilities and services, and provides details regarding wastewater and water service, and other infrastructure. Page 107 contains discussion regarding consistency with the applicable Urban Water Management Plan, consistent with the requirements of CEQA.

12

Please see Response No.3. The proposed action is the development of a residential project. The project is consistent with the City's General Plan and Zoning Ordinance. Discussion of compliance with population, housing, and jobs forecasts for the subregion is beyond the scope of a single residential project. These larger, regional issues were addressed in the EIR prepared for the City's General Plan which was adopted in 1994.

13

Comment noted.

- public health and water quality.*
- Schedule future development at a pace consistent with the provision of public infrastructure facilities and available funding.*

**SRCP POLICIES RELATED TO STANDARD OF LIVING**

The policies addressing Standard of Living promote the regional strategic goal to stimulate the economy. The listed goals are aimed at developing urban environments that enable individuals to spend less income on housing, minimize public and private development costs, and enable firms to be more competitive.

**GROWTH MANAGEMENT ELEMENT:**

SCAG 3.03

- Manage growth to ensure the ability to provide the public services and facilities needed to maintain the quality of life for current and future residents of Western Riverside County.*

SCAG 3.05

- Attach urban development to existing urban centers to establish balanced subregional land use patterns which maintains the quality of life, provides for effective service delivery, and helps attain other subregional goals while accommodating a range of lifestyles.*
- Riverside County should reflect a balanced land use pattern, with development and growth of urbanization attached to existing urban centers.*
- Promote infill development within existing urban centers.*

SCAG 3.09

- Provide adequate services and facilities to maintain and improve the quality of life as the subregion's population increases.*

**WATER RESOURCES ELEMENT:**

SCAG 3.05

- Manage a timely, orderly and efficient arrangement of public infrastructure*

**14**

3. The document contains information, pages 104-109, relative to the provision of all public services, consistent with this policy.

**14** Comment noted.

**15**

4. The project is adjacent to a residential community with a density of 3.97 du/ac and a subdivision with 4.31 du/ac. It is contiguous to other approved, similar projects. The proposed project is generally consistent with this policy.

**15** Comment noted

**16**

5. This would not be considered infill development, inconsistent with this policy.

**16** The project is located in the central portion of the City. It is part of the core development area of the City, adjacent to an existing transportation corridor (I-215) and existing residential development. Based on this, Murrieta Oaks qualifies as an in-fill project.

**17**

6. Please see comment 2.

**17** Comment noted.

**18**

7. Please see comments 2, and 3. The project is consistent with these policies.

**18** Comment noted.

- facilities and distribution/collection systems to serve as the framework for development that best supports existing and proposed land uses.*
- Manage the rate, sequence and location of development in a manner that recognizes and preserves the jurisdiction's fiscal capacity.*

**ECONOMIC ELEMENT:**

- SCAG 3.04  *Diversify the job base within the subregion.*
- Provide an adequate number and variety of jobs to meet the employment needs of Western Riverside County residents.*
- SCAG 3.08  *Provide a range of employment opportunities to meet the education, experience and skill level of residents in the subregion.*
- SCAG 3.04  *Provide employment near workers' places of residence.*
- Increase the number and variety of jobs in the subregion to reduce commuting to other employment centers.*
- Eliminate negative air quality impacts and reduce excessive use of the transportation system.*

- SCAG 3.08  *Increase the amount of retail and service employment to meet the purchasing needs of residents and businesses within the subregion.*

**HOUSING ELEMENT:**

- SCAG 3.04  *Provide housing in convenient proximity to jobs and employment centers.*
- Encourage a balanced land use pattern with development and the growth of urbanization attached to urban centers.*

**19**

8. The project includes a proposed school which, if built, would provide limited employment opportunities. No other permanent employment is proposed. The proposed project is not consistent with these policies.

**20**

9. Please see comment 8.

**21**

10. Please see comment 8.

**22**

11. No retail or service employment is proposed, inconsistent with this policy.

**23**

12. The DEIR includes no discussion regarding employment, and provides no job producing uses, inconsistent with this policy.

- 19** Please see Response to Comments No. 3 and 12.
- 20** Please see Response to Comments No. 3 and 12.
- 21** Please see Response to Comments No. 3 and 12.
- 22** Please see Response to Comments No.3 and 12.
- 23** Please see Response to Comments No. 3 and 12.

24

- Provide a selection of housing choices to preserve residential and community life style choices.

**OPEN SPACE and HABITAT CONSERVATION**

**ELEMENT:**

SCAG 3.07

- Maintain and protect open space.
- Preserve and maintain agricultural lands for farm use as an important industry in the subregion and as a desirable open space use, consistent with existing and future needs for agricultural products and open space.

13. The project will provide 560 single-family dwellings at an average density of 2.1 units/acre. These are designed for all age groups and will provide housing choices consistent with these policies.

25

14. The project proposes 65 acres of natural open space, about 39 acres of modified open space. There are approximately 5 acres for the proposed park. The land is not considered to be Prime Farmland, or Farmland of Statewide Importance. There are 1.5 acres of Class II soils which will be lost to development. The Williamson Act no longer affects this property. The project is generally consistent with these policies.

**SRCP POLICIES RELATED TO QUALITY OF LIFE**

Quality of life policies are intended to enhance and preserve the quality of the physical and social living environment. The underlying goals of the policies include creating urban environments that preserve open space and natural resources, are aesthetically pleasing, preserve the character of the community, and offer a variety of lifestyles. Issues regarding mobility and clean air are also included in this category.

**MOBILITY ELEMENT:**

SCAG 3.12

- Support concentration of development around transit stations and corridors in order to increase accessibility to transit.
- Support mixed uses which encourage walking and bicycling.
- Encourage mixed use development.
- Locate jobs and housing near each other to produce shorter work commutes.

SCAG 3.13

- Require new development to contribute to public transit facilities.

24

Comment noted.

25

Comment noted.

26

As noted, the project is located adjacent to the I-215 transit corridor. In addition, the Riverside Transit Agency (RTA) has indicated that it will initiate transit service on Clinton Keith Road once there is sufficient project occupancy to support it. The project has provided a bus turn-out on the south side of Clinton Keith Road, just east of "A" Street, as requested by the RTA. This location also connects a main multi-use trail link to the school park, which is only 900 ft. away.

27

Please see Response to Comment No. 26.

28

Please see Response to Comments No. 3 and 12.

29

Please see Response to Comment No. 26.

26

15. The project is located in an area which is not served by transit. It is adjacent to I-215, which is considered a future transit corridor, partially consistent with this policy.

16. The proposed project is not a mixed use project. However, there will be multi-use trails for biking and walking. The project is partially consistent with this policy.

17. Please see comment 8. The project is generally inconsistent with this policy.

18. There is no discussion pertaining to transit. The project is not served by transit. The project does not appear to be consistent with this policy.

27

28

29

SCAG 3.16

Reduce congestion within the subregional transportation system to enhance access to residential communities, urban centers, and important services.

30

19. Please see comment 15. Mitigation requires the improvement of roadways, consistent with the General Plan, to reduce traffic congestion. The project is partially consistent with this policy.

HOUSING ELEMENT:

SCAG 3.17

Provide a sufficient number and variety of housing units to meet the lifestyle requirements of all Western Riverside County residents.

31

20. Please see comment 13.

SCAG 3.22

Protect residents and structures from man-made and natural hazards.

32

21. The DEIR on pages 66 and 71, discusses how the project will comply with adopted standards to ensure safety from geologic and man-made hazards, consistent with this policy.

WATER RESOURCES ELEMENT:

SCAG 3.20

Optimize the use of existing water resources through conservation programs and efficient ground and surface water management programs.

33

22. The DEIR, does not contain discussion regarding water conservation. Staff is unable to determine consistency with this policy.

SRCP POLICIES RELATED TO SOCIAL, POLITICAL, AND CULTURAL EQUITY

Policies addressing social, political and cultural equity are intended to promote the regional strategic goal to minimize social and geographical disparities and achieve equity among all segments of society. The listed goals are aimed at developing urban environments that avoid economic and social polarization of communities.

WATER RESOURCES ELEMENT:

SCAG 3.27

Ensure that water supply and facilities sufficient for domestic consumption and fire protection, and capable of serving both existing and proposed development needs, are available or assured prior to approving new development. Provide adequate and reliable systems of public infrastructure which provide for

34

23. Please see comment 2. The project is consistent with these policies.

30 The project is conditioned to pay Developer Impact Fees (DIF). A portion of the DIF is used to pay the subregional Southwest Road and Bridge Benefit District, which improves road infrastructure.

31 Comment noted.

32 Comment noted.

33 The City's Development Code requires decreasing the use of water for landscaping purposes by requiring the efficient use of irrigation, appropriate plant materials, and regular maintenance. Water conservation is also achieved by raising public awareness of the need to conserve water through education.

34 Comment noted.

- the continued economic and growth potentials of the subregion.
- Provide funding and/or financing mechanisms to provide adequate and reliable water supplies, wastewater treatment, flood control, and water retention facilities and systems.
- Provide effective public utilities coordination.

**SRCP POLICIES RELATED TO AIR QUALITY**

The Air Quality Management Plan (AQMP) contains measures to reduce air pollution from both stationary and mobile sources. AQMP policies to reduce mobile emissions are aimed at influencing people to drive less. This influence can be applied directly or indirectly through land use design. The goal of both strategies is to either reduce the number or shorten the length of vehicle trips.

- SCAG 5.07 Implement measures to support the use of transit and other alternatives to the single occupancy vehicle.
- Implement measures to support walking, biking, ridesharing, telecommuting, and the use of transit.

SCAG 5.08

- Relieve congestion to reduce emission through the implementation of TSM techniques through the Riverside County Congestion Management Program and the Comprehensive Transportation Plan
- Manage the roadway system through planning, monitoring, and maintaining street widths and levels of service for highways and intersections.

SCAG 5.11

- Provide for the mitigation of projects' air quality impacts, consistent with the legal requirements of CEQA.

**35**

24. Please see comment 18. Also, a multi-use trail system is proposed however, there is no discussion of off-site bike lane connections, and staff is unable to determine consistency with these policies.

**36**

25. TSM actions are not discussed. Discussion of consistency with the Riverside County Congestion Management Plan should be incorporated into the Final EIR.

**37**

26. The project includes construction of various roads, streets and improvements which will alleviate congestion and maintain appropriate levels of service consistent with this policy.

**38**

27. Air Quality impacts remain significant and unavoidable, and a Statement of Overriding Considerations should be adopted, in compliance with the requirements of CEQA. Some AQ mitigation measures use "should" rather than "shall", and are therefore unenforceable, not

**35**

The Murrieta Oaks project's multi-use trails and bike paths have been designed to connect all project neighborhoods. They also connect with Greer Ranch to the north, a future City trail head at Toulon Court, and Las Brisas Road to the south. As discussed in Response to Comment No. 27, the project will provide an RTA-requested bus stop adjacent to the project on the south side of Clinton Keith Road with easy access to multi-use trails. The project will also provide bike lane striping on Clinton Keith Road.

**36**

The I-215 interchange at Clinton Keith Road is under the control of Caltrans. This interchange operates at Level of Service E or better and is consistent with the Riverside County Congestion Management Plan. In accordance with the Project Study Report prepared December 12, 1999, the City is will pay for future improvements to this interchange with DIF funds.

**37**

Comment noted.

**38**

Comment noted. Please see Chapter D of the FEIR.

SRCP POLICIES RELATED TO WATER QUALITY

Water Quality policies are based on two underlying goals: to restore and maintain the chemical, physical and biological integrity of the nation's water supply, and to achieve and maintain water quality objectives necessary to protect all beneficial uses of all waters.

SCAG 11.02  
 *Protect surface and groundwater from degradation.*

SCAG 11.03  
 *Integrate new data on water supplies, wastewater treatment capacities, flood hazards, and other infrastructure facilities and systems into the Western Riverside Information Network (WRIN).*

SCAG 11.06  
 *Encourage maximum reuse of reclaimed wastewater and other non-potable waters.*  
 *Support the retention (reclamation) and reuse of wastewater.*

HAZARDOUS WASTE ELEMENT

**NOTE:** *Hazardous Waste Management in Western Riverside is the sole responsibility of the Riverside County Department of Environmental Health Services. WRCOG only focuses on household hazardous wastes. As such, the SCAG HWMC policies are not applicable.*

SRCP POLICIES RELATED TO REGIONAL MOBILITY

The SRCP Mobility Element goals and objectives are intended to refine and implement the goals and policies identified by SCAG in its Regional Comprehensives Plan and Guide. SCAG's goals and policies regarding regional mobility address system mobility, reducing energy consumption,

consistent with this policy.

**39**

28. The DEIR does not discuss the requirement of a NPDES permit and the use of Best Management Practices to maintain water quality. Staff is unable to determine if the project is consistent with this policy.

**40**

29. Please note this policy.

**41**

30. Neither the use of, nor collection for, reclaimed water is discussed. Staff is unable to determine if the project is consistent with this policy.

**39**

The project must acquire a Construction Activity General Permit as a condition of approval of all tract maps, to be done prior to issuance of grading permits. The earthen-bottom detention basins on-site were designed to minimize project impacts to water quality and to allow recharge of groundwater.

**40**

Policy noted.

**41**

Reclaimed water is not available to the project. The project will have non-irrigated slopes. Reclaimed water cannot be used on private lots. The only area in the project that could utilize reclaimed water is the park.

promoting transportation friendly development patterns, fostering economic development and enhancing the environment. In addition, SCAG policies regarding regional mobility relate directly to regional strategic policies for Quality of Life.

**Transportation Demand Management**

SCAG 4.02

- Evaluate transportation improvement alternatives based on their cost-effectiveness in increasing and maintaining mobility.

SCAG 4.03

- Encourage mixed land use development.
- Support planned land use patterns that locate homes near employment centers.

SCAG 4.06

- Provide residents of the subregion with a variety of transportation modes that ensure safety and efficient access to urban centers and important services.

- Maximize the efficient use of the circulation system and minimize congestion through the use of TDM and TSM strategies.

SCAG 4.07

- Support the development of a safe public transportation system that provides mobility to all Western Riverside County residents.

**Streets and Highways/Freeways/HOV**

SCAG 4.12

- Encourage the provision of ramp meters along all freeway ramps.

SCAG 4.13

- Support the implementation of site design standards that reduce localized roadway congestion for the safety of motorists, pedestrian and bicyclists.

**Transportation Systems Management**

SCAG 4.22

- New transportation infrastructure will incorporate advanced systems

**42**

31. This evaluation is not contained in the document. Staff is unable to determine consistency with this policy.

**43**

32. Please see comments 4, And 16. The project is not consistent with these policies.

**44**

33. The project includes pedestrian amenities such as mixed-use trails. There is no transit at this time, and none committed in the future. The project is generally inconsistent with this policy.

**45**

34. The use of TDMs and TSM strategies are not discussed in the DEIR. Staff is unable to determine if the project is consistent with this policy.

**46**

35. Please see comments 18. The project does not appear to be consistent with this policy.

**47**

36. One freeway interchange was evaluated in the traffic analysis. There is no discussion regarding ramp metering. Staff is unable to determine if the project is consistent with this policy.

**48**

37. The internal circulation design is discussed on page V.C-15 and 16 of the document. The design will include safety features consistent with this policy.

**49**

38. There is no discussion regarding the incorporation of advanced systems technology or traffic actuated operation. Staff is unable to

**42** The City has a Transportation Demand Ordinance. This includes alternate work schedules, flex time, parking management, car pools, van pools, ride share, and telecommuting.

**43** Please see Responses to Comments No. 3, No. 12, No. 26, and No. 41.

**44** Please see Response to Comment No. 26.

**45** Please see Response to Comment No. 42. The City is implementing a fiber optic centralized traffic control system to optimize flow and minimize congestion. The first phase of this system is now under construction.

**46** Please see Responses to Comments No. 26, No. 36, No. 42, and No. 45.

**47** Ramp metering devices will be installed when required by Caltrans.

**48** Comment noted.

**49** Please see Response to Comment No. 45. All signals are actuated with emergency preemption, and with video detection.

determine if the project is consistent with these two policies.

**50**

39. Please see comments 26. The project is consistent with this policy.

**50** Comment noted.

**51** Please see Response to Comment No. 35.

**52** Please see Response to Comment No. 35.

technologies, where appropriate.

- SCAG 4.24
- Design all future traffic signals for traffic actuated operation.
- Maintain acceptable levels-of-services (LOS) on the subregional network.

**Non-motorized Transportation**

- SCAG 4.25, 4.26, 4.27
- Provide facilities that support non-motorized means of transportation (e.g., walking, bicycling, telecommuting), and are designed to provide for safety.
- Is the project consistent with the WRCOG Subregional Non-Motorized Transportation Plan ?

**51**

40. The internal multi-use trail is the only non-motorized item discussed. The project does not appear to be consistent with this policy.

**52**

41. The Non-Motorized Plan shows Gap 14 in the Temecula/Murrieta area. Included on that map is a portion of Clinton Keith Road adjacent to the project site, and identified as a "planned bikeway". If this is not existing, developing the lane on this portion of Clinton Keith Road should be included in the project. It is not discussed in the DEIR, and staff is unable to determine consistency



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Redwine and Sherrill

April 27, 2000

Mr. Ernest Perea  
City of Murrieta  
26442 Beckman Court  
Murrieta, CA 92562

Dear Mr. Perea:  
Subject: Murrieta Oaks

This letter is in response to your request for comments regarding sewer service for the subject project. A plan-of-service was originally prepared for this project by the developer's engineer. Upon review of this plan by the District, it was determined that additional facilities would need to be built to support this development, along with others which are planned for this area. These additional facilities consist of up sizing an existing gravity sewer beginning in Hancock Avenue south to the intersection of Los Alamos Road and Shoshone Drive. This up sizing would be accomplished by either paralleling or replacing the existing sewer.

These improvements are outlined on the attached sketch. We would request that the portion of these improvements which are through open space/riparian habitat be included on the environmental documentation for the subject project to assure the District that there are no environmental issues that could delay providing service to the subject project.

Please feel free to contact me if you have any questions or comments.

Sincerely,

Charles J. Bachmann  
Ass't. General Manager of Engineering

CJB/cw

CITY OF MURRIETA

MAY - 2 2000

RECEIVED  
PLANNING DEPT.

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (909) 928-3777 Fax: (909) 928-6177  
Location: 2270 Trumble Road Perris, CA 92570

B-15

Between Hancock Avenue and the approximate extension of existing Via Espana, the existing sewer and easement are on the west side of the urban drainage. The easement is under a dirt maintenance road and across non-native grassland. Depending on its eventual exact location, the new sewer construction may impact the western edge of the willow riparian habitat. This would be limited to a few trees, and may be able to be accomplished by trimming back some of the overhanging branches. No significant impact to habitat would be expected in this stretch.

At approximately the extension of Via Espana, the easement crosses the urban drainage from west to east. This crossing would be bored; as such, no impacts to habitats would be expected.

Between the extension of Via Espana and approximately the extension of Franklin Avenue, the easement runs on the east side of the urban drainage, through non-native grassland. No significant impacts to habitat would be expected in this stretch.

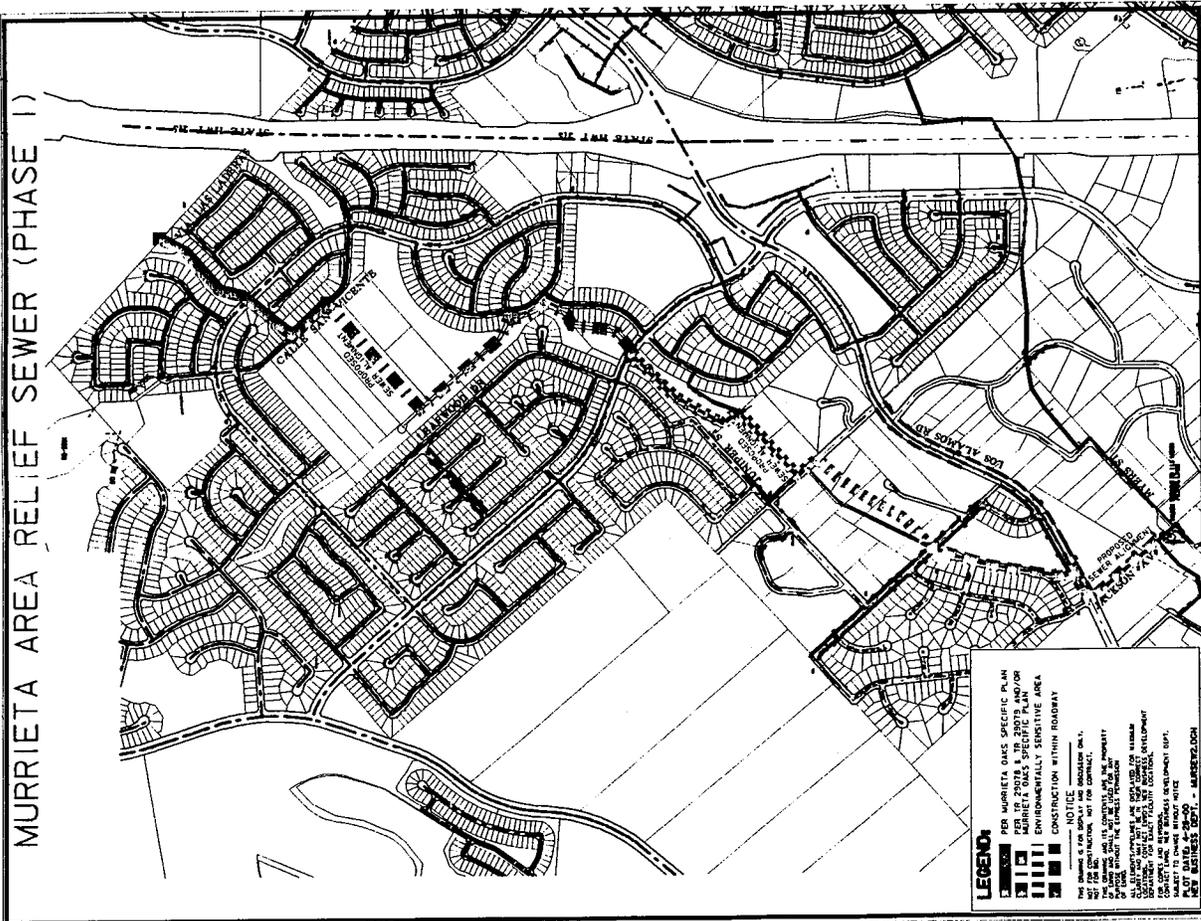
Between the extension of Franklin Avenue and a point approximately 200 feet north of Lincoln Avenue, the existing easement is partially within the riparian habitat of the urban drainage. A new easement will be developed to the east in this stretch, allowing the sewer to be placed within non-native grassland; as such, no significant impacts to habitat would be expected in this stretch.

The new easement on the east side of the urban drainage may be able to also include this last 200 feet of sewer north of Lincoln Avenue. There are presently unresolved engineering concerns that may preclude this. If this approximately 200-foot segment cannot be moved to a new easement, the sewer will be built in the existing easement. This existing easement crosses the urban drainage and its willow riparian habitat from east to west, to a manhole in Lincoln Avenue. Construction in the existing easement will require the removal of some of the willows to allow an approximately 40 to 50-foot wide construction zone. Permanent loss of the habitat in this construction zone would be considered a significant impact. This can be mitigated by revegetating the easement following the placement of the new sewer. The habitat is dominated by a ground cover of non-native vegetation, with arroyo willows (*Salix lasiolepis*), sandbar willows (*Salix hindiana*), and mulefat (*Baccharis salicifolia*).

If it is necessary to use this easement, the project shall revegetate the disturbed area. The revegetation shall include the above willow species and mulefat. The detailed Revegetation Plan shall be developed with the U.S. Army Corps of Engineers and the California Department of Fish and Game within the permit processes required under Section 404 of the federal Clean Water Act and the California Department of Fish and Game's Streambed Alteration Agreement.

Between Lincoln Avenue and the southern terminus of the sewer the route is largely within pavement, with two short stretches of disturbed/non-native grassland areas immediately south of Lincoln Avenue and immediately north of Los Alamos Road. No impacts to habitats would be expected within this final segment.

MURRIETA AREA RELIEF SEWER (PHASE 1)



DEPARTMENT OF FISH AND GAME

Eastern Sierra - Inland Deserts Region  
4775 Bird Farm Road  
Chino Hills, California 91709  
(909) 597-5043



CITY OF MURRIETA

MAY - 2 2000

RECEIVED  
PLANNING DEPT.

April 28, 2000

Roger Scherer  
City of Murrieta  
26442 Beckman Court  
Murrieta, CA 92562-8850  
Ph #: (909) 698-1040

Re: Murrieta Oaks Specific Plan 98-102  
Draft Environmental Impact Report  
SCH 99031094

Dear Mr. Scherer:

The California Department of Fish and Game (Department) thanks you for the opportunity to comment on the proposed development. The development consists of a maximum of 560 single-family detached residences, 65.25 acres of natural open space, 44.35 acres of modified open space, and a 10 acre elementary school site. The site is 260 acres of currently undeveloped property located in southwestern Riverside County adjacent to Clinton Keith Road. Land to the south and west is developed with single-family homes, land to the north is developed as rural residential, and land to the east is vacant.

The Department is responding as a Trustee Agency under the California Environmental Quality Act (CEQA) regarding impacts to biological resources and as a Responsible Agency regarding the necessity for 1601-1603 Streambed Alteration Agreements (Agreements) and California Endangered Species Act permits. The issues of concern to the Department raised in this letter pertain to the necessity for further information regarding fully protected species on the site, the need for a 1601-1603 Streambed Alteration Agreement, an explanation of 1601-1603 Streambed Alteration procedures, and clarification of jurisdictional streambed mitigation measures.

Impacts to Biological Resources

The site contains 56.1 acres of chamise chaparral, 85.6 acres of *Ceanothus crassifolius* chaparral, 42.5 acres of coastal sage scrub, 2.3 acres of disturbed coastal sage scrub, 9.1 acres of oak woodland, 1.6 acres of southern willow scrub, 3.7 acres of riparian forest and 0.04 acres of mulefat scrub. The project will remove 40.25 acres of chamise chaparral, 37.4 acres of *Ceanothus crassifolius* chaparral, 34.87 acres of coastal sage scrub, 2.3 acres of disturbed coastal sage scrub, 4.29 acres of oak woodland, 1.23 acres of southern willow scrub, .71 acres of riparian forest and 0.04 acres of mulefat scrub.

The site also contains 7.42 acres of Department jurisdictional wetlands. Of this 7.42 acres, 2.62 acres will be removed. A wetlands delineation was conducted in 1999, which concluded that there are 1.21 acres of non-wetland waters of the United States, 1.46 acres of Army Corps wetlands and 7.42 acres of CDFG jurisdictional streams.

Biological surveys to determine the presence or absence of the Coastal California gnatcatcher (*Poiloxyia californica californica*) and Quino checkerspot butterfly (*Euphydryas editha quino*) were conducted in

1998. Neither the coastal California gnatcatcher nor the Quino checkerspot butterfly were found on site.

The biological studies disclosed that 44 species of birds were found on the site, five mammals, four reptiles and the Pacific treefrog. Focused plant studies were conducted in 1993 and it is not clear whether subsequent biological studies conducted in 1999 confirmed the results of the 1993 plant studies. Biological studies conducted seven years ago are not adequate and need to be updated. The Department requires a specific response as to whether focused plant surveys were updated for the draft EIR.

54

Species of special concern found on the site include: horned lark (*Eremophila alpestris*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), Bell's sage sparrow (*Amphispiza belli belli*) and the San Diego black-tailed jackrabbit (*Lepus californicus bennetti*).

The biological surveys state that a family of white-tailed kites (*Elianus leucurus*) was observed in the riparian/oak woodland and likely nests there as well. The documents state that the nest itself was not observed. The nesting white tailed kite is a fully protected species. The possible presence of the nesting kites is a potential significant impact. In the absence of specific data on the location of the nesting kites the Department cannot make a determination as to whether the fully protected species will or will not be impacted by development. Therefore, the Department assumes presence and requests that the applicant consult with the Department prior to any grading or vegetation removal to ensure that the kite remains protected. In addition, further biological studies should be conducted to analyze potential project impacts on the kites and the results submitted to the Department for analysis.

55

#### Project Mitigation

The DEIR states that mitigation consists of the following:

1. Retention of 44.05 acres of chaparral habitat.
2. Purchase of 29.5 acres of coastal sage scrub as mitigation for the loss of 37.17 acres on a 1:1 ratio.
3. Provision of 4.2 acres as mitigation for the loss of unoccupied Quino checkerspot habitat.
4. Creation of 1.31 acres of habitat to mitigate for the loss of Army Corps wetlands.
5. Creation of 3.93 acres of riparian habitat as mitigation for the loss of CDFG jurisdictional waters.

The Department has some questions and concerns about the mitigation. First, the DEIR proposes a total of 5.24 acres of riparian/wetland habitat to compensate for the loss of 2.82 acres (2:1 ratio) of CDFG jurisdictional waters. The DEIR states that a *Delineation of Wetlands and Jurisdictional Waters* was conducted by LSA in 1999. However, a copy of the delineation was not included in the three-volume document but instead is listed as available for review at the City of Murrieta. This information is critical to the Department's analysis of the adequacy of the DEIR's impacts and proposed mitigation.

The Crosby Mead Benton & Associates study states that: "The four separate streams cross Clinton Keith Road via existing culverts beneath the roadway and continue to flow across the Murrieta Oaks site. As the streams flow southerly and southwesterly, they combine with each other until they form one single stream just before the combined stream exits the site to the west." Again, the Department cannot analyze this project's impacts on jurisdictional wetlands without the wetlands determination.

56

In addition, the DEIR does not contain an analysis of how many linear feet of stream will be preserved and/or eliminated. There is no analysis of the quality of the resources contained in the existing drainages and what resources will be preserved and what resources will be lost. There is no analysis of road

57

54 Affinis biologists surveyed the property on four days in May and June of 1999. During the surveys, the rare plants sought but not detected in 1993 were again searched for. As discussed on page 11 of the Biological Resources Report (Appendix C to the DEIR), a population of Fallbrook spineflower (*Chorizanthe procumbens*) mapped in 1993 was not relocated in the 1999 surveys. Laciniate spineflower (*Chorizanthe fimbriata* var. *laciniata*) was located, but it is not considered sensitive. The only sensitive species observed was Engelmann oak (*Quercus engelmannii*).

55 At the present time, it is unknown when construction of the proposed project will occur. Additional surveys will be conducted during the breeding season prior to project construction to determine whether white-tailed kites are breeding on-site. If breeding activity is detected, no construction shall be allowed until it is verified that the young have fledged. No construction shall be allowed during breeding season (approximately mid-February until September 30, or as determined in consultation with the California Department of Fish and Game).

56 In response to the comment, LSA has submitted a copy of the Jurisdictional Waters Report to the California Department of Fish and Game. A copy of the final EIR will also be sent to Fish and Game to initiate the permitting process.

57 See Response to Comment No. 56.

crossings and the amount of fill which will be placed in the streams. The Biology report in Volume 1 states that the project will impact 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acres of riparian forest and 0.04 acres of mullet scrub. The report states that the project will mitigate for the loss of 0.29 acres of Corps-defined wetlands, 0.73 acres of waters of the U.S., and 2.62 acres of CDFG jurisdictional waters. Combining the mitigation for Army Corps impacts and CDFG impacts is confusing. Mitigation for the loss of CDFG jurisdictional stream habitat should be mitigated by the creation of like habitat. Likewise, the DEIR does not discuss measures and alternatives to avoid impacts to the wetlands and jurisdictional waters. The State of California has a policy of no net loss of wetlands and the Department has a policy of mitigating impacts to jurisdictional waters on a 3:1 ratio.

58

58

There are approximately 15,200 linear feet of streambed on-site; about 9,500 will be impacted. The habitats along the stream courses are moderate to high quality, although in some areas they are adjacent to areas previously disturbed by agriculture so they are not in a pristine setting. The amount of fill necessary for road crossings has not been calculated at this time, but it will be addressed as part of the permitting process.

The California Department of Fish and Game's jurisdiction is larger than the Corps' jurisdiction. Therefore, the 0.29 acres of Corps-defined wetlands and 0.73 acres of waters of the U.S. are included within the 2.62 acres of CDFG jurisdictional waters. Mitigation of the CDFG jurisdictional area will be done with "in-kind" revegetation. The details of the revegetation plan, including plant materials, will be included with the permit applications to the Corps and CDFG.

#### 1601--1603 Lake and Streambed Alteration Agreements

The Department is a Responsible Agency regarding the issuance of 1601-1603 Lake and Streambed Alteration Agreements (Agreements). The Department is implementing new procedures for processing Agreements. In this regard, the Department is notifying lead agencies that projects that will result in impacts to lakes or jurisdictional streambeds must include the supporting biological studies and CEQA-required analysis in the text of CEQA-certified documents. Any information necessary to the issuance of an Agreement must be processed via CEQA. If the information necessary for the issuance of an Agreement is included with the CEQA documents and has been subject to CEQA and public review, the Agreement can be processed per Department procedures. Information which the Department requires for its issuance of an Agreement which has not been CEQA-certified must be again subject to the CEQA process for public review. In this scenario, the Department has several options: 1) the lead agency can initiate a subsequent CEQA document and forward it to the Department following completion of the CEQA process, and 2) the Department can become lead agency. This same process applies to other discretionary actions, such as CESA Incidental Take Permits.

The Department prefers that the applicant submit an Agreement application with information approved during the CEQA process. The Department is available for consultation on projects prior to the submission of an Agreement application. Ordinarily, the information required includes: a description of the direct and indirect impacts of the project on the lake or stream; a biological survey of the lake or stream and identification of the absence or presence of riparian resources (flora and fauna); a discussion of environmental alternatives; a discussion of avoidance measures to reduce project impacts; and a discussion of potential mitigation measures required to reduce the project impacts to a level of insignificance.

The Department understands that this Agreement process is new to most applicants and lead agencies and that this is not the way Agreements have been processed in the past and that delays in Agreement processing may result. In order to avoid delays or repetition of the CEQA process, the lead agency should consult with the Department to discuss potential project impacts and avoidance and mitigation measures. This change in Agreement procedure is a result of litigation. The Department is under a writ of mandate from a State of California Superior Court regarding the processing of Agreements (*Mendocino Environmental Center vs California Department of Fish and Game, Respondents, Bruce Choder, River Rat Salvage et al, Real Parties*). The writ of mandate states in part:

A writ of mandate shall issue ordering the California Department of Fish and Game on or before May 1, 1999, to prepare and implement a program or process that will incorporate a CEQA review into the Fish and Game Section 1603 process. The writ of mandate shall further order the California Department of Fish and Game to cease and desist entering into Section 1603 agreements after May 1, 1999, unless such agreements have been subject to a CEQA review.

Therefore, the Department is advising the lead agency that all potential impacts to biological resources and sensitive habitat areas need to be analyzed in the DEIR document, along with specific measures

Alternative C, the Maximum Preservation Alternative, is discussed on pages 134-137 of the DEIR. The focus of this alternative was to minimize impacts to jurisdictional waters on-site. It was determined that under this alternative, all oak woodland would be preserved and 90 to 100 percent of the riparian habitats would not be impacted. It was concluded that while this alternative would reduce a number of impacts, including those to biological resources, it was economically infeasible.

Page 4  
Mr. Roger Scherer  
April 28, 2000

and alternatives to avoid or mitigate for the loss of sensitive biological resources. A 1989 statute requires that public agencies adopt, reporting or monitoring programs to ensure mitigation measures are implemented. In this connection, mitigation measures have to be specific, have to be capable of being implemented and must be capable of being monitored.

This letter has focused on the issues of concern to the Department. However, in focusing on potential problems the beneficial aspects of the project often get overlooked. For this reason, the Department compliments the project applicant and the lead agency on their efforts to design the proposed development to preserve natural resources on-site. The Department would appreciate a specific response to the issues raised in this letter. If you have any questions, please call Robin Maloney-Rames, ES III, at (714) 817-0585.

Sincerely,



Glenn Black  
Supervisor  
Habitat Conservation - South  
Region 6

cc: Jeff Newman, USFWS, Carlsbad

B-20

# CALIFORNIA INDIAN LEGAL SERVICES

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Legal Fellow  
Kathryn A. Ogas

Staff Attorneys  
Denise M. Douglas  
Joanne Willis Newton  
Laura Y. Miranda  
James F. Zakradka II  
Deirdre M. Daly  
Devon Reed

May 2, 2000

Mr. Ernest Perea  
Planning Manager  
City of Murrieta  
26442 Beckman Court  
Murrieta, CA 92562-8850

Sent via facsimile to (909) 698-4509

Re: **Pechanga Band comments on the Draft Environmental Impact Report (DEIR) for the Murrieta Oaks Project**

Dear Mr. Perea:

The Pechanga Band, a federally recognized Indian tribe and sovereign tribal government, is formally requesting, per the Public Resources Code §21092(b)(3), to be notified and involved in the entire CEQA environmental review process for this project.

We are submitting the following comments on behalf of our client, the Pechanga Band of Luiseno Indians (hereinafter, "Pechanga Band" or "Band").

The Pechanga Band is not opposed to this development project in Murrieta. As we have stated in previous correspondence to the City, the Pechanga Band is primarily concerned with the project's impacts on cultural resources. The Pechanga Cultural Resources Committee (PCRC), on behalf of the Pechanga Band, is charged with the preservation and protection of its unique and irreplaceable cultural resources. In particular, the PCRC has expertise with regard to Luiseno cultural resources and requests to work with the City on a government to government basis, in accordance with the law, to protect any Native American remains and cultural resources which will be disturbed by ground-breaking work associated with this project.

The Pechanga Band and our firm has reviewed the DEIR for the Murrieta Oaks project, the 1987 Archaeological Survey by Victor de Munck (hereinafter, "1987 Survey"), and the 1992 RMW Archaeological Survey (hereinafter, "1992 Survey"). The Pechanga Band requests that the comments contained herein in conjunction with the comments submitted in our April 14, 1999 letter constitute the Band's comments on the DEIR.

Significance of CA-RIV 3056

The 1999 archaeological resources inventory and evaluation completed by Affinis

59

The basis for Affinis' conclusion that CA-RIV-3056 is not considered an important resource under CEQA is provided in the technical report. The site is not considered eligible for the California Register of Historical Resources (the California Register) based on the paucity of material recovered and the minimal subsurface deposits at the site. For an archaeological site to be considered an important resource under CEQA it must be "historically significant." Public Resources Code §5024.1 (g) says that a significant historical resource is one that qualifies for inclusion on the California Register or is listed in a local register or is deemed significant in a historical resource survey. To be listed in the California Register a resource must meet one of the following four criteria:

- A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- B) Is associated with the lives of persons important in our past;
- C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents an important creative individual, or possesses high artistic values; or;
- D) Has yielded or may be likely to yield information important in prehistory or history.

Archaeological sites are usually evaluated in terms of Criterion D, although the other three may be used if they apply. For an archaeological site to yield important information about the past it must have sufficient materials to allow study and must retain those materials in a way that the context of the artifacts reflects past activities. Again, based on the paucity of the materials and the lack of indications of a substantial subsurface deposit, there is little potential for this site to yield important information about the past.

B-21

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The comment letter contends that the site is in an alluvial setting and that there may be substantial deposits below those encountered in Affinis' shovel tests. First, the report clearly states that the site appears to be in an erosional setting rather than a depositional setting where sediments would be expected to accumulate (page 26.) Further, evidence of past plowing, which would have destroyed the context of any artifacts at the site is presented (pages 22-26, Figures 6-8).

Affinis did not rely on the Shovel Test Pits alone to determine the nature of the deposits at the site. As indicated in the Methods (pages 16-16) and Stratigraphy (pages 21-26, Figures 6 and 7) discussions, additional deeper profiles were examined. One such profile was in an existing trench on the site and the other was in a fresh road cut. In the road cut, the bottom of the profile was decomposed bedrock, not alluvium.

The contention that half of the subsurface artifacts were recovered from "depths of 40 cm or greater" is incorrect. This appears to be based on a misreading of Table 2 in the Cultural resources report which reports the depths of excavations, whether or not artifacts were recovered, and how many artifacts were recovered in each where artifacts were found. From this table it can be concluded that half the artifacts were recovered from Shovel Test Pits that were excavated to a depth of 40 cm or greater, but no information on the vertical distribution of artifacts within the test pits is provided in this table. Table 3 does present data on the levels from which artifacts were recovered in those Shovel Test Pits that yielded artifacts. Examination of the table indicates four items were recovered from the 0-10 cm level, three from the 10-20 cm level, two from the 30-35 cm level, and one from the 30-40 cm level. The two items from the 30-35 cm level are unburned bone from a rabbit-sized mammal (page 28). These pieces of bone were recovered from the same level in the unit and may not be cultural. They may have been naturally incorporated into the site sediments and may belong to an animal that died in its burrow.

61

The second point in the letter has to do with the nature of the site and its location on a known trade route. Affinis does not dispute either of these contentions. Indeed, Affinis characterized the site as a residential site (page 29). Neither being located on a trade route nor being a residential site are sufficient to qualify a site for the California Register in the absence of deposits that allow something to be learned about the nature of the residence or the nature and context of the trade.

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Comment noted. The sensitive materials referred to are available for review at the City of Murrieta.

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Comment noted.

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(hereinafter, "1999 Affinis Evaluation") concludes that site CA-RIV 3056 (hereinafter, site 3056) is not considered an important site under the CEQA and that it is not eligible for the California Register. Affinis did not explain how they arrived at this conclusion nor did they explain which CEQA sections were applied to make this determination. The Pechanga Band, therefore, requests the basis for such conclusion.

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At this time the Pechanga Band can not agree with Affinis' conclusion that the site is not significant under CEQA. Until Affinis can provide evidence otherwise, the Pechanga Band believes that site 3056 may, in fact, be entitled to protections under the Public Resources Code §21083.2. First, the 3056 site sits in an alluvial area. Such geography indicates layers of soil settlement. Because each layer is separate from another in terms of the deposits of cultural resources it is quite probable that more significant cultural resources lie at greater depths than Affinis excavated. The nature of alluvial soil further dictates that lack of artifacts at certain depths does not mean that artifacts do not exist at other or greater depths. The area was only tested at subsurface depths of up to 50 cm. It is very probable, given the presence of 111 surface artifacts and 10 subsurface artifacts, that more artifacts lie at deeper levels. For example, of the 10 artifacts uncovered during subsurface testing one-half (5%) of those artifacts were found at depths of 40 cm or greater. Second, this site 3056 was described in both the 1987 Survey and the 1992 Survey as a temporary camp site with multiple components (1987 Survey, pg. 5; 1992 Survey, pg. 17). It is also well known that this site sits on a trade route which stretched from Oceanside inland through what is now known as Murrieta. This site has the potential to contain rare and critical data to our understanding of the past as sites with multiple components are rare and unusual (1992 Survey, pg. 17). Lastly, the Pechanga Band was not provided important maps, designated as sensitive material in Appendix D of the DEIR, which plot the locations of the cultural resources. Without this information or specifics on how the site does not meet CEQA standards of significance, the Pechanga Band can not agree with the assessment that the site 3056 is not significant under the CEQA, and the Band further believes, that there will be more cultural items uncovered during grading activities that could be significant under CEQA.

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#### Requested Mitigation Measures

Because more cultural items are likely to be uncovered during development of this project the Pechanga Band requests that a mitigation measure calling for Native American monitors be added to the Final EIR. Affinis supports this mitigation measure and recommends that the City adopt such a mitigation measure during grading activities (DEIR, Appendix D, pg. 31). The Pechanga Band also requests that the City, in accordance with CEQA Guidelines §15064.5, enter into a pre-excavation agreement with the Band to address any accidental discoveries of cultural resources and human remains that will likely be uncovered during project development.

It is stated in the Affinis 1999 Evaluation that "no mitigation measures are necessary from an archaeological standpoint" (DEIR, Appendix D, pg. 31). This conclusion should not be

Letter to Mr. Ernest Perea, Planning Manager  
City of Murrieta  
Re: Pechanga Band comments on the DEIR for the Murreita Oaks Project  
May 2, 2000  
Page 3

**64** the final word on whether mitigation measures are necessary under the law. The Pechanga Band as an expert on their Luiseno culture, history and cultural items believe that mitigation measures are necessary to preserve the recorded site 3056 because the DEIR and the Affinis 1999 Evaluation state that almost all of this site will be destroyed by this development project. The expert opinion of the Pechanga Band must be taken into account in conjunction with the archaeological opinion to determine the significance of the site and the necessity for mitigation measures. The concern of the City should not be whether mitigation measures are necessary from an archaeological standpoint solely, but the necessity for mitigation measures should be evaluated in terms of all expert opinions and the law.

**65** Even if the City determines that site 3056 is not significant under pertinent CEQA sections, the City, in accordance with the spirit and preferences of the CEQA to preserve cultural resources, should nevertheless implement mitigation measures protect and preserve the cultural resources that will be uncovered during the development of this project to the greatest extent possible. The Pechanga Band is willing to work with the City to achieve such goals. As a tribe dedicated to preserving its cultural resources, the Band requests to be involved in the development of mitigation measures on a government to government basis with the City of Murrieta.

**64** Comment noted.

**65** Comment noted.

**66** Comment noted.

#### Uncovered Artifacts

**66** The Pechanga Band agrees with Affinis' recommendation to return all cultural items and artifacts collected at this project site to the Pechanga Band for appropriate treatment and requests that the City adopt this recommendation.

The Pechanga Band appreciates the opportunity to submit comments on the DEIR for Murrieta Oaks. If there are any questions regarding these comments or the position of the Pechanga Band with regard to this project please contact me at (760) 746-8941, ext. 110. We look forward to working with the City of Murrieta to preserve and protect the valuable cultural resources that exist within this project area.

Sincerely,  
CALIFORNIA INDIAN LEGAL SERVICES

  
Laura Y. Miranda  
Attorneys for the Pechanga Band



**California Regional Water Quality Control Board**  
San Diego Region

Winston H. Hickox  
Secretary for  
Environmental  
Protection

Internet Address: <http://www.swrqcb.ca.gov/~rwqcb09/>  
9771 Clairemont Mesa Boulevard, Suite A, San Diego, California 92124-1324  
Phone (858) 467-2952 • FAX (858) 571-6972



Gray Davis  
Governor

March 20, 2000

State Clearinghouse  
1400 Tenth Street  
Sacramento, California 95814  
SCH# 1999031094

**SUBJECT: Murrieta Oaks**

Dear Sirs:

The Regional Water Quality Control Board, San Diego Region (Regional Board) has reviewed the Draft Environmental Impact Report (DEIR) for the Murrieta Oaks Project (Project) that was received on March 16, 2000. The proposed project is located in the City of Murrieta and proposes to develop 560-unit single-family detached residential homes within a 260-acre parcel.

The primary concerns and mandates of the Regional Board is the protection of water quality and beneficial uses; these are identified in the *Water Quality Control Plan for the San Diego Basin* (9). With a loss of over 90% of California's wetland and riparian habitats, stream courses are highly depleted and sensitive resources. The current degraded condition of the drainages within the project area does not negate the fact that they provide several beneficial uses that could be improved through restoration and/or enhancement. The existing condition provides a level of water quality purification functions that could be eliminated or reduced by the proposed project.

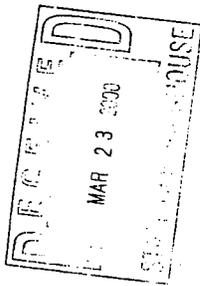
The potential elimination of beneficial uses, functions, and values of drainages within the project area needs to be addressed. The Regional Board requests that the DEIR address the following specific concerns:

- Discussion of water quality and beneficial uses associated with the drainages and potential impacts resulting from the proposed project and alternatives. Please provide the results of water quality sampling along these drainages if any are available. Also include a discussion of typical urban pollutants associated with residential developments and how these pollutants will be treated (e.g., treatment wetlands, filters).
- A complete discussion of the history of improvements made to these drainages and measures that were previously implemented to preserve water quality and beneficial uses. Include information on the acreage of the watersheds and sub-watersheds which are tributaries to these drainages, along with the volume of dry-season urban runoff which is generated from such watersheds. Also include a discussion of the level of wetlands, or other water quality treatment processes, that are being provided by each of the drainages. This discussion should

**67** A delineation of federal and state jurisdictional waters, including wetlands, with mitigation measures has been developed for this project (*Delineation of Wetlands and Jurisdictional Waters, Murrieta Oaks, Murrieta, Riverside County, California*) by LSA. This document is being used in the processing of permits under the federal Clean Water Act and the state Streambed Alteration Agreement. During the preparation of this DEIR it was (erroneously) assumed that the RWQCB had already received a copy of that report for the 401 Certification process. A copy of this report is being sent to RWQCB.

**68** Text has been added to the FEIR discussing water quality and beneficial uses associated with the drainages, and potential project impacts. No water quality data are available from these ephemeral/intermittent streams. Typical urban pollutants are discussed on DEIR page 77. Treatment is based around the mitigation developing vegetated detention basins.

**69** No improvements to the on-site drainages are evident at the present time. Antelope Road formerly ran through the property along the major drainage (the "B" drainages) south and west of the predominant ridge line. This road has been replaced by Clinton Keith Road, and has been abandoned in place, blocked at both ends at the property lines. Acreages of tributary watersheds have been added to the text. No dry season urban runoff occurs with the upstream watershed. As noted on DEIR page 72 and on Figure II-2, the upstream areas are not urban, but are large land parcels containing some homes and outbuildings. Wetlands are quantified and discussed in the *Delineation of Wetlands and Jurisdictional Waters* (please see Response to Comment No. 67). Water quality treatment processes are inherent to the design of the project. As noted on DEIR page 77, the grading of the site has been adjusted to result in runoff in any developed basin being at or below the amount runoff under existing conditions for the project south of the ridge. Grading and site design has incorporated measures, including widening of channels and creation of detention basins, sufficient to prevent increased runoff from the project site. A Storm Water Pollution Prevention Plan, including the site-appropriate Best Management Practices will be done prior to the commencement of grading.



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include structural and nonstructural Best Management Practices (BMPs), previous loss of wetland habitat within these drainages, and restoration and conservation projects.

- Complete discussion of the pre- and post-construction hydrology of these drainages relative to the proposed project and alternatives. Include a discussion of 10-year events as well as 100-year events. The discussion within Section H (Hydrology/Water Quality) is confusing and difficult to follow.

70

Existing on-site basins are shown in the color Figure IV-H-2 of the DEIR, with the developed condition on-site basins in Figure IV-H-3. The project was not designed and then mitigation proposed. The design process included ongoing modifications to allow the developed condition runoff to be less than or equal to the runoff for the existing conditions for the 2-year, 5-year, 10-year, and 100-year storms, as required by the Riverside County Flood Control and Water Conservation District.

- Provide a detailed discussion of how the drainages will be crossed. Include information on the types of culverts (e.g., pipe, arch, box) that will be used at each drainage crossing and what resources occur upstream and downstream of these drainages.

71

Existing on-site basins are shown in the color Figure IV-H-2 of the DEIR, with the developed condition on-site basins in Figure IV-H-3. The project was not designed and then mitigation proposed. The design process included ongoing modifications to allow the developed condition runoff to be less than or equal to the runoff for the existing conditions for the 2-year, 5-year, 10-year, and 100-year storms, as required by the Riverside County Flood Control and Water Conservation District.

- Provide a detailed discussion of proposed mitigation. This discussion should include, but not be limited to, plant palettes, locations, maintenance and monitoring criteria, and success standards.

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Please see Response to Comment No. 67. Also, mitigation is discussed on DEIR page 58 and DEIR Figure IV-D-2. A Mitigation Monitoring and Reporting Program is included with this FEIR.

- Provide a discussion of impacts to Murrieta Creek resulting from past, as well as the proposed, loss of beneficial uses, functions, and values provided by these drainages.

The level of detail provided in the DEIR is insufficient to assess the degree or type of impacts to water quality and beneficial uses.

73

Text has been modified to include this discussion.

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Please see Response to Comment No. 67 and the specific comments above.

If you have any questions regarding our concerns, please contact Ms. Stacey Baczkowski (858-637-5594) or Mr. Greig Peters (858-467-2976). We appreciate the opportunity to comment on the proposed project.

Sincerely,



Stacey Baczkowski  
Environmental Specialist III  
San Diego Regional Water Quality Control Board

Dr. Chet M. Francisco



Superintendent

**District Office**

21205 Beckman Court  
Murrleta, CA 92562  
909/696-1400  
Fax: 909/696-1641

**Planning Office**

23090 Judeween Avenue  
Murrleta, CA 92562  
909/696-1411  
Fax: 909/696-1433

**Board of Education**

Scott M. Akeley  
Kenneth C. Dickson  
Aileen Lutzky  
Judy Rosen  
Nancy Wray

March 7, 2000

**TO:** City of Murrleta  
Planning Department  
Attention: Roger Scherz

**FROM:** Charlene Stone  
Facilities Planning and Development Specialist

**RE:** Murrleta Oaks Specific Plan

Please submit into the records, the following additional comments regarding the above referenced project.

The Murrleta Valley Unified School District has determined that it has a need for an elementary school site within the Murrleta Oaks Specific Plan. This requirement is based on the impact of this project to the district.

Please call me at 696-1600 xt 3006 with any questions.

Sincerely,

Charlene Stone  
Facilities Planning and Development Specialist

/cs

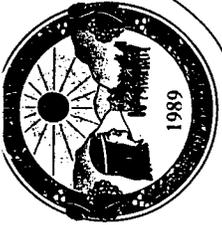
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Project File  
Project File

34432602

75 Comment noted. Please see Section IV-N (page 112) of the DEIR.

75



# City of Temecula

43200 Business Park Drive • Temecula, CA 92590 • Mailing Address: P.O. Box 9033 • Temecula, CA 92589-9033  
(909) 694-6444 • Fax (909) 694-1999 • www.ci.temecula.ca.us

Jeffrey E. Stone  
Mayor

Jeff Comerchero  
Mayor Pro Tem

Michael S. Naggar  
Councilmember

Albert S. Pratt  
Councilmember

Ronald H. Roberts  
Councilmember

(909) 506-5100  
FAX 694-6499

April 26, 2000

Mr. Roger Scherer, AICP  
Associate Planner  
City of Murrieta  
26442 Beckman Court  
Murrieta, CA 92562-8850

Subject: Murrieta Oaks Specific Plan 98-102

Dear Mr. Scherer:

Thank you for the opportunity to comment on the above Specific Plan and related cases. Our understanding of the project is that the City is processing a Specific Plan of Land Use on a 260-acre site located at the southwest corner of Interstate 215 and Clinton Keith Road. The project consists of a 560-lot single family detached residential development with a minimum lot size of 7,200 square feet. In addition, the project proposes 65.25 acres of natural open space, 44.35 acres of modified open space, and also provides for an elementary school site and several 5 to 8 foot wide multi-use trails for pedestrian and bicycle use.

Our review of the Environmental Impact Report and supporting data leads us to the conclusion that there will be no direct impacts to the City of Temecula. However, we would request that the City of Murrieta condition the Specific Plan to participate in the TUMF program that is currently in the formation stage.

Should you have any questions regarding our comments please contact Stephen Brown at (909) 694-6400.

Sincerely,

Jeffrey E. Stone  
Mayor

cc: City Council  
Shawn Nelson, City Manager  
Gary Thornhill, Deputy City Manager  
Planning Commission

CITY OF MURRIETA

MAY - 2 2000

RECEIVED  
PLANNING DEPT.

B - 27

76 Comment noted.

76

**CHAPTER C**

**MODIFICATIONS TO THE DRAFT EIR**

## CHAPTER C

### MODIFICATIONS TO THE DRAFT EIR

The following chapter identifies modifications made to the draft EIR in response to project revisions occurring during the public review period. All additions to text are identified in redline and all deletions to text are identified by strikeout.

## II. ENVIRONMENTAL SETTING

### Regional Setting

The Murrieta Oaks project is located in the region of the Temecula/Murrieta Valley, which is currently experiencing a proliferation of residential, commercial, and light industrial development. The region is visually dominated by the Santa Rosa Plateau and the Santa Ana Mountains on the west, the Santa Margarita and Agua Tibia ranges to the south, and the San Jacinto ranges to the east.

Geomorphically, the immediate region lies in the Peninsular Ranges Province and has a history of seismic activity. Faults located within the region include the Elsinore Fault Zone, Wolf Valley Fault, San Andreas Fault Zone, Newport-Inglewood Fault Zone, San Jacinto Fault Zone, Agua Caliente Fault Zone, and the Murrieta Hot Springs Fault.

The region lies within the inland portion of the Santa Margarita River basin, encompassing an area of about 750 square miles. Ground water basins include the Murrieta-Temecula Basin and the French Valley Basin. The various creeks in the region serve to recharge water for the underlying ground water basins.

Natural regional biological communities include: non-native grasslands, chaparral, Diegan and Riversidian sage scrub, and riparian. Modified areas include urban lands and agricultural lands. Species of concern include the Stephen's kangaroo rat, the California gnatcatcher, and the Quino checkerspot butterfly. Special-status plant species are also identified within the region. These are apt to be associated with vernal pools, clay soils, wetlands, and areas of chaparral, scrub, and woodlands.

The region's air quality is addressed by the South Coast Air Quality Management District which samples ambient air quality at more than 38 monitoring stations in the basin. Most of the region's air quality problems are associated with continued population growth, heavy industry, and traffic. The problem is exacerbated by the basin's geography; mountains and hills ringing the central valley trap pollutants, as do thermal inversions.

Human populations have inhabited the region for thousands of years, and the remnants of their occupations are found throughout the area. Portions of the region have also yielded a wide array of paleontological materials, including fossils of mammoth, mastodon, ground sloth, dire wolf, short-faced bear, saber-toothed cat, camel, and pronghorn.

### Project Setting

The Murrieta Oaks project includes approximately 260 undeveloped acres located in the northeastern portion of the City of Murrieta, in southwestern Riverside County (Figure II-1). Approximately 250 acres are located at the southwest corner of Interstate-215 and Clinton Keith Road, with an additional 10 acres located north of Clinton Keith Road (Figure II-2).

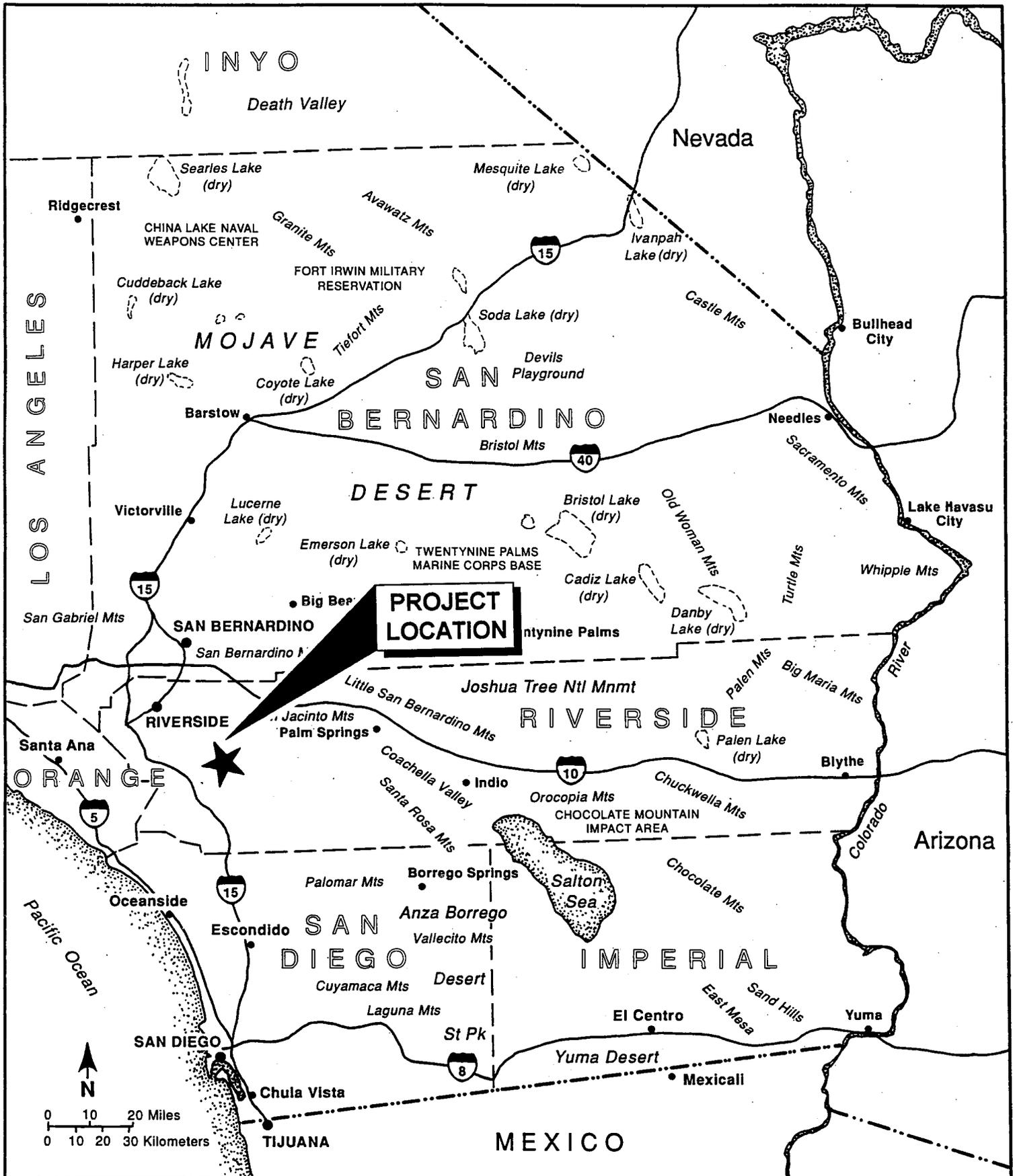
The property is situated in Township 7 South, Range 3 West of the USGS 7.5' Murrieta quadrangle (Figure II-3), and is identified by Assessor's Parcel Numbers 956-280-01 and 956-280-11.

Adjacent land to the south and west of the property consists of open space and single-family residences. Land to the north consists of scattered rural single-family residences and vacant land. Interstate-215 lies east of the property.

The Murrieta Oaks parcel is characterized by a prominent southwest to northeast trending ridge that runs through the center of the property. The site topography ranges from almost flat in the northwestern portions to gradients of over 50 percent in the steepest parts of the hillsides. Elevations range from about 1,310 ft in the southern portion of the property to over 1,590 ft in the center. The geotechnical analysis of the property (Pacific Soils Engineering 1999) identifies the bedrock units underlying the property as Woodson Mountain granodiorite, San Marcos gabbro, quartz monzonite, and the Pauba Formation. Soil types include undocumented artificial fill and topsoils.

The primary vegetation type is chamise-dominated native chaparral. Ruderal habitat, Oak Woodland, Southern Willow Scrub, Riparian Forest, and Mulefat Scrub were also mapped on the property. These types of vegetations support 44 bird species (including white-tailed kite, Cooper's hawk, and American kestrel), and five mammal species (including Coyote, desert wood rat, and California ground squirrel) on the property. No state- or federal-listed rare or endangered plant species occur on the site. While portions of the property have been determined as potential habitat for the federal-listed Endangered Stephen's kangaroo rate, no other state- or federal-listed Threatened or Endangered species have been detected.

While portions of the property were previously designated for Agricultural purposes, the contract under the Williamson Act has expired. The property is zoned SP (Specific Plan) and is designated in the General Plan for residential uses.



**Affinis**

Shadow Valley Center  
 839 Jamacha Road  
 El Cajon, CA 92019

**REGIONAL LOCATION  
 IN RIVERSIDE COUNTY**

**FIGURE II-1**



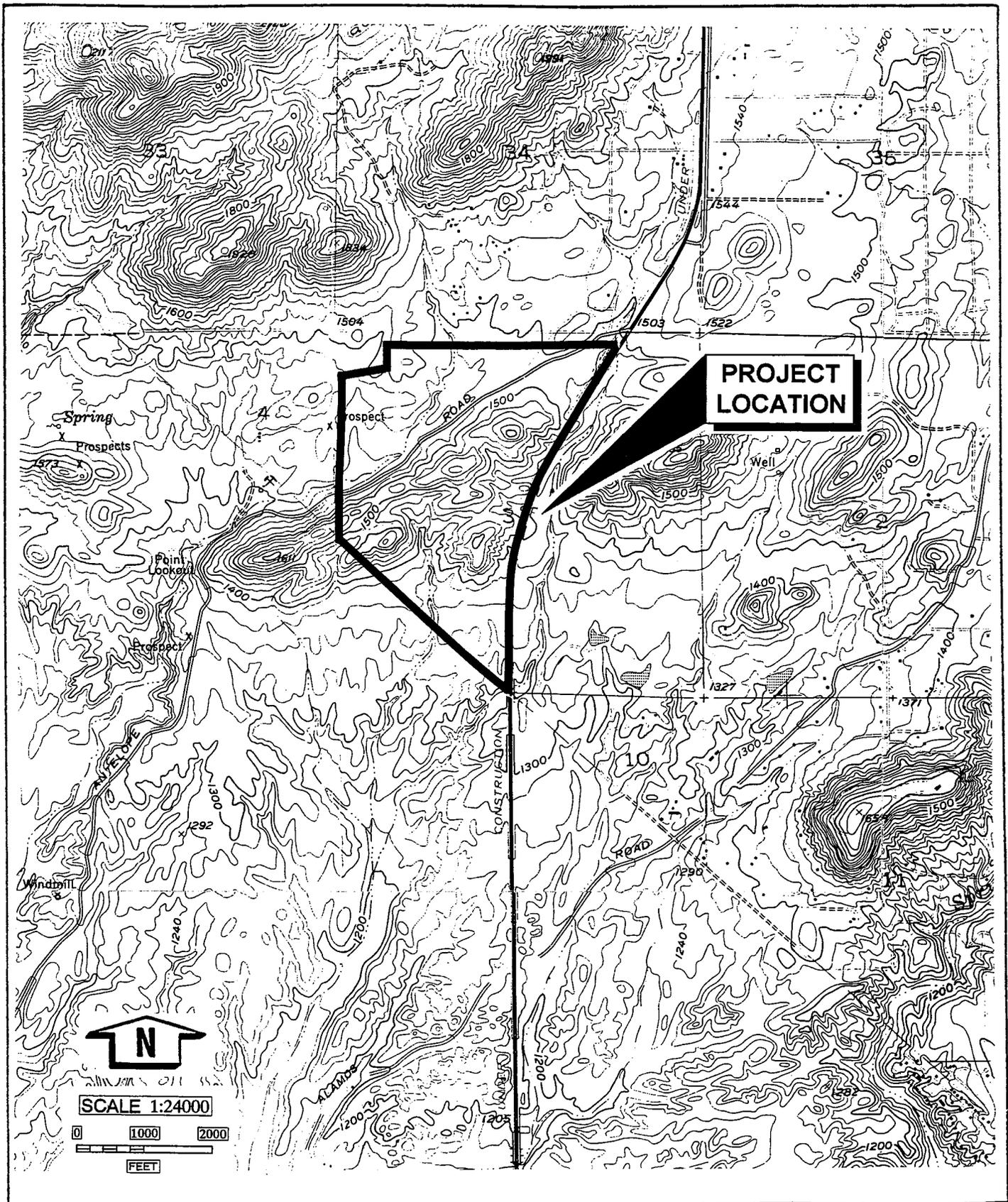
SOURCE: PDS WEST, 1999

## Affinis

Shadow Valley Center  
847 Jamacha Road  
El Cajon, CA 92019

PROJECT LOCATION ON AERIAL PHOTO MAP

FIGURE II-2



# Affinis

Shadow Valley Center  
 847 Jamacha Road  
 El Cajon, CA 92019

PROJECT LOCATION ON USGS  
 7.5' MURRIETA QUADRANGLE

FIGURE II-3



## **E. CULTURAL RESOURCES**

A Cultural Resources Study was prepared by the proposed project by Affinis (1999), The report, included as Appendix D to this EIR, provides the background for the following analysis.

### **Existing Conditions**

The Murrieta Oaks project area was surveyed for cultural resources in 1987 by archaeologists from the Archaeological Research Unit at the University of California, Riverside (de Munck 1987). One large prehistoric site (CA-RIV-3056) was recorded, in the southern portion of the property. Cultural material noted at the site included "numerous mano and metate fragments; basalt and chert flakes; a hammerstone; and two Cottonwood triangular projectile points" (de Munck 1987:5). "The site requires subsurface testing to determine its potential for yielding useful information" (de Munck 1987:5).

The property was surveyed again in 1992. In addition to CA-RIV-3056, two historic trash scatters were recorded (CA-RIV-4905H and -4906H) (Bissell 1992). Although he noted a greater number of artifacts and a previously unrecorded bedrock milling feature, Bissell found CA-RIV-3056 basically as previously described. Both historic trash scatters were found along a drainage on the north side of Antelope Road. The survey report noted that the "visible portions of these deposits contain material from the 1920s to modern times" (Bissell 1992:17).

Affinis senior archaeologists Mary Robbins-Wade and G. Timothy Gross visited the recorded sites in December 1998 to assess their current status and the need for subsurface testing or other evaluation measures. One of the historic archaeological sites (CA-RIV-4906H) was found to be off-property to the west, and it appears to have been destroyed by relatively new residential development. Robbins-Wade also visited the extant historic site (CA-RIV-4905H) with historic archaeologist Stephen R. Van Wormer in January 1999 to assess the age and potential significance of the site. Van Wormer found that the site did not appear to pre-date World War II. One piece of Depression era glass was found, but other items included a Duraglass Gallo wine bottle post-dating 1954, an aerosol can with a plastic nozzle characteristic of the 1960s, church key type cans, and other nondescript artifacts. There was a surprising lack of plastic and few bottles. The site was not old enough to be considered historic, and there was a general lack of material with research potential. Therefore, the site is not considered an important resource and no further work is recommended.

A testing program was conducted at CA-RIV-3056 by Affinis archaeologists in February 1999. The testing report is included as Appendix D to this report. Testing at CA-RIV-3056 consisted of mapping surface artifacts, excavating 21 shovel test pits (STPs) to test for subsurface deposits, recording bedrock milling features, and examining several available exposures of site sediments to allow evaluation of stratigraphy.

The testing program at the CA-RIV-3056 produced a small collection of artifacts, primarily from the surface. The collection is dominated by flaked lithic debitage, cores, manos, and hammers. The assemblage suggests tool making and/or maintenance, and food processing as the principal activities that occurred in the site area. The site probably served as a residential site, at least on a limited basis. It probably was used in conjunction with other sites in the area as part of a larger local settlement system.

The STPs excavated at the site indicate that there is very little subsurface material present, and no signs of dark midden soils were noted. There is evidence of past disturbance of the site in the form of plowing and discing, and the area appears to have been eroded in the past. No significant archaeological deposits were located.

Representatives of the Pechanga Band of Luiseño Mission Indians expressed concerns regarding cultural resources. Affinis Principal Archaeologist, G. Timothy Gross, Ernest Perea of the City of Murrieta, and Roger Scherer of the City of Murrieta met with representatives of the Pechanga Band, Raymond Vasquez, Phil Ibanez, and Ben Masiel, and Laura Miranda of the California Indian Legal Service to visit the project area and the archaeological site, CA-RIV-3056, to address potential concerns.

### **Impacts**

One of the historic sites (CA-RIV-4906H) mapped as within the project area was actually located west of the property; it has been destroyed by development, and this project would not affect it. The other historic site, CA-RIV-4905H, is located within open space Lot E. Due to its location within an open space lot the site would not be subject to direct impacts from project development.

A small portion of the prehistoric site, CA-RIV-3056, would be preserved in open space Lot M. The majority of the site would be destroyed by improvements within Lot K and residential development surrounding Lot M.

### **Significance of Impacts**

The two recorded historic sites would not be subject to impacts from the project. CA-RIV-4905H has been determined not to be an important cultural resource under CEQA, and CA-RIV-4906H no longer exists. If development plans change, and CA-RIV-4905H would be subject to impacts from project implementation, such impacts would not constitute significant effects.

The majority of CA-RIV-3056 would be subject to direct impacts from project development. The site has been determined not to be an important cultural resource under CEQA. Therefore, impacts would not constitute significant environmental effects.

## **Mitigation Measures**

Because no significant impacts have been identified to archaeological resources, no mitigation measures are necessary from an archaeological standpoint. From a cultural standpoint, representatives of the Pechanga Band of Luiseño Mission Indians have requested that a Native American monitor be on-site during grading activities to ascertain that no impacts to cultural resources occur. This request shall be honored.



## H. HYDROLOGY/WATER QUALITY

### Existing Conditions

All of the project area is within the watershed of Murrieta Creek. The project area is bisected by a southwest to northeast ridge line that dictates the direction of any runoff from the property. Watershed areas south of the ridge are designated "A" and watershed areas north of the ridge are designated "B" in this discussion. These designations match those used in the Specific Plan, and are used here to allow easy reference to that Plan.

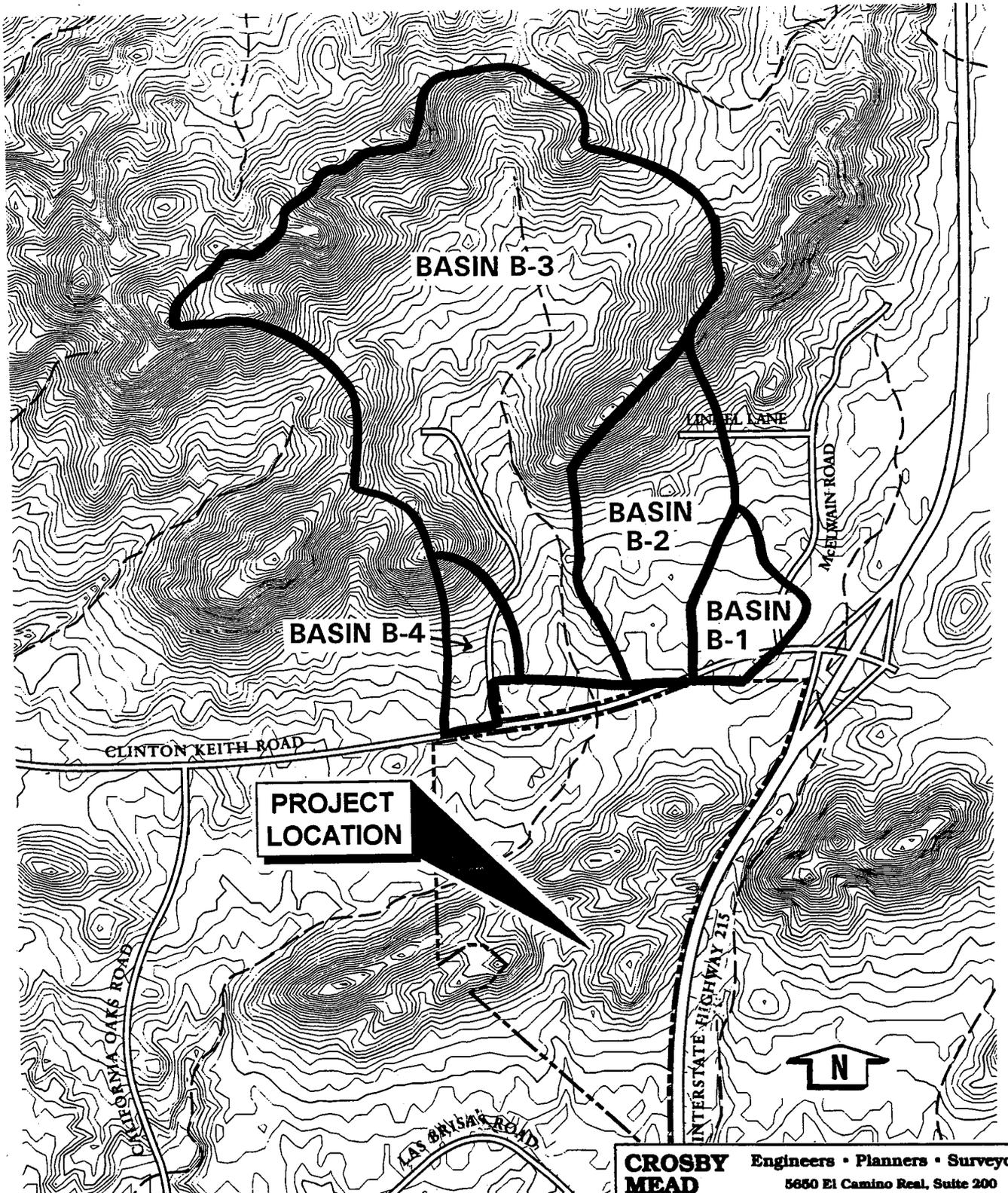
Four intermittent/ephemeral streams enter the project area from the north, in culverts under Clinton Keith Road. The watersheds for these are designated as B-1 through B-4 on Figure IV-H-1. These basins are occupied by large land parcels, containing some individual homes and outbuildings. Watershed B-1 occupies approximately 38 acres. B-2 occupies approximately 107 acres. Watershed B-3 is by far the largest of the upstream watersheds (Figure IV-H-1), encompassing approximately 440 acres. B-4 contains approximately 21 acres.

Basin B-5 is the on-site watershed of the land north of the bisecting ridge line. It receives the waters of Basins B-1 through B-4, via each's culvert under Clinton Keith Road. The channels of B-2 and B-3 join on the property, approximately 1000 feet from Clinton Keith Road. The channels of B-1 and B-4 join this streamway, with B-4's confluence just upstream of the property boundary (Figure IV-H-1).

The Specific Plan has identified twelve drainage basins on the project area south of the ridge line (Figure IV-H-2). All of these "A" basins originate on the property; there is no off-site runoff entering any "A" basin. Basins A-1 through A-9 are relatively small basins that drain to the southeast, each to a culvert under I-215. Basins A-10 and A-11 each drain to the southwest. Off-site, both flow into an earthen channel created by the existing development. Basin A-12 drains to the south in a natural channel.

Although the area has been disturbed by agricultural activities in the past, the drainages have retained beneficial uses in terms of water quality. The earthen bottoms allow recharge of ground water. The vegetation associated with the drainages functions to trap and absorb pollutants, allowing a weathering process to break down the pollutants over time.

Both "A" and "B" drainages eventually flow to Murrieta Creek, approximately one mile to the south of the property. Murrieta Creek eventually merges with Temecula Creek and Warm Springs Creek to form the Margarita River just south of the City of Temecula. The City of Murrieta is rapidly growing, as are other areas within the watershed of Murrieta Creek. With this development has come greater hardscape, with greater storm runoff, and with an increase in the amount of urban pollutants in the system.



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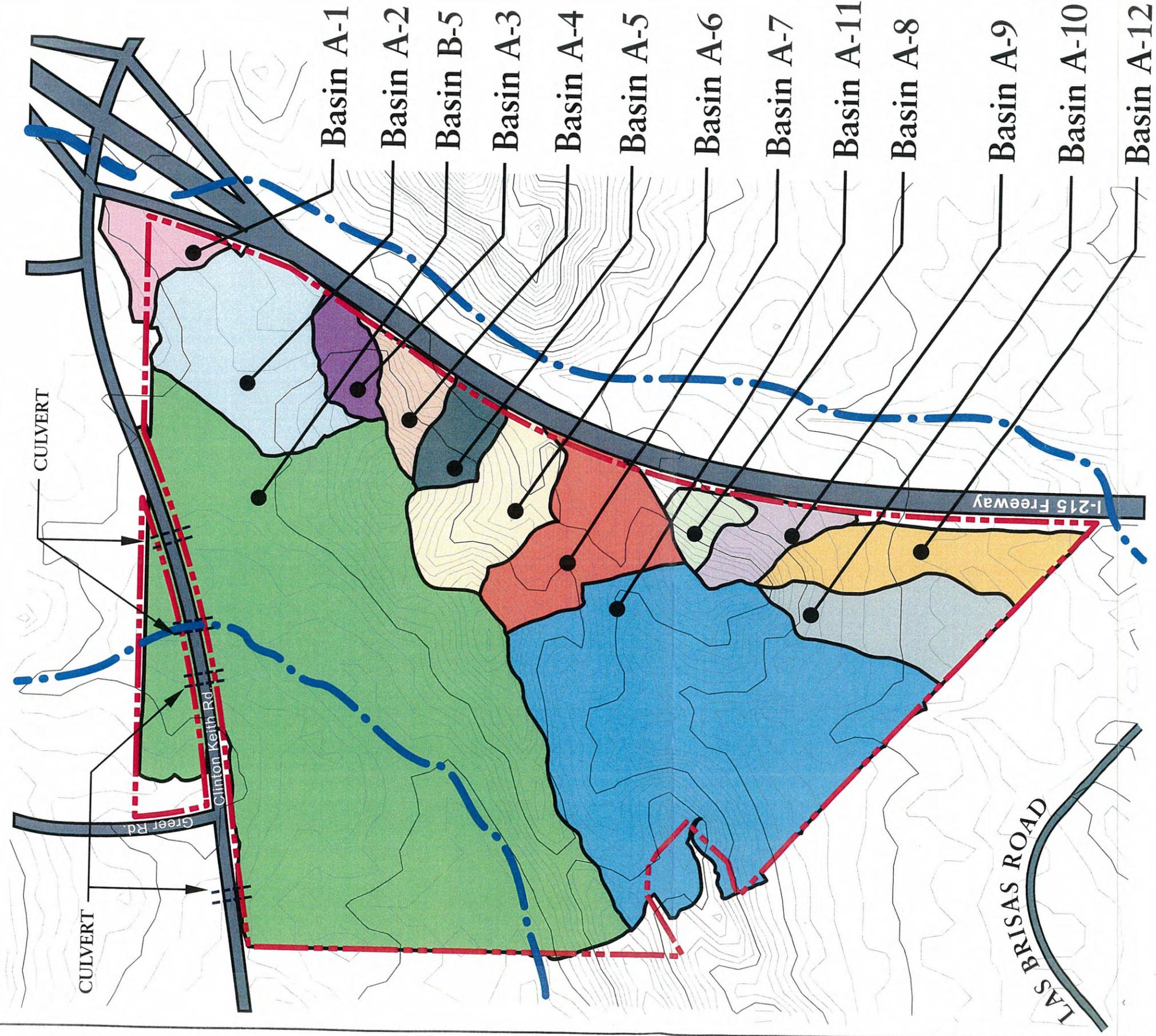
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**EXISTING OFFSITE BASINS**

**FIGURE IV-H-1**



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EXISTING ONSITE BASINS

FIGURE IV-H-2



The proposed project lies in an area of minimal flooding (City of Murrieta MEA, 1994).

## **Impact**

Unless impounded on-site, rainfall on a given area will: infiltrate the soil and "soak in" to the ground, run off, or evaporate in place. Evaporation is insignificant on the project area except for minor rain events.

Development of open land almost always results in greater hardscape, which leads to less absorption of rain and increased runoff. Simultaneously, a development that reduces the steepness of a site or the length of some slopes can allow greater absorption of rain in the non-hardscape areas (lawns, landscaping). Because the slopes are less steep or shorter, the runoff flows more slowly, and has more time to be absorbed by the soil.

The introduction of impervious surfaces with roadways, driveways, and houses would increase the amount of urban runoff during rainstorms. Petroleum products from vehicular traffic and parking and household fertilizers and pesticides would be introduced into the runoff, with the great majority in the runoff in the first storm of the season. These pollutants can impact water quality.

Project design has incorporated measures to prevent these potential impacts. The existing Basin A-1 will be modified and its runoff diverted to a different culvert. Basins A-2 through A-9 will be modified to Developed Condition Basins F-1 through F-8; each will flow through an existing culvert under I-215 (Figure IV-H-3). The proposed grading of the site has been adjusted such that the runoff exiting each of these Developed Basins will be at or below the amount of runoff under presently existing conditions.

Three Developed Condition Basins, S-1, S-2, and N, have been designed to incorporate four flood detention basins to control excess storm runoff (Figure IV-H-3). Site design and grading will allow excess runoff -- amounts projected to be greater than under existing conditions -- from the areas of Basins A-1 through A-9 to these flood detention areas.

The existing Basin A-10 drains to a small ditch adjacent to existing off-site residences. Project design evaluation included concerns that these existing residences are inadequately protected from potential flooding. To eliminate these concerns, all runoff from the area of existing Basin A-10 will be diverted to Developed Condition Basins S-1 and S-2, which contain flood detention basins. No runoff from the project will be placed in the small ditch adjacent to the offsite properties.

The onsite existing Basin B-5 will become Developed Condition Basin N (Figure IV-H-3). A detention basin will be placed north of Clinton Keith Road (basin N-1) to receive the outflows of Basins B-2 and B-3, and deliver them under Clinton Keith Road in one culvert, to the existing open channel. Flows entering from offsite Basin B-1 will be run in a pipe to join this open channel (Figure IV-H-3). Runoff from offsite Basin B-4 will continue in its existing channel.

A second detention basin will be incorporated into Developed Condition Basin N. This will be associated with the open channel near the western boundary of the site (basin N-2, Figure IV-H-3).

The design process included ongoing modifications to allow the developed condition runoff to be less than or equal to the runoff for the existing conditions for the 2-year, 5-year, 10-year, and 100-year storms, as required by the Riverside County Flood Control and Water Conservation District.

No flooding impacts would be expected with the proposed project.

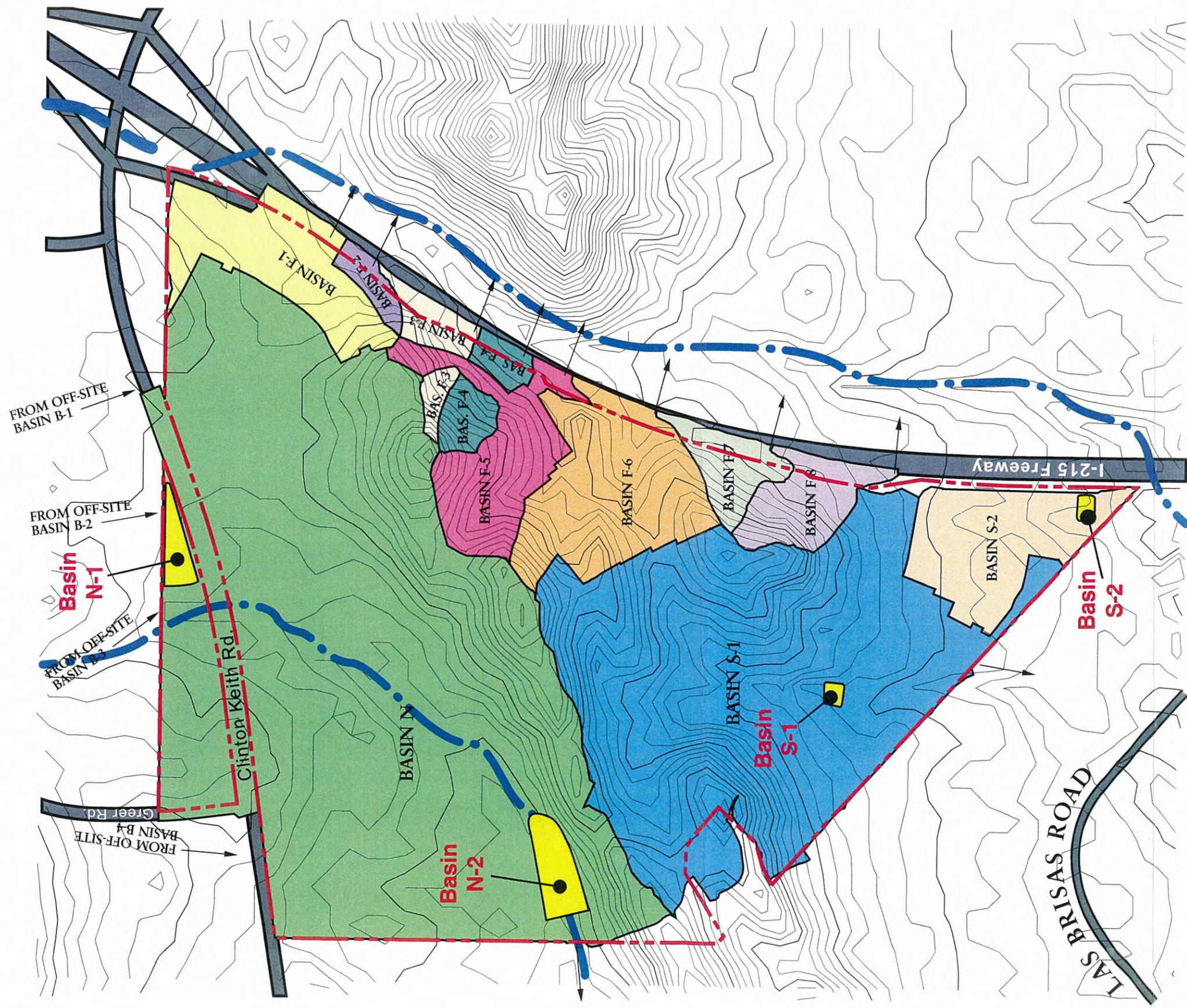
### **Significance of Impact**

No significant impacts to runoff or water quality would be expected with the proposed project.

- Runoff will exit the project area at the same places as at present.
- The magnitude of each separate developed condition flow exiting the project area will be equal to or less the magnitude of the corresponding existing condition flow (2-year, 5-year, 10-year storm events and 100-year storm).
- The earthen-bottom stream channels and four detention basins will allow absorption and infiltration of runoff. The vegetation in these will contribute to the capture and breakdown of urban pollutants, reducing the potential of such materials being carried to downstream receiving waters.

### **Mitigation Measures**

As no significant impacts were identified, no mitigation is necessary. Adherence to project design will be done at the City with plan checks associated with the issuance of grading permits. Measures to assure the establishment of vegetation are included in Section IV-D, Biological Resources.



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DEVELOPED CONDITIONS BASINS

FIGURE IV-H-3



## L. PUBLIC FACILITIES

### Existing Conditions

Police Services. The objective of the Safety Element of the City's General Plan regarding police facilities is to control crime in the City by maintaining adequate police department staff, equipment, and facilities. The city of Murrieta's Police Department is located at 40080 California Oaks Road. Murrieta's standard response time is within 5 minutes for Priority 1 calls (Grady, personal communication, 1999). As of May 1999, the Police Department has a total of 32 sworn officers, a ratio of .69 per 1,000 population (Landwehr, personal communication, 1999)

Fire Protection and Emergency Medical Services. Regarding fire department facilities, the Safety Element objective is to provide a safe living environment ensuring adequate fire protection services to prevent and reduce the loss of life and property from structural, wildland, and wildland/urban fire damage.

The Murrieta Fire Protection District (MFPD) has a total of 33 full time employees. The MFPD does not have an adopted service ratio standard. Current staffing provides 0.7 fire personnel per 1,000 residents (Allen, personal communication, 1999). The Murrieta Fire Protection District Fire Protection Plan, which outlines future staffing and equipment needs, recommends a ratio of approximately 1.38 career-uniform firefighters per 1,000 population based on a build-out population of 60,000.

Fire and emergency medical services are provided to the project's vicinity from Station 2 at 40060 California Oaks Road which has three firefighters on duty at all times. A total of eight firefighters from all three stations respond to structural fires within a five minute response time.

Library. The Murrieta Public Library, located at 39589 Los Alamos Road, opened in April 1999. It has just over 7,000 books and periodicals at this time. The library is open 39 hours a week including two evenings and Saturdays. The library staffs four full time and three part time employees (Steedman, personal communication). Murrieta library cards are honored at any Riverside County branch, including Temecula, Sun City, and Elsinore. Interlibrary loan services are available, making it possible for Murrieta residents to have access to library resources across the county. Funding for the new facility comes from a portion of property taxes. Three cents of every property tax dollar collected in Murrieta is used for library services.

Water Service. The proposed project lies within the service boundary of the Eastern Municipal Water District (EMWD). While at this time EMWD does not have the facilities necessary to provide potable water to Murrieta Oaks, water service could be provided with proposed infrastructure improvements to extend the existing facilities to the project (Back, personal communication, 1999).

Wastewater Collection. EMWD provides wastewater collection service to the project area. Existing sewer mains lie southwest of the proposed project in Las Brisas Road. While these existing sewer mains would not be sufficient to provide service to the project, service could be provided with proposed infrastructure development to the disposal system that would carry effluent out of the Murrieta Oaks project (Back, personal communication, 1999).

## **Impact**

Police Services. Development of the Murrieta Oaks project would introduce 560 single-family residences into Murrieta, increasing the need for police services and increasing response times. Response times to the project would exceed the City's standard.

Fire Protection and Emergency Medical Services. Construction of the Murrieta Oaks project would increase demand for fire protection and emergency medical services, but adequate response time could be provided under most conditions (Allen, personal communication, 1999).

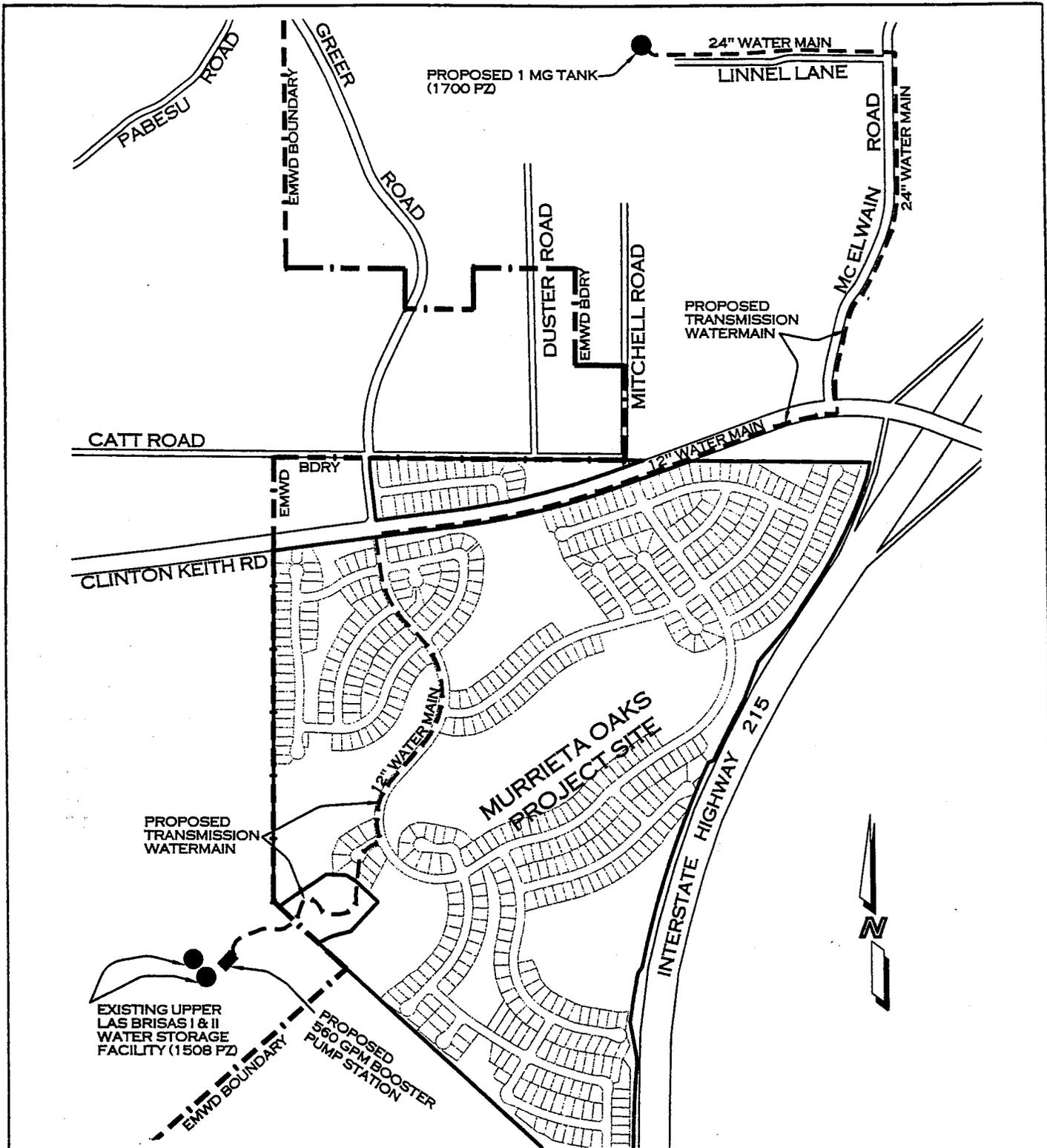
Library Services. Development of the Murrieta Oaks Project would introduce 560 single-family residences into the City of Murrieta increasing the demand for library services.

Water Service. In order for water service to be provided to the proposed project, a new water distribution system has been proposed. The following water distribution system was designed by the EMWD and Crosby, Mead, Benton & Associates. A one-million gallon reservoir tank would be constructed to the north of Murrieta Oaks at the end of Linnel Lane (see Figure IV-L-1). The existing Upper Las Brisas I & II Water Storage Facility would fill the proposed new tank. A new booster pump station, rated at 560 gallons per minute (GPM), would be built at the Water Storage Facility. Water being pumped by the new booster pump station to the 1 MG tank would travel in a 12" transmission main across the Murrieta Oaks project to Clinton Keith Road and then along Clinton Keith to McElwain Road where the water main would increase in diameter to 24" to the end of Linnel Lane.

Potable water and fire fighting water would be delivered to the residential areas of the project by smaller water mains in the streets to be constructed as the project is built out. These local distribution mains would tap directly into the transmission main at appropriate points. The preparation of the final engineering plans would determine the sizes and capacities and would be in conformance with EMWD standards.

## **ALTERNATIVE CONCEPTUAL POTABLE WATER SYSTEM PLAN**

This section describes an alternative proposal for the development of an infrastructure water distribution system that will provide potable water service to the Murrieta Oaks project. This alternative system has significant advantages in cost and simplicity over the "primary" proposal, but its physical and economic feasibility is dependent upon factors that are completely beyond the control of the project developers. If certain property owners and developers of lands lying to the east of Interstate Highway 215 make decisions to construct



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**CONCEPTUAL WATER  
 SYSTEM PLAN**

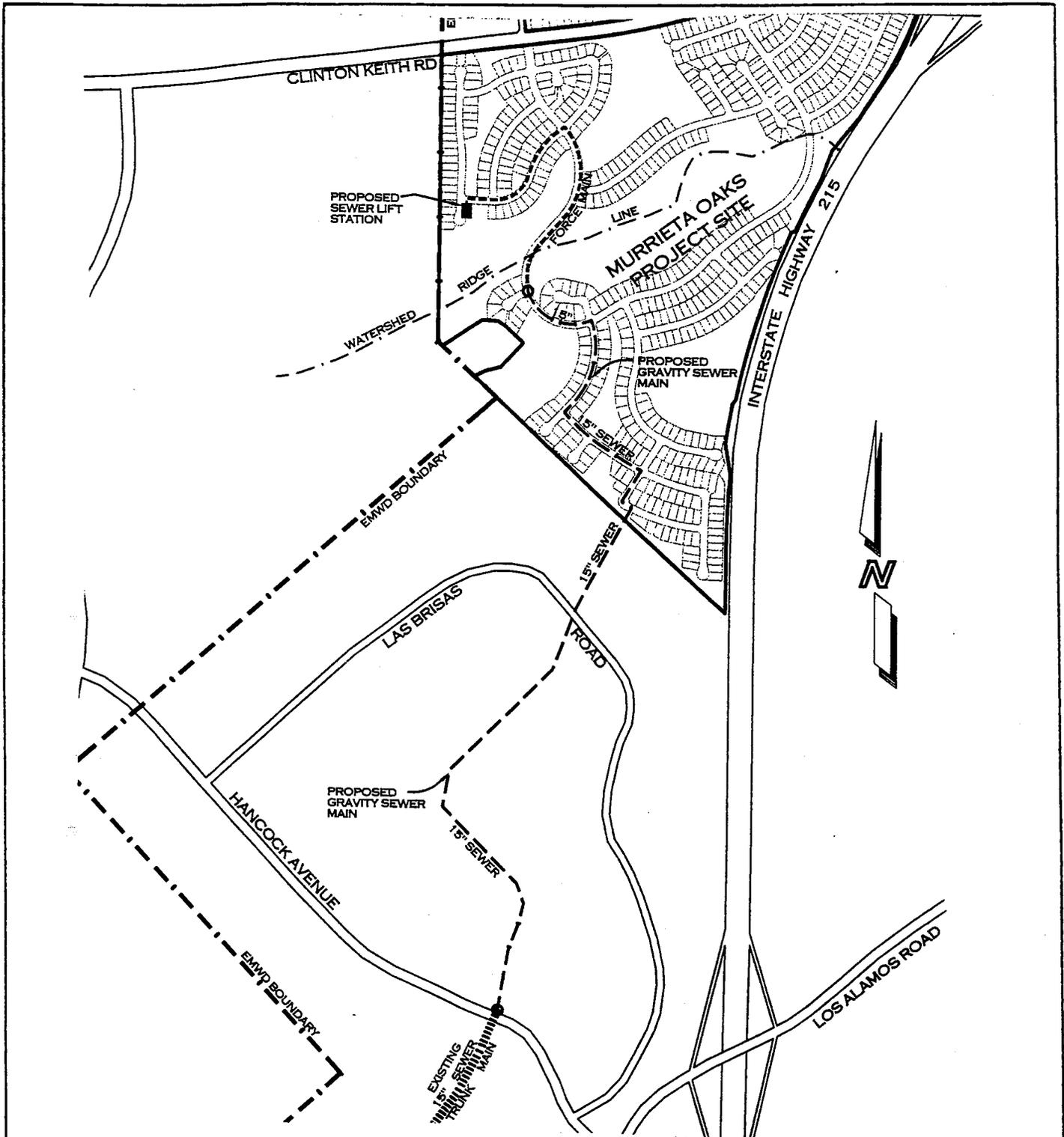
**FIGURE IV-L-1**

certain water infrastructure improvements, if Eastern Municipal Water District approves those decisions and agrees to provide potable water in adequate quantities to the intersection of Antelope Road and Clinton Keith Road and if the schedule for the construction of these improvements is compatible with the schedule for the development of Murrieta Oaks, then this Alternative Water System may prove to be a preferred alternative to the "primary" proposal. At present, the probability of this alternative becoming feasible is considered to be low. This alternative infrastructure system is illustrated on the attached Exhibit.

If, by the time that construction of the Murrieta Oaks project water infrastructure system begins, a potable water supply of adequate pressure and capacity becomes available at the intersection of Antelope Road and Clinton Keith Road, the developer of the Murrieta Oaks project will construct a 24" diameter pipeline running to the west from that intersection, within the right of way of Clinton Keith Road where possible. The new water main will be extended across the right of way of I-215 by jacking a pipe sleeve under the freeway and installing the new 254" waterline within the pipe sleeve. To the west of the freeway, the new 24" diameter waterline would be extended to the intersection of McElwain Road with Clinton Keith Road. At that point, a 24" diameter stub will be provided to the north for the future extension of a large main to the north. To the west, the watermain would be reduced to 12" in diameter and it would be constructed within the right of way of Clinton Keith Road between McElwain Road and Greer Road where stubs will be provided to the north and to the south.

Delivery of potable water and fire fighting water to the residential areas of the Murrieta Oaks project would be handled by smaller water mains to be constructed in the local streets that would be built in phases as the Murrieta Oaks project is built out. These local distribution mains will tap directly into the infrastructure transmission main at the Greer Road intersection and other appropriate points. Sizes and capacities will be determined during the preparation of the final engineering plans for the project and will be in conformance with EMWD standards.

The impact of the proposed project on the regional potable water supply and distribution system has been evaluated by the EMWD and included in their regional planning. In 1995, the EMWD prepared a 5-year Urban Water Management Plan as a part of its negotiations with the Metropolitan Water District. An earlier version of the Murrieta Oaks project included 750 Equivalent Dwelling Units (EDU's) compared to the 600 EDU's of the current, smaller project, so the impacts of the current project are within planned tolerances.



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**CONCEPTUAL SEWER SYSTEM PLAN**

**FIGURE IV-L-2**

Wastewater Collection. In order for wastewater collection to be provided to the site, the following sewage system has been proposed by EMWD and Crosby, Mead, Benton & Associates.

Because of the northeast-southwest trending ridge line in the property, it has been proposed that a Sewer Lift Station be built at the lowest point on the northern end of the project (see Figure IV-L-2). From the Lift Station a Force Main would carry effluent to the top of the watershed ridge where it would go into the proposed 15" gravity sewer main. Existing mains within Las Brisas Road and Hancock Avenue have limited capacity so an offsite sewer trunk main would be constructed. The diameter of the proposed sewer trunk main would be 15" and would carry wastewater from the proposed project to the EMWD collection network and the EMWD treatment facilities.

### **Significance of Impact**

Police Services. While the police response times would exceed the City's standard, revenues to the city from property and sales tax paid by new consumers would lower the impact to police services to a level below significance.

Fire Protection and Emergency Medical Services. The proposed project would increase demand for fire protection and emergency medical services, but these services could be provided to the project within the five-minute standard response time under normal conditions. No significant impacts to fire protection and emergency medical services are anticipated if the proposed project is implemented.

Library Services. No significant impacts would result from the implementation of the proposed project.

Water Service. The impacts on water service have been evaluated and incorporated into the EMWD Urban Water Management Plan. The proposed project is within the Plans' guidelines. Therefore, no significant project water-related impacts are anticipated.

Wastewater Collection. The impacts on wastewater collection have been evaluated and incorporated into the EMWD Urban Water Management Plan. The proposed project is within the Plans' guidelines. Therefore, project implementation would create no significant impacts to this service.

## **Mitigation Measures**

While the project incrementally affects public facility services, impacts are mitigated by payment of developer fees, increased revenues to the City from property tax and long-term sales tax paid by new consumers. Payment of public facilities fees provides a feasible mitigation measure for reducing impacts of residential projects such as Murrieta Oaks.

Construction of the proposed water system infrastructure and proposed sewer system would create no significant impacts; therefore, no mitigation measures are required.

**CHAPTER D**

**MITIGATION MONITORING AND REPORTING PROGRAM**

## CHAPTER D

### MITIGATION MONITORING AND REPORTING PROGRAM

This document identifies mitigation measures which would reduce or eliminate potential environmental impacts of the proposed project. The City of Murrieta is required to implement all adopted mitigation measures. To ensure compliance, the following Mitigation Monitoring Program and checklist is provided. This program is to be adopted by the Lead and Responsible agencies upon formulation of Findings, to comply with Assembly Bill 3180 (Public Resources Code Section 21080.6).

The Planning, Engineering, and Engineering Inspection Departments of the City of Murrieta will administer the Mitigation Monitoring Plan. Augmented by possible contract personnel, these Departments are responsible for enforcement of City zoning regulations, which is provided on a full-cost recovery basis by the City. Authorization to commence any on-site activity occurs only after concurrence of the respective City Departments.

Information contained within the following checklist identifies the mitigation measure, the conditions required to verify compliance, the department responsible for determining compliance, and the monitoring schedule. The City of Murrieta determines which measures are applicable to the specific discretionary actions identified in the monitoring schedule.

## Mitigation Monitoring Checklist for the Murrieta Oaks Project

Please note:

CM = Construction-related Mitigation (mitigation requiring monitoring during project construction, such as dust control or road improvements)

OM = Operational Mitigation (mitigation measures necessary to reduce impacts required for implementation of the project)

Mitigation Measure	Type	Monitor	Schedule
<b><u>Aesthetics</u></b>			
Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.	CM	Engineering Division	Prior to issuance of a Grading Permit
Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.	CM	Planning Division	Prior to issuance of a Grading Permit
A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6-8-ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.	CM	Planning Division	Prior to issuance of a Building Permit
Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts.	CM	Engineering Division	Prior to issuance of a Grading Permit
<b><u>Air Quality</u></b>			
ROC emissions from painting and other architectural coatings, including asphalt, shall be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.	CM	Building and Safety Division	During construction

<b>Mitigation Measure</b>	<b>Type</b>	<b>Monitor</b>	<b>Schedule</b>
While projected construction emissions of PM <sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust shall be followed. Project construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.	CM	Engineering Division	During construction
Exposed surfaces must be watered twice daily.	CM	Engineering Division	During construction
All haul roads must be watered twice daily.	CM	Engineering Division	During construction
Speeds on unpaved roads must be reduced to 15 miles per hour or less.	CM	Building and Safety Division	During construction
Construction and mobile equipment must be properly maintained.	CM	Building and Safety Division	During construction
Measures shall be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.	CM	Planning Division	Prior to the issuance of a Building Permit
<b>Biological Resources</b>			
Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space. The project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.	CM	Planning Division	Prior to issuance of a Grading Permit
Mitigation for un-occupied Quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants.	CM	Planning Division	Prior to issuance of a Grading Permit

Mitigation Measure	Type	Monitor	Schedule
The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, 2.99 acres of riparian forest, and 0.0 acre of mulefat scrub) in open space, providing mitigation at a 1.3:1 ratio.	CM	Planning Division	Prior to issuance of a Grading Permit
A Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required.	CM	Planning Division	Prior to issuance of a Grading Permit
The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters.	CM	Planning Division	Prior to issuance of a Grading Permit
A Streambed Alteration Agreement must be made with the California Department of Fish and Game. Habitat creation will be done in Drainage "A" and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat.	CM	Planning Division	Prior to issuance of a Grading Permit

Mitigation Measure	Type	Monitor	Schedule
<u>Geology/Soils</u>			
Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.	CM	Engineering Division	Prior to issuance of a Grading Permit
Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.	CM	Engineering Division	Prior to issuance of a Grading Permit
Geologic observation during the grading process would identify potential boulder and rock fall areas that may be created by site grading. Stabilization fills, rock bolting or debris catchment areas are possible mitigation measures to be evaluated on a case by case basis.	CM	Engineering Division	During construction
The following standard engineering practices must be incorporated into the project in order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction:			
a) Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.	CM	Engineering Division	During construction
b) Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.	CM		

Mitigation Measure	Type	Monitor	Schedule
<b><u>Fire Hazards</u></b>			
Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created.	CM	Murrieta Fire Department	Prior to issuance of a Grading Permit
Access to the fuel modification zones shall be provided at a maximum of every 1,500 ft.	CM	Murrieta Fire Department	Prior to issuance of a Grading Permit
All high fire hazard plant species shall be removed.	CM	Murrieta Fire Department	Prior to occupancy
Tree branches shall be pruned up 6 ft.	CM/OM	Murrieta Fire Department/ Planning Division	Prior to occupancy
Plant material shall be pruned to a height of 18 inches.	CM/OM	Murrieta Fire Department/ Planning Division	Prior to occupancy
Manufactured slopes shall be planted with Fire Protection District List B and C recommended species.	CM	Murrieta Fire Department/ Planning Division	Prior to occupancy
Trees shall be placed at a distance of three times their mature diameter.	CM	Murrieta Fire Department/ Planning Division	Prior to occupancy
Large shrubs shall be planted at 20 ft on center.	CM	Murrieta Fire Department/ Planning Division	Prior to occupancy

<u>Mitigation Measure</u>	Type	Monitor	Schedule
<u>Landform Alteration</u>			
Grading shall be minimized on slopes, ridges, and canyons.	CM	Engineering Division/Planning Division	Prior to issuance of a Grading Permit
Contour grading techniques shall be used wherever possible.	CM	Engineering Division/Planning Division	Prior to issuance of a Grading Permit
Cut and fill shall be balanced on-site.	CM	Engineering Division/Planning Division	Prior to issuance of a Grading Permit
Excess soil shall be used on-site.	CM	Engineering Division/Planning Division	Prior to issuance of a Grading Permit/ During construction
All grading and drainage system plans shall be prepared under the direction of a licensed Civil Engineer.	CM	Engineering Division	Prior to issuance of a Grading Permit
Slope variation and undulation shall be followed wherever possible to retain natural contours .	CM	Engineering Division	Prior to issuance of a Grading Permit
Existing dominant landforms shall be retained and incorporated into the project design.	CM	Engineering Division	Prior to issuance of a Grading Permit

Mitigation Measure	Type	Monitor	Schedule
<b><u>Land Use</u></b>			
Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.	CM	Planning Division	Prior to issuance of a Building Permit
Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.	CM	Planning Division	Prior to issuance of a Building Permit
<b><u>Noise</u></b>			
The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.	CM	Planning Division	Prior to issuance of a Building Permit
Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.	CM	Planning Division	Prior to issuance of a Building Permit
When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and interior noise levels.	CM	Planning Division	Prior to issuance of a Grading Permit
The City's noise standards for residential air conditioning shall be incorporated into development requirements.	CM	Planning Division	Prior to issuance of a Building Permit
<b><u>Recreation</u></b>			
The project would provide active and passive parkland improvements and shall pay a Developer Impact Fee to the City for parks and recreation.	CM	Community Services District	Prior to issuance of a Building Permit

Mitigation Measure	Type	Monitor	Schedule
<u>Schools</u>			
The applicant shall pay a developers fee of \$2.24 per square foot of habitable living space.	CM	Murrieta Valley Unified School District	0
<u>Traffic/Circulation</u>			
Project traffic impact mitigation measures shall consist of:			
a) Installing traffic signals at the intersection of Clinton Keith Road and Greer Road.	CM/OM	Engineering Division	When warranted by traffic or prior to the issuance of the building permit for the 400 <sup>th</sup> dwelling unit
b) Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road.	CM/OM	Engineering Division	When warranted by traffic or prior to the issuance of the building permit for the 400 <sup>th</sup> dwelling unit

**DRAFT ENVIRONMENTAL IMPACT REPORT**

**FOR THE**

**PROPOSED MURRIETA OAKS PROJECT**

**(SP 98-102)**

**SCH No. 99031094**

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## EXECUTIVE SUMMARY

### I. PROJECT DESCRIPTION

The California Environmental Quality Act (CEQA) requires an environmental assessment of all governmental discretionary actions defined as projects. Actions which could result in significant physical impacts to the environment require the preparation of an environmental impact report (EIR).

The application for the proposed Murrieta Oaks project (99031094) has been filed with the City of Murrieta. The project proposes a Specific Plan (SP 98-102). The City of Murrieta solicited comments regarding potential environmental effects from responsible agencies and individuals by use of a Notice of Preparation. The comments received in response to the Notice of Preparation and the Initial Study determined the scope of analysis for this EIR.

The Murrieta Oaks project includes approximately 260 undeveloped acres located in the northeastern portion of the City of Murrieta, in southwestern Riverside County. Approximately 250 acres are located at the southwest corner of Interstate-215 and Clinton Keith Road, with an additional 10 acres located north of Clinton Keith Road. The property is situated in Township 7 South, Range 3 West of the USGS 7.5' Murrieta quadrangle, and is identified by Assessor's Parcel Numbers 956-280-01 and 956-280-11.

The proposed Murrieta Oaks project objective is to provide a quality single-family residential community while retaining assets of the existing environment. This objective would be met by developing a project that offers a low dwelling unit density consistent with both the neighboring single family and the rural/non-urban character of surrounding areas, by clustering homes within the flatter portions of the site, creating substantial amounts of open space, and by preserving the central ridge line of the property as well as the majority of large drainage courses and associated oak-woodland areas found on the property.

The Murrieta Oaks application includes a vesting Tentative Map and a Specific Plan for the property.

Tentative Map. The Tentative Map proposes a maximum 560-unit single-family detached residential development. The units would be part of four individual residential neighborhoods comprising a total of 100.8 acres. The Murrieta Oaks project would be designed with an overall density of 2.2 dwelling units (du) per acre; minimum lot size would be 7,200 sq ft. Development would be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line. A small part of the project would be located north of Clinton Keith Road, with development limited to the western portion of that parcel.

The Tentative Map would set aside 65.25 acres of natural open space and 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park). It also provides for an elementary school site (10.00 acres) and designates a 5-8 ft-wide multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas. The open space areas would be owned and maintained by the City of Murrieta.

Specific Plan. The Specific Plan identifies the four residential neighborhoods that would be created in a series of eight phases (Figure III-4) - the Creekside Neighborhood (a maximum of 129 lots on 32.33 acres); the Highland Neighborhood ( a maximum of 187 lots on 50.11 acres); the Ridge View Neighborhood (a maximum of 111 lots on 32.27 acres); and the Lowland Neighborhood (a maximum of 133 lots on 39.07 acres; Figure III-5). Property setbacks would comply with the single-family residential development standards established in the City's General Plan except that side setbacks will be 5 ft. Dwellings would be limited to a maximum height of 35 ft. Project backbone infrastructure would be installed in the initial phase of implementation.

Sound attenuating walls constructed of 6-to-8 ft high splitface block and planted with vines would be located along Clinton Keith Road and Interstate-215 where residential lots abut these roadways. Six-ft high collector street and community walls constructed of splitface block would be erected along those interior areas of the project where portions of residential lots lie adjacent to streets. Some project walls of masonry and tubular steel 6 ft in height would be constructed with consideration given to the architecture of surrounding neighborhoods, and would be located next to open space to allow visual access to these areas. The Specific Plan would also identify approximately 41.27 acres of right-of-way for a looping collector roadway and interior residential streets.

Grading Plan. The grading plan calls for 1,400,000 cubic yards (cu yds) of grading, with a balance of cut and fill on-site. The plan would emphasize the preservation of significant existing topographic features, selectively cluster development on the flatter portions of the site, and replicate the slopes and characteristics of natural landforms during the grading process.

Landscape Plan. The project would incorporate plant species that are already well established in Murrieta and would include a variety of trees and shrubs historically found in the area, both native and non-native. The landscape concept would be defined by six areas linked together by landscaped corridors along primary roadways and in the open space areas.

## II. ENVIRONMENTAL ANALYSIS

### A. AESTHETICS

**Impact.** Implementation of the proposed project would change the existing character of the property from a natural viewshed to a largely developed urban residential landscape, comparable to neighboring developments. Although the ridge lines, the dominant physical features, would be unaltered and retained in open spaces, the flatter elevations of the property would be graded and developed and would be visible from the east along Interstate-215 and from the north along Clinton Keith Road (see Figure IV-A-1). The preserved ridgelines would break up the short-range views of residential development along Interstate 215 (44% of the frontage along the 215 will be in preserved hillside). The Highland Neighborhood (northern-most) will have an additional 50' setback from the Interstate Highway and interchange. The effect of the Murrieta Oaks development would be to extend the existing residential views outward to these main roadways. Visual impacts would also occur from more distant vantage points to the south, in the general area of Los Alamos Road and Interstate-215, where the existing long-range views of natural terrain would be replaced by views of rooftops with only the most prominent hilltops remaining.

**Mitigation.** Mitigation measures developed to reduce impacts to below a level of significance include:

- Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.
- Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.
- A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6 to 8 ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.
- Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts.

## B. AGRICULTURAL RESOURCES

**Impact.** Ultimate implementation of the proposed project would result in the development of 560 residential units, and would result in the loss of 1.5 acres of Class II soils. Because the Williamson Act contract has expired, there would be no conversion of property from agriculture to suburban land uses.

**Mitigation.** No significant impacts are associated with implementation of this project; therefore, no mitigation measures are required.

## C. AIR QUALITY

**Impact.** Implementation of the proposed Murrieta Oaks development would result in the emissions of pollutants during project construction and subsequent to occupation of the homes. Principle sources of pollution during construction would be gaseous and particulate emissions from construction equipment. After construction, the major sources of emissions would be generated by occupants' vehicles, and to a lesser degree, by water heaters, fireplaces, and landscape maintenance equipment. A vehicle trip generation rate of 9.57 trips per dwelling unit was used to determine project vehicle emissions.

Construction Emissions. Construction emissions were calculated for the proposed project using the URBEMIS7G computer program. Analysis assumptions included that the project would begin in 2000 and would be completed in five years; that construction would occur at a constant rate over the five years; and that one-fifth of the total home construction (113 houses) would occur during each of the five years. Estimated construction emissions would not exceed the SCAQMD significance criteria for NO<sub>x</sub>, CO, or PM<sub>10</sub>; emission of reactive organic compounds (ROC) would exceed the significance criteria due to the use of exterior and interior paints.

Operations Emissions. During the first year of occupancy, 2001, operations emissions from vehicles and ROC sources (hair spray, deodorant, etc.) would not exceed the SQAQMD significance criteria. Emissions sources increase, however, as the number of occupants rises in subsequent years. By 2002, emissions of NO<sub>x</sub> would exceed significance criteria; emissions of ROC would exceed significance criteria beginning in 2003.

**Mitigation.** The following measures shall be incorporated into the project design to reduce significant air quality impacts to the lowest level possible:

### Construction Emissions.

- ROC emissions from painting and other architectural coatings, including asphalt, should be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.

- While projected construction emissions of PM<sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust should be followed. Project construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.
- Exposed surfaces must be watered twice daily.
- All haul roads must be watered twice daily.
- Speeds on unpaved roads must be reduced to 15 miles per hour or less.
- Construction and mobile equipment must be properly maintained.

#### Occupancy Emission.

Measures should be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.

### **D. BIOLOGICAL RESOURCES**

**Impact.** The project would result in the loss of 40.25 acres of chamise chaparral, and 37.4 acres of *Ceanothus crassifolius* chaparral. The project will retain 44.05 acres of chaparral habitats on the ridgeline which will be left in open space. Approximately 73.1 acres of ruderal habitat would be impacted. A total of 37.1 acres of coastal sage scrub and 2.3 acres of disturbed coastal sage scrub would be impacted.

The project will also result in the loss of 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acre of riparian forest, and 0.04 acres of mulefat scrub). The project would also result in the loss of four individual coast live oak trees and one canyon live oak.

The project will impact 0.29 acre of Corps-defined wetlands and 0.73 acre of Waters of the U.S. Approximately 2.62 acres of habitat under Fish and Game jurisdiction would be impacted.

**Mitigation.** Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space.

Because the coastal sage scrub habitat does not support sensitive species such as the California gnatcatcher, a 1:1 mitigation ratio would be acceptable. The project will impact 37.17 acres (including disturbed coastal sage) and will retain 7.63 acres of coastal sage on-site. Thus, the project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.

Because the quino checkerspot has not been found on the site, the habitat is assumed not to be occupied by this species. Mitigation for un-occupied quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants. In its quino survey report, LSA (1999) identified approximately 4.2 acres of suitable habitat on-site.

The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, and 2.99 acres of riparian forest) in open space, providing mitigation at a 1.3:1 ratio.

The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters. Similarly, a Streambed Alteration Agreement must be made with the California Department of Fish and Game. The project will create 1.31 acres of habitat to mitigate for Corps-defined wetlands and Waters of the U.S. An additional 3.93 acres of riparian habitat such as oak woodland will be created to meet the mitigation required by the Department of Fish and Game. The habitat creation will be done in Drainage "A" and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat.

In accordance with the City's Tree Preservation Ordinance (Section 16.42 of the Murrieta Municipal Code), a Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required by the ordinance:

"When the trees to be removed are associated with a proposal for development, the appraised value of the removed trees shall be applied to increasing the amount of landscaping within the proposed project or by planting minimum 24-inch box trees of equal value within City rights-of-way or public parks."

## E. CULTURAL RESOURCES

**Impact.** One of the historic sites (CA-RIV-4906H) mapped within the project area was actually located west of the property; it has been destroyed by development, and this project would not affect it. The other historic site, CA-RIV-4905H, is located within open space Lot E. Due to its location within an open space lot the site would not be subject to direct impacts from project development.

A small portion of the prehistoric site, CA-RIV-3056, would be preserved in open space Lot M. The majority of the site would be destroyed by improvements within Lot K and residential development surrounding Lot M.

**Mitigation.** Because no significant impacts have been identified to archaeological resources, no mitigation measures are necessary from an archaeological standpoint. Representatives of the Pechanga Band of Luiseño Mission Indians have requested that a Native American monitor be on-site during grading activities to ascertain that no impacts to cultural resources occur.

## F. GEOLOGY AND SOILS

**Impact.** Development of the project would require removal of undocumented fill, topsoil, alluvium, older alluvium and any colluvium or slopewash prior to fill placement to a depth of .5 to 13 ft. If the compacted artificial fill along the western site boundary is found suitable to support the additional fill load for structures proposed for the project, the upper 1 to 3 ft of existing compacted fill would also be removed.

The highly weathered areas of gabbro and granodiorite would require removal as well. This could adversely affect the stability of the slope by increasing the potential for rock falls caused by earthquakes, slides or slumps.

Design cut, fill-over-cut, fill, and natural slopes are considered grossly stable as designed.

In places where the excavation into the bedrock reaches below 10 -17 ft, it is expected that very heavy ripping and/or blasting would be needed as these are the areas where the rock is most resistant.

Liquefaction, which can occur when certain saturated soils are shaken during an earthquake, is extremely unlikely due to the lack of near surface groundwater, the proposed subdrains, complete soil/alluvium removals, and the high in-place density of the gabbro and granodiorite bedrock.

**Mitigation.** Geologic observation during the grading process would identify potential boulder and rock fall areas that may be created by site grading. Stabilization fills, rock

bolting or debris catchment areas are possible mitigation measures to be evaluated on a case by case basis.

The following standard engineering practices must be incorporated into the project in order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction. Detailed geotechnical recommendations are given in Appendix E.

- Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.
- Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.
- Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.
- Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.

## **G. HAZARDS**

**Impact.** Fire Hazard Some portions of the Murrieta Oaks project would be exposed to potential wildland fire hazards (see Figure IV-G-1). Such areas would be subject to fuel modification improvements, which would include reduction of fuel volume, planting of approved low-fuel ground covers and shrubs, and limited irrigation of areas adjacent to structures. Brush clearance would be permitted in fuel maintenance zones, but mass grading would not. The areas of the Murrieta Oaks project identified as fuel management zones would be owned and maintained by the City of Murrieta.

Toxic Materials Based on the results of the site assessment, implementation of the proposed project would not result in the exposure of residents to residual hazardous or toxic materials relating to previous uses of the land.

**Mitigation.** The following mitigation measures would reduce impacts to below a level of significance.

### Fire Hazard Mitigation Measures

- Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created.
- Access to the fuel modification zones shall be provided at a maximum of

every 1,500 ft.

- All high fire hazard plant species shall be removed.
- Tree branches shall be pruned up 6 ft.
- Plant material shall be pruned to a height of 18 inches.
- Manufactured slopes shall be planted with Fire Protection District List B and C recommended species.
- Trees shall be placed at a distance of three times their mature diameter.
- Large shrubs shall be planted at 20 ft on center.

## H. HYDROLOGY

**Impact.** Unless impounded on-site, rainfall on a given area will: infiltrate the soil and “soak in” to the ground, run off, or evaporate in place. Evaporation is insignificant on the project area except for minor rain events.

Development of open land almost always results in greater hardscape, which leads to less absorption of rain and increased runoff. Simultaneously, a development that reduces the steepness of a site or the length of some slopes can allow greater absorption of rain in the non-hardscape areas (lawns, landscaping). Because the slopes are less steep or shorter, the runoff flows more slowly, and has more time to be absorbed by the soil.

The introduction of impervious surfaces with roadways, driveways, and houses would increase the amount of urban runoff during rainstorms. Petroleum products from vehicular traffic and parking and household fertilizers and pesticides would be introduced into the runoff, with the great majority in the runoff in the first storm of the season. These pollutants can impact water quality.

Project design has incorporated measures to prevent these potential impacts. The existing Basin A-1 will be modified and its runoff diverted to a different culvert. Basins A-2 through A-9 will be modified to Developed Condition Basins F-1 through F-8; each will flow through an existing culvert under I-215. The proposed grading of the site has been adjusted such that the runoff exiting each of these Developed Basins will be at or below the amount of runoff under presently existing conditions.

Three Developed Condition Basins, S-1, S-2, and N, have been designed to incorporate flood detention structures to control excess storm runoff. Site design and grading will allow excess runoff -- amounts projected to be greater than under existing conditions -- from the areas of Basins A-1 through A-9 to these flood detention areas.

The existing Basin A-10 drains to a small ditch adjacent to existing off-site residences. Project design evaluation included concerns that these existing residences are inadequately protected from potential flooding. To eliminate these concerns, all runoff from the area of existing Basin A-10 will be diverted to Developed Condition Basins S-1 and S-2, which contain flood detention structures. No runoff from the project will be placed in the small ditch adjacent to the offsite properties.

The onsite existing Basin B-5 will become Developed Condition Basin N. A detention basin will be placed north of Clinton Keith Road to receive the outflows of Basins B-2 and B-3, and deliver them under Clinton Keith Road in one culvert, to the existing open channel. Flows entering from offsite Basin B-1 will be run in a pipe to join this open channel. Runoff from offsite Basin B-4 will continue in its existing channel.

A second detention basin will be incorporated into Developed Condition Basin N. This will be associated with the open channel near the western boundary of the site.

No flooding impacts would be expected with the proposed project.

## I. LANDFORM ALTERATION

**Impact.** The proposed project would require 1,400,000 cu yds of balanced cut (82.5 acres) and fill (106.9 acres) over a total of 178.45 graded acres. Hillside portions of the property (those areas with a slope of over 50 percent) would be left in their natural state; adjacent areas would be contour graded. The maximum height cut on-site would be 97 ft, located on Lot 423 in the southern portion of the property.

All cut material would be redeposited on-site. The majority of the fill would be placed in the southern, northeastern, and central western portions of the property. The overall grading per acre is 5,511 cu yds.

**Mitigation.** Implementation of the following mitigation measures would reduce impacts to below a level of significance:

- Grading shall be minimized on slopes, ridges, and canyons.
- Contour grading techniques shall be used wherever possible.
- Cut and fill shall be balanced on-site.
- Excess soil shall be used on-site.
- All grading and drainage system plans shall be prepared under the direction of a

licensed Civil Engineer.

- Slope variation and undulation shall be followed wherever possible to retain natural contours.
- Existing dominant landforms shall be retained and incorporated into the project design.

## J. LAND USE

**Impact.** The Tentative Map would develop up to 560 single-family residential lots on 260 acres, along with associated infrastructure. No change in land use designation is needed for the project, which is presently designated as SP (Specific Plan) 1 by the General Plan.

A 5.13-acre neighborhood park, located in the north central portion of the project, near Clinton Keith, has been set aside to meet the City's recreation requirement, which calls for the dedication of 5.0 acres of active use parkland per 1,000 population. A 10.00-acre elementary school site adjacent to the park has been requested by the Murrieta Valley Unified School District. The project would also provide 65.25 acres of natural open space and 44.35 acres of modified open space including an associated passive use trail system.

Compatibility. The project would have a density of 2.2 du/net ac, which is within the density allowance for the SP (Specific Plan) land use designation of 2.1-5.0 du/ac as specified in the Murrieta Municipal Code (Title 16.06). The project would be compatible with the existing single-family residential subdivisions located to the south and west, with rural residences to the north, and with future single-family residences located to the east, across Interstate-215. It would also be compatible with the designated open space area to the southwest, by linking it to planned natural open space within the project. The portion of the project located north of Clinton Keith Road would be located near an area designated for Regional Commercial use, but since these proposed lots are clustered at the western end of the parcel, the resulting open space on the east would provide a buffer between the lots and the potential future commercial use. Land use incompatibilities would occur between those portions of the project adjacent to Interstate-215 and Clinton Keith Road, and the eastern portions of the project north of Clinton Keith Road.

The project is located in a portion of the City which is characterized by single-family residences and open space. Its agricultural usage ended with the termination of its Williamson Act contract. The proposed project is consistent with other residential uses in the area and no adverse impacts to land use would result. The proposed commercial uses to the northeast and to the east across I-215 are not immediately adjacent to the project or would be buffered from these areas by City code requirements and would not represent adverse impacts. However, significant land use incompatibilities could occur between Interstate-215 and those lots adjacent to it.

**Mitigation.** All potential land use incompatibilities can be mitigated to below a level of significance by:

- Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.
- Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.

## **K. NOISE**

**Impact. Traffic Generated Noise.** The FHWA Traffic Noise model was used to calculate traffic noise levels. Based on an average speed of 50 miles per hour on Clinton Keith Road, the 70 dBA CNEL noise contour would be located approximately 140 ft from the center of the road; the 65 dBA CNEL noise contour would be 350 ft from the center of the road. Using an average speed of 70 miles per hour, on Interstate-215 the 70 dBA CNEL noise contour was about 525 ft from the center of the freeway; the 65 dBA CNEL noise contour was 1100 ft from the center.

As shown in Figure IV-K-2 , a considerable portion of the proposed development would be located between the 65 dBA CNEL contour and the roadways, and some residences would be located between the 70 dBA CNEL and the roadways.

**Project Generated Noise.** Noise generated on the project site would be typical of residential neighborhoods. Such noise might include children playing, dogs barking, trash removal and landscape maintenance equipment noise. The project would not be anticipated to generate noise levels in excess of 50 dBA at the property boundaries during the day, or 45 dBA at night.

**Construction Generated Noise.** Noise would be generated during project site preparation, grading, and construction. Construction noise levels typically average 85-90 dB  $L_{eq}$  at a distance of 50 ft from the equipment for short periods of time during site preparation and grading. Following site preparation, noise levels are anticipated to average 65-75 dB  $L_{eq}$  at a distance of 50 ft. All construction shall be performed between 7 am and 7 pm and would comply with the construction standards required by City's noise ordinance.

**Mitigation.** Implementation of the following mitigation measures would reduce impacts to below a level of significance:

- The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.

- Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.
- When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and interior noise levels.
- The City's noise standards for residential air conditioning shall be incorporated into development requirements.

## L. PUBLIC FACILITIES

**Impact. Police Services.** Development of the Murrieta Oaks project would introduce 560 single-family residences into Murrieta, increasing the need for police services and increasing response times. Response times to the project would exceed the City's standard.

**Fire Protection and Emergency Medical Services.** Construction of the Murrieta Oaks project would increase demand for fire protection and emergency medical services, but adequate response time could be provided under most conditions (Allen, personal communication, 1999).

**Library Services.** Development of the Murrieta Oaks Project would introduce 560 single-family residences into the City of Murrieta increasing the demand for library services.

**Water Service.** In order for water service to be provided to the proposed project, a new water distribution system has been proposed. The following water distribution system was designed by the EMWD and Crosby, Mead, Benton & Associates. A one-million gallon reservoir tank would be constructed to the north of Murrieta Oaks at the end of Linnel Lane. The existing Upper Las Brisas I & II Water Storage Facility would fill the proposed new tank. A new booster pump station, rated at 560 gallons per minute (GPM), would be built at the Water Storage Facility. Water being pumped by the new booster pump station to the 1 MG tank would travel in a 12" transmission main across the Murrieta Oaks project to Clinton Keith Road and then along Clinton Keith to McElwain Road where the water main would increase in diameter to 24" to the end of Linnel Lane.

Potable water and fire fighting water would be delivered to the residential areas of the project by smaller water mains in the streets to be constructed as the project is built out. These local distribution mains would tap directly into the transmission main at appropriate points. The preparation of the final engineering plans would determine the sizes and capacities and would be in conformance with EMWD standards.

**Wastewater Collection.** In order for wastewater collection to be provided to the site, the

following sewage system has been proposed by EMWD and Crosby, Mead, Benton & Associates.

Because of the northeast-southwest trending ridge line in the property, it has been proposed that a Sewer Lift Station be built at the lowest point on the northern end of the project. From the Lift Station a Force Main would carry effluent to the top of the watershed ridge where it would go into the proposed 15" gravity sewer main. Existing mains within Las Brisas Road and Hancock Avenue have limited capacity so an offsite sewer trunk main would be constructed. The diameter of the proposed sewer trunk main would be 15" and would carry wastewater from the proposed project to the EMWD collection network and the EMWD treatment facilities.

**Mitigation.** While the project incrementally affects public facility services, impacts are mitigated by payment of developer fees, increased revenues to the City from property tax and long-term sales tax paid by new consumers. Payment of public facilities fees provides a feasible mitigation measure for reducing impacts of residential projects such as Murrieta Oaks.

Construction of the proposed water system infrastructure and proposed sewer system would create no significant impacts; therefore, no mitigation measures are required.

## **M. RECREATION**

**Impact.** The Murrieta Oaks project is proposing to include a 5.13 acre active use neighborhood park, which would include a practice soccer field, a softball field, two half court basketball courts, a tot lot, and picnic facilities. The project also includes 65.25 acres of natural open space, 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park) and designates a multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas. The parkland and open space would be deeded to the City of Murrieta, which, through the Community Service District, would be responsible for liability and maintenance.

With open space allotments of 7.33 active use acres and 109.6 passive use acres, the project would provide approximately 105.23 acres more recreational land than is required by the City's General Plan. Allotted active parkland, which consists of the 5.13 active use park and the 2.2-acre trail system totals 7.33 acres, exceeding the Quimby Act active use parkland requirement of 5.5 acres by 1.83 acres.

**Mitigation.** Implementation of the active and passive parkland improvements proposed by the project and payment of the Developer Impact Fee to the City for parks and recreation would reduce impacts to recreation to below a level of significance and no further mitigation measures would be required. An agreement for the park shall be in place prior to issuance of the building permit for the 201<sup>st</sup> dwelling unit, and park construction shall begin at that

time. If the elementary school is constructed before the 201<sup>st</sup> unit building permit is issued, the park shall be built in conjunction with the construction of the school.

## **N. SCHOOLS**

**Impact.** Construction of the Murrieta Oaks project would introduce 560 single-family residences into the Murrieta Valley Unified School District. Applying the generation rate of 0.4024 elementary students per single-family dwelling, the project would increase the enrollment at Tovashal Elementary by 225 students. The generation rate of 0.1809 middle school students per single-family dwelling would increase enrollment at Thompson Middle School by 101 students. The generation rate of 0.2004 high school students per single-family dwelling would increase enrollment at Murrieta Valley High School by 112 students. At buildout, the project would add approximately 438 new students to the Murrieta Valley Unified School District.

In addition, the Murrieta Valley Unified School District has indicated interest in purchasing land adjacent to the neighborhood park for an elementary school site. The school, which would be planned as a separate project under CEQA, would be very similar to Tovashal School. The adjacent park/school locations would allow for shared use of the playfields and possibly other facilities.

**Mitigation.** The applicant would pay a developers fee of \$2.24 per square foot of habitable living space. Payment of these fees would reduce impacts to below a level of significance and would provide mitigation of impacts to schools.

## **O. TRANSPORTATION/TRAFFIC**

**Impact.** All of the project traffic will take its access from Clinton Keith Road. The project has been designed to have two major access points, one aligning with Greer Road, and one matching the future alignment of McElwain Road. An additional minor access point will be available for the 29 units proposed north of Clinton Keith Road, in the way of a right-in, right-out only intersection with Clinton Keith Road. The raised median on Clinton Keith Road will prevent left turns in or out of the project at this point.

The proposed project will contribute approximately 3300 vehicles westerly on Clinton Keith Road, and 2100 vehicles easterly on Clinton Keith Road per 24-hour period.

Peak hour analyses found the morning peak hour will carry 114 vehicles into the project, and 336 vehicles out of the project. The evening peak carries 390 vehicles into the project, and 216 vehicles out. The maximum peak hour demand on the system, therefore, is the 390 vehicles seeking to enter the project in the p.m. peak hour time frame.

Analyses of levels of service (LOS) were done for five key street intersections with Clinton Keith Road:

- California Oaks Road
- Greer Road
- McElwain Road
- Southbound I-215 ramp
- Northbound I-215 ramp

Analyses were done under four scenarios:

- Existing conditions
- Existing conditions plus Murrieta Oaks
- Projected conditions in Year 2015 without Murrieta Oaks
- Projected conditions in Year 2015 with Murrieta Oaks

Analyses of the intersections of Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road are not applicable under Existing Conditions, as there is no traffic from Murrieta Oaks to consider. All other intersections are operating under LOS A, B, or C.

With the proposed project added, all intersections continue to operate at LOS A or B. With 2-way stop signs in place, the Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road intersections are projected to operate at LOS A.

A seemingly anomalous LOS improvement exists for the northbound I-215 ramp from Clinton Keith Road. The present LOS is C, while with the proposed project the LOS is projected at B. This is a result of a change in Traffic Control Type, as the intersection will be changed from a 2-way stop to an all-way stop by the time of project buildout.

All intersections are projected to operate at LOS A or B, with the exception of Clinton Keith Road/California Oaks Road, which is projected to operate at LOS C in the p.m. peak hour period, with or without the Murrieta Oaks Project.

The intersection of Clinton Keith Road/McElwain Road is projected to operate at LOS A at all times without the project. The a.m. peak is projected to operate at LOS B with the Murrieta Oaks Project.

Year 2015 projections require assumptions be made:

- The arterial street network in the project area will be built out to assumed levels by Year 2015.
- The I-215 interchange with Clinton Keith Road will be built out to ultimate capacity by Year 2015, to include

Three moving lanes for through traffic in each direction.

Double left turn lanes from Clinton Keith Road onto I-215.

At least two lanes on the I-215 exit ramps.

As of May, 1999, the Clinton Keith Road interchange with I-215 was in the final stages of a study for the approval of a Caltrans *Project Study Report*.

The inclusion of the school/park site would not reduce the LOS of any of the intersections analyzed, based on the following:

- The proposed project with the school/park site has fewer dwelling units (560) than that assumed in the Traffic Technical Report (600).
- The proposed school will have peak-hour traffic at different times than the normal peak hour traffic generated by the project. The starting times will be after the "normal" peak hours, and the dismissal time is before those peak hours. The impact will be intense traffic within the immediate vicinity of the school for approximately one-half hour in the morning and fifteen minutes in the afternoon, but this traffic will occur outside of the overall peak hours for project traffic.
- No significant impacts are projected for traffic with the Murrieta Oaks Project, as LOS is maintained within the City standards.

No significant impacts are projected due to project traffic on the I-15 interchanges with Winchester Road or Rancho California Road, given the small contribution made by project traffic.

**Mitigation.** Project traffic impact mitigation measures shall consist of:

- Installing traffic signals at the intersection of Clinton Keith Road and Greer Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

- Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

## P. UTILITIES/SERVICE SYSTEMS

**Impact.** Electric Service. Southern California Edison has indicated that service can be provided to the Murrieta Oaks project. Other than increasing demand for electricity, which can be met, the project would have no impacts on electric service.

Gas Service. Southern California Gas Company has indicated that service to the Murrieta Oaks project can be provided. Other than increasing demand for gas, which can be met, the project would have no impacts on gas service.

Telephone Service. General Telephone Electronics has stated that telephone service could be provided to the project; therefore no impacts to telephone service are anticipated.

Cable Television Service. Development of the Murrieta Oaks project would most likely increase the demand for cable television service. As this service can be provided by Media One, no negative impacts to cable service are expected.

Solid Waste Disposal Service. The proposed project is estimated to have 1,992 residents meaning 19,920 pounds of waste would be generated daily by the project. This waste would be taken to any one of three area landfills. USA Waste Management has indicated that service can be provided to the project. Other than increasing demand for solid waste disposal, which can be met, the project would have no impacts on solid waste disposal service.

**Mitigation.** Electricity, Gas, Telephone, Cable Television, and Solid Waste Disposal Service. No impacts to these services are associated with implementation of this project, therefore no mitigation measures are required.

## I. INTRODUCTION

The California Environmental Quality Act (CEQA) requires an environmental assessment of all governmental discretionary actions defined as projects. Actions which could result in significant physical impacts to the environment require the preparation of an environmental impact report (EIR).

The application for the proposed Murrieta Oaks project (99031094) has been filed with the City of Murrieta. The project proposes a Specific Plan (SP 98-102). The City of Murrieta solicited comments regarding potential environmental effects from responsible agencies and individuals by use of a Notice of Preparation (NOP), which appears in this EIR as Appendix A. Comments received in response also are included in Appendix A, as is the Initial Study. The comments and the Initial Study determined the scope of analysis for this EIR (CEQA Guidelines, Section 15082).

This EIR analyzes all issues identified as having potentially significant environmental impacts resulting from implementation of the proposed project, including aesthetics, agricultural resources, biological resources, cultural resources, geological/soils, hazards, hydrology/water quality, landform alteration, land use, noise, public services, recreation, transportation/traffic, and utilities/service system. Because CEQA requires that the degree of specificity in an EIR correspond with the underlying activity described in the EIR, all impacts have been analyzed to the Specific Plan/Tentative Tract Map level. Effects dismissed in the Initial Study as clearly insignificant and unlikely to occur have not been discussed in the EIR per CEQA Guidelines Section 15143.

Background technical studies have been prepared on air quality, biological resources, cultural resources, geology/soils, environmental site conditions, hydrology, noise, and traffic. These technical reports are included as Appendices to the EIR.

The purpose of this EIR is to provide a document which analyzes the environmental impacts of the proposed project. Mitigation measures and alternatives designed to eliminate or reduce environmental impacts to below a level of significance are delineated in accordance with CEQA Guidelines Section 15126 [c], [d]. To insure that mitigation measures are implemented, monitoring systems are also outlined, and a mitigation, monitoring, and reporting program will be prepared. Agency and public comments regarding the Draft EIR will be included in the Final EIR, with appropriate responses. The EIR will be considered by City officials in their determination of the Specific Plan and project. This report has been prepared in accordance with the requirements of the California Environmental Quality Act (California Public Resources Code, Section 21000 et seq. and California Administrative Code).



## II. ENVIRONMENTAL SETTING

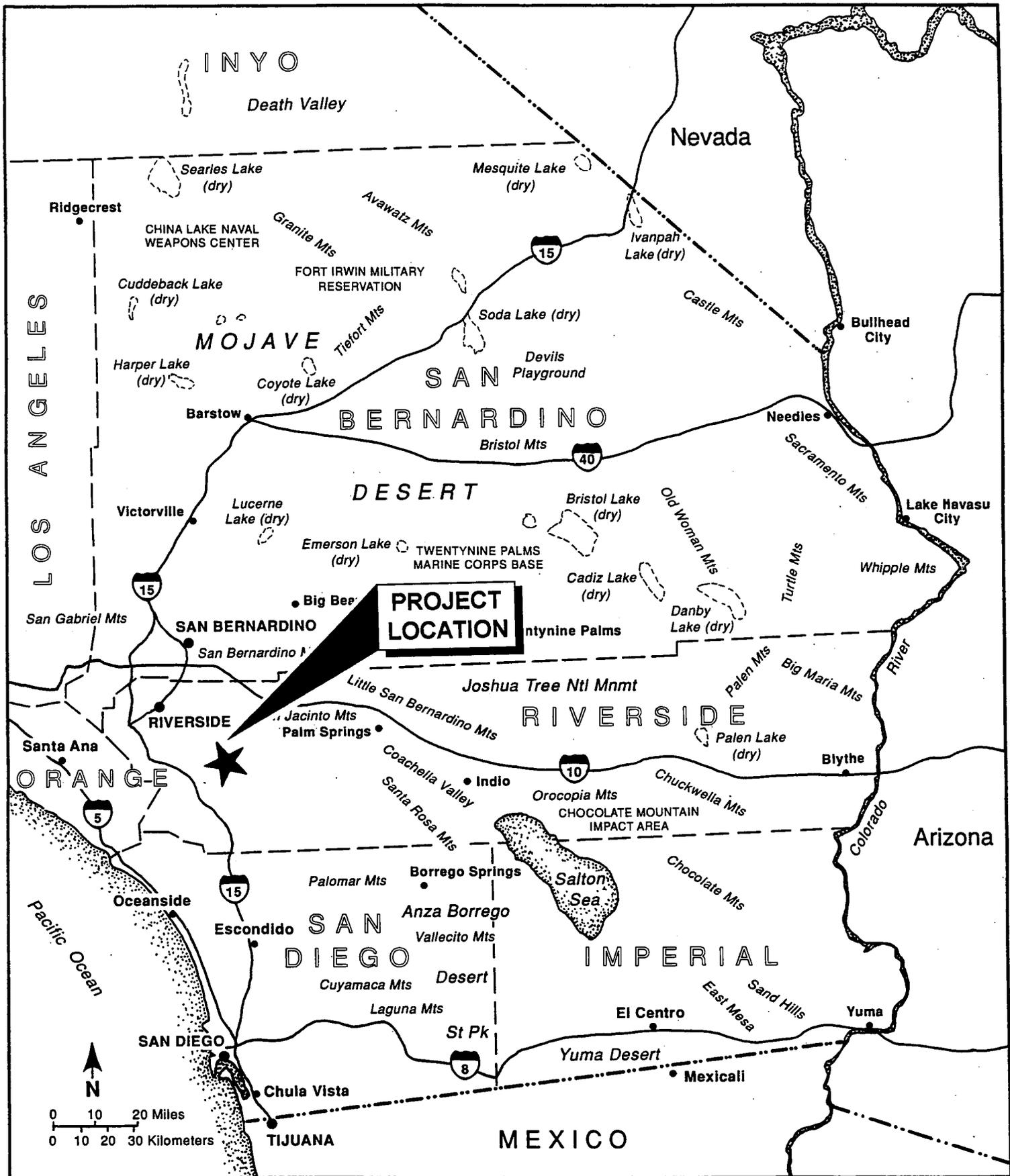
The Murrieta Oaks project includes approximately 260 undeveloped acres located in the northeastern portion of the City of Murrieta, in southwestern Riverside County (Figure II-1). Approximately 250 acres are located at the southwest corner of Interstate-215 and Clinton Keith Road, with an additional 10 acres located north of Clinton Keith Road (Figure II-2). The property is situated in Township 7 South, Range 3 West of the USGS 7.5' Murrieta quadrangle (Figure II-3), and is identified by Assessor's Parcel Numbers 956-280-01 and 956-280-11.

Adjacent land to the south and west of the property consists of open space and single-family residences. Land to the north consists of scattered rural single-family residences and vacant land. Interstate-215 lies east of the property.

The Murrieta Oaks parcel is characterized by a prominent southwest to northeast trending ridge that runs through the center of the property. The site topography ranges from almost flat in the northwestern portions to gradients of over 50 percent in the steepest parts of the hillsides. Elevations range from about 1,310 ft in the southern portion of the property to over 1,590 ft in the center. The geotechnical analysis of the property (Pacific Soils Engineering 1999) identifies the bedrock units underlying the property as Woodson Mountain granodiorite, San Marcos gabbro, quartz monzonite, and the Pauba Formation. Soil types include undocumented artificial fill and topsoils.

The primary vegetation type is chamise-dominated native chaparral. Ruderal habitat, Oak Woodland, Southern Willow Scrub, Riparian Forest, and Mulefat Scrub were also mapped on the property. These types of vegetations support 44 bird species (including white-tailed kite, Cooper's hawk, and American kestrel), and five mammal species (including Coyote, desert wood rat, and California ground squirrel) on the property. No state- or federal-listed rare or endangered plant species occur on the site. While portions of the property have been determined as potential habitat for the federal-listed Endangered Stephen's kangaroo rat, no other state- or federal-listed Threatened or Endangered species have been detected.

While portions of the property were previously designated for Agricultural purposes, the contract under the Williamson Act has expired. The property is zoned SP (Specific Plan) and is designated in the General Plan for residential uses.



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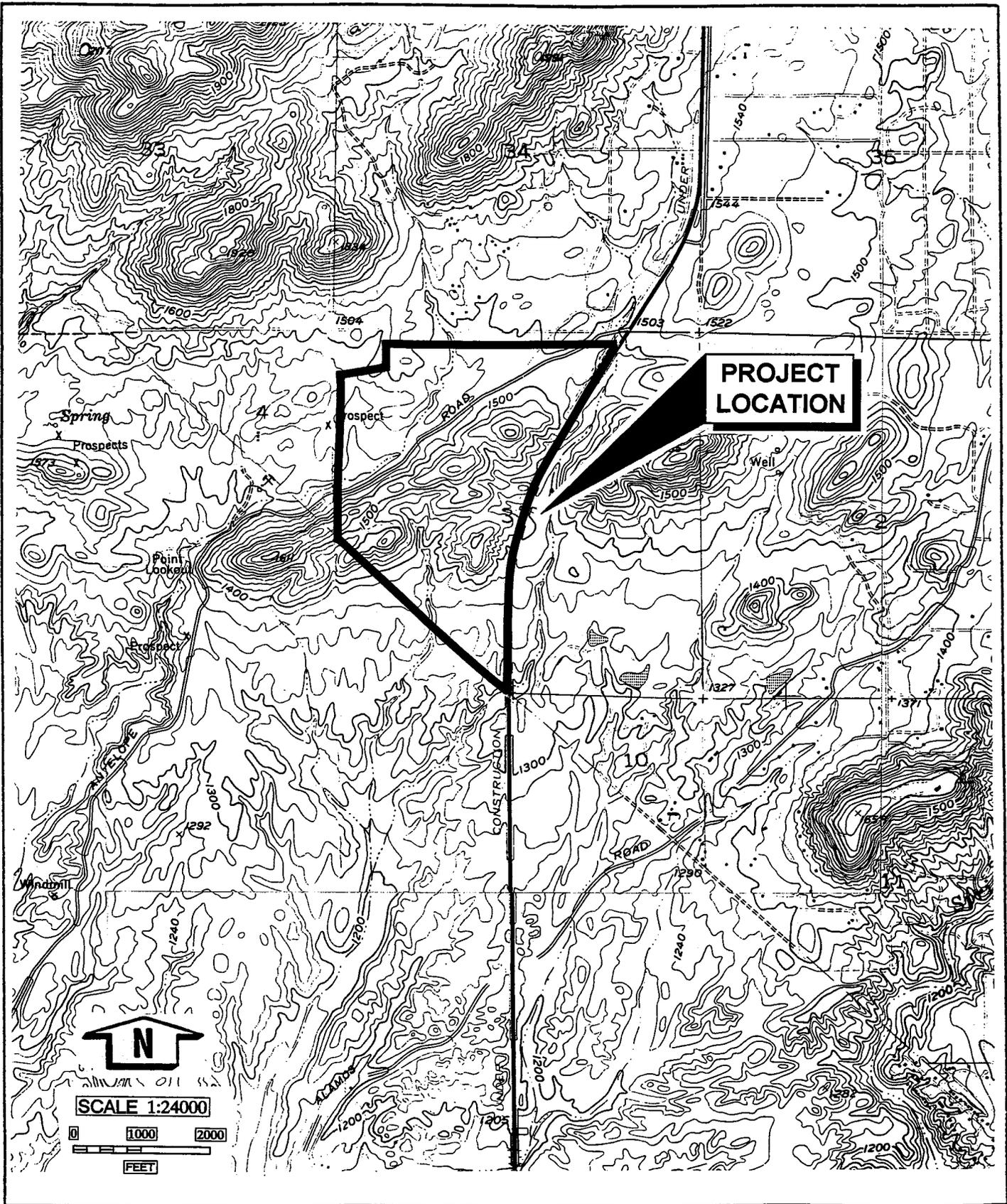
Shadow Valley Center  
 839 Jamacha Road  
 El Cajon, CA 92019

REGIONAL LOCATION  
 IN RIVERSIDE COUNTY

FIGURE II-1







# Affinis

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PROJECT LOCATION ON USGS  
 7.5' MURRIETA QUADRANGLE

FIGURE II-3

### III. PROJECT DESCRIPTION

#### A. PROJECT OBJECTIVE

The proposed Murrieta Oaks project objective is to provide a quality single-family residential community while retaining assets of the existing environment. This objective would be met by developing a project that offers a low dwelling unit density consistent with both the neighboring single family and the rural/non-urban character of surrounding areas, by clustering homes within the flatter portions of the site, creating substantial amounts of open space, and by preserving the central ridge line of the property as well as the majority of large drainage courses and associated oak-woodland areas found on the property.

#### B. PROJECT FEATURES

The Murrieta Oaks application includes a vesting Tentative Map and a Specific Plan for the property.

Tentative Map. The Tentative Map proposes a maximum 560-unit single-family detached residential development (Figure III-1). The units would be part of four individual residential neighborhoods comprising a total of 98.73 acres. The Murrieta Oaks project would be designed with an overall density of 2.2 dwelling units (du) per acre; minimum lot size would be 7,200 sq ft. Development would be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line. A small part of the project would be located north of Clinton Keith Road, with development limited to the western portion of that parcel.

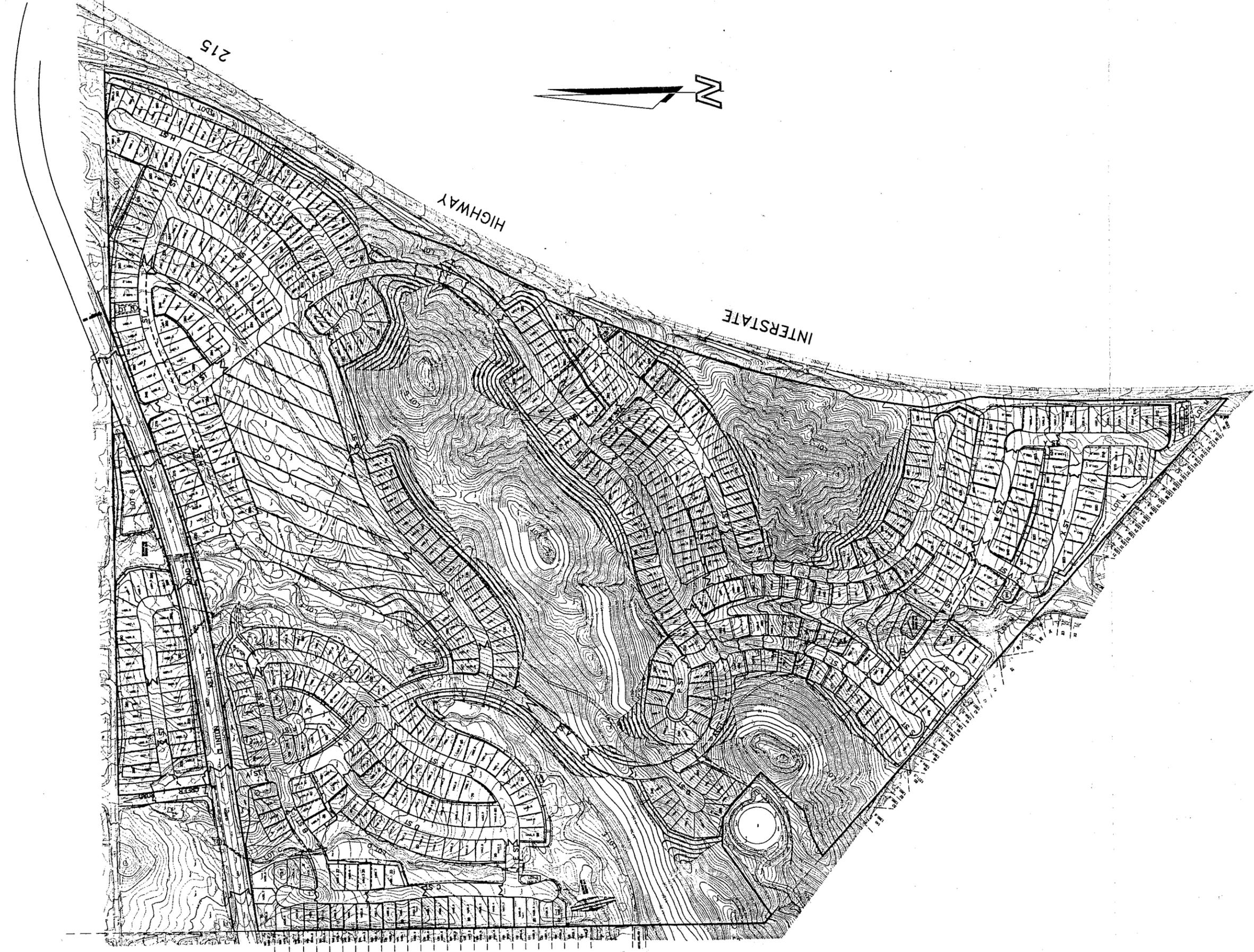
The Tentative Map would set aside 65.25 acres of natural open space and 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park; Table III-1) in 13 lots (Lots A-M, Figure III-2). It also provides for a neighborhood park (5.13 acres; refer to Section IV-M), an elementary school site (10.00 acres; refer to Section IV-N) and designates a 5-8 ft-wide multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas (approximately 2.2 acres). The open space areas would be owned and maintained by the City of Murrieta (see Figure III-3).

Table III-1 Land Use Acreage

<b>LAND USE ACRES</b>		
<b>DEVELOPED</b>	Residential Lots	98.73
	Road Rights-of-Way	41.27
	Elementary School	10.00
		<b>150.00</b>
<b>NATURAL OPEN SPACE</b>	Natural Open Space	<b>65.25</b>
<b>MODIFIED OPEN SPACE</b>	Landscaped Banks	30.45
	Fuel Modification Zone	8.77
	Park	5.13
		<b>44.35</b>
<b>TOTAL ACREAGE</b>		<b>259.60</b>

Approximately 1,400,000 cu yds of grading would be required; cut and fill would be balanced on-site. Two points of access to the property would be provided, both via Clinton Keith Road, one as an extension of Greer Road, the other as an extension of a realigned McElwain Road. A two-lane, 60-ft wide roadway would loop through the development, connecting the four proposed neighborhoods (see Figures III-1 and III-2). Sixty-ft wide interior residential streets would provide on-site circulation. Interior streets would include two lanes, parking lanes, and sidewalks.





**CROSBY** Engineers • Planners • Surveyors  
**MEAD** 6600 El Camino Real, Suite 200  
**HEINTON** Carlsbad, California 92008  
 A PROFESSIONAL CORPORATION (760) 438 - 1210

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 El Cajon, CA 92019

TENTATIVE MAP

FIGURE III-1

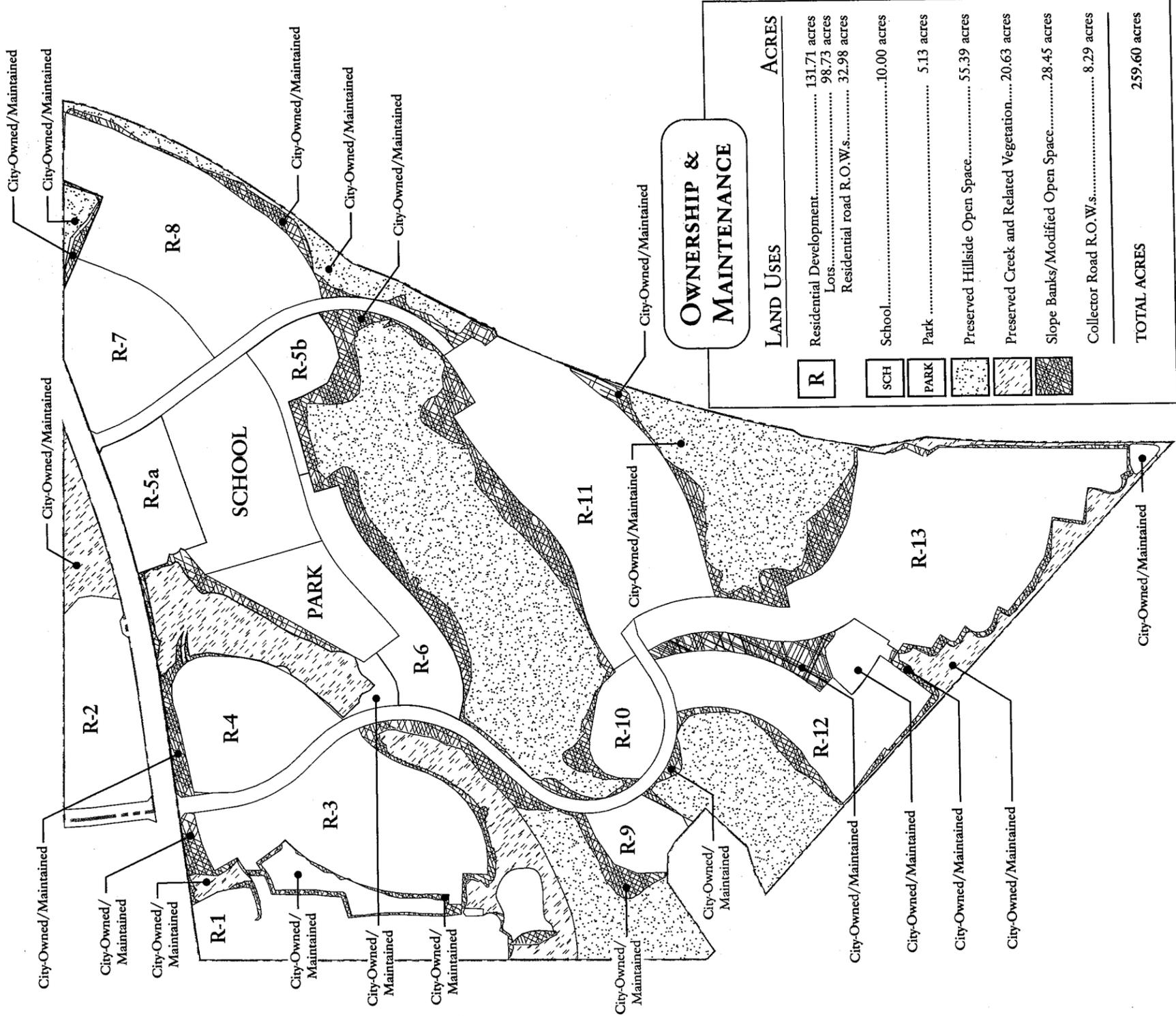


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 El Cajon, CA 92019

ILLUSTRATIVE MAP

FIGURE III-2



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Shadow Valley Center  
839 Jamacha Road  
El Cajon, CA 92019

CITY OWNED AND MAINTAINED AREAS

FIGURE III-3

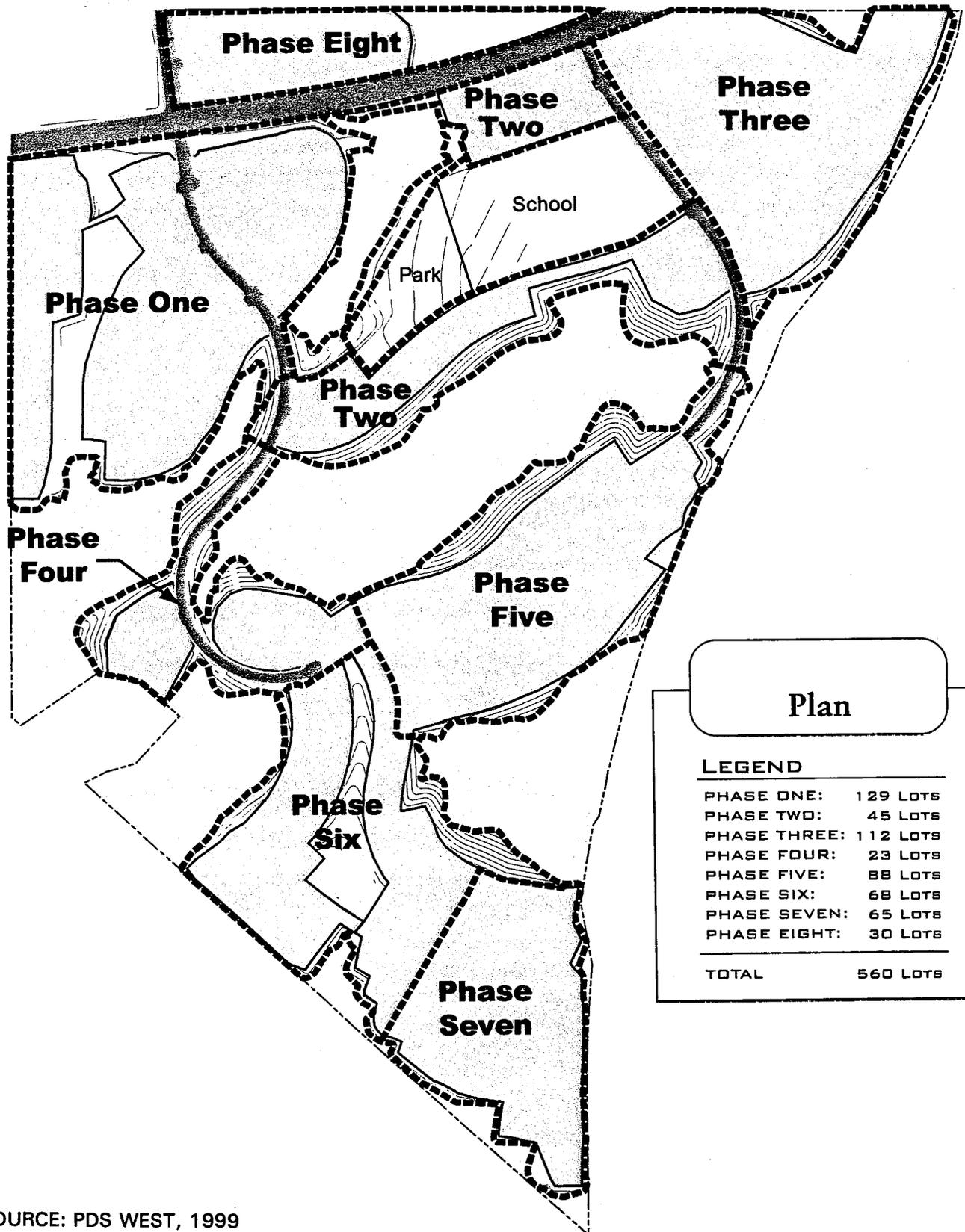
Specific Plan. The Specific Plan identifies the four residential neighborhoods that would be created in a series of eight phases (Figure III-4) - the Creekside Neighborhood (a maximum of 129 lots on 32.33 acres); the Highland Neighborhood ( a maximum of 187 lots on 50.11 acres); the Ridge View Neighborhood (a maximum of 111 lots on 32.27 acres); and the Lowland Neighborhood (a maximum of 133 lots on 39.07 acres; Figure III-5). Property setbacks would comply with the single-family residential development standards established in the City's General Plan except that side setbacks will be 5 ft. Dwellings would be limited to a maximum height of 35 ft. Project backbone infrastructure would be installed in the initial phase of implementation.

Sound attenuating walls constructed of 6-to-8 ft high splitface block and planted with vines would be located along Clinton Keith Road and Interstate-215 where residential lots abut these roadways. Six-ft high collector street and community walls constructed of splitface block would be erected along those interior areas of the project where portions of residential lots lie adjacent to streets. Some project walls of masonry and tubular steel 6 ft in height, would be constructed with consideration given to the architecture of surrounding neighborhoods, and would be located next to open space to allow visual access to these areas. Wall locations are shown in Figure III-6. The specific plan would also identify approximately 41.27 acres of right-of-way for a looping collector roadway and interior residential streets.

Grading Plan. The grading plan, which is analyzed in Chapter IV, Section I, Landform Alteration, calls for 1,400,000 cubic yards (cu yds) of grading, with a balance of cut and fill on-site. The plan would emphasize the preservation of significant existing topographic features, selectively cluster development on the flatter portions of the site, and replicate the slopes and characteristics of natural landforms during the grading process.

Landscape Plan. The project would incorporate plant species that are already well established in Murrieta and would include a variety of trees and shrubs historically found in the area, both native and non-native. The landscape concept would be defined by six areas linked together by landscaped corridors along primary roadways and in the open space areas (Figure III-7). Landscape areas include:

- Collector Roadway. Camphor would be the primary tree used along the two-lane parkway and walkways. Other trees would include white alder, California buckeye, and bottle tree. Shrubs would include India hawthorne and abelia. Plantings would be grouped and randomly spaced to allow for views of natural open spaces and riparian areas.



Plan	
LEGEND	
PHASE ONE:	129 LOTS
PHASE TWO:	45 LOTS
PHASE THREE:	112 LOTS
PHASE FOUR:	23 LOTS
PHASE FIVE:	88 LOTS
PHASE SIX:	68 LOTS
PHASE SEVEN:	65 LOTS
PHASE EIGHT:	30 LOTS
<b>TOTAL</b>	<b>560 LOTS</b>

SOURCE: PDS WEST, 1999

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 847 Jamacha Road  
 El Cajon, CA 92019

**PROPOSED PROJECT  
 PHASING PLAN**

**FIGURE III-4**

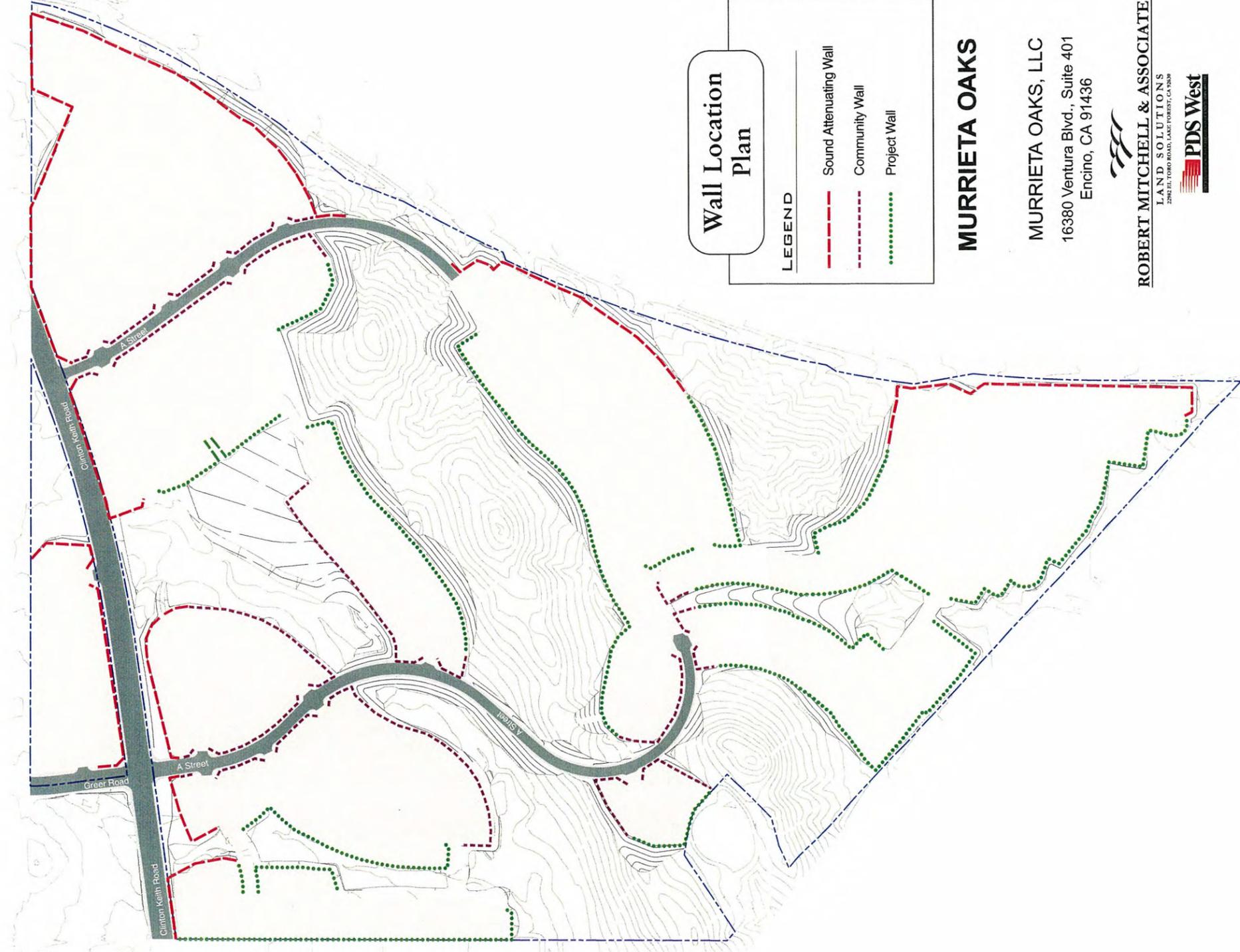


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Shadow Valley Center  
847 Jamacha Road  
El Cajon, CA 92019

SPECIFIC PLAN NEIGHBORHOODS

FIGURE III-5



**Wall Location Plan**

**LEGEND**

- Sound Attenuating Wall
- - - Community Wall
- ..... Project Wall

**MURRIETA OAKS**

MURRIETA OAKS, LLC  
 16380 Ventura Blvd., Suite 401  
 Encino, CA 91436

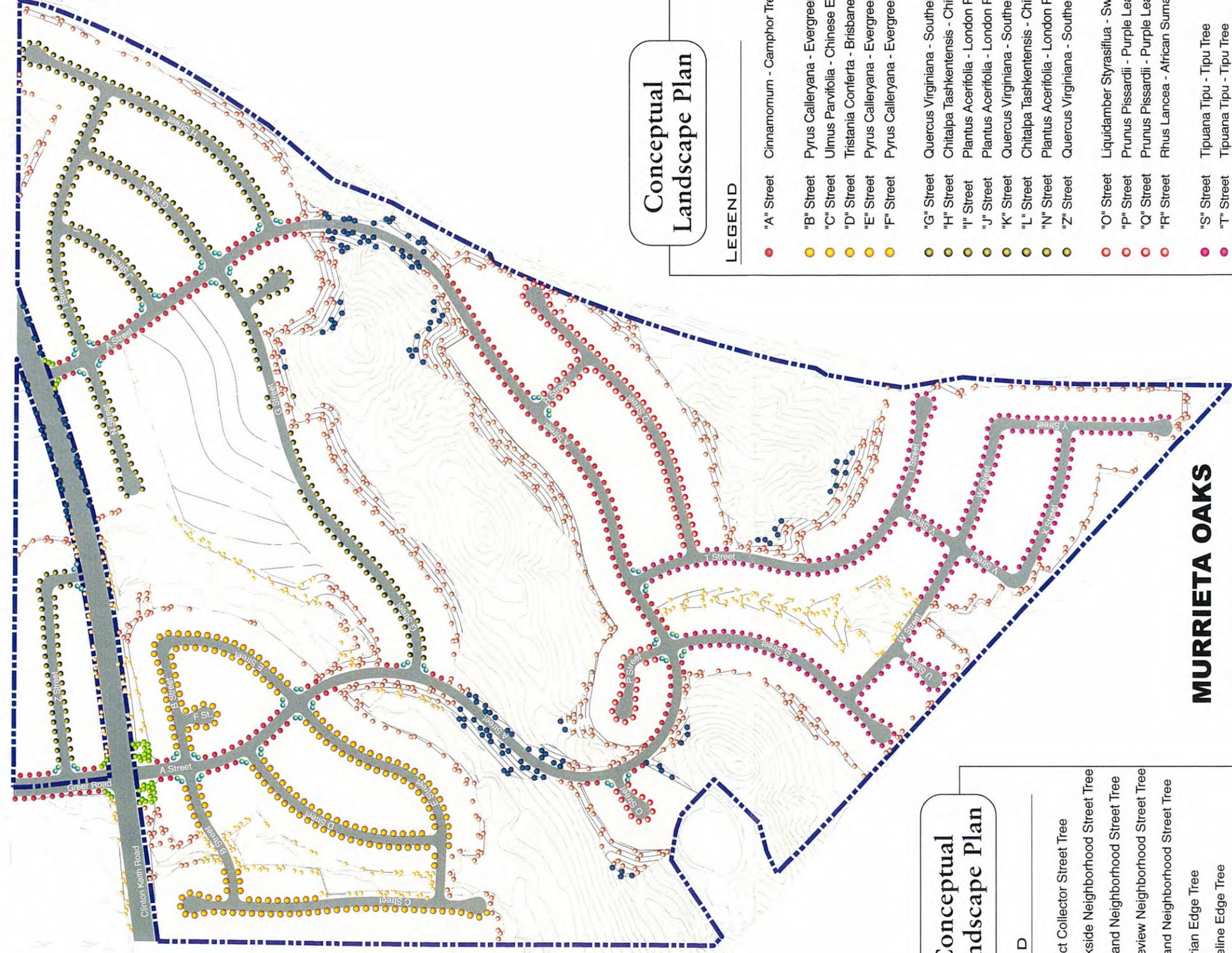
**ROBERT MITCHELL & ASSOCIATES**  
 LAND SOLUTIONS  
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**PDS West**

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**WALL LOCATIONS**

**FIGURE III-6**



**Conceptual Landscape Plan**

- LEGEND**
- Project Collector Street Tree
  - Creekside Neighborhood Street Tree
  - Highland Neighborhood Street Tree
  - Ridgeview Neighborhood Street Tree
  - Lowland Neighborhood Street Tree
  - Riparian Edge Tree
  - Ridgeline Edge Tree
  - Community Entry Tree
  - Neighborhood Entry Tree
  - Fuel Modification Tree
  - Neighborhood Park Tree
  - Preserved Natural Vegetation
  - Graded Slopes

**Conceptual Landscape Plan**

- LEGEND**
- "A" Street - Cinnamomum - Camphor Tree
  - "B" Street - Pyrus Calleryana - Evergreen Pear
  - "C" Street - Ulmus Parvifolia - Chinese Elm
  - "D" Street - Tristantia Conferta - Brisbane Box
  - "E" Street - Pyrus Calleryana - Evergreen Pear
  - "F" Street - Pyrus Calleryana - Evergreen Pear
  - "G" Street - Quercus Virginiana - Southern Live Oak
  - "H" Street - Chitalpa Tashkentensis - Chitalpa
  - "I" Street - Plantus Acerifolia - London Plane Tree
  - "J" Street - Plantus Acerifolia - London Plane Tree
  - "K" Street - Quercus Virginiana - Southern Live Oak
  - "L" Street - Chitalpa Tashkentensis - Chitalpa
  - "N" Street - Plantus Acerifolia - London Plane Tree
  - "Z" Street - Quercus Virginiana - Southern Live Oak
  - "O" Street - Liquidamber Styraciflua - Sweet Gum
  - "P" Street - Prunus Pissardii - Purple Leaf Plum
  - "Q" Street - Prunus Pissardii - Purple Leaf Plum
  - "R" Street - Rhus Lancea - African Sumac
  - "S" Street - Tipuana Tipu - Tipu Tree
  - "T" Street - Tipuana Tipu - Tipu Tree
  - "U" Street - Lagerstroemia Indica - Crape Myrtle
  - "V" Street - Lagerstroemia Indica - Crape Myrtle
  - "W" Street - Quercus Ilex - Holly Oak
  - "X" Street - Lagerstroemia Indica - Crape Myrtle
  - "Y" Street - Quercus Ilex - Holly Oak

**MURRIETA OAKS**

MURRIETA OAKS, LLC

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**ROBERT MITCHELL & ASSOCIATES**

LAND SOLUTIONS  
2200 EL TORO ROAD, LARK FOREST, CA 94043



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Shadow Valley Center  
839 Jamacha Road  
El Cajon, CA 92019

LANDSCAPE CONCEPT PLAN

FIGURE III-7

- Residential Streets. Plantings to add color and texture, as well as to help define individual neighborhoods within the development, would be part of the project design. Low maintenance trees, such as camphor, ornamental pear, London plane tree, southern live oak, liquidambar, holly oak, crape myrtle, and sycamore, would be planted along residential streets. Shrubs would include orchid rockrose, society garlic, Japanese privet, hemerocallis, abelia, agapanthus, mock orange, xylosma, and India hawthorne.
- Community Entries. The community would be accessed via a primary entry and a secondary entry, both on Clinton Keith Road. The entries would convey the style and character of the community. Entry plantings would include Afghan pine, California pepper, and coast live oak. Shrubs would include New Zealand flax, star jasmine, India hawthorne, photinia, and juniper.
- Neighborhood Entries. Neighborhood entry features would identify and establish an image for individual neighborhoods. Features would include enhanced paving, lighting, signage, and landscape.
- Modified Open Space. Open space areas impacted by grading would be restored and enhanced by native revegetation. Plantings adjacent to riparian areas would include white alder, weeping willow, and white birch. Areas adjacent to open space would be planted with liquidambar, sycamore, and California pepper.
- Neighborhood Park. The 5.13-acre active use park facility would be planted with lawn, southern live oak, white alder, and London plane trees.



## **IV. ENVIRONMENTAL ANALYSIS**

### **A. AESTHETICS**

#### **Existing Conditions**

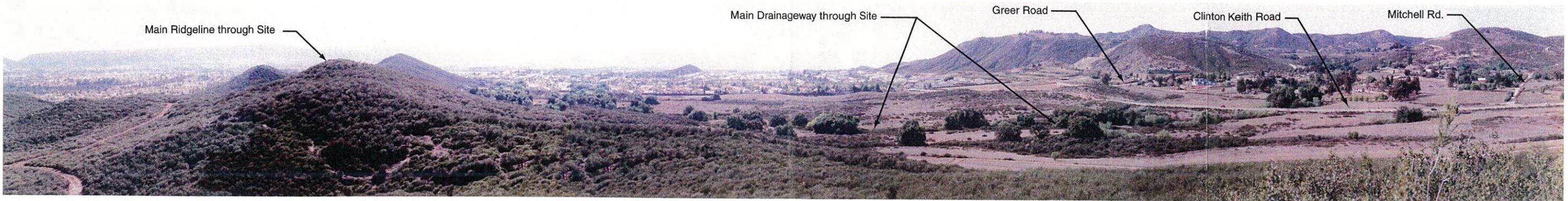
The proposed project area is currently undeveloped and has a natural appearance and character. As addressed in Section IV-J, Land Use, this contrasts with the developed single-family residential uses in the immediate vicinity of the project area, located to the south, southwest, and west. At present, the property is more visually consistent with vacant land across Interstate-215 to the east, and rural single-family development located north of the project, across Clinton Keith Road, which have a distinctly open quality. The dominant feature of the property is a northeast-southwest trending ridge line flanked by lower hills and broad, gentle flatlands (see Figure II-2). Elevations across the property range from approximately 1,310 to 1,597 ft above mean sea level (see Figure IV-A-1).

The property is presently visible from two major public vantage points - Interstate-215, which carries thousands of cars past the property each day, and Clinton Keith Road. The higher elevations on the property are also somewhat visible from points to the south, including Los Alamos Road. In general, the property in its present state provides visual relief from the developed properties around it.

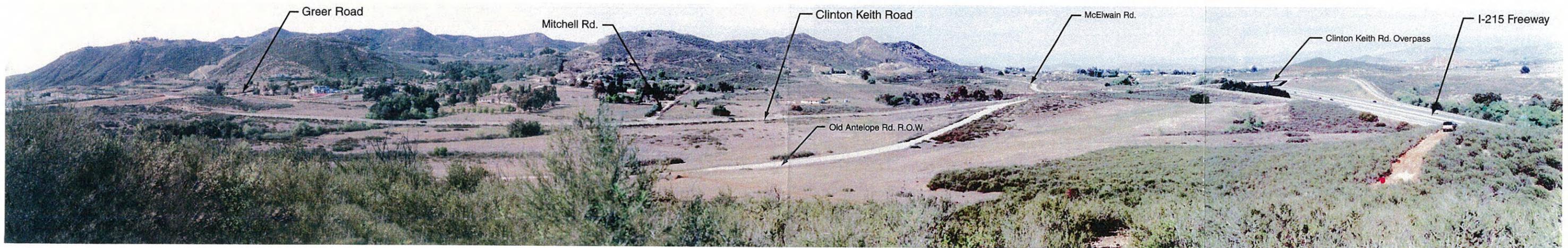
#### **Impact**

Implementation of the proposed project would change the existing character of the property from a natural viewshed to a largely developed urban residential landscape, comparable to neighboring developments. Although the ridge lines, the dominant physical features, would be unaltered and retained in open spaces, the flatter elevations of the property would be graded and developed and would be visible from the east along Interstate-215 and from the north along Clinton Keith Road (see Figure IV-A-1). The preserved ridgelines would break up the short-range views of residential development along Interstate 215 (44% of the frontage along Interstate-215 will be in preserved hillside). The Highland Neighborhood (northern-most) will have an additional 50' setback from the Interstate Highway and interchange. The effect of the Murrieta Oaks development would be to extend the existing residential views outward to these main roadways. Visual impacts would also occur from more distant vantage points to the south, in the general area of Los Alamos Road and Interstate-215, where the existing long-range views of natural terrain would be replaced by views of rooftops with only the most prominent hilltops remaining.

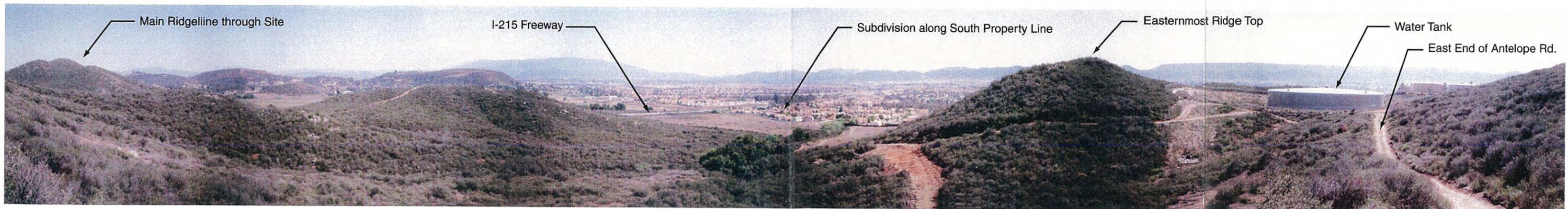




150° Pan View from Southwest to North, Taken from Easternmost Ridgetop



160° Pan View from West to Northeast, Taken from Easternmost Ridgetop



170° Pan View from Southeast to West, Taken from Saddle nearest Water Tank

## **Significance of Impact**

Implementation of the proposed project would create significant, but mitigable visual impacts. Adherence to the following mitigation measures would reduce visual impacts to below a level of significance.

## **Mitigation Measures**

- Development shall be clustered with lots situated on the flatter portions of the property, 70-80 ft below the major ridge line, preserving the dominant physical features on-site and consequently preserving the associated viewsheds.
- Six-ft-high walls constructed of slumpstone or splitface masonry shall be constructed on the property frontage along the length of Clinton Keith Road, both north and south of the roadway.
- A minimum 50-ft setback along the Highland Neighborhood (northern portion of the site) frontage with Interstate-215 shall be maintained. A 6-8-ft-high masonry wall shall be constructed to block views of the development from north and southbound traffic on Interstate-215. Vines shall be planted to cover the walls, softening the visual impact.
- Manufactured slopes shall be landscaped with variable gradients, clustered landscape elements, and rounded slope edges to lessen visual impacts

## **B. AGRICULTURAL RESOURCES**

### **Existing Conditions**

The project site is not presently being used for agriculture. The Soil Survey for western Riverside County designates none of the soils as suitable for prime non-irrigated agricultural production. Two soil units on-site are considered Class II and could be prime soil under irrigated conditions. Honcut sandy loam covers approximately 1.0 acres in the southern portion of the project site. Honcut sandy loam, eroded covers 0.5 acres in the northern portion of the property.

A Notice of Non-Renewal was filed with the Riverside County Recorder's Office (October 3, 1989) regarding the conversion of 130 acres in the northern portion of the project site from an Agricultural Preserve (under the Williamson Act) to non-agricultural suburban land use. Under government code, this portion of the project site may be used for non-agricultural uses after nine years. As of January 1, 1999 the land was no longer an Agricultural Preserve. The project area is presently designated in the City's General Plan as Single-Family 1, a residential use.

### **Impact**

Ultimate implementation of the proposed project would result in the development of 560 residential units, and would result in the loss of 1.5 acres of Class II soils. Because the Williamson Act contract has expired, there would be no conversion of property from agriculture to suburban land uses.

### **Significance of Impact**

While the loss of Class II soil for agricultural use is characterized as an irreversible, irretrievable commitment of resources, the land is designated Single-Family 1 in the City's General Plan and the residential use of the property would be consistent with the General Plan. Therefore, impacts to agriculture are not significant

### **Mitigation Measures**

No significant impacts are associated with implementation of this project, therefore no mitigation measures are required.

## C. AIR QUALITY

An Air Quality Impact Analysis (1999) was prepared for the project by James Kurtz. The final technical report, included as Appendix B of this EIR, provides the background for the following analysis.

### Existing Conditions

Regulatory Framework. Air pollution standards are regulated through the Federal Clean Air Act of 1970 and the Clean Air Amendment of 1977, which required the adoption of national ambient air quality standards (NAAQS). Current standards are set for sulphur dioxide (SO<sub>2</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), hydrocarbons (HC), ozone (O<sub>3</sub>), particulates of less than 10 microns in size (PM<sub>10</sub>), fine particulate matter equal or less than 2.5 microns in size (PM<sub>2.5</sub>), and lead (Pb). Standards for 8-hour ozone and PM<sub>2.5</sub> became effective on September 15, 1997, and policies and systems to implement these new standards are being developed. There will be no new controls required by the Environmental Protection Agency (EPA) until after the year 2002.

State standards, established by the Air Resources Board (ARB), are generally more restrictive than the NAAQS, and have incorporated additional pollutants, such as hydrogen sulfide (H<sub>2</sub>S). Federal and state standards, including quantitative thresholds are shown in Table IV-C-1. There are presently no mobile emissions standards; the state standard used applies strictly to stationary emissions. Thresholds are used only as a basis for comparison.

The South Coast Air Quality Management District (SCAQMD) is the agency responsible for administering state and federal air quality standards in Riverside County. Its tasks include monitoring air pollution, enforcing rules and regulations, and preparing the State Implementation Plan (SIP). The SIP includes strategies and tactics to attain acceptable air quality in the County. The Air Quality Management Plan (AQMP), which when approved, functions as that part of the SIP applicable in the South Coast Air Basin.

Local Standards. An Air Quality Element is included in the City of Murrieta's General Plan. Its purpose is to address the problems of maximum air pollution levels, reduce the health and economic impacts of air pollution, comply with the AQMP requirements, and increase awareness of local community and governmental responsibility for air quality. The Air Quality Element also contains goals, objectives, and policies to further efforts to improve air quality.

Table IV-C-1 Federal and State Air Quality Standards

Pollutant	Averaging Time	California Standards	National Standards	
		Concentration	Primary	Secondary
Ozone (O <sub>3</sub> )	1-Hour	0.09 ppm (180 µg/m <sup>3</sup> )	0.12 ppm (235 µg/m <sup>3</sup> )	Same as Primary Standard
	8-Hour	-	0.08 ppm	-
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m <sup>3</sup> )	9.0 ppm (10 mg/m <sup>3</sup> )	-
	1-Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Average	-	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary Standard
	1-Hour	0.25 ppm (470 µg/m <sup>3</sup> )	-	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Average	-	80 µg/m <sup>3</sup> (0.03 ppm)	-
	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )	365 µg/m <sup>3</sup> (0.14 ppm)	-
	3-Hour	-	-	1300 µg/m <sup>3</sup> (0.5 ppm)
	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )	-	-
Suspended Particulate Matter (PM <sub>10</sub> )	Annual Geometric Mean	30 µg/m <sup>3</sup>	-	-
	24-Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	-
	Annual Arithmetic Mean	-	50 µg/m <sup>3</sup>	
Fine Particulate Matter (PM <sub>2.5</sub> )	24-Hour	-	65 µg/m <sup>3</sup>	-
	Annual Arithmetic Mean	-	15 µg/m <sup>3</sup>	-
Sulfates (SO <sub>4</sub> )	24-Hour	25 µg/m <sup>3</sup>	-	-
Lead (Pb)	30-Day Average	1.5 µg/m <sup>3</sup>	-	-
	Calendar Quarter	-	1.5 µg/m <sup>3</sup>	Same as Primary Standard
Hydrogen Sulfide (H <sub>2</sub> S)	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	-	-
Vinyl Chloride (chloroethene)	24-Hour	0.010 ppm (26 µg/m <sup>3</sup> )	-	-
Visibility Reducing Particles	8-hour (10 am-6 pm, Pacific Standard Time)	In sufficient amount to produce an extinction coefficient of 0.23 per kilometer due to particles when the relative humidity is less than 70 percent.	-	-

Source: CARB 1997; SCAQMD bulletin (8/97)

Ambient Air Quality. The South Coastal Air Basin is classified as a nonattainment area for CO, a serious nonattainment area for PM<sub>10</sub>, and an extreme nonattainment area for O<sub>3</sub> under federal standards; it is a serious nonattainment area for CO, a nonattainment area for PM<sub>10</sub>, and an extreme nonattainment area for O<sub>3</sub> under state standards. Local air quality is not measured in Murrieta. The closest SCAQMD monitoring stations to the project area are located in Lake Elsinore, about 9 miles to the northwest, and Perris, about 15 miles to the north. Data for these monitoring stations is shown in Table IV-C-2. District significance emission thresholds are shown in Table IV-C-3.

## **Impact**

Implementation of the proposed Murrieta Oaks development would result in the emissions of pollutants during construction and subsequent to the occupation of the homes. Principle sources of pollution during construction would be gaseous and particulate emissions from construction equipment. After construction, the major sources of emissions would be generated by occupants vehicles, and to a lesser degree, by water heaters, fireplaces, and landscape maintenance equipment. A vehicle trip generation rate of 9.57 trips per dwelling unit was used to determine project vehicle emissions.

Construction Emissions. Construction emissions were calculated for the proposed project using the URBEMIS7G computer program. Analysis assumptions included that the project would begin in 2000 and would be completed in five years; that construction would occur at a constant rate over the five years, and that one-fifth of the total home construction (113 houses) would occur during each of the five years. Estimated construction emissions would not exceed the SCAQMD significance criteria for Nox (nitrogen oxides), CO, or PM<sub>10</sub>; emission of reactive organic compounds (ROC) would exceed the significance criteria due to the use of exterior and interior paints. Results are summarized in Table IV-C-4.

Operations Emissions. As shown in Table IV-C-5, during the first year of occupancy, 2001, operations emissions from vehicles and ROC sources (hair spray, deodorant, etc.) would not exceed the SQAQMD significance criteria. Emissions sources increase, however, as the number of occupants rises in subsequent years. By 2002, emissions of Nox would exceed significance criteria; emissions of ROC would exceed significance criteria beginning in 2003 (Tables IV-3-6, -7, -8, and -9).

## **Significance of Impact**

Air Quality impacts would be considered significant if they would:

- cause or contribute to any new violation of any standard in the area;

Table IV-C-2 Ambient Air Quality Summary

Pollutant	Averaging Time	Federal Primary Standards	California Air Quality Standards	Number of Days Exceeding Federal Standard				Number of Days Exceeding State Standard				Maximum Concentrations						
				1994	1995	1996	1997	1998	1994	1995	1996	1997	1998	1994	1995	1996	1997	1998
				Oxidants (Ozone)	1 hour	0.12 ppm	0.09ppm	39	23	4 <sup>a</sup>	0 <sup>b</sup>	22	102	72	14 <sup>a</sup>	1 <sup>b</sup>	52	0.19
Oxidants (Ozone)	8 hour	0.08 ppm	None	76	51	10 <sup>a</sup>	1 <sup>b</sup>	44	-	-	-	-	-	0.15	0.14	0.12 <sup>a</sup>	0.09 <sup>b</sup>	0.14
Nitrogen Dioxide	1 hour	N/A	0.25 ppm	-	-	-	-	-	0	0	0	0	0	0.11	.013	0.10	0.11	0.08

Source: CARB 1999.

Concentration units for ozone and nitrogen dioxide are in parts per million (ppm).

- a. Ozone monitoring in 1996 occurred only 15 percent of the time when high pollutant concentrations are expected.
- b. Ozone monitoring in 1997 occurred only 5 percent of the time when high pollutant concentrations are expected.

Table IV-C-3 District Emission Significance Thresholds

	Pollutant				
	CO	ROC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>
Construction emissions (pounds/day)	550	75	100	150	150
Construction emissions (tons/quarter)	24.75	2.5	2.5	6.75	6.75
Operations (pounds/day)	550	55	55	150	150

Source: SCAQMD 1993.

Table IV-C-4 Estimated Construction Emissions Before Mitigation

Source	Emissions - pounds per day <sup>a</sup>			
	ROC	NO <sub>x</sub>	CO	PM <sub>10</sub> <sup>b</sup>
Site grading	5	63	-	86 <sup>b</sup>
Construction worker trips	1	1	2	<0.5
Stationary equipment	<0.5	<0.5	-	<0.5
Mobile equipment - diesel	<0.5	9	-	1
Architectural coatings	438	-	-	-
Asphalt offgasing	<0.5	-	-	-
<b>Totals</b>	444	73	2	86 <sup>b</sup>
SCAQMD significance criteria	75	100	550	150
Exceed significance criteria?	Yes	No	No	No <sup>b</sup>
- value not calculated by URBEMIS a -URBEMIS7G, Version 3.2, for construction of 112 single family homes. Pounds per day values rounded to the nearest pound, except for values between 0 and 0.49, which are shown as <0.5. b - URBEMIS values for PM <sub>10</sub> from grading are likely understated and, without mitigation would exceed SCAQMD criteria; please see text.				

Table IV-C-5 Estimated Operations Emissions for 2001

Source	Emissions - pounds per day			
	ROC	NOx	CO	PM <sub>10</sub>
Vehicles	21	28	172	9
Area Sources (excluding fireplaces and wood stoves)	6	2	1	0
<b>Totals</b>	27	30	173	9
SCAQMD significance criteria	55	55	550	150
Exceed significance criteria?	No	No	No	No
URBEMIS7G, Version 3.2. Pounds per day values rounded to the nearest pound. Values are shown for a winter day; summer values would be less.				

Table IV-C-6 Estimated Operations Emissions for 2002

Source	Emissions - pounds per day			
	ROC	NOx	CO	PM <sub>10</sub>
Vehicles	39	53	319	16
Area Sources (excluding fireplaces and wood stoves)	11	5	2	<0.5
<b>Totals</b>	50	58	321	17
SCAQMD significance criteria	55	55	550	150
Exceed significance criteria?	No	Yes	No	No
Average annual day	44	56	240	16
URBEMIS7G, Version 3.2. Pounds per day values rounded to the nearest pound. Values are shown for a winter day; summer values would be less.				

Table IV-C-7 Estimated Operations Emissions for 2003

Source	Emissions - pounds per day			
	ROC	NOx	CO	PM <sub>10</sub>
Vehicles	55	76	444	24
Area Sources (excluding fireplaces and wood stoves)	17	7	3	<0.5
<b>Totals</b>	72	83	447	25
SCAQMD significance criteria	55	55	550	150
Exceed significance criteria?	Yes	Yes	No	No
Average annual day	63	80	340	24
URBEMIS7G, Version 3.2. Pounds per day values rounded to the nearest pound. Values are shown for a winter day; summer values would be less.				

Table IV-C-8 Estimated Operations Emissions for 2004

Source	Emissions - pounds per day			
	ROC	NOx	CO	PM <sub>10</sub>
Vehicles	76	107	608	36
Area Sources (excluding fireplaces and wood stoves)	23	10	4	<0.5
<b>Totals</b>	99	117	612	37
SCAQMD significance criteria	55	55	550	150
Exceed significance criteria?	Yes	Yes	Yes	No
Average annual day	86	113	472	36
URBEMIS7G, Version 3.2. Pounds per day values rounded to the nearest pound. Values are shown for a winter day; summer values would be less.				

Table IV-C-9 Estimated Operations Emissions for 2005

Source	Emissions - pounds per day			
	ROC	NOx	CO	PM <sub>10</sub>
Vehicles	85	129	724	44
Area Sources (excluding fireplaces and wood stoves)	28	12	5	<0.5
<b>Totals</b>	113	141	729	45
SCAQMD significance criteria	55	55	550	150
Exceed significance criteria?	Yes	Yes	Yes	No
Average annual day	100	135	563	44
URBEMIS7G, Version 3.2. Pounds per day values rounded to the nearest pound. Values are shown for a winter day; summer values would be less.				

- interfere with provisions in the application of the State Implementation Plan (SIP) for maintenance or attainment of air quality standards; increase the frequency or severity of any existing violation of standard; or,
- delay timely attainment of any standard, any emission reduction, or other milestones included in the SIP for air quality.

Application of mitigation measures would reduce impacts to all emission-related pollutants, except ROC, to below levels of significance. Further, because the region is considered a nonattainment zone for CO, PM<sub>10</sub>, and O<sub>3</sub> under both federal and state standards, project mitigation measures can be employed to reduce, but not fully eliminate, air quality impacts.

### Mitigation Measures

The following measures shall be incorporated into the project design to reduce significant air quality impacts to the lowest level possible:

#### Construction Emissions.

1. ROC emissions from painting and other architectural coatings, including asphalt, should be minimized by using products with the lowest ROC content available that is feasible for the application and in conformance with SCAQMD Rule 113, Architectural Coatings.
2. While projected construction emissions of PM<sub>10</sub> would not be significant, mitigation measures to minimize the generation of fugitive dust should be followed. Project

construction activities should conform to the requirements and recommendations contained in SCAQMD Rule 403, Fugitive Dust.

3. Exposed surfaces must be watered twice daily
4. All haul roads must be watered twice daily
5. Speeds on unpaved roads must be reduced to 15 miles per hour or less
6. Construction and mobile equipment must be properly maintained

Occupancy Emission.

Measures should be incorporated into the proposed project to minimize adverse air quality impacts, as included in the requirements of SCAQMD Rules and Regulations or as recommended in the 1993 SCAQMD Air Quality Handbook.

## D. BIOLOGICAL RESOURCES

Several biological surveys have been previously conducted on the property. A full biological resource assessment was done for an earlier proposed development (Michael Brandman Associates, 1992), and focused surveys for rare plants were done in 1993 (Tierra Madre Consultants). A Due Diligence Report was done for the applicant by LSA (1998), and focused surveys for rare animal species were recently completed by LSA (1998 and 1999). The current survey reports are attached to the 1999 Biological Resources Report (see Appendix C). The prior reports are on file at the City of Murrieta and may be reviewed at that location.

### Existing Conditions

The property consists of lower hills and broad, gentle flatlands that flank a predominant northeast- to southwest-trending ridgeline. Elevations across the property range from approximately 1310 to 1597 ft above mean sea level (amsl). General geologic units and/or soil types including Cretaceous gabbros were encountered during a field investigation (PSE, 1999). Soils reported from the site by the Soil conservation Service include Cajalco loams, Cieneba loam, Fallbrook loam, Honcut loam, Las Posas loam, and Vista loam (Tierra Madre, 1993).

The site is presently vacant; portions have been farmed in the past. Land to the south and west is largely developed with single-family homes. Land to the north is developed as rural residential. Vacant land is to the east, across I-215.

### Vegetation

Plant species observed on-site during the surveys are listed in Appendix C. Habitat types occurring on the property are presented in shown on Figure IV-D-1.

Chamise chaparral. Approximately 56.1 acres of chamise chaparral, dominated by chamise (*Adenostema fasciculatum*) occur on-site. Chamise chaparral is one of the most common and least diverse communities in Southern California. It is dominated by almost monotypic stands of chamise, occasionally having other species in the openings or between clumps of chamise. Some other species observed in the chaparral on this site include black sage (*Salvia mellifera*), purple heads (*Acourtia microcephala*), and common rock rose (*Helianthemum scoparium*).

*Ceanothus crassifolius* chaparral. Approximately 65.6 acres of this chaparral occurs on-site. This chaparral is differentiated from the smaller chamise chaparral by being dominated by the taller thick leaved ceanothus (*Ceanothus crassifolius*). There is also a large component of chamise as these two habitats often intergrade. Holland (1986) reports that *Ceanothus crassifolius* chaparral often comes in during the first forty years after a fire and then is

gradually replaced by the chamise chaparral. In portions of the property, bush penstemon (*Keckiella antirrhinoides*) also is a major component.

Ruderal. Approximately 78.5 acres of the site is classified as ruderal habitat, having been previously disturbed by discing, weed control, and recreational uses. The ruderal areas are primarily dominated by non-natives such as castor bean (*Ricinus communis*), shortpod mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), and filaree (*Erodium* sp.), although a portion of the ruderal habitat in the southern portion of the site is dominated by native species such as doveweed (*Eremocarpus setigerus*), fascicled tarplant (*Hemizonia fasciculata*), corrugated spineflower, (*Chorizanthe corrugata*), and curving tarweed (*Holocarpha virgata*).

Coastal sage scrub. Coastal sage scrub, dominated by buckwheat (*Eriogonum fasciculatum*) and deerweed (*Lotus scoparius*) was mapped on about 42.5 acres of the property. Coastal sage scrub had not been mapped during the 1992 survey, but a portion of the site had burned at that time. Pockets of coastal sage may have established in some of the burned areas, as well as in some parts of the site previously mapped as ruderal. Another small patch of coastal sage scrub dominated by exotics was mapped as disturbed coastal sage (2.3 acres).

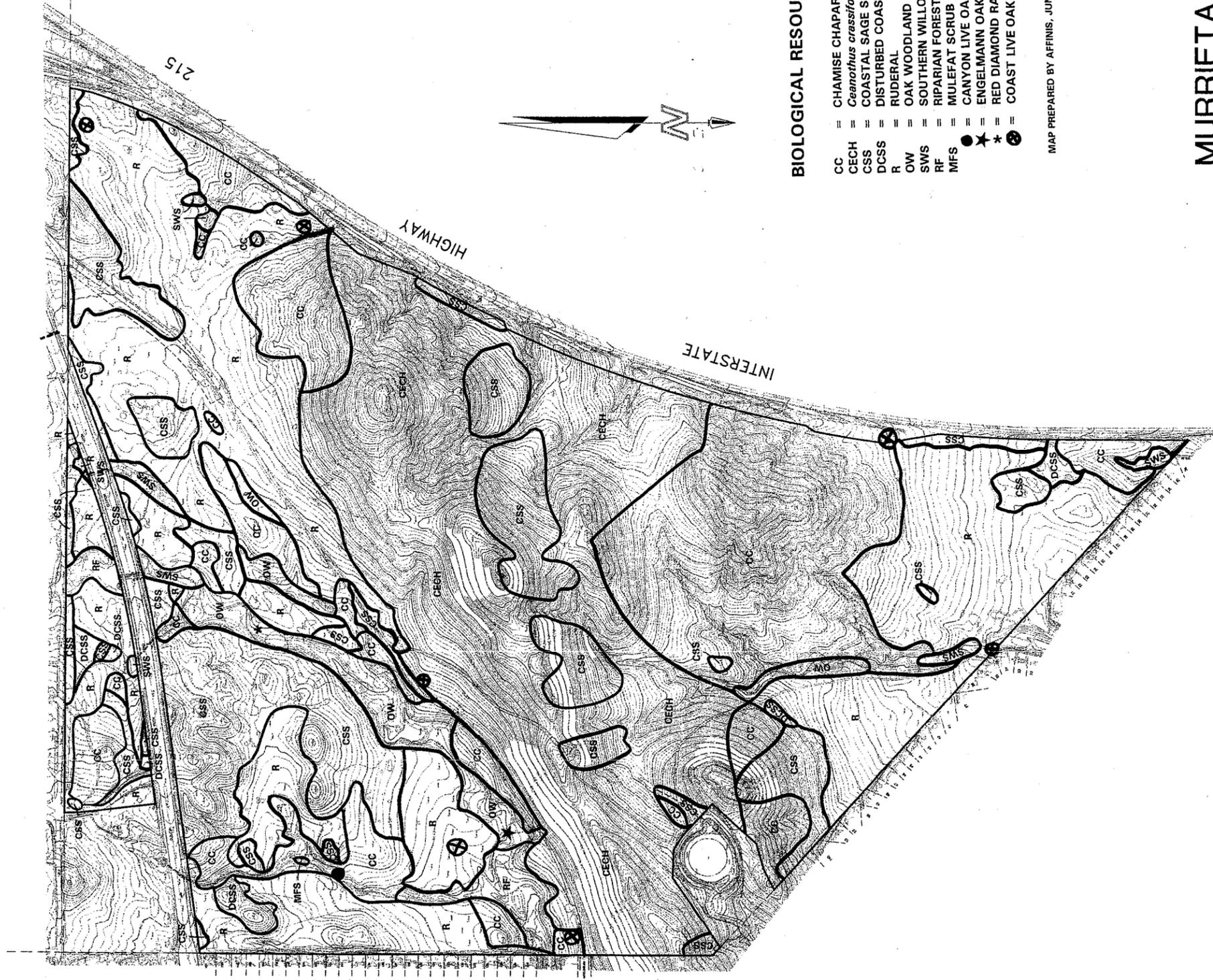
Oak Woodland. About 9.1 acres of coast live oak woodland are on-site, primarily along the drainages. Dominated by coast live oak (*Quercus agrifolia*), the woodlands have a well-developed understory including poison oak (*Toxicodendron diversilobum*), wild cucumber (*Marah macrocarpus*), squaw bush (*Rhus trilobata*), white sage (*Salvia apiana*), and golden yarrow (*Eriophyllum confertifolium*).

Southern Willow Scrub. Five small areas of southern willow scrub totalling 1.6 acres were mapped on the site. These areas support arroyo willow (*Salix lasiolepis*), black willow (*Salix gooddingii*), hedge nettle (*Stachys rigida*), and Mexican elderberry (*Sambucus mexicana*).

Riparian Forest. About 3.7 acres of riparian forest were mapped on-site. These are areas with mature willow forests dominated by black willows, Fremont's cottonwood (*Populus fremontii*), and occasional oak trees (*Quercus* sp.). Also seen in these areas is the exotic salt cedar (*Tamarix parviflora*). These areas found in the wettest portions of the site and often have a disproportionately high value for wildlife due to the combined presence of moisture/water and cover.

Mulefat Scrub. One small patch (.04 acre) of mulefat scrub dominated by mulefat (*Baccharis salicifolia*) was mapped in the northwestern portion of the property.





**BIOLOGICAL RESOURCES**

- CC = CHAMISE CHAPARRAL
- CECH = *Ceanothus crassifolius* / CHAPARRAL
- CSS = COASTAL SAGE SCRUB
- DCSS = DISTURBED COASTAL SAGE SCRUB
- R = RUDERAL
- OW = OAK WOODLAND
- SWS = SOUTHERN WILLOW SCRUB
- RF = RIPARIAN FOREST
- MFS = MULEFAT SCRUB
- = CANYON LIVE OAK
- ★ = ENGELMANN OAK
- ★ = RED DIAMOND RATTLESNAKE
- ⊗ = COAST LIVE OAK

MAP PREPARED BY AFFINIS, JUNE 1989

**MURRIETA OAKS**  
TOPOGRAPHIC MAP

**CHOBBY** Engineers • Planners • Surveyors  
**MEAD**  
**BENTON**  
& ASSOCIATES  
6650 El Camino Real, Suite 200  
Culver City, California 90009  
(310) 458 - 7210

**Affinis**

Shadow Valley Center  
847 Jamacha Road  
El Cajon, CA 92019

**BIOLOGICAL RESOURCES**

**FIGURE IV-D-1**



## Wildlife

A total of 44 bird species were observed during the field surveys (Appendix C). The oak woodland and riparian areas are used by several raptors, including white-tailed kite (*Elanus caeruleus*), Cooper's hawk (*Accipiter cooperi*), and red-shouldered hawk (*Buteo lineatus*). In addition, red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and turkey vulture (*Cathartes aura*) were observed foraging over the property. The oak woodlands and riparian habitats also provide habitat for species such as mourning dove (*Zenaida macroura*), barn owl (*Tyto alba*), several hummingbird species, Nuttall's woodpecker (*Picoides nuttallii*), spotted towhee (*Pipilo erythrophthalmus*), California towhee (*P. crissalis*) and orioles (*Icterus* sp.). Birds commonly found in the chaparral and scrub habitats on-site included California quail (*Callipepla californica*), common flicker (*Colaptes auratus*), ash-throated flycatcher (*Myiarchus cinerascens*), scrub jay (*Aphelocoma coerulescens*), wrentit (*Chamaea fasciata*), California thrasher (*Toxostoma redivivum*), and Lawrence's goldfinch (*Carduelis lawrenci*).

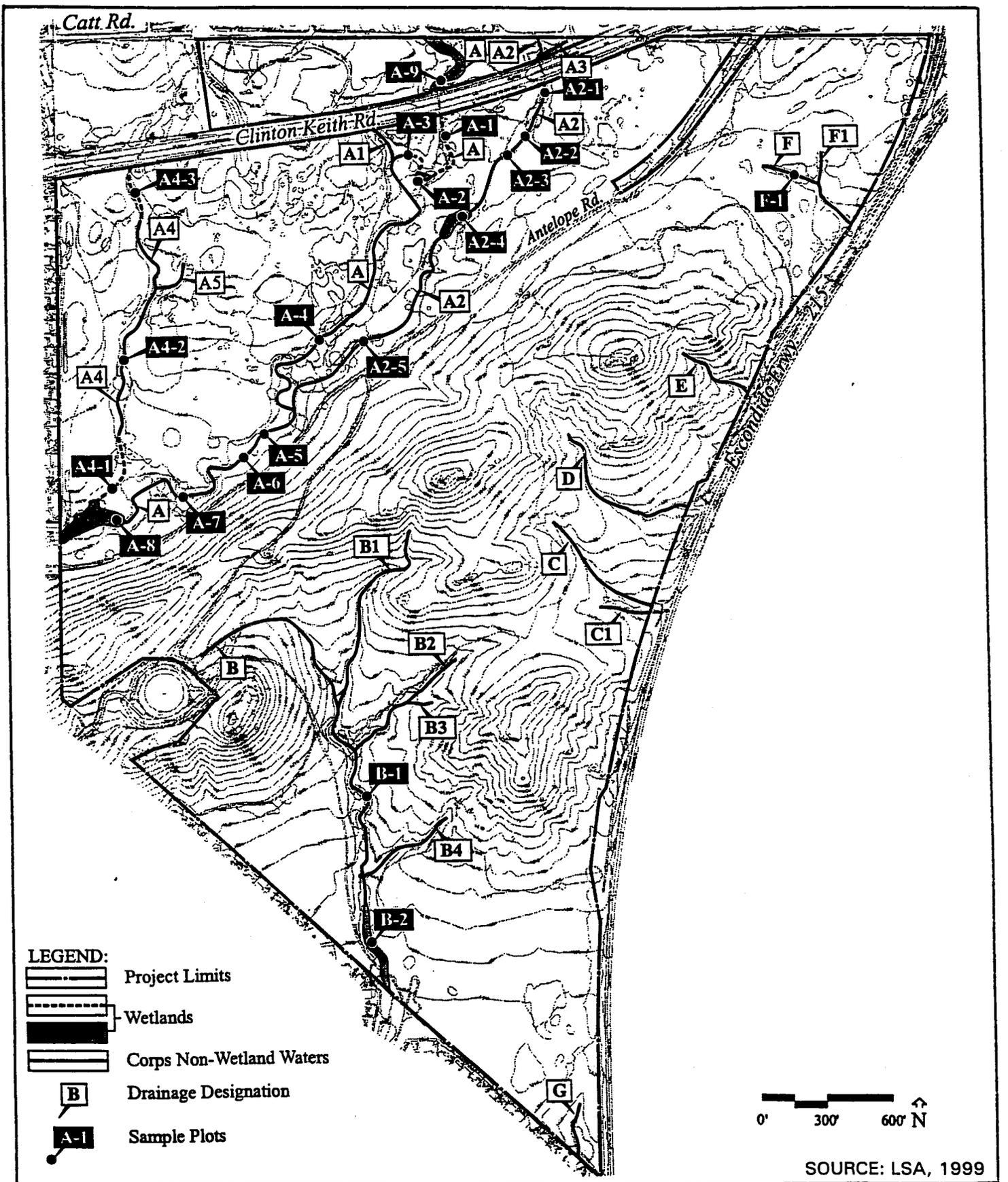
Five mammal species were observed or detected on-site (Appendix C). Coyote (*Canis latrans*), desert wood rat (*Neotoma lepida*), Audubon's cottontail (*Sylvilagus audubonii*), Botta's pocket gopher (*Thomomys bottae*), and California ground squirrel (*Spermophilus beecheyi*) were noted in the oak woodlands, chaparral habitats, and ruderal areas. Four reptiles, including alligator lizard (*Gerrhonotus multicarinatus*), side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), and red-diamond rattlesnake (*Crotalus ruber*) were encountered.

One amphibian, Pacific treefrog (*Hyla regilla*), was heard in the oak woodland.

## Sensitive Habitat

The riparian habitats on-site, including oak woodlands, riparian forest, and southern willow scrub provide food and cover for animal species, as well as corridors for their movement. As such, they represent sensitive habitat types on the property. In addition, portions of the riparian habitats fall under the jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game. LSA prepared the *Delineation of Wetlands and Jurisdictional Waters* (1999, on file with the City of Murrieta) report which concluded that there are 1.21 acres of non-wetland Waters of the U.S., 1.46 acres of Corps-defined wetlands, and 7.42 acres of habitat under Fish and Game jurisdiction (Figures IV-D-2 and IV-D-3).

Coastal sage scrub is targeted for protection under regional habitat conservation plans, primarily because it is the preferred habitat for the California gnatcatcher. As noted above, no gnatcatchers were detected on the property during focused surveys, but mitigation is still required for unoccupied habitat (Dodson, personal communication, 1999).

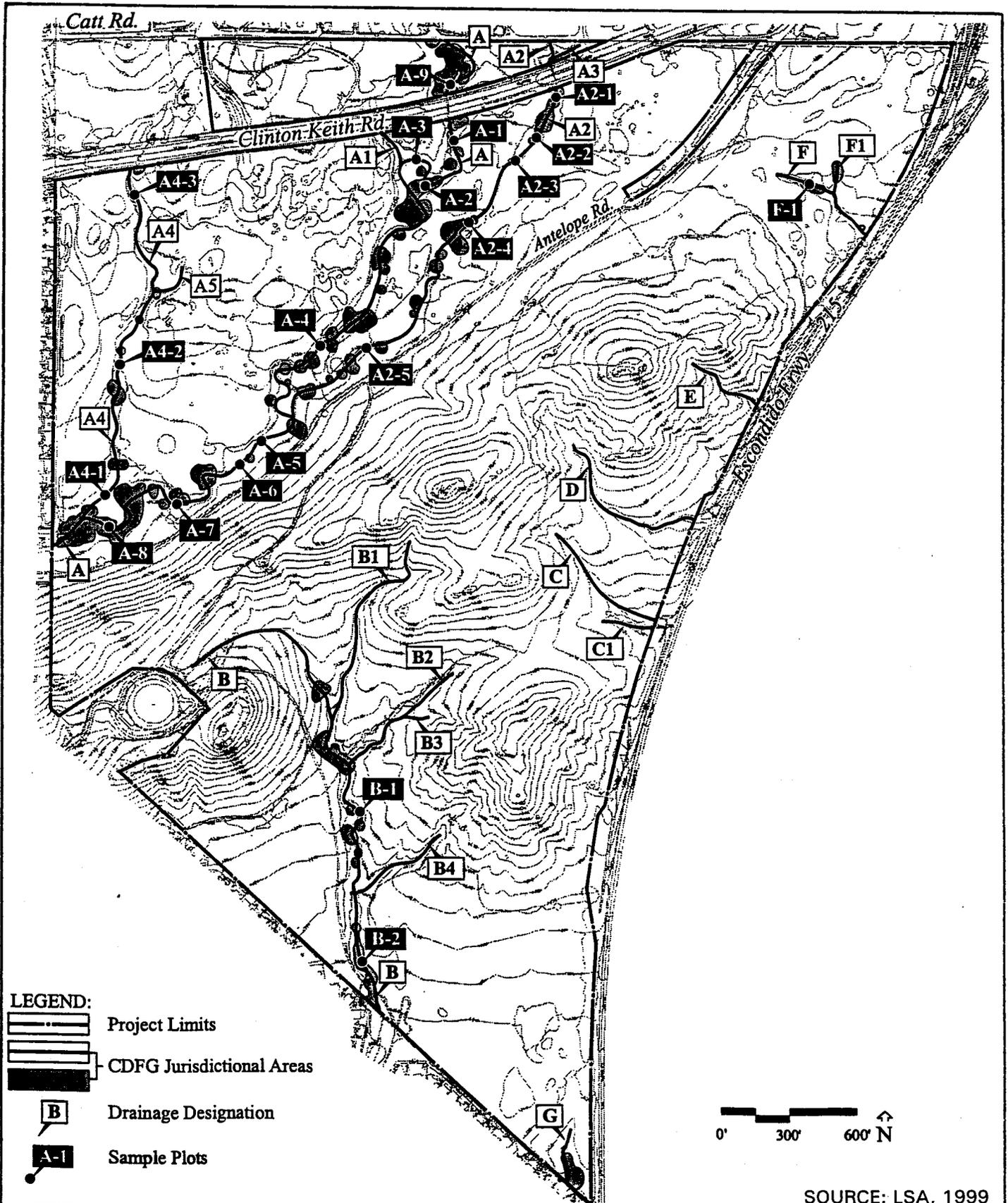


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U.S. ACOE JURISDICTIONAL  
 AREAS

FIGURE IV-D-2



# Affinis

Shadow Valley Center  
 847 Jamacha Road  
 El Cajon, CA 92019

## CDFG JURISDICTIONAL AREAS

FIGURE IV-D-3

Tierra Madre (1993) noted a moist area not associated with the drainage channels. Because the area did not meet the criteria for a vernal pool, it was termed a mesic sink. LSA biologists checked this area on January 15, 1999. They reported the plant community was significantly altered from that reported by Tierra Madre Consultants, and that none of the species present were on the list of vernal pool indicator species of the Army Corps. They noted no hydrologic indications were present, and that this visit followed the El Nino winter of 1997-98 which had significantly above average amounts of precipitation. LSA did an additional field examination on January 28, 1999, following approximately 0.78" rain over a three-day period. No ponded water or any other evidence of saturation or inundation was present (*Delineation of Wetlands and Jurisdictional Waters, Murrieta Oaks, LSA, February 11, 1999*).

On May 4, 1999, Affinis biologists again checked the site. The site showed no signs of water retention, and supported no distinctive plants. The site was not distinguishable from the surrounding area on the May 4 visit.

Tierra Madre (1993) reported the area may be a sensitive habitat. None of the work done since, through May of 1999, has found evidence to support a designation as a sensitive habitat. The area does not support a sensitive habitat at this time. It may be that the 1993 work was done following conditions that allowed the area to be more moist. It may be that ongoing brushing and off-road vehicle activities on the overall site have affected the area such that it no longer can maintain the higher moisture, or some combination of these and other, unknown factors.

#### Rare and/or Endangered or Sensitive Species

**Plants.** Focused surveys for rare plants were conducted by Tierra Madre (1993). Species searched for on the property but not detected include Munz's onion (*Allium munzii*), thread-leaf brodiaea (*Brodiaea filifolia*), Orcutt's brodiaea (*B. orcuttii*), jewelflower (*Caulanthus heterophyllus* var. *pseudo-similans*), Orcutt's spineflower (*Chorizanthe orcuttiana*), slender-horned spineflower (*Dodecahema leptoceras*), San Diego button celery (*Eryngium aristulatum* var. *parishii*), Palmer's grapplinghook (*Harpagonella palmeri* var. *palmeri*), Parish's meadowfoam (*Limnanthes gracilis* var. *parishii*), little mousetail (*Myosurus minimus* ssp. *apus*), and California orcutt grass (*Orcuttia californica*).

No state- or federal-listed rare or endangered plant species were observed or are expected to occur on-site. Tierra Madre (1993) reported a population of Fallbrook spineflower (*Chorizanthe procumbens*) in the northwestern portion of the site, but it was not relocated during the current surveys. Fallbrook spineflower is a California Native Plant Society (CNPS) List 4 species (a "watch" list), but it has no state or federal status. Laciniate spineflower (*Chorizanthe fimbriata* var. *laciniata*) was observed in ruderal habitat in the southern portion of the site; it was considered for listing by the CNPS but was rejected as being too common.

One Engelmann oak (*Quercus engelmannii*) is within the oak woodland on the western portion of the site. Engelmann oak is a CNPS List 4 species and is considered rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time; endangered in a portion of its range; and rare outside California. In addition to the Engelmann oak, other individual coast live oaks and one canyon oak were noted outside the oak woodland areas (Figure IV-D-1). The City of Murrieta requires preservation, protection, and maintenance of native trees, including oaks (Section 16.42 of the Development Code).

**Animals.** Focused surveys were conducted by LSA for the federal-listed Threatened California gnatcatcher (*Polioptila californica californica*) and for the federal-listed Endangered Quino checkerspot butterfly (*Euphydryas editha quino*). Six gnatcatcher surveys were done between April 15 and May 21, 1998; seven Quino surveys were conducted between March 24 and May 8, 1999 (Appendix C). In addition, three surveys for Quino were conducted during the 1998 field season (April 15, 21, and 27). Neither species was detected on the property.

Michael Brandman Associates (1992) determined that portions of the property were potential habitat for the federal-listed Endangered Stephens' kangaroo rat ("SKR," *Dipodomys stephensi*). The project will be required to pay into a mitigation fund at time of issuance of the grading permit.

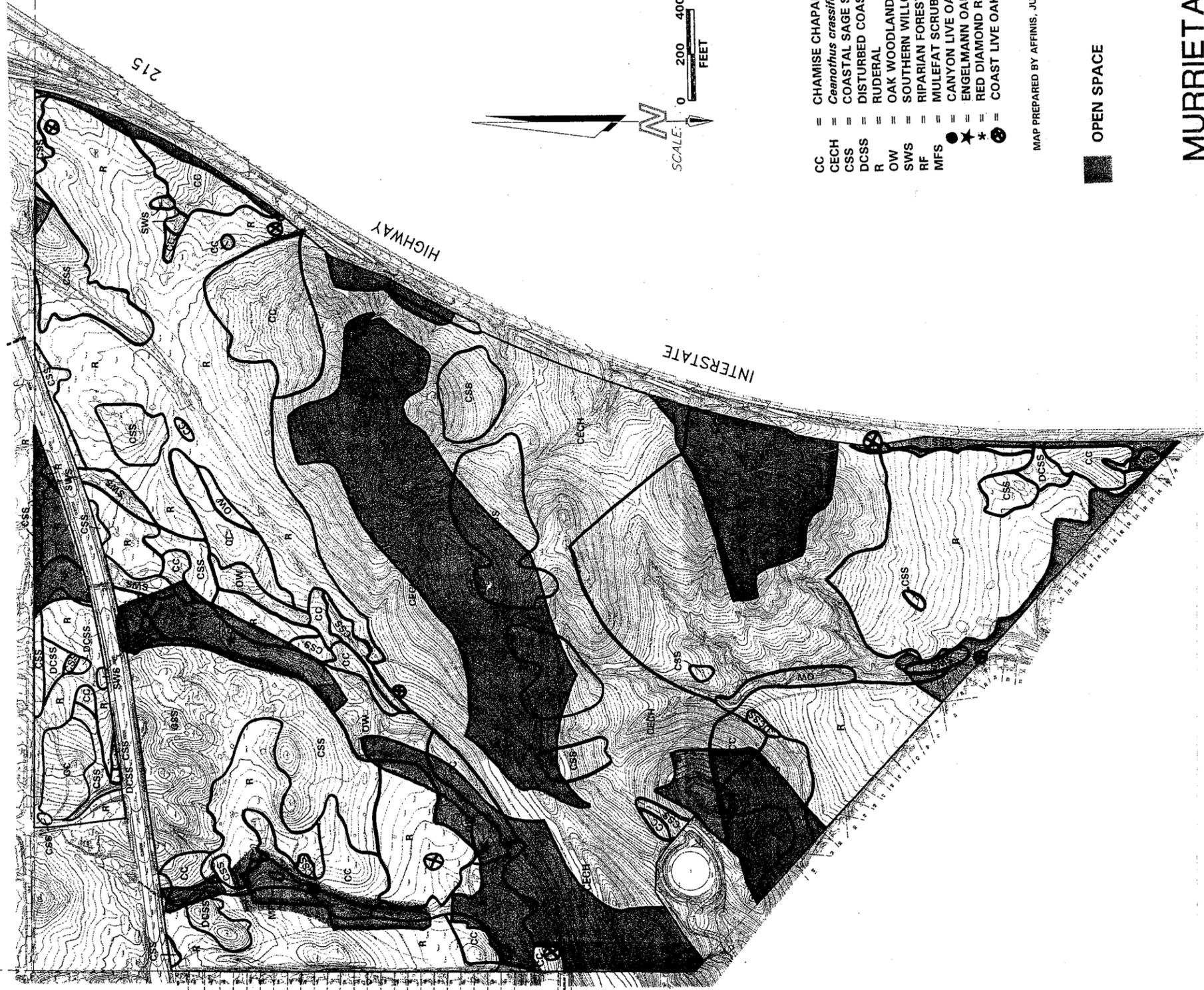
No other state- or federal-listed Threatened or Endangered species were detected during the current surveys. One species, the white-tailed kite, is Protected by the State of California. A family of white-tailed kites was seen in the riparian/oak woodland areas and likely nested on-site although the nest itself was not observed.

### **Impact**

The project footprint, including a brush management zone extending 100 feet, is overlain on the biological resource map shown in Figure IV-D-4. A summary of impacts to habitats is presented in Table IV-D-1.

The project would result in the loss of 40.25 acres of chamise chaparral, and 37.4 acres of *Ceanothus crassifolius* chaparral. The project will retain 44.05 acres of chaparral habitats on the ridgeline which will be left in open space. Approximately 73.1 acres of ruderal habitat would be impacted. A total of 34.87 acres of coastal sage scrub and 2.3 acres of disturbed coastal sage scrub would be impacted.





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**BIOLOGICAL RESOURCES  
 WITH DEVELOPMENT OVERLAY**

**FIGURE IV-D-4**



Table IV-D-1 Project Impacts

HABITAT TYPE	TOTAL ACRES	AC. IMPACTED	% IMPACTED	AC. PRESERVED	% PRESERVED
Chamise chaparral	56.1	40.25	72	15.85	29
<i>Ceanothus crassifolius</i> chaparral	65.6	37.4	57	28.2	43
Ruderal	78.5	73.1	93	5.4	7
Coastal sage scrub	42.5	34.87	82	7.63	18
Disturbed coastal sage scrub	2.3	2.3	100	0.0	0
Oak Woodland	9.1	4.29	47	4.81	53
Southern Willow Scrub	1.6	1.23	77	0.37	23
Riparian Forest	3.7	0.71	19	2.99	81
Mulefat Scrub	0.04	0.04	100	0.0	0
TOTAL	259.4	194.19	75	65.25	25

The project will also result in the loss of 6.27 acres of riparian habitats (4.29 acres of oak woodland, 1.23 acres of southern willow scrub, 0.71 acre of riparian forest, and 0.04 acres of mulefat scrub). The project would also result in the loss of four individual coast live oak trees and one canyon live oak.

As shown in Table IV-D-2, the project will impact 0.29 acre of Corps-defined wetlands and 0.73 acre of Waters of the U.S. Approximately 2.62 acres of habitat under Fish and Game jurisdiction would be impacted.

### **Significance of Impacts**

Because the chaparral habitats on-site do not support sensitive species, impacts to these habitats would not be considered significant.

Coastal sage scrub is targeted for protection under regional habitat conservation plans throughout Southern California. Losses of coastal sage scrub habitat are considered significant.

Impacts to oak woodland, southern willow scrub, riparian scrub, mulefat scrub, and jurisdictional wetlands and waters are considered significant.

### **Mitigation**

Although no mitigation is required for the loss of chaparral habitat, the project will retain 44.05 acres of this habitat on the ridgeline which will be left in open space.

Because the coastal sage scrub habitat does not support sensitive species such as the California gnatcatcher, a 1:1 mitigation ratio would be acceptable. The project will impact 37.17 acres (including disturbed coastal sage) and will retain 7.63 acres of coastal sage on-site. Thus, the project will be required to purchase 29.5 acres of off-site habitat to mitigate the loss.

Because the Quino checkerspot has not been found on the site, the habitat is assumed not to be occupied by this species. Mitigation for un-occupied Quino habitat would be provided off-site at a 1:1 ratio, requiring purchase of habitat with suitable host and nectaring plants. In its quino survey report, LSA (1999) identified approximately 4.2 acres of suitable habitat on-site.

The project will preserve 8.17 acres of riparian habitats (4.81 acres of oak woodland, 0.37 acres of southern willow scrub, 2.99 acres of riparian forest, and 0.0 acre of mulefat scrub) in open space, providing mitigation at a 1.3:1 ratio.

Table IV-D-2 ACOE and CDFG Impacts and Mitigation

	TOTAL AC ON-SITE	AC IMPACTED	MITIGATION RATIO	MITIGATION AC REQUIRED
ACOE defined wetlands	1.46	0.29	2:1	0.58
ACOE non-wetlands Waters of the US	1.21	0.73	1:1	0.73
CDFG jurisdiction <sup>1</sup>	7.42	2.62	2:1	5.24

<sup>1</sup> The area under CDFG jurisdiction includes the acreage under ACOE jurisdiction. Since the project will create 1.31 acres of wetlands/waters for the ACOE, an additional 3.93 acres of habitat such as oak woodlands will be created to meet the 5.24 acres required for CDFG mitigation.

The proposed project must obtain a permit from the U.S. Army Corps of Engineers for its fill in jurisdictional waters. Similarly, a Streambed Alteration Agreement must be made with the California Department of Fish and Game. As shown in Table IV-D-2, the project will create 1.31 acres of habitat to mitigate for Corps-defined wetlands and Waters of the U.S. An additional 3.93 acres of riparian habitat such as oak woodland will be created to meet the mitigation required by the Department of Fish and Game. The habitat creation will be done in Drainage "A" (shown on Figure IV-D-2) and in the portion of Drainage "A" outside the project footprint on the parcel north of Clinton Keith Road. Plantings will be made within the existing channel, and the channel will be widened in areas to create additional habitat (Easton, personal communication).

In accordance with the City's Tree Preservation Ordinance (Section 16.42 of the Murrieta Municipal Code), a Tree Removal Permit will be required prior to removal of the four coast live oaks and single canyon oak. Mitigation will be determined by an appraised value report as required by the ordinance:

"When the trees to be removed are associated with a proposal for development, the appraised value of the removed trees shall be applied to increasing the amount of landscaping within the proposed project or by planting minimum 24-inch box trees of equal value within City rights-of-way or public parks."

## E. CULTURAL RESOURCES

A Cultural Resources Study was prepared by the proposed project by Affinis (1999). The report, included as Appendix D to this EIR, provides the background for the following analysis.

### Existing Conditions

The Murrieta Oaks project area was surveyed for cultural resources in 1987 by archaeologists from the Archaeological Research Unit at the University of California, Riverside (de Munck 1987). One large prehistoric site (CA-RIV-3056) was recorded, in the southern portion of the property. Cultural material noted at the site included "numerous mano and metate fragments; basalt and chert flakes; a hammerstone; and two Cottonwood triangular projectile points" (de Munck 1987:5). "The site requires subsurface testing to determine its potential for yielding useful information" (de Munck 1987:5).

The property was surveyed again in 1992. In addition to CA-RIV-3056, two historic trash scatters were recorded (CA-RIV-4905H and -4906H) (Bissell 1992). Although he noted a greater number of artifacts and a previously unrecorded bedrock milling feature, Bissell found CA-RIV-3056 basically as previously described. Both historic trash scatters were found along a drainage on the north side of Antelope Road. The survey report noted that the "visible portions of these deposits contain material from the 1920s to modern times" (Bissell 1992:17).

Affinis senior archaeologists Mary Robbins-Wade and G. Timothy Gross visited the recorded sites in December 1998 to assess their current status and the need for subsurface testing or other evaluation measures. One of the historic archaeological sites (CA-RIV-4906H) was found to be off-property to the west, and it appears to have been destroyed by relatively new residential development. Robbins-Wade also visited the extant historic site (CA-RIV-4905H) with historic archaeologist Stephen R. Van Wormer in January 1999 to assess the age and potential significance of the site. Van Wormer found that the site did not appear to pre-date World War II. One piece of Depression era glass was found, but other items included a Duraglass Gallo wine bottle post-dating 1954, an aerosol can with a plastic nozzle characteristic of the 1960s, church key type cans, and other nondescript artifacts. There was a surprising lack of plastic and few bottles. The site was not old enough to be considered historic, and there was a general lack of material with research potential. Therefore, the site is not considered an important resource and no further work is recommended.

A testing program was conducted at CA-RIV-3056 by Affinis archaeologists in February 1999. The testing report is included as Appendix D to this report. Testing at CA-RIV-3056 consisted of mapping surface artifacts, excavating 21 shovel test pits (STPs) to test for subsurface deposits, recording bedrock milling features, and examining several available exposures of site sediments to allow evaluation of stratigraphy.

The testing program at the CA-RIV-3056 produced a small collection of artifacts, primarily from the surface. The collection is dominated by flaked lithic debitage, cores, manos, and hammers. The assemblage suggests tool making and/or maintenance, and food processing as the principal activities that occurred in the site area. The site probably served as a residential site, at least on a limited basis. It probably was used in conjunction with other sites in the area as part of a larger local settlement system.

The STPs excavated at the site indicate that there is very little subsurface material present, and no signs of dark midden soils were noted. There is evidence of past disturbance of the site in the form of plowing and discing, and the area appears to have been eroded in the past. No significant archaeological deposits were located.

Representatives of the Pechanga Band of Luiseño Mission Indians expressed concerns regarding cultural resources. Affinis Principal Archaeologist, G. Timothy Gross, Ernest Perea of the City of Murrieta, and Roger Scherer of the City of Murrieta met with representatives of the Pechanga Band, Raymond Vasquez, Phil Ibanez, and Ben Masiel, and Laura Miranda of the California Indian Legal Service to visit the project area and the archaeological site, CA-RIV-3056, to address potential concerns.

### **Impacts**

One of the historic sites (CA-RIV-4906H) mapped as within the project area was actually located west of the property; it has been destroyed by development, and this project would not affect it. The other historic site, CA-RIV-4905H, is located within open space Lot E. Due to its location within an open space lot the site would not be subject to direct impacts from project development.

A small portion of the prehistoric site, CA-RIV-3056, would be preserved in open space Lot M. The majority of the site would be destroyed by improvements within Lot K and residential development surrounding Lot M.

### **Significance of Impacts**

The two recorded historic sites would not be subject to impacts from the project. CA-RIV-4905H has been determined not to be an important cultural resource under CEQA, and CA-RIV-4906H no longer exists. If development plans change, and CA-RIV-4905H would be subject to impacts from project implementation, such impacts would not constitute significant effects.

The majority of CA-RIV-3056 would be subject to direct impacts from project development. The site has been determined not to be an important cultural resource under CEQA. Therefore, impacts would not constitute significant environmental effects.

## **Mitigation Measures**

Because no significant impacts have been identified to archaeological resources, no mitigation measures are necessary from an archaeological standpoint. Representatives of the Pechanga Band of Luiseño Mission Indians have requested that a Native American monitor be on-site during grading activities to ascertain that no impacts to cultural resources occur.

## **F. GEOLOGY/SOILS**

A preliminary geotechnical report was prepared for the Murrieta Oaks project area by Pacific Soils Engineering, Inc. in January 1999, and is included here as Appendix E. This geotechnical report was used as the basis for the following analysis. Additional information was taken from a draft EIR prepared for an earlier proposed project for the property (Urban Logic Consultants 1995).

### **Existing Conditions**

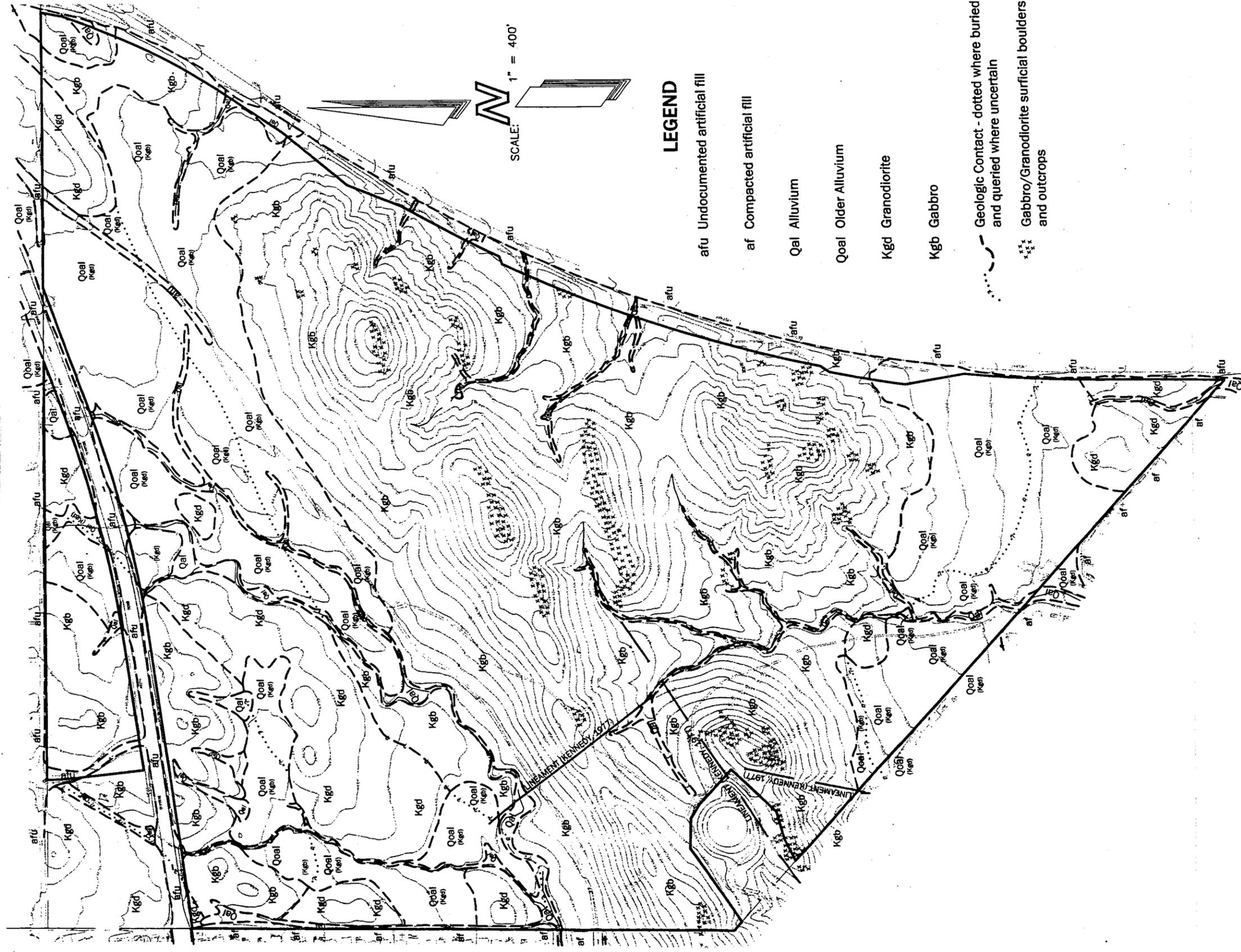
The Murrieta Oaks site topography consists of lower hills and broad, gentle flatlands that flank a predominate northeast-southwest trending ridge line (Figures II-2 and IV-A-1). Elevations across the property range from approximately 1310 to 1597 ft above mean sea level (MSL). General geologic units and/or soil types including Cretaceous gabbros, granodiorite, older alluvium, alluvium, colluvium, topsoil, and artificial fill were encountered during the field investigation (Appendix E). These are shown in Figure IV-F-1.

Older alluvium forms a terrace that caps much of the lower relief areas of the site. In general, the older alluvium is fine to medium grained, medium dense to dense, slightly moist, clayey, silty sand. Alluvium occurs within modern drainages throughout the site. It is fine to coarse grained, dry to slightly moist, loose to moderately dense silty sand with some organic particles. The colluvium found occurs at the bases of steep slopes throughout the site. It is fine to coarse grained, slightly moist, moderately dense, clayey, silty sand and gravelly sand with common cobble and some boulders. The topsoil blankets much of the site. It is fine to coarse grained, dry to slightly moist, clayey organic silty sand. Compacted artificial fill associated with the existing tank reservoir and subdivision occurs along the western boundary of the project area. Undocumented artificial fill occurs along the northern site boundary in association with previously developed areas.

The artificial fills, topsoil, colluvium, alluvium and older alluvium are comprised of silty sands to gravelly sands in a loose to medium dense state. The soils are anticipated to be readily excavatable (Appendix E).

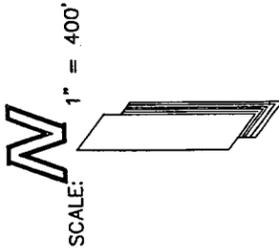
The primary bedrock unit underlying the site is Cretaceous gabbro. It forms the prominent northeast trending ridge and hills in the central and northwestern portions of the project area. Cretaceous granodiorite underlies the low relief areas in the north-northwest and far south-southwest portions of the project area.

Three onsite lineaments were found through the study of aerial photographs and published and unpublished maps and reports. Trenching showed these lineaments to be



**LEGEND**

- afu Undocumented artificial fill
- af Compacted artificial fill
- Qal Alluvium
- Qoal Older Alluvium
- Kgd Granodiorite
- Kgb Gabbro
- Geologic Contact - dotted where buried and queried where uncertain
- \*\*\* Gabbro/Granodiorite surficial boulders and outcrops



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**PROJECT SOILS  
 AND GEOLOGIC MAP**

**FIGURE IV-F-1**



absent of fault indicative features (Appendix E). While active faults are not known to exist within the project area, the Murrieta Oaks project is in southern California, a tectonically active area. The project lies just 4 miles east of the Temecula segment of the Elsinore fault zone where there exists a moderate to high probability of the project area experiencing an earthquake of magnitude 6 or greater (Urban Logic Consultants, 1995).

### **Impact**

Development of the project would require removal of undocumented fill, topsoil, alluvium, older alluvium and any colluvium or slopewash prior to fill placement to a depth of .5 to 13 ft. If the compacted artificial fill along the western site boundary is found suitable to support the additional fill load for structures proposed for the project, the upper 1 to 3 ft of existing compacted fill would also be removed.

The highly weathered areas of gabbro and granodiorite would require removal as well. This could adversely affect the stability of the slope by increasing the potential for rock falls caused by earthquakes, slides or slumps.

Design cut, fill-over-cut, fill, and natural slopes are considered grossly stable as designed.

In places where the excavation into the bedrock reaches below 10 -17 ft, it is expected that very heavy ripping and/or blasting would be needed as these are the areas where the rock is most resistant.

Liquefaction, which can occur when certain saturated soils are shaken during an earthquake, is extremely unlikely due to the lack of near surface groundwater, the proposed subdrains, complete soil/alluvium removals, and the high in-place density of the gabbro and granodiorite bedrock (Appendix E).

### **Significance of Impact**

No significant soil or geologic conditions have been identified that would preclude the development of the project site under the proposed Vesting Tentative Map, providing standard engineering practices are followed. Poorly consolidated alluvial soils and colluvium/topsoil would require remedial grading and recompaction, which are standard engineering practices.

Slope stability analysis indicates that both natural slopes and artificial cut and fill slopes would be stable at the gradients and heights proposed by the Tentative Map. One possible exception might be an increased susceptibility to rock falls following the excavation of cut slopes in gabbro or granodiorite.

While there is a moderate to high probability of the project being subject to an earthquake of magnitude 6 or greater, the likelihood of such an event is no greater for the project area than in other areas of Southern California. The liquefaction potential is low to very low.

### **Mitigation Measures**

Geologic observation during the grading process would identify potential boulder and rock fall areas that may be created by site grading. Stabilization fills, rock bolting or debris catchment areas are possible mitigation measures to be evaluated on a case by case basis.

The following standard engineering practices must be incorporated into the project in order to remedy constraints associated with development in areas of alluvial and colluvial soils and to reduce the potential for erosion during grading and construction. Detailed geotechnical recommendations are given in Appendix E.

- Remedial grading in the form of partial to total removal of alluvium and colluvium/topsoil and recompaction shall be used to alleviate the potential for settlement. Detailed soil removal quantities would be determined by the geotechnical engineer in conjunction with review of the final grading plan.
- Cut and fill slopes shall be designed at inclinations of 2:1 or flatter.
- Fill slopes shall be landscaped as soon as practical to reduce the erosion potential.
- Proposed structures shall be built in accordance with the current lateral force requirements of the Structural Engineers Association of California to reduce earthquake hazards.

## **G. HAZARDS**

### **Existing Conditions**

Fire Hazard. The City of Murrieta identifies undeveloped hillside areas as potentially serious hazards due to the risk of large scale wildland fires. This risk is particularly high in developments situated along the City's urban fringe (City of Murrieta 1991). Projects in such locations are subject to the policies of the Murrieta Fire Protection District, which guide development. These policies pertain to setbacks and access, architectural materials, and landscaping. Developments are required to have Fuel Modification Plans for those portions of projects subject to wildland fire risk.

Toxic Materials. Past use of the Murrieta Oaks property includes agriculture, as well as refuse dumping. A potential for residual hazardous materials related to these activities was believed to exist. A Phase I Environmental Site Assessment (ESA) was conducted on the property in December of 1996 by Robert Bein, William Frost & Associates. This study was updated in July, 1998 and consisted of a review of public documents and a site inspection of the property and accessible abutting properties. The results of this study indicated there was no evidence of significant surface hazardous materials on or within the immediate vicinity.

### **Impact**

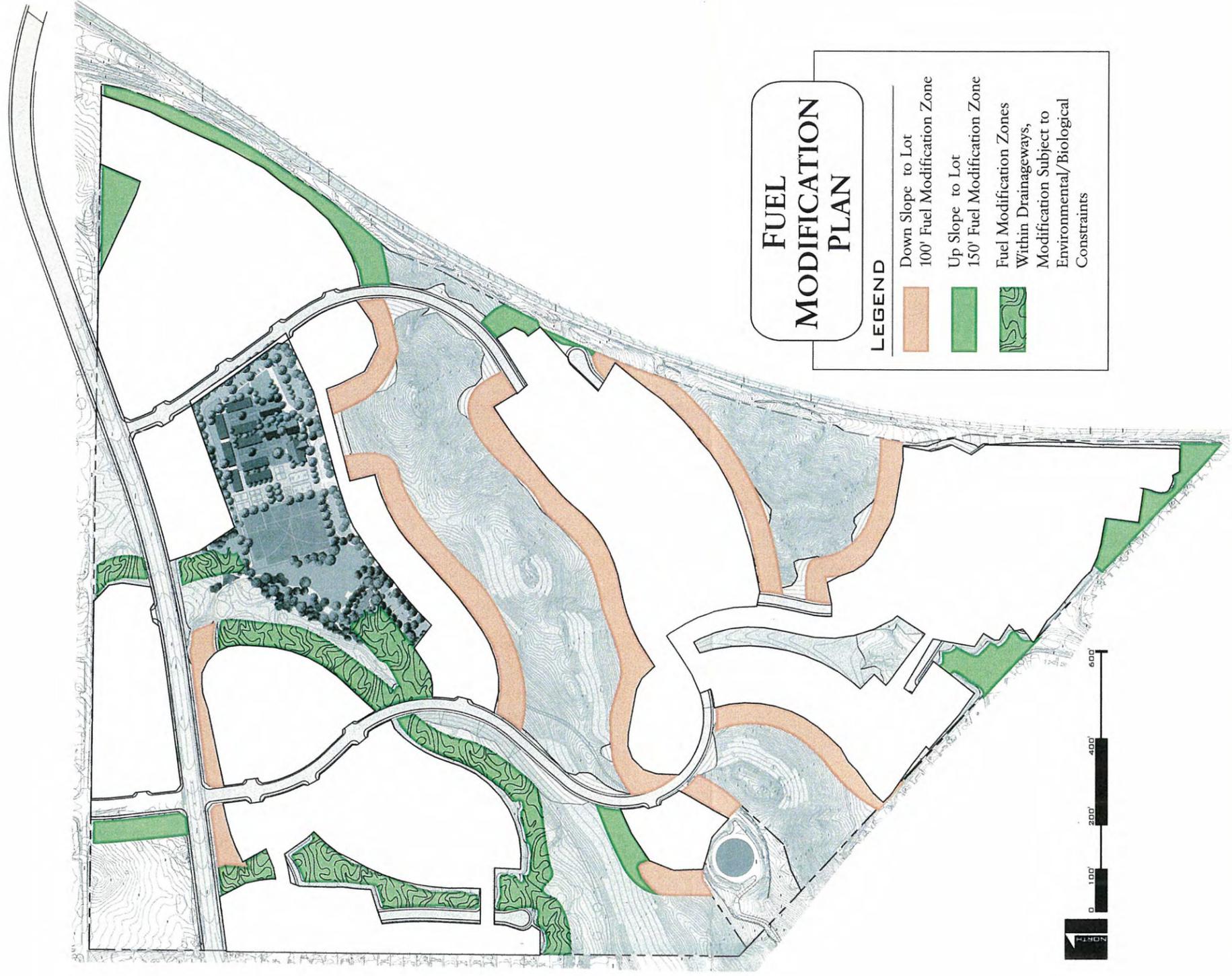
Fire Hazard. Some portions of the Murrieta Oaks project would be exposed to potential wildland fire hazards (see Figure IV-G-1). Such areas would be subject to fuel modification improvements, which would include reduction of fuel volume, planting of approved low-fuel ground covers and shrubs, and limited irrigation of areas adjacent to structures. Brush clearance would be permitted in fuel maintenance zones, but mass grading would not. The areas of the Murrieta Oaks project identified as fuel management zones would be owned and maintained by the City of Murrieta.

Toxic Materials. Based on the results of the ESA, implementation of the proposed project would not result in the exposure of residents to residual hazardous or toxic materials relating to previous uses of the land.

### **Significance of Impact**

Fire Hazard. Those portions of the Murrieta Oaks project adjacent to wildland areas would potentially be exposed to adverse fire hazards. Adherence to the guidelines and policies of the Murrieta Fire Protection District and Implementation of the proposed Fuel Modification Plan would reduce fire hazard impacts to below a level of significance.





**FUEL MODIFICATION PLAN**

- LEGEND**
-  Down Slope to Lot 100' Fuel Modification Zone
  -  Up Slope to Lot 150' Fuel Modification Zone
  -  Fuel Modification Zones Within Drainageways, Modification Subject to Environmental/Biological Constraints



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FUEL MODIFICATION PLAN

FIGURE IV-G-1



Toxic Materials. Findings of the Phase I Environmental Site Assessment indicate that the potential for adverse toxic material impacts is not significant and mitigation measures are not required.

## **Mitigation Measures**

### Fire Hazard Mitigation Measures

- Fuel modification zones ranging from 100-150 ft from the adjacent property line, based on vegetation type, shall be created
- Access to the fuel modification zones shall be provided at a maximum of every 1,500 ft
- All high fire hazard plant species shall be removed
- Tree branches shall be pruned up 6 ft
- Plant material shall be pruned to a height of 18 inches
- Manufactured slopes shall be planted with Fire Protection District List B and C recommended species
- Trees shall be placed at a distance of three times their mature diameter
- Large shrubs shall be planted at 20 ft on center

## **H. HYDROLOGY/WATER QUALITY**

### **Existing Conditions**

All of the project area is within the watershed of Murrieta Creek. The project area is bisected by a southwest to northeast ridge line that dictates the direction of any runoff from the property. Watershed areas south of the ridge are designated "A" and watershed areas north of the ridge are designated "B" in this discussion. These designations match those used in the Specific Plan, and are used here to allow easy reference to that Plan.

Four intermittent/ephemeral streams enter the project area from the north, in culverts under Clinton Keith Road. The watersheds for these are designated as B-1 through B-4 on Figure IV-H-1. These basins are occupied by large land parcels, containing some individual homes and outbuildings.

Basin B-5 is the on-site watershed of the land north of the bisecting ridge line. It receives the waters of Basins B-1 through B-4, via each's culvert under Clinton Keith Road. The channels of B-2 and B-3 join on the property, approximately 1000 feet from Clinton Keith Road. The channels of B-1 and B-4 join this streamway, with B-4's confluence just upstream of the property boundary (Figure IV-H-1).

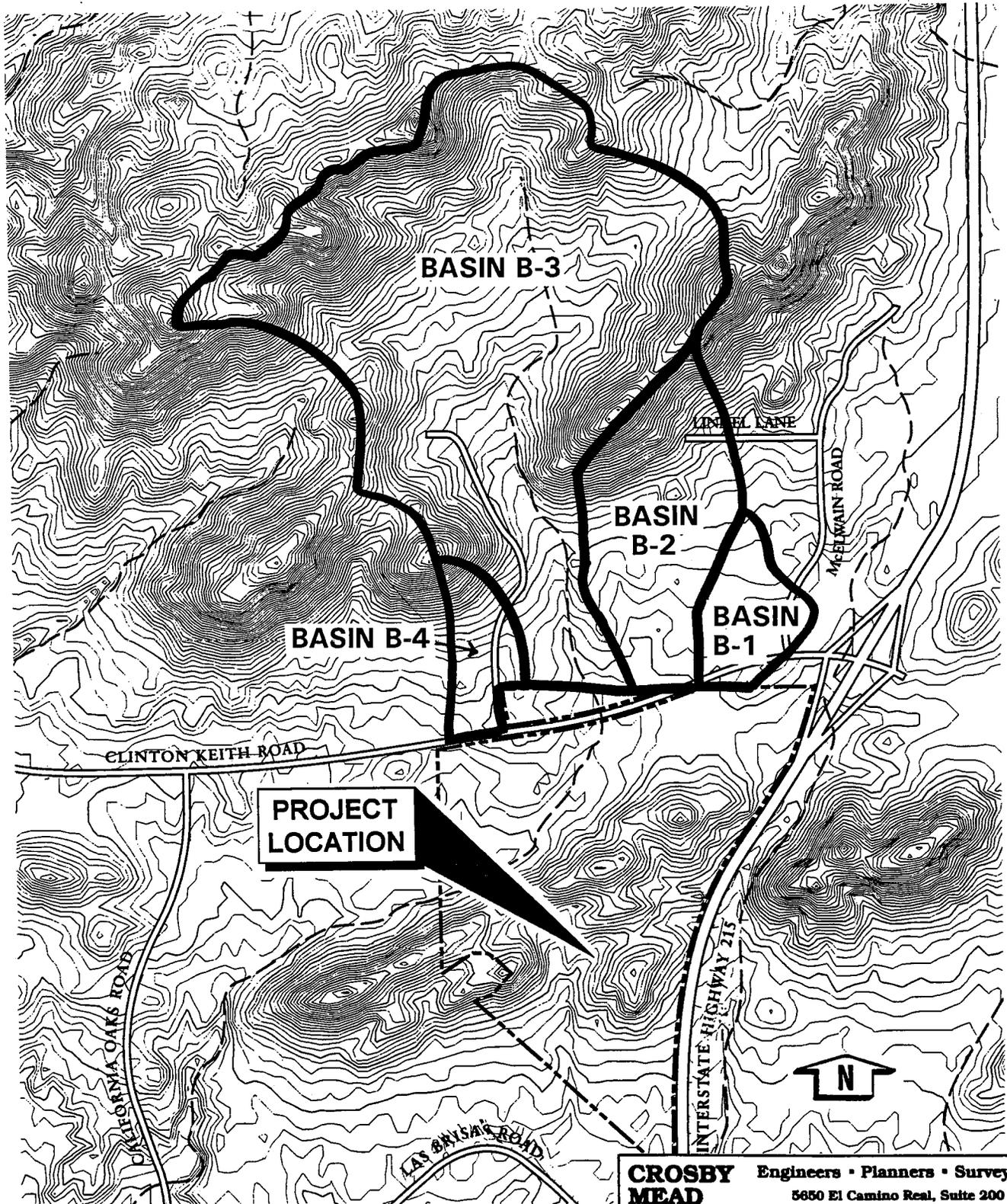
The Specific Plan has identified twelve drainage basins on the project area south of the ridge line (Figure IV-H-2). All of these "A" basins originate on the property; there is no off-site runoff entering any "A" basin. Basins A-1 through A-9 are relatively small basins that drain to the southeast, each to a culvert under I-215. Basins A-10 and A-11 each drain to the southwest. Off-site, both flow into an earthen channel created by the existing development. Basin A-12 drains to the south in a natural channel.

Both "A" and "B" drainages eventually flow to Murrieta Creek, approximately one mile to the south of the property. Murrieta Creek eventually merges with Temecula Creek and Warm Springs Creek to form the Margarita River just south of the City of Temecula.

The proposed project lies in an area of minimal flooding (City of Murrieta MEA, 1994).

### **Impact**

Unless impounded on-site, rainfall on a given area will: infiltrate the soil and "soak in" to the ground, run off, or evaporate in place. Evaporation is insignificant on the project area except for minor rain events.



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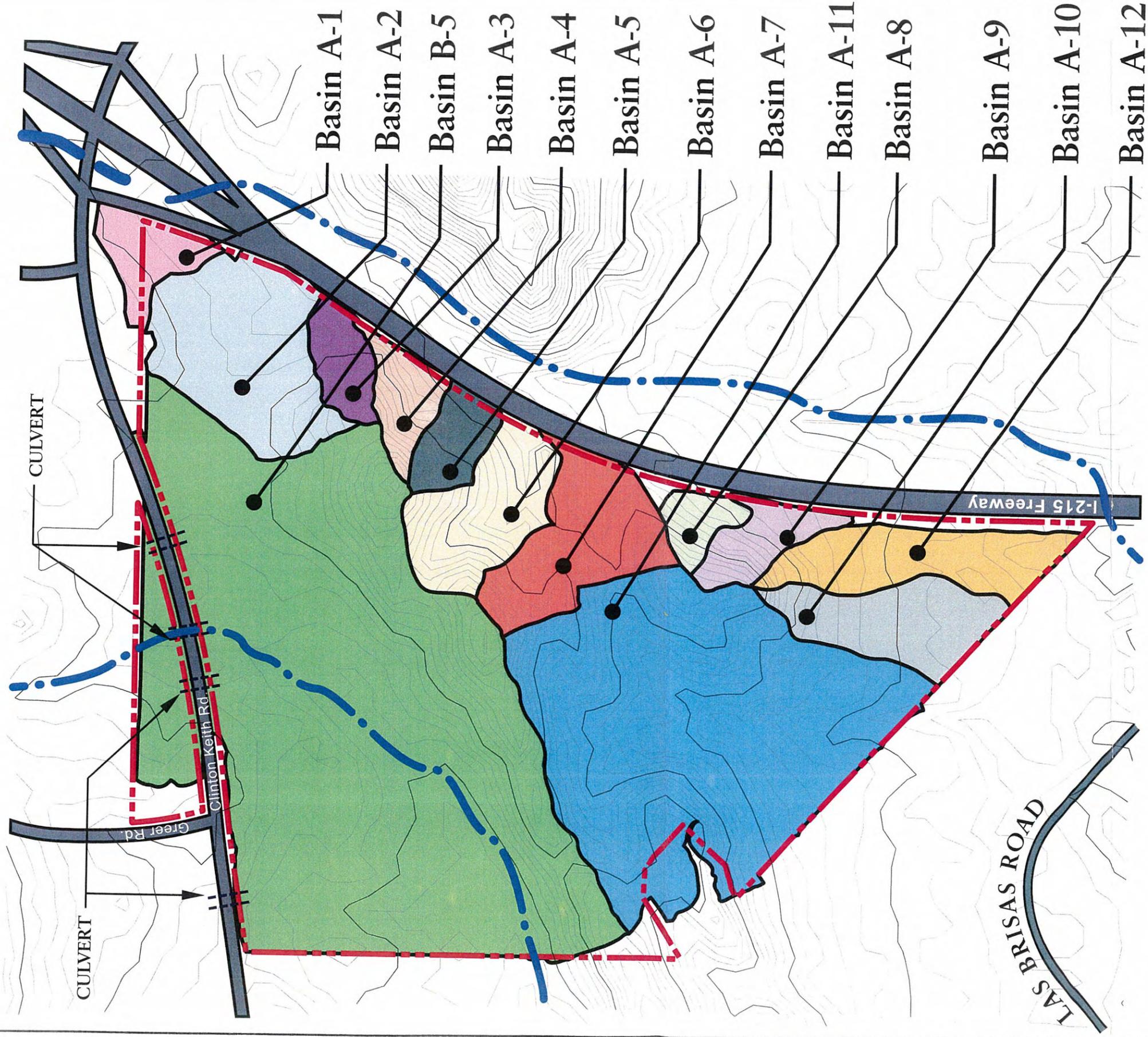
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**EXISTING OFFSITE BASINS**

**FIGURE IV-H-1**





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EXISTING ONSITE BASINS

FIGURE IV-H-2



Development of open land almost always results in greater hardscape, which leads to less absorption of rain and increased runoff. Simultaneously, a development that reduces the steepness of a site or the length of some slopes can allow greater absorption of rain in the non-hardscape areas (lawns, landscaping). Because the slopes are less steep or shorter, the runoff flows more slowly, and has more time to be absorbed by the soil.

The introduction of impervious surfaces with roadways, driveways, and houses would increase the amount of urban runoff during rainstorms. Petroleum products from vehicular traffic and parking and household fertilizers and pesticides would be introduced into the runoff, with the great majority in the runoff in the first storm of the season. These pollutants can impact water quality.

Project design has incorporated measures to prevent these potential impacts. The existing Basin A-1 will be modified and its runoff diverted to a different culvert. Basins A-2 through A-9 will be modified to Developed Condition Basins F-1 through F-8; each will flow through an existing culvert under I-215 (Figure IV-H-3). The proposed grading of the site has been adjusted such that the runoff exiting each of these Developed Basins will be at or below the amount of runoff under presently existing conditions.

Three Developed Condition Basins, S-1, S-2, and N, have been designed to incorporate four flood detention basins to control excess storm runoff (Figure IV-H-3). Site design and grading will allow excess runoff -- amounts projected to be greater than under existing conditions -- from the areas of Basins A-1 through A-9 to these flood detention areas.

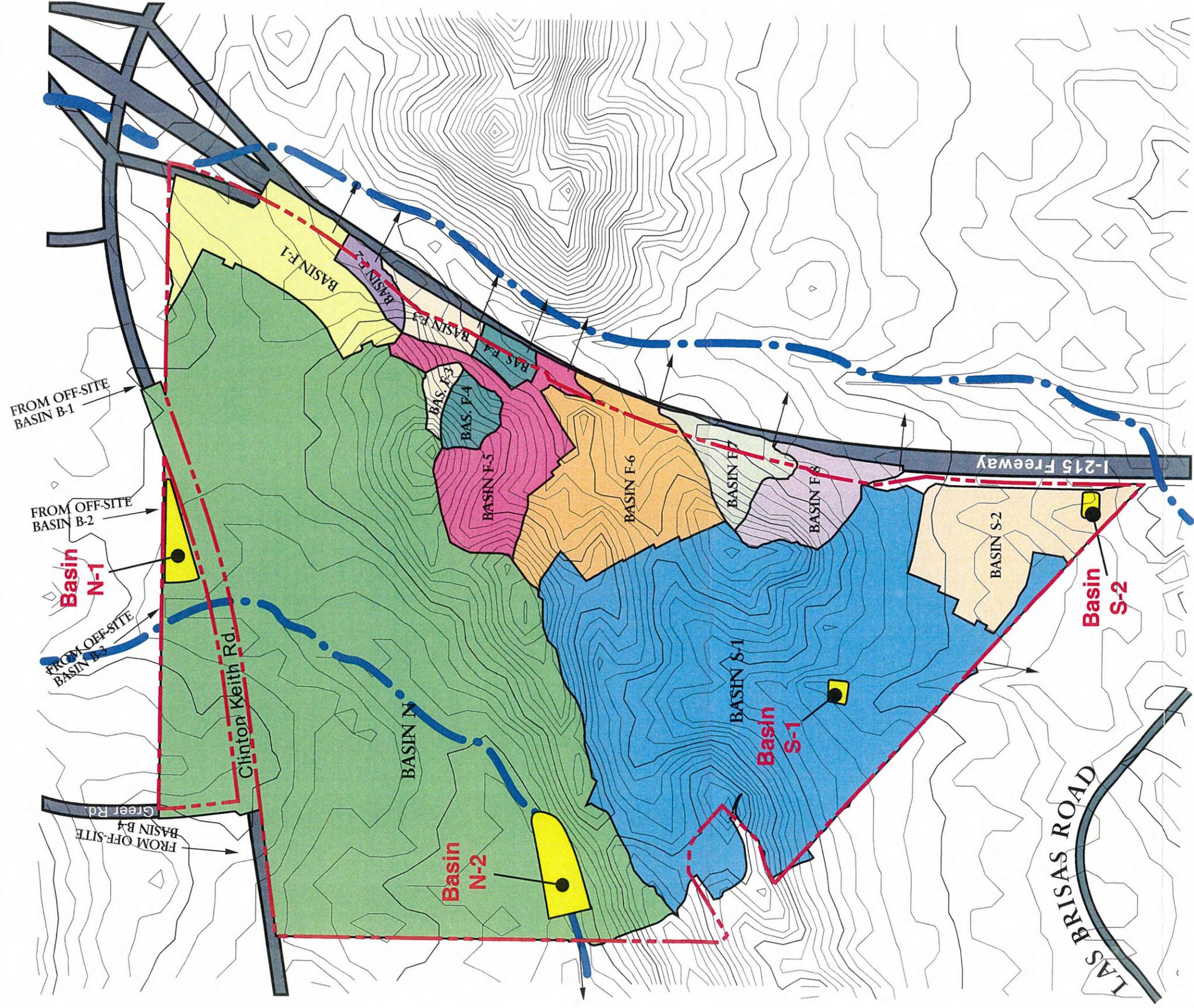
The existing Basin A-10 drains to a small ditch adjacent to existing off-site residences. Project design evaluation included concerns that these existing residences are inadequately protected from potential flooding. To eliminate these concerns, all runoff from the area of existing Basin A-10 will be diverted to Developed Condition Basins S-1 and S-2, which contain flood detention basins. No runoff from the project will be placed in the small ditch adjacent to the offsite properties.

The onsite existing Basin B-5 will become Developed Condition Basin N (Figure IV-H-3). A detention basin will be placed north of Clinton Keith Road (basin N-1) to receive the outflows of Basins B-2 and B-3, and deliver them under Clinton Keith Road in one culvert, to the existing open channel. Flows entering from offsite Basin B-1 will be run in a pipe to join this open channel (Figure IV-H-3). Runoff from offsite Basin B-4 will continue in its existing channel.

A second detention basin will be incorporated into Developed Condition Basin N. This will be associated with the open channel near the western boundary of the site (basin N-2, Figure IV-H-3).

No flooding impacts would be expected with the proposed project.





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DEVELOPED CONDITIONS BASINS

FIGURE IV-H-3



## **Significance of Impact**

No significant impacts to runoff or water quality would be expected with the proposed project.

- Runoff will exit the project area at the same places as at present.
- The magnitude of each separate developed condition flow exiting the project area will be equal to or less the magnitude of the corresponding existing condition flow (2-year, 5-year, 10-year storm events and 100-year storm).
- The earthen-bottom stream channels and four detention basins will allow absorption and infiltration of runoff. The vegetation in these will contribute to the capture and breakdown of urban pollutants, reducing the potential of such materials being carried to downstream receiving waters.

## **Mitigation Measures**

As no significant impacts were identified, no mitigation is necessary. Adherence to project design will be done at the City with plan checks associated with the issuance of grading permits. Measures to assure the establishment of vegetation are included in Section IV-D, Biological Resources.

## I. LANDFORM ALTERATION

Background engineering information for the following analysis was provided by Crosby, Mead, Benton and Associates.

### Existing Conditions

The proposed project is currently undeveloped and has a rural character. The property is dominated by a prominent ridge running northeast to southwest across the property. On-site elevations range from a low of 1,307 ft above mean sea level (AMSL) at the southeast corner of the property to a maximum height of 1,597 ft AMSL on the ridge line. The lowest point of the ridge line is approximately 1,507 ft AMSL. The property is virtually flat along Clinton Keith Road, rising to over 50 percent slopes near the ridge line peaks.

Under the City's Development Standards, areas with a slope of up to 25 percent are not considered hillside conditions. The Standards identify hillside conditions as those areas where the natural slope falls between 25 percent and 50 percent. In such areas, development is limited to less visually prominent slopes where grading, vegetation removal, and safety, environmental, and aesthetic impacts can be minimized. The City's General Plan require steep hillsides equal to or exceeding a 50 percent slope to be designated as open space. Approximately 80 percent of the property consists of slopes less than 25 percent, contained primarily in the northern and extreme southern portions of the site. Slopes of between 25 to 50 percent comprise roughly 15.5 percent of the property, with slopes of over 50 percent located on about 0.7 percent. The slope analysis is summarized below in Table IV-I-1. The topography of the site is shown in Figure IV-I-1.

Table IV-I-1 Slope Analysis Summary

Category	Acreage	Percent
Up to 25 percent slopes	219.0 acres	79.8 %
25 to 50 percent slopes	50.6 acres	19.5 %
50 percent and greater slopes	1.9 acres	0.7 %
Total	259.6	100.0



**SLOPE CATEGORIES AND AREAS**

0% < SLOPE < 25%	207.1 AC	79.8 %
25% < SLOPE < 50% HEIGHT < 30'	11.9 AC	4.6 %
25% < SLOPE < 50% HEIGHT > 30'	38.7 AC	14.9 %
50% < SLOPE HEIGHT < 30'	1.4 AC	0.5 %
50% < SLOPE HEIGHT > 30'	0.5 AC	0.2 %

TOTAL PROJECT AREA 259.6 AC 100.0 %

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SLOPE ANALYSIS  
 OF EXISTING TOPOGRAPHY

FIGURE IV-I-1



## **Impact**

The proposed project would require 1,400,000 cu yds of balanced cut (82.5 acres) and fill (106.9 acres) over a total of 178.45 graded acres. Hillside portions of the property (those areas with a slope of over 50 percent) would be left in their natural state; adjacent areas would be contour graded. The maximum height cut on-site would be 97 ft, located on Lot 423 in the southern portion of the property. Figure IV-I-2 shows the proposed lot placement relative to the conceptual contour grading plan.

All cut material would be redeposited on-site. The majority of the fill would be placed in the southern, northeastern, and central western portions of the property. Cut areas and fill areas are identified in the conceptual cut/fill plan shown in Figure IV-I-3. The overall grading per acre is 5,511 cu yds.

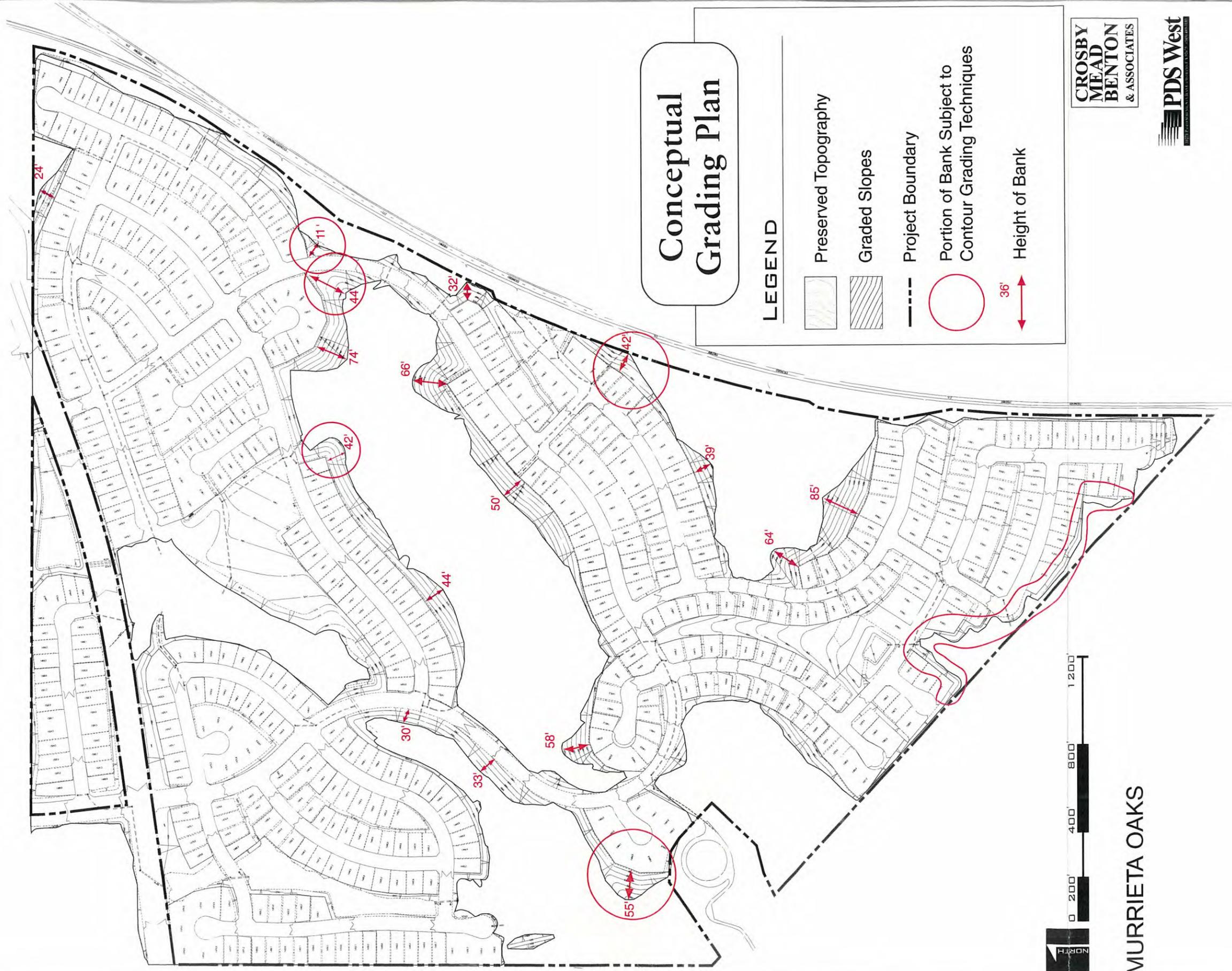
## **Significance of Impact**

The project would retain open areas on all hillside portions of the property with slopes exceeding 50 percent as required by the City. Therefore, no encroachment into hillsides would occur with project implementation. Alteration of the property involving the cut and fill of 1,400,000 cubic yards would result in significant grading impacts; use of measures designated by the City's Grading Ordinance would reduce these impacts to below a level of significance.

## **Mitigation Measures**

- Grading shall be minimized on slopes, ridges, and canyons
- Contour grading techniques shall be used wherever possible
- Cut and fill shall be balanced on-site
- Excess soil shall be used on-site
- All grading and drainage system plans shall be prepared under the direction of a licensed Civil Engineer
- Slope variation and undulation shall be followed wherever possible to retain natural contours
- Existing dominant landforms shall be retained and incorporated into the project design





# Conceptual Grading Plan

## LEGEND

- Preserved Topography
- Graded Slopes
- Project Boundary
- Portion of Bank Subject to Contour Grading Techniques
- Height of Bank

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**PDS West**  
PDESIGN SOLUTIONS



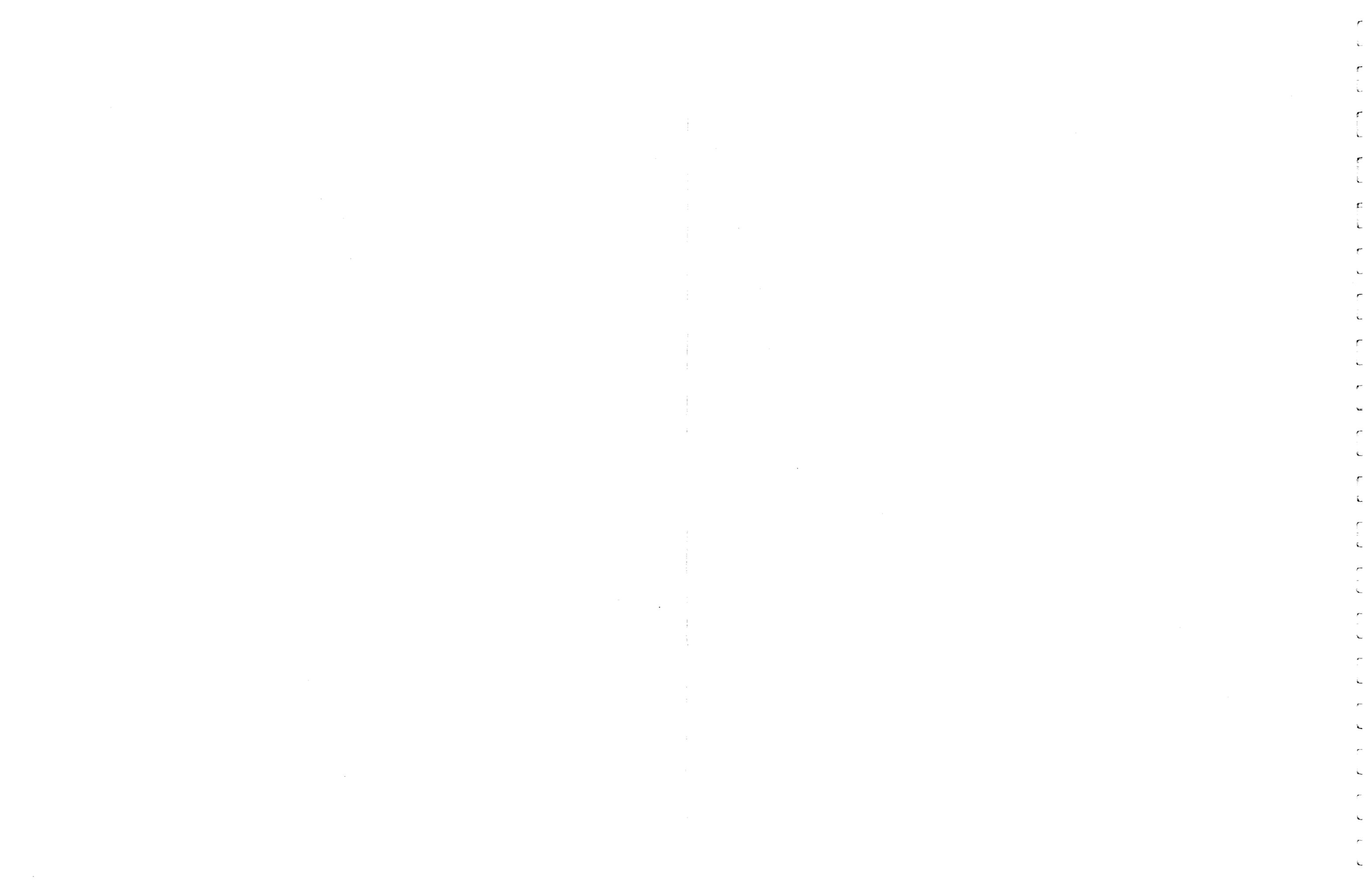
**MURRIETA OAKS**

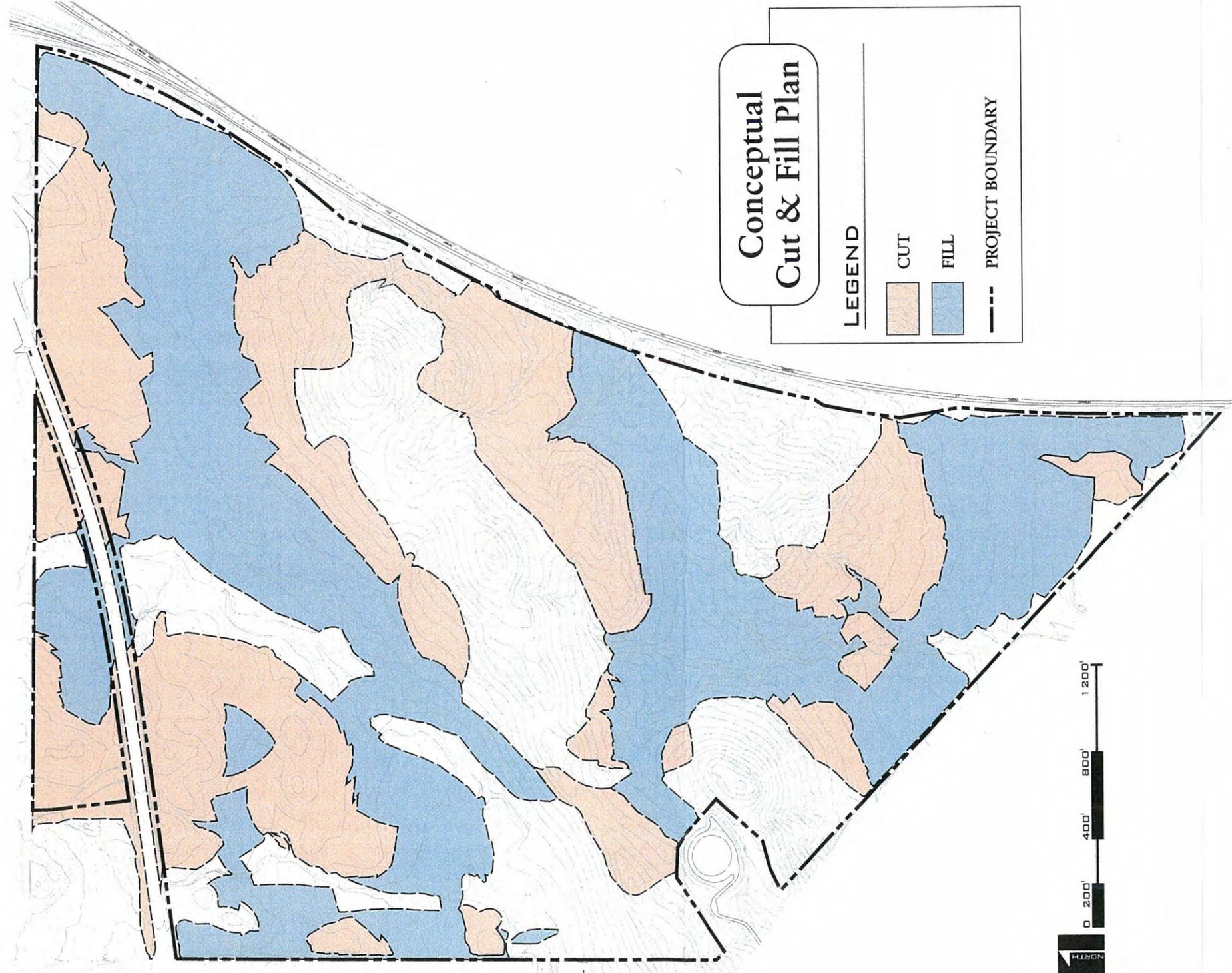
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CONCEPTUAL CONTOUR GRADING PLAN

FIGURE IV-I-2





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CONCEPTUAL CUT/FILL PLAN

FIGURE IV-I-3



- Grading shall emphasize and accentuate scenic vistas and natural landforms wherever possible
- Slopes adjacent to roadways and developments shall be graded to create a varied, undulating appearance
- Graded soils and exposed slopes shall be seeded and planted with approved landscape materials using approved procedures as soon as site grading is completed
- Visually prominent slopes and vistas shall be preserved to the maximum extent feasible
- Drainage courses shall remain unaltered to the maximum state possible
- Residential access across drainages shall be accomplished by means of a bridge or aesthetically enhanced culvert. Natural materials shall be used to protect slope banks in such areas
- Construction materials and equipment shall be centrally stored
- Construction materials and equipment shall not be stored in natural open spaces
- Streets shall be graded to follow the existing landform wherever possible
- Uniform grades on manufactured slopes shall be avoided wherever possible

## **J. LAND USE**

### **Existing Conditions**

The project site, which is designated as SP (Specific Plan) by the General Plan, consists of undeveloped land, some of which has been used for agricultural cultivation. The density allowance is 2.1-5.0 dwelling units per acre (du/ac). The property was formerly under Williamson Act contract, but this contract expired in January 1999. There are no buildings or structures on the property. Antelope Road, which has been abandoned, runs northeast to southwest diagonally across the center of the property. The majority of the project area is bounded by Clinton Keith Road to the north, by Interstate-215 to the east, and by single-family residential developments to the west and south. A 10-acre portion of the project lies across Clinton Keith Road, north of the main project location.

The project is situated in a partially developed area with single-family residential, rural residential, and vacant land use designations and associated zoning. Adjacent and nearby land uses include:

- the Del Brisa subdivision (3.97 du/ac), the San Tropez subdivision (4.31 du/ac), and designated open space to the southwest
- the Encanto subdivision, designated SP (Specific Plan) (2.38 du/ac) to the west
- Interstate-215 to the east
- vacant land to the east of the property, across Interstate-215, designated SP (Specific Plan) (2.1- 5.0 du/ac) and Community Commercial (0.27 floor area ratio)
- rural residences, designated Rural Residential (0.1-0.4 du/ac) to the north
- vacant land northeast of the property designated Regional Commercial (0.50 floor area ratio)

The existing General Plan designations and zoning for surrounding properties are shown in Figure IV-J-1.

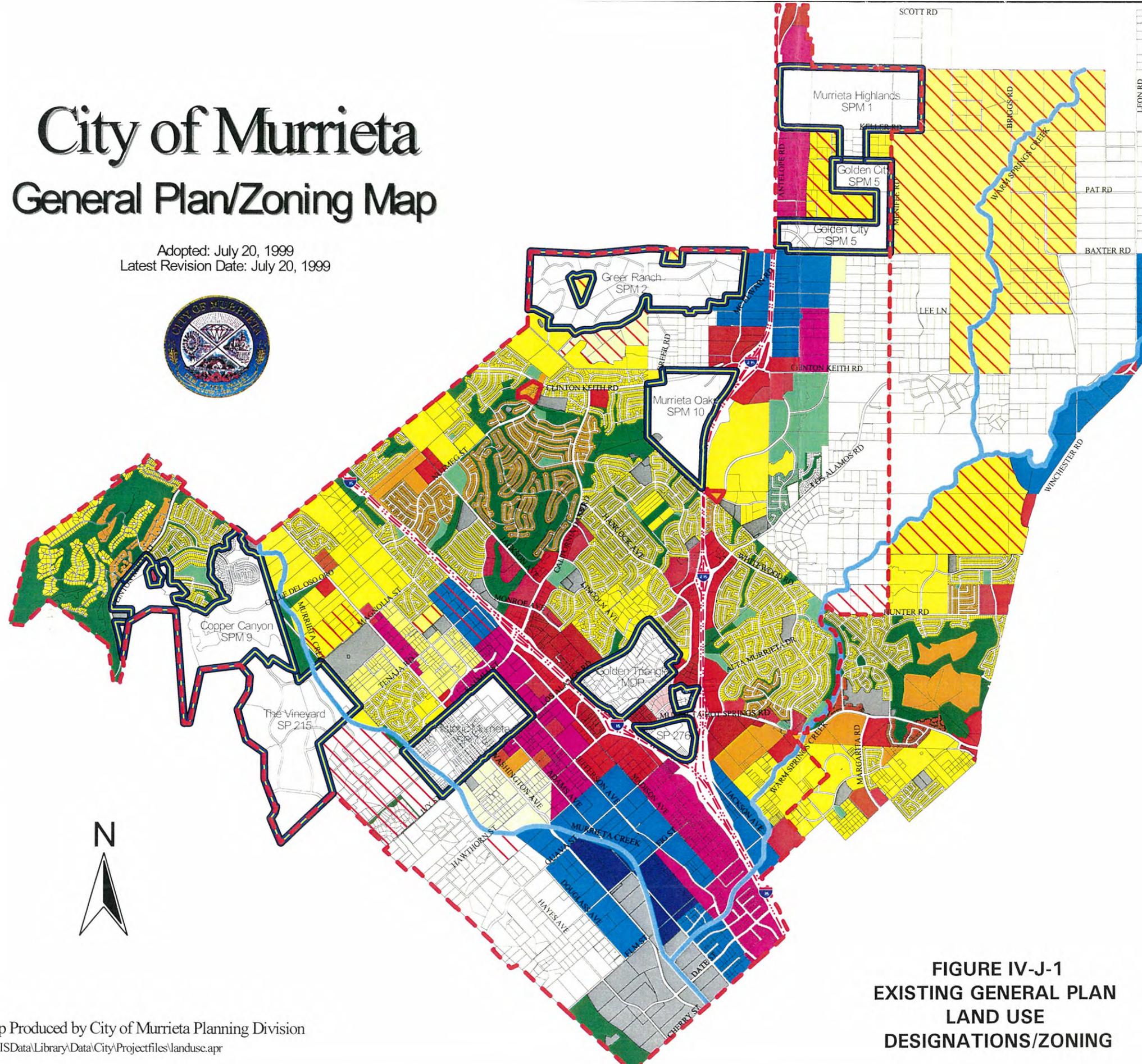
### **Impact**

The Tentative Map would develop up to 560 single-family residential lots on 260 acres, along with associated infrastructure. No change in land use designation is needed for the project, which is presently designated as SP (Specific Plan) by the General Plan.

# City of Murrieta

## General Plan/Zoning Map

Adopted: July 20, 1999  
 Latest Revision Date: July 20, 1999



### GENERAL PLAN / ZONING LEGEND

<p><b>RESIDENTIAL</b></p> <ul style="list-style-type: none"> <li>RR (Rural Residential) BASE DENSITY 0.4 du/ac TARGET DENSITY None MIN. LOT SIZE 2.5 Acres 20,000 s.f. (MPO)</li> <li>ER-1 (Estate Residential 1) BASE DENSITY 0.5-1.0 du/ac TARGET DENSITY None MIN. LOT SIZE 1 Acre 10,000 s.f. (MPO)</li> <li>ER-2 (Estate Residential 2) BASE DENSITY 1.1-2.0 du/ac TARGET DENSITY None MIN. LOT SIZE 3 Acres 7,200 s.f. (MPO)</li> <li>ER-3 (Estate Residential 3) BASE DENSITY 2.0-3.0 du/ac TARGET DENSITY None MIN. LOT SIZE 10,000 s.f.</li> <li>SF-1 (Single-Family 1, Residential) BASE DENSITY 2.1-3.0 du/ac TARGET DENSITY 3.5 du/ac MIN. LOT SIZE 7,200 s.f.</li> <li>SF-2 (Single-Family 2, Residential) BASE DENSITY 5.1-10.0 du/ac TARGET DENSITY 5.1 du/ac (detached projects) 8.0 du/ac (attached projects) MIN. LOT SIZE 5,000 s.f. 5 ac site area</li> <li>MF-1 (Multi-Family 1, Residential) BASE DENSITY 10.1-15.0 du/ac TARGET DENSITY 12.0 du/ac MIN. SITE SIZE 5 Acres</li> <li>MF-2 (Multi-Family 2, Residential) BASE DENSITY 15.1-18.0 du/ac TARGET DENSITY 16.0 du/ac MIN. SITE SIZE 5 Acres</li> </ul> <p><b>PARKS AND OPEN SPACE</b></p> <ul style="list-style-type: none"> <li>P&amp;R (Parks &amp; Recreation)</li> <li>PR (Private Recreation)</li> <li>OS (Open Space)</li> </ul> <p><b>MISCELLANEOUS</b></p> <ul style="list-style-type: none"> <li>CI (Civic/Institutional)</li> <li>SP (Specific Plan)</li> </ul>	<p><b>COMMERCIAL</b></p> <ul style="list-style-type: none"> <li>PC (Professional Commercial) 50 Floor Area Ratio</li> <li>NC (Neighborhood Commercial) 25 Floor Area Ratio</li> <li>CC (Community Commercial) 27 Floor Area Ratio</li> <li>RRC (Recreational/Resort Commercial) 25 Floor Area Ratio</li> <li>RC (Regional Commercial) 50 Floor Area Ratio</li> </ul> <p><b>INDUSTRIAL</b></p> <ul style="list-style-type: none"> <li>BP (Business Park) 40 Floor Area Ratio</li> <li>GI (General Industrial) 40 Floor Area Ratio</li> </ul> <p><b>MULTIPLE USE</b></p> <ul style="list-style-type: none"> <li>MU-1 (Multiple Use - 1, Golden Triangle) - Refer to Master Development Plan for Golden Triangle</li> <li>MU-2 (Multiple Use - 2) - Refer to Industrial Development standards in Murrieta Development Code</li> <li>MU-3 (Multiple Use - 3) - Refer to Commercial Development standards Development Code</li> </ul>
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### ADDITIONAL FEATURE LEGEND

<ul style="list-style-type: none"> <li>Specific Plan/Master Development Plan Boundary</li> <li>SP - Specific Plan</li> <li>SPM - Specific Plan Murrieta</li> <li>MDP - Master Development Plan</li> </ul>	<ul style="list-style-type: none"> <li>Master Plan Overlay (MPO)</li> <li>Creeks</li> <li>City Limits</li> </ul>
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**Notes:**  
 Master Plan Overlay (MPO): May be used to preserve sensitive lands, sensitive species, or for a more efficient utilization of infrastructure and resources. Projects in the MPO with RR, ER-1, ER-2 designations shall not exceed the base density of the designation. Projects in the SF-1 designation shall not exceed the target density of that designation. A MPO is not permitted within the ER-3 designation. Only single-family detached development is permitted within a MPO, unless within a Specific Plan.  
 Target Density: Single-family residential base densities (or target densities if specified) are the maximum permitted density unless a project complies with State density bonus provisions. Multi-family target densities are the maximum permitted density unless a project provides exceptional design/development amenities which exceed Development Code standards, provision of community infrastructure, and/or complies with State density bonus provisions.

**FIGURE IV-J-1**  
**EXISTING GENERAL PLAN**  
**LAND USE**  
**DESIGNATIONS/ZONING**



A 5.13-acre neighborhood park, located in the north central portion of the project, near Clinton Keith Road (see Figure III-1), has been set aside to meet the City's recreation requirement, which calls for the dedication of 5.0 acres of active use parkland per 1,000 population. A 10.00-acre elementary school site adjacent to the park has been requested by the Murrieta Valley Unified School District. The project would also provide approximately 65.25 acres of natural open space including an associated passive use trail system.

Compatibility. The project would have a density of 2.2 du/net ac, which is within the density allowance for the SP (Specific Plan) land use designation of 2.1-5.0 du/ac as specified in the Murrieta Municipal Code (Title 16.06). The project would be compatible with the existing single-family residential subdivisions located to the south and west, with rural residences to the north, and with future single-family residences located to the east, across Interstate-215. It would also be compatible with the designated open space area to the southwest, by linking it to planned natural open space within the project (see Figure III-2). The portion of the project located north of Clinton Keith Road would be located near an area designated for Regional Commercial use, but since these proposed lots are clustered at the western end of the parcel, the resulting open space on the east would provide a buffer between the lots and the potential future commercial use. Land use incompatibilities would occur between those portions of the project adjacent to Interstate-215 and Clinton Keith Road, and the eastern portions of the project north of Clinton Keith Road.

The project is located in a portion of the City which is characterized by single-family residences and open space. Its agricultural usage ended with the termination of its Williamson Act contract. The proposed project is consistent with other residential uses in the area and no adverse impacts to land use would result. The proposed commercial uses to the northeast and to the east across I-215 are not immediately adjacent to the project or would be buffered from these areas by City code requirements and would not represent adverse impacts. However, significant land use incompatibilities could occur between Interstate-215 and those lots adjacent to it.

### **Significance of Impact**

Incompatibility impacts between the project and adjacent Interstate-215 could occur. These impacts can be mitigated to below a level of significance by implementation of the mitigation measures specified below.

### **Mitigation Measures**

All potential land use incompatibilities can be mitigated to below a level of significance by:

- Adherence to the Specific Plan, which identifies a minimum 50-ft wide setback between the northeastern portion of the project area and Interstate-215. The entire eastern portion of the project would be enclosed with a 6-to-8 ft-high masonry sound attenuation wall.

- Adherence to the Specific Plan which identifies a 6-ft high masonry community wall between residential lots and Clinton Keith Road.

## K. NOISE

A Noise Impact Analysis was prepared for the proposed project by James P. Kurtz (1999b). The report, included as Appendix H to this EIR, provides the background for the following analysis.

### Existing Conditions

Noise Standards. The City of Murrieta, which has adopted the State of California noise/land use compatibility standards (Figure IV-K-1), regulates the level of noise which may be generated from one property to another. The exterior noise level standard for noise-sensitive areas, including residences, is 60 decibel (dB) Community Noise Equivalent Level (CNEL) ; the standard for interior noise levels is 45 dB CNEL. The City's Noise Element, contained in the General Plan, states:

Within the 65 dB to 70 dB CNEL residential development should be carefully reviewed to ensure that proper mitigation is included in projects in order to meet California Noise Insulation Standards for maximum interior noise levels of 45 dB.

The CNEL scale represents a time-weighted 24-hour average sound level (dBA  $L_{eq}$ ); noise that occurs during certain sensitive periods is penalized for occurring at these times. The evening period (7 pm to 10 pm) penalized noise by 5 dBA, and nighttime (10 pm to 7 am) noises are penalized by 10 dBA. The penalties are added to reflect increased sensitivity to noise during these hours.

Title 24 of the California Administrative Code requires that residential structures, other than detached single-family residences, be designed to prevent the intrusion of exterior noise so that the interior CNEL with windows closed do not exceed 45 dBA in any habitable room. The application of this standard with regard to single-family detached dwellings is implied in the City's Noise Element.

Traffic Conditions. Currently, and in the future, most noise within the project area would be generated by traffic on Clinton Keith Road and Interstate-215. Clinton Keith Road, located on the northern boundary of the project area, is a two lane road that widens to four lanes in the western boundary of the project area. Existing traffic on Clinton Keith Road is estimated at 1176 Average Daily Trips (ADT). Interstate-215, located on the eastern boundary of the project area, is a major freeway connecting San Diego and Riverside. A freeway interchange is located at Clinton Keith Road and Interstate-215.

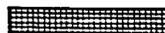
As indicated by the Circulation Element of the City of Murrieta's General Plan, at

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE Ldn Or CNEL, db					
	55	60	65	70	75	80
Residential - Low Density Single Family, Duplex, Mobile Homes	█	█	█	█	█	█
Residential - Multi. Family	█	█	█	█	█	█
Transient Lodging - Motel, Hotels	█	█	█	█	█	█
Schools, Libraries, Churches, Hospitals, Nursing Homes	█	█	█	█	█	█
Auditorium, Concert Hall, Amphitheaters	█	█	█	█	█	█
Sports Arena, Outdoor Spectator Sports	█	█	█	█	█	█
Playgrounds, Neighborhood Parks	█	█	█	█	█	█
Golf Courses, Riding Stables, Water Recreation, Cemeteries	█	█	█	█	█	█
Office Buildings, Business Commercial and Professional	█	█	█	█	█	█
Industrial, Manufacturing, Utilities, Agriculture	█	█	█	█	█	█



**NORMALLY ACCEPTABLE**

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.



**CONDITIONALLY ACCEPTABLE**

New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.



**NORMALLY UNACCEPTABLE**

New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.



**CLEARLY UNACCEPTABLE**

New construction or development clearly should not be undertaken.

A major objective of the noise element is to utilize this information to insure compatible land use planning: The noise contours shall be used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of community residents to excessive noise. (Government Code Section 65302(f))

SOURCE: CITY OF MURRIETA GENERAL PLAN, 1999

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**COMPATIBILITY STANDARDS**

**FIGURE IV-K-1**

buildout, traffic on Clinton Keith Road is anticipated to be 68,000 ADT; buildout traffic on Interstate-215 is anticipated at 170,000 ADT.

Surrounding Land Use. Estate residential development is located just north of Clinton Keith Road; clustered single-family subdivisions are located adjacent to the project area on the south, southwest, and west. Applicable noise levels along the project's boundaries are 50 dBA <sub>Leq(30 min.)</sub> For the day and evening hours and 45 dBA <sub>Leq(30 min.)</sub> for the nighttime.

Sensitive Biological Species. No threatened or endangered noise sensitive biological species are present in the project area.

## **Impact**

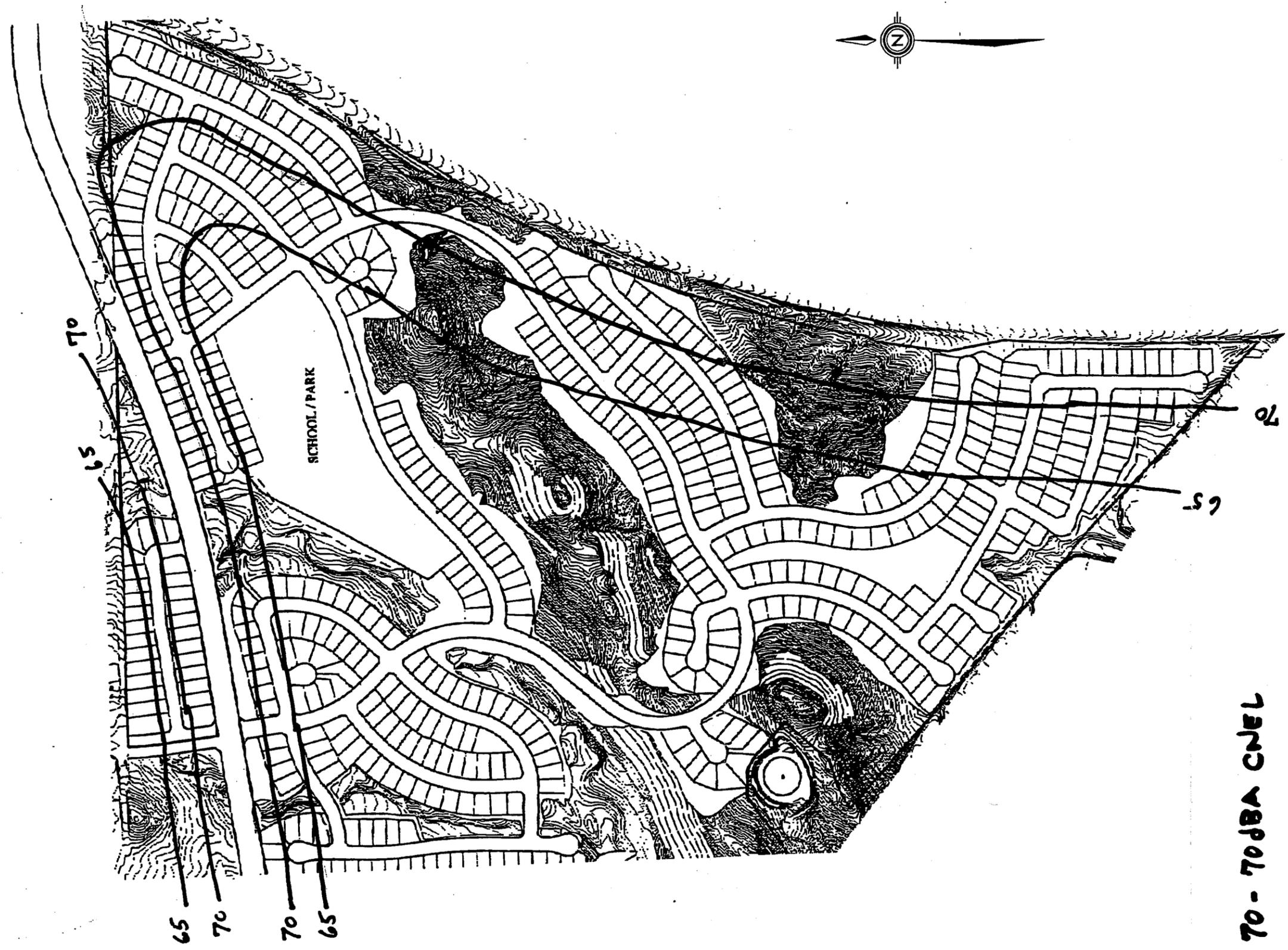
Traffic Generated Noise. The FHWA Traffic Noise model was used to calculate traffic noise levels. Based on an average speed of 50 miles per hour, on Clinton Keith Road, the 70 dBA CNEL noise contour would be located approximately 140 ft from the center of the road; the 65 dBA CNEL noise contour would be 350 ft from the center of the road. Using an average speed of 70 miles per hour, on Interstate-215 the 70 dBA CNEL noise contour was about 525 ft from the center of the freeway; the 65 dBA CNEL noise contour was 1100 ft from the center.

As shown in Figure IV-K-2 , a considerable portion of the proposed development would be located between the 65 dBA CNEL contour and the roadways, and some residences would be located between the 70 dBA CNEL and the roadways.

Project Generated Noise. Noise generated on the project site would be typical of residential neighborhoods. Such noise might include children playing, dogs barking, trash removal and landscape maintenance equipment noise. The project would not be anticipated to generate noise levels in excess of 50 dBA at the property boundaries during the day, or 45 dBA at night.

Construction Generated Noise. Noise would be generated during project site preparation, grading, and construction. Construction noise levels typically average 85-90 dB  $L_{eq}$  at a distance of 50 ft from the equipment for short periods of time during site preparation and grading. Following site preparation, noise levels are anticipated to average 65-75 dB  $L_{eq}$  at a distance of 50 ft. All construction shall be performed between 7 am and 7 pm and would comply with the construction standards required by City's noise ordinance.





**70 - 70dBA CNEL**

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**UNATTENUATED NOISE CONTOURS**

**FIGURE IV-K-2**



## **Significance of Impact**

Exterior noise levels in excess of 60 dBA CNEL are not compatible with the City of Murrieta's Noise Element and must be mitigated to meet the City's standard.

Traffic Generated. Those parts of the project area experiencing traffic-related exterior noise levels greater than 60 dBA CNEL and interior noise levels greater than 45 dBA would be subject to significant traffic noise impacts and mitigation measures would be required.

Construction Generated Noise. Construction noise impacts would be temporary and infrequently adverse. Therefore, construction-related noise impacts would not be significant.

## **Mitigation Measures**

- The project would construct a 6-to-8 ft-high split stone or slumpstone wall along the perimeter of the property. Construction of this barrier would reduce exterior ground level impacts to below a level of significance.
- Natural or artificial barriers shall be constructed at those areas of the project experiencing exterior ground level noise levels in excess of 60 dBA CNEL.
- When development plans are generated, noise analyses shall be performed for all areas where exterior noise levels could exceed 60 dB CNEL to determine if noise mitigation would be required to meet City standards for exterior and interior noise levels.
- The City's noise standards for residential air conditioning shall be incorporated into development requirements.

## L. PUBLIC FACILITIES

### Existing Conditions

Police Services. The objective of the Safety Element of the City's General Plan regarding police facilities is to control crime in the City by maintaining adequate police department staff, equipment, and facilities. The city of Murrieta's Police Department is located at 40080 California Oaks Road. Murrieta's standard response time is within 5 minutes for Priority 1 calls (Grady, personal communication, 1999). As of May 1999, the Police Department has a total of 32 sworn officers, a ratio of .69 per 1,000 population (Landwehr, personal communication, 1999)

Fire Protection and Emergency Medical Services. Regarding fire department facilities, the Safety Element objective is to provide a safe living environment ensuring adequate fire protection services to prevent and reduce the loss of life and property from structural, wildland, and wildland/urban fire damage.

The Murrieta Fire Protection District (MFPD) has a total of 33 full time employees. The MFPD does not have an adopted service ratio standard. Current staffing provides 0.7 fire personnel per 1,000 residents (Allen, personal communication, 1999). The Murrieta Fire Protection District Fire Protection Plan, which outlines future staffing and equipment needs, recommends a ratio of approximately 1.38 career-uniform firefighters per 1,000 population based on a build-out population of 60,000.

Fire and emergency medical services are provided to the project's vicinity from Station 2 at 40060 California Oaks Road which has three firefighters on duty at all times. A total of eight firefighters from all three stations respond to structural fires within a five minute response time.

Library. The Murrieta Public Library, located at 39589 Los Alamos Road, opened in April 1999. It has just over 7,000 books and periodicals at this time. The library is open 39 hours a week including two evenings and Saturdays. The library staffs four full time and three part time employees (Steedman, personal communication). Murrieta library cards are honored at any Riverside County branch, including Temecula, Sun City, and Elsinore. Interlibrary loan services are available, making it possible for Murrieta residents to have access to library resources across the county. Funding for the new facility comes from a portion of property taxes. Three cents of every property tax dollar collected in Murrieta is used for library services.

Water Service. The proposed project lies within the service boundary of the Eastern Municipal Water District (EMWD). While at this time EMWD does not have the facilities necessary to provide potable water to Murrieta Oaks, water service could be provided with

proposed infrastructure improvements to extend the existing facilities to the project (Back, personal communication, 1999).

Wastewater Collection. EMWD provides wastewater collection service to the project area. Existing sewer mains lie southwest of the proposed project in Las Brisas Road. While these existing sewer mains would not be sufficient to provide service to the project, service could be provided with proposed infrastructure development to the disposal system that would carry effluent out of the Murrieta Oaks project (Back, personal communication, 1999).

## **Impact**

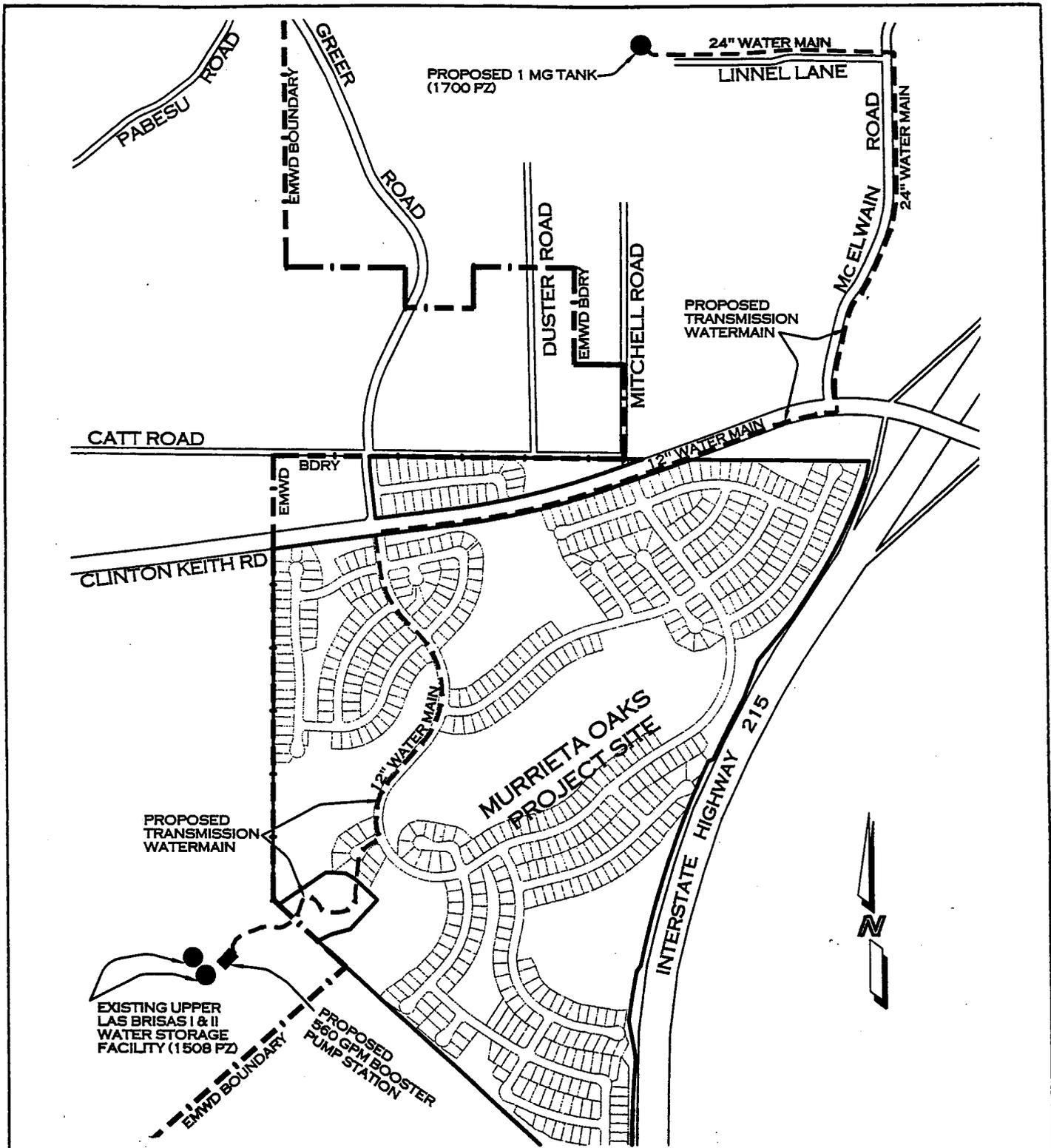
Police Services. Development of the Murrieta Oaks project would introduce 560 single-family residences into Murrieta, increasing the need for police services and increasing response times. Response times to the project would exceed the City's standard.

Fire Protection and Emergency Medical Services. Construction of the Murrieta Oaks project would increase demand for fire protection and emergency medical services, but adequate response time could be provided under most conditions (Allen, personal communication, 1999).

Library Services. Development of the Murrieta Oaks Project would introduce 560 single-family residences into the City of Murrieta increasing the demand for library services.

Water Service. In order for water service to be provided to the proposed project, a new water distribution system has been proposed. The following water distribution system was designed by the EMWD and Crosby, Mead, Benton & Associates. A one-million gallon reservoir tank would be constructed to the north of Murrieta Oaks at the end of Linnel Lane (see Figure IV-L-1). The existing Upper Las Brisas I & II Water Storage Facility would fill the proposed new tank. A new booster pump station, rated at 560 gallons per minute (GPM), would be built at the Water Storage Facility. Water being pumped by the new booster pump station to the 1 MG tank would travel in a 12" transmission main across the Murrieta Oaks project to Clinton Keith Road and then along Clinton Keith to McElwain Road where the water main would increase in diameter to 24" to the end of Linnel Lane.

Potable water and fire fighting water would be delivered to the residential areas of the project by smaller water mains in the streets to be constructed as the project is built out. These local distribution mains would tap directly into the transmission main at appropriate points. The preparation of the final engineering plans would determine the sizes and capacities and would be in conformance with EMWD standards.



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**CONCEPTUAL WATER  
 SYSTEM PLAN**

**FIGURE IV-L-1**

Wastewater Collection. In order for wastewater collection to be provided to the site, the following sewage system has been proposed by EMWD and Crosby, Mead, Benton & Associates.

Because of the northeast-southwest trending ridge line in the property, it has been proposed that a Sewer Lift Station be built at the lowest point on the northern end of the project (see Figure IV-L-2). From the Lift Station a Force Main would carry effluent to the top of the watershed ridge where it would go into the proposed 15" gravity sewer main. Existing mains within Las Brisas Road and Hancock Avenue have limited capacity so an offsite sewer trunk main would be constructed. The diameter of the proposed sewer trunk main would be 15" and would carry wastewater from the proposed project to the EMWD collection network and the EMWD treatment facilities.

### **Significance of Impact**

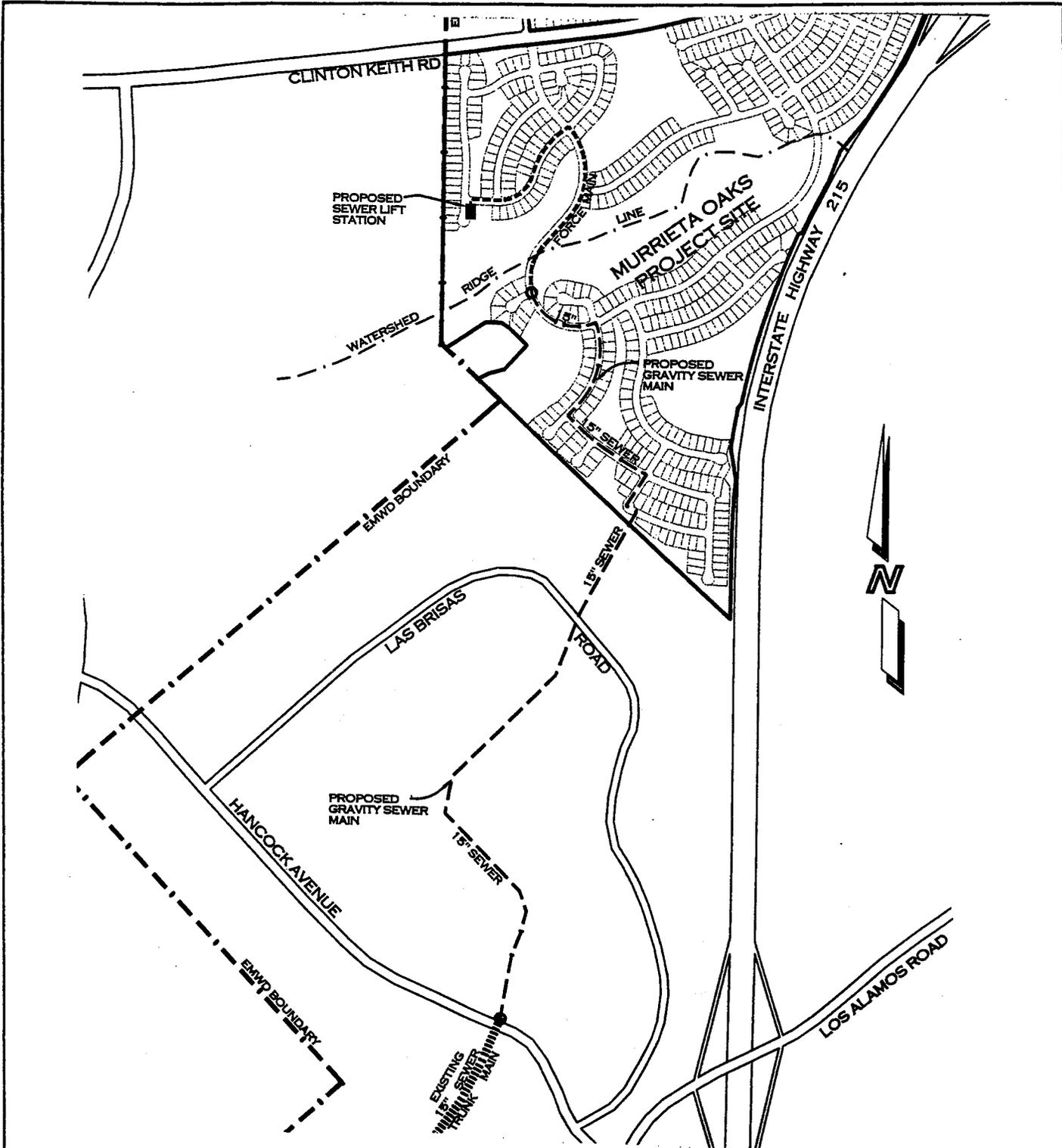
Police Services. While the police response times would exceed the City's standard, revenues to the city from property and sales tax paid by new consumers would lower the impact to police services to a level below significance.

Fire Protection and Emergency Medical Services. The proposed project would increase demand for fire protection and emergency medical services, but these services could be provided to the project within the five-minute standard response time under normal conditions. No significant impacts to fire protection and emergency medical services are anticipated if the proposed project is implemented.

Library Services. No significant impacts would result from the implementation of the proposed project.

Water Service. The impacts on water service have been evaluated and incorporated into the EMWD Urban Water Management Plan. The proposed project is within the Plans' guidelines. Therefore, no significant project water-related impacts are anticipated.

Wastewater Collection. The impacts on wastewater collection have been evaluated and incorporated into the EMWD Urban Water Management Plan. The proposed project is within the Plans' guidelines. Therefore, project implementation would create no significant impacts to this service.



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**CONCEPTUAL SEWER SYSTEM PLAN**

**FIGURE IV-L-2**

## **Mitigation Measures**

While the project incrementally affects public facility services, impacts are mitigated by payment of developer fees, increased revenues to the City from property tax and long-term sales tax paid by new consumers. Payment of public facilities fees provides a feasible mitigation measure for reducing impacts of residential projects such as Murrieta Oaks.

Construction of the proposed water system infrastructure and proposed sewer system would create no significant impacts; therefore, no mitigation measures are required.

## **M. RECREATION**

### **Existing Conditions**

No recreational facilities currently exist within the Murrieta Oaks project area, although a number of facilities are located nearby. Regional public recreational facilities in proximity to the proposed project include the Cleveland National Forest, Lake Elsinore State Park, and Lake Skinner County Park. All three are considered active use facilities and offer a variety of recreational activities. The Murrieta Valley High School site offers additional recreational opportunities and includes a track and ball fields, as does the California Oaks Sports Park.

Two parkland acreage requirements must be met by the project. The Quimby Act states that 3.0 acres of active use parkland per 1,000 persons is required to serve a project. Using the City of Murrieta Community Profile Standard of 3.32 persons per household, the 560-unit Murrieta Oaks project would have a population of 1,859. A total of approximately 5.5 acres of active use parkland would be required by Murrieta Oaks for compliance with the Quimby Act active parkland standard. The City's General Plan states a standard of 5.0 acres of parkland per 1,000 population, which would place the project's park requirement at about 9.5 acres.

### **Impact**

The Murrieta Oaks project is proposing to include a 5.13 acre active use neighborhood park (Figure III-1), which would include a practice soccer field, a softball field, two half court basketball courts, a tot lot, and picnic facilities. The project includes 65.25 acres of natural open space and 44.35 acres of modified open space (landscaped banks, fuel modification zone, and park) and designates a multi-use (pedestrian and bicycle) trail system with rest areas and picnic areas. The parkland and open space would be deeded to the City of Murrieta, which, through the Community Service District, would be responsible for liability and maintenance.

With a combined open space allotment of 109.6 acres (65.25 natural open space; 44.35 modified open space), the project would provide approximately 105.23 acres more recreational land than is required by the City's General Plan. Allotted active parkland, which consists of the 5.13 active use park and the 2.2-acre trail system totals 7.33 acres, exceeding the Quimby Act active use parkland requirement of 5.5 acres by 1.83 acres (Holston, personal communication, 1999) .

## **Significance of Impact**

By introducing additional population into the area, the proposed project would increase demand on recreational facilities. Implementation of proposed mitigation measures would reduce impacts to below a level of significance.

## **Mitigation Measures**

Implementation of the active and passive parkland improvements proposed by the project and payment of the Developer Impact Fee to the City for parks and recreation would reduce impacts to recreation to below a level of significance and no further mitigation measures would be required. An agreement for the park shall be in place prior to issuance of the building permit for the 201<sup>st</sup> dwelling unit, and park construction shall begin at that time. If the elementary school is constructed before the 201<sup>st</sup> unit building permit is issued, the park shall be built in conjunction with the construction of the school.

## **N. SCHOOLS**

### **Existing Conditions**

The Murrieta Oaks project is within the Murrieta Valley Unified School District which has one elementary school, one middle school, and one high school servicing the project area. All three schools are presently operating below capacity (Stone, personal communication, 1999).

Tovashal Elementary has a capacity of 812 students, and has a present enrollment of 439 students; Thompson Middle School has a capacity of 1,182 students, and has a present enrollment of 757 students; and Murrieta Valley High School has a capacity of 3,245 students, and has a present enrollment of 2,555 students (Stone, personal communication).

The Murrieta Valley Unified School District assumes student generation rates for new development of 0.4024 elementary students, 0.1809 middle school students, and 0.2004 high school students per single-family residence.

The current school impacts developer fee rate is \$2.24 per sq. ft. of habitable living space. This project, without an approved map on file prior to November 3, 1998, would be charged the developer fee (due to the passage of SB50 and Proposition 1A) of \$2.24 per square foot of habitable living space.

### **Impact**

Construction of the Murrieta Oaks project would introduce 560 single-family residences into the Murrieta Valley Unified School District. Applying the generation rate of 0.4024 elementary students per single-family dwelling, the project would increase the enrollment at Tovashal Elementary by 225 students. The generation rate of 0.1809 middle school students per single-family dwelling would increase enrollment at Thompson Middle School by 101 students. The generation rate of 0.2004 high school students per single-family dwelling would increase enrollment at Murrieta Valley High School by 112 students. At buildout, the project would add approximately 438 new students to the Murrieta Valley Unified School District.

In addition, the Murrieta Valley Unified School District has indicated interest in purchasing land adjacent to the neighborhood park for an elementary school site (see Figures III-1 and III-2). The school, which would be planned as a separate project under CEQA, would be very similar to Tovashal School. The adjacent park/school locations would allow for shared use of the playfields and possibly other facilities.

### **Significance of Impact**

Implementation of the project would introduce new students into the Murrieta Valley Unified School District. While all three schools within the district are presently operating under capacity, the project and other new developments which may be implemented in the near future prior to the construction of the project's final phase, may significantly increase school enrollments.

### **Mitigation Measures**

Mitigation measures for the development of the school on the project site would follow LU-3.3g(i) of the Land Use Element, which states the following:

*Require that all development projects comply with the school mitigation provisions of Senate Bill 50 (Chapter 407 of the Statutes of 1998), or subsequent legislation, including, but not limited to, paying any school mitigation fees above those authorized by the Government Code if the school district is authorized by law to charge additional fees.*

The applicant would pay a developers fee of \$2.24 per square foot of habitable living space.

## O. TRANSPORTATION/TRAFFIC

A technical resources report, *Traffic Analysis for Murrieta Oaks Specific Plan*, has been prepared by Hank Mohle & Associates. This technical resources report serves as the basis for this EIR section, and is included here as Appendix I. The report was done early enough in the process to aid in project design, and assumed 600 dwelling units for the project area. With the project proposed at 560 dwelling units, the report may slightly overestimate some impacts to traffic by the smaller proposed project.

### Existing Conditions

The proposed project is located at the southwest corner of Interstate 215 and Clinton Keith Road. The existing general area roadway network is shown in Figure IV-O-1.

Clinton Keith Road. Clinton Keith Road is improved to its ultimate geometric configuration between California Oaks Road and the proposed project. Along the proposed project the road is striped for one lane in each direction, and has a speed limit of 45 mph.

Interstate-215. The Clinton Keith Road overcrossing of I-215 has one lane of moving traffic in each direction. The interchange configuration is a full diamond, with one lane on each of the four ramps. Traffic control is accomplished with stop signs for the traffic exiting on the ramps, as the ramps intersect Clinton Keith Road. There are no left-turn lanes for traffic on Clinton Keith Road wanting to turn on the I-215 on-ramps; the turns are made from the through-lanes (the only lanes) on Clinton Keith Road.

Greer Road. Greer Road is an unimproved dirt road running north of Clinton Keith Road. It has a stop sign at its T-intersection with Clinton Keith Road. Greer Road does not exist south of Clinton Keith Road, on the project property.

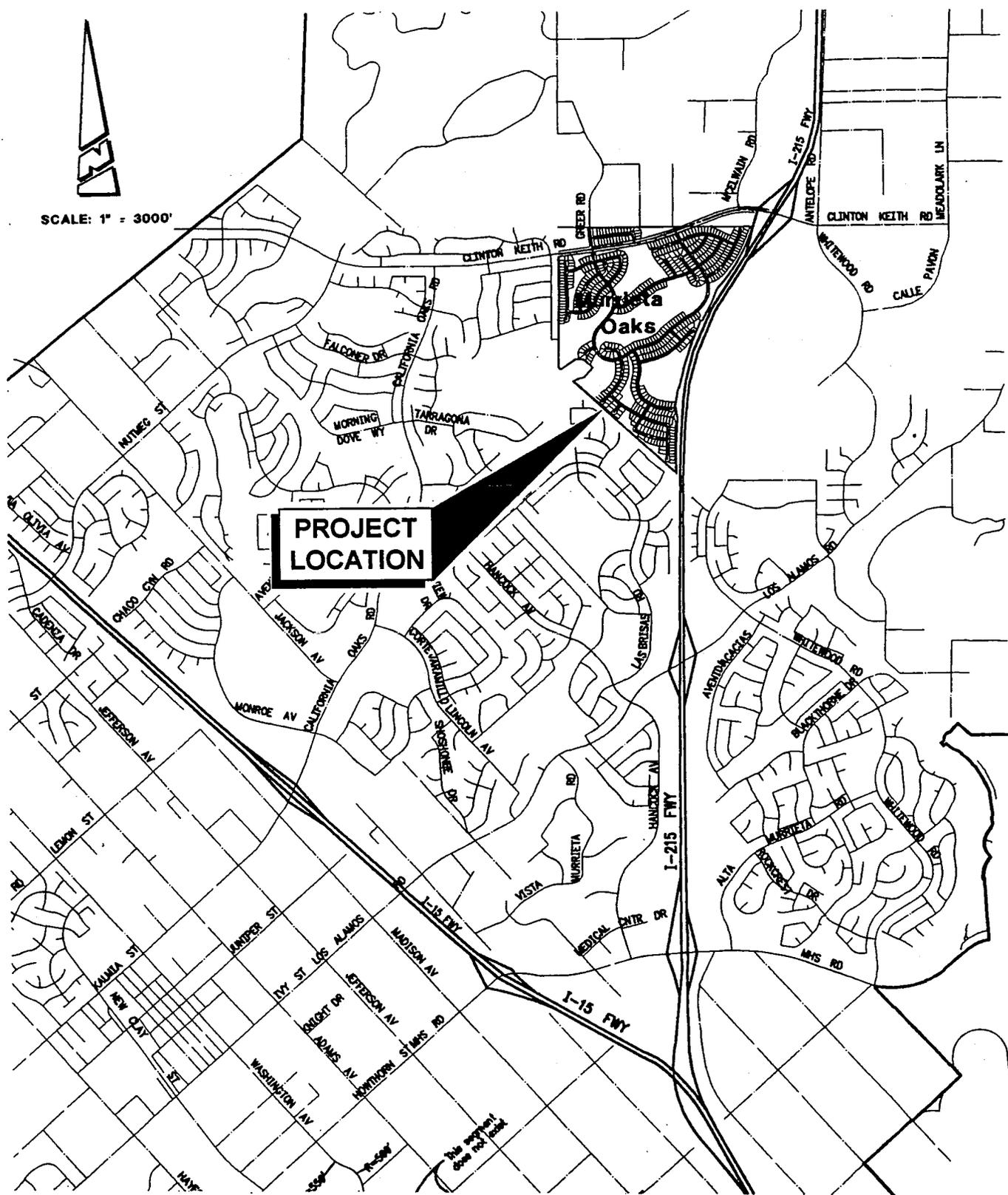
McElwain Road. McElwain Road is a two-lane paved road, also running north of Clinton Keith Road, with a stop sign at its T-intersection with Clinton Keith Road. McElwain Road does not exist on the property. The City Circulation Element calls for McElwain Road to be realigned to a position west of its current intersection with Clinton Keith Road.

California Oaks Road. California Oaks Road is a 4-lane arterial with a signalized intersection with Clinton Keith Road, approximately one-half mile west of the proposed project.

On-Site Roadways. A remnant of the abandoned Antelope Road still exists on the site. Access is blocked by a gate at the northern end of the property, and a fence near the southern end. Some rough, one-lane 4-wheel-drive roads have recently been placed for geotechnical testing on the site.



SCALE: 1" = 3000'



SOURCE: HMA, 1999

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AREA ROADS AND PROJECT

FIGURE IV-O-1

## Impacts

All of the project traffic will take its access from Clinton Keith Road. The project has been designed to have two major access points, one aligning with Greer Road, and one matching the future alignment of McElwain Road. An additional minor access point will be available for the 29 units proposed north of Clinton Keith Road, in the way of a right-in, right-out only intersection with Clinton Keith Road. The raised median on Clinton Keith Road will prevent left turns in or out of the project at this point.

The proposed project will contribute approximately 3300 vehicles westerly on Clinton Keith Road, and 2100 vehicles easterly on Clinton Keith Road per 24-hour period. Projected trip distribution is shown on Figure IV-O-2.

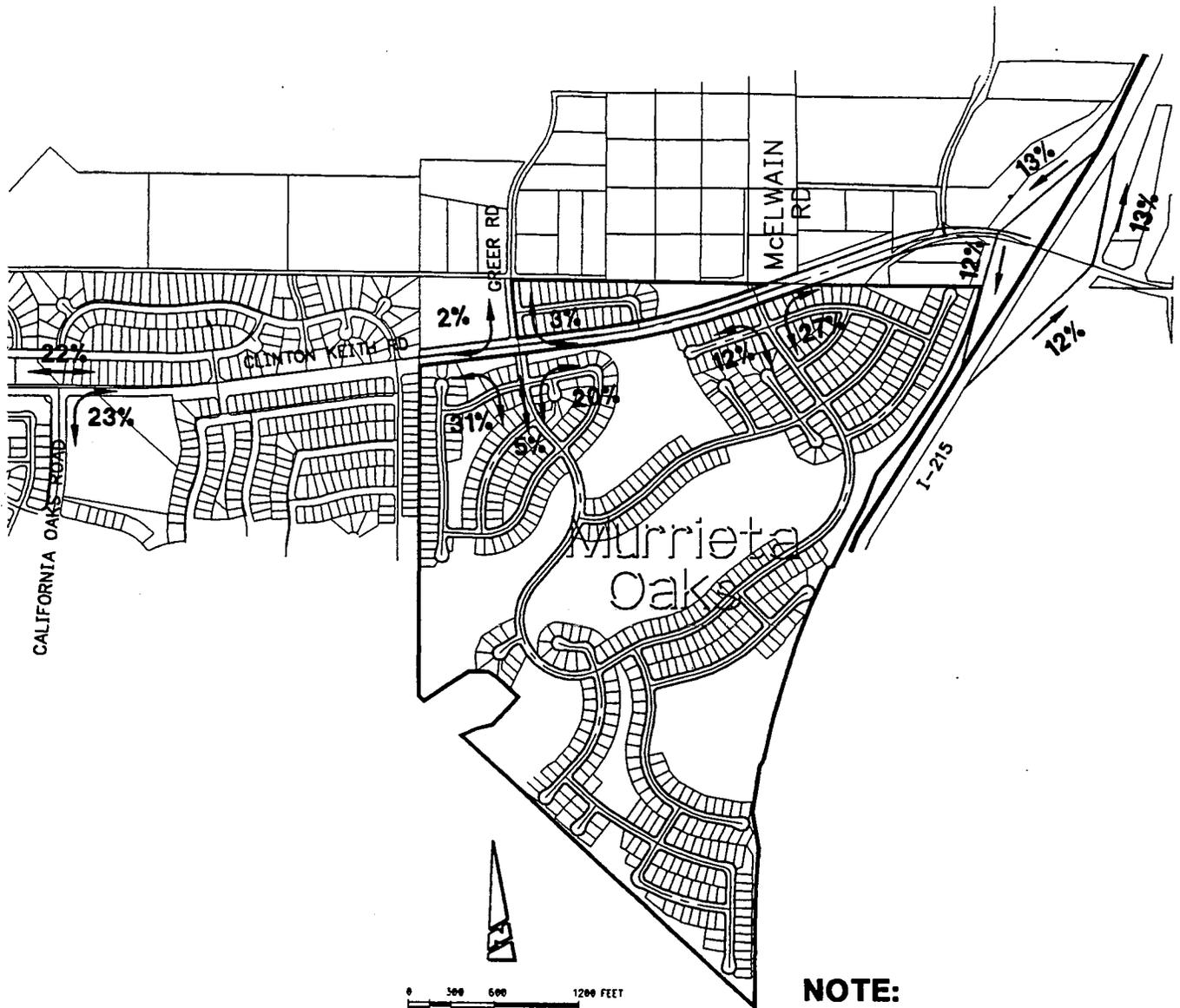
Peak hour analyses found the morning peak hour will carry 114 vehicles into the project, and 336 vehicles out of the project. The evening peak carries 390 vehicles into the project, and 216 vehicles out. The maximum peak hour demand on the system, therefore, is the 390 vehicles seeking to enter the project in the p.m. peak hour time frame.

Analyses of levels of service (LOS) were done for five key street intersections with Clinton Keith Road (Figure IV-O-3):

- California Oaks Road
- Greer Road
- McElwain Road
- Southbound I-215 ramp
- Northbound I-215 ramp

Analyses were done under four scenarios:

1. Existing conditions.
2. Existing conditions plus Murrieta Oaks.
3. Projected conditions in Year 2015 without Murrieta Oaks.
4. Projected conditions in Year 2015 with Murrieta Oaks.



**NOTE:**

PERCENTAGES SHOWN ARE TOTAL PROJECT TRIP GENERATION

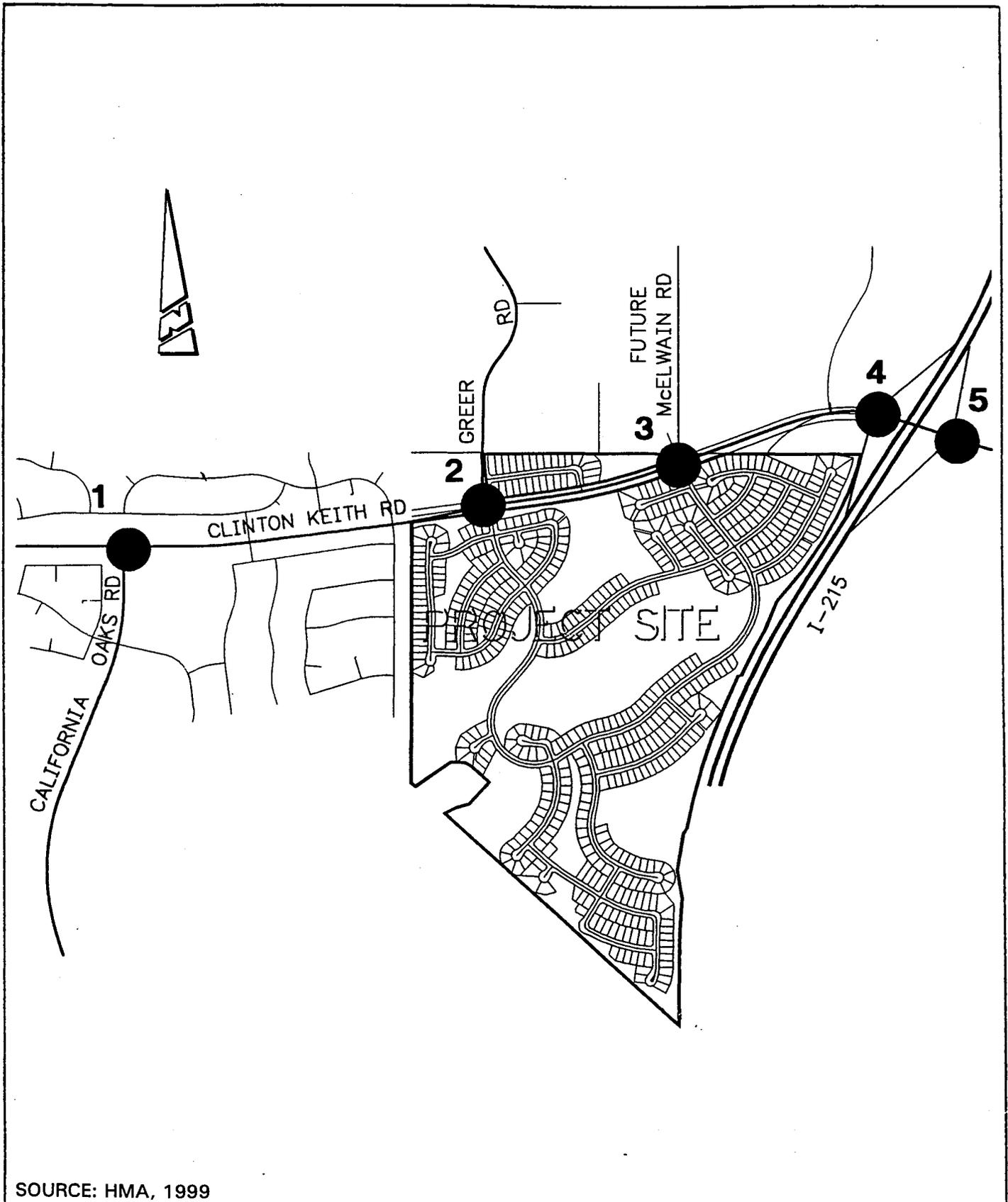
SOURCE: HMA, 1999

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**DIRECTIONAL TRIP DISTRIBUTION**

**FIGURE IV-O-2**



SOURCE: HMA, 1999

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## INTERSECTIONS ANALYZED

FIGURE IV-O-3

The standards defining the various levels of service are given in Table IV-O-1.

The results of the intersection analyses for the first two scenarios are given in Table IV-O-2. Analyses of the intersections of Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road are not applicable under Existing Conditions, as there is no traffic from Murrieta Oaks to consider. All other intersections are operating under LOS A, B, or C.

With the proposed project added, all intersections continue to operate at LOS A or B. With 2-way stop signs in place, the Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road intersections are projected to operate at LOS A (Table IV-O-2).

A seemingly anomalous LOS improvement exists in Table IV-O-2 for the northbound I-215 ramp from Clinton Keith Road. The present LOS is C, while with the proposed project the LOS is projected at B. This is a result of a change in Traffic Control Type, as the intersection will be changed from a 2-way stop to an all-way stop by the time of project buildout.

Results of the intersection analyses for Year 2015 with and without the Murrieta Oaks Project are given in Table IV-O-3.

All intersections are projected to operate at LOS A or B, with the exception of Clinton Keith Road/California Oaks Road, which is projected to operate at LOS C in the p.m. peak hour period, with or without the Murrieta Oaks Project.

The intersection of Clinton Keith Road/McElwain Road is projected to operate at LOS A at all times without the project. The a.m. peak is projected to operate at LOS B with the Murrieta Oaks Project.

Year 2015 projections require assumptions be made. These are discussed in Appendix I, the Traffic Technical Report, and are summarized here:

- The arterial street network in the project area will be built out to assumed levels by Year 2015.
- The I-215 interchange with Clinton Keith Road will be built out to ultimate capacity by Year 2015, to include

Three moving lanes for through traffic in each direction.

Double left turn lanes from Clinton Keith Road onto I-215.

At least two lanes on the I-215 exit ramps.

As of May, 1999, the Clinton Keith Road interchange with I-215 was in the final stages of a study for the approval of a Caltrans *Project Study Report*.

As noted, the Traffic Technical Report was done early in the process to allow its input to be used in project design. The proposed project now includes a school and park site, which was not in the original plan analyzed by the Traffic Technical Report. Accordingly, on October 1, 1999, Hank Mohle & Associates prepared an Addendum to their report, to deal with the inclusion of a school, and to deal with an alternative project. This Addendum has been added to Appendix I.

The Addendum concluded that the inclusion of the school/park site would not reduce the LOS of any of the intersections analyzed, based on the following:

- The proposed project with the school/park site has fewer dwelling units (560) than that assumed in the Traffic Technical Report (600).
- The proposed school will have peak-hour traffic at different times than the normal peak hour traffic generated by the project. The starting times will be after the "normal" peak hours, and the dismissal time is before those peak hours. The impact will be intense traffic within the immediate vicinity of the school for approximately one-half hour in the morning and fifteen minutes in the afternoon, but this traffic will occur outside of the overall peak hours for project traffic.

In a response to the Notice of Preparation of an EIR, The City of Temecula expressed a concern about the project's possible impacts on the traffic at the I-15 interchanges with Winchester Road and with Rancho California Road. A select link modeling run was conducted to examine these possible impacts (Appendix I). Traffic from Murrieta Oaks is projected to contribute approximately 1.5 percent of the total vehicles using the northbound entrance and southbound exit ramps at Winchester Road. At Rancho California Road the percentage is approximately 1.0 percent.

### **Significance of Impact**

The City's General Plan Circulation Plan's policies include standards for levels of service (LOS). Two of these apply to this project:

- City street intersections shall be maintained at LOS D or higher during peak hour periods.
- Freeway interchange intersections shall be maintained at LOS E or higher during peak hour periods.

Table IV-O-1 Level of Service (LOS) Standards

LEVEL OF SERVICE (LOS)	AVERAGE STOPPED DELAY PER VEHICLE (SECONDS)	AVERAGE TOTAL DELAY PER VEHICLE (SECONDS)
	Signalized Intersections	Unsignalized Intersections
A	0 to 5.00	0 to 10
B	5.01 to 15.00	10 to 15
C	15.01 to 25.00	15 to 25
D	25.01 to 40.00	25 to 35
E	40.01 to 60.00	35 to 50
F	60.01 and up	50 and up

Table IV-O-2 Intersection Analyses - Existing

CLINTON KEITH ROAD INTERSECTIONS	EXISTING			EXISTING + PROJECT		
	Level of Service		Traffic Control Type	Level of Service		Traffic Control Type
	A.M. Peak Hours	P.M. Peak Hours		A.M. Peak Hours	P.M. Peak Hours	
California Oaks Road	B	B	Signal	B	B	Signal
Greer Road	N/A	N/A	N/A	A	A	2-Way Stop
McElwain Road	N/A	N/A	N/A	A	A	2-Way Stop
South Bound I-215 Ramp	A	A	2-Way Stop	A	A	All-Way Stop
North Bound I-215 Ramp	A	C	2-Way Stop	A	B	All-Way Stop

SOURCE: HANK MOHLE & ASSOCIATES 5/5/99

Table IV-O-3 Intersection Analyses - Projected

CLINTON KEITH ROAD INTERSECTIONS	YEAR 2015			YEAR 2015 + PROJECT		
	Level of Service		Traffic Control Type	Level of Service		Traffic Control Type
	A.M. Peak Hours	P.M. Peak Hours		A.M. Peak Hours	P.M. Peak Hours	
California Oaks Road	B	C	Signal	B	C	Signal
Greer Road	B	B	Signal	B	B	Signal
McElwain Road	A	A	Signal	B	A	Signal
South Bound I-215 Ramp	B	B	Signal	B	B	Signal
North Bound I-215 Ramp	B	B	Signal	B	B	Signal

SOURCE: HANK MOHLE & ASSOCIATES 5/5/99

No significant impacts are projected for traffic with the Murrieta Oaks Project, as LOS is maintained within the City standards.

No significant impacts are projected due to project traffic on the I-15 interchanges with Winchester Road or Rancho California Road, given the small contribution made by project traffic.

### **Mitigation Measures**

Project traffic impact mitigation measures shall consist of:

- Installing traffic signals at the intersection of Clinton Keith Road and Greer Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.
- Installing traffic signals at the intersection of Clinton Keith Road and McElwain Road, when warranted by traffic conditions or prior to the issuance of the building permit for the 400<sup>th</sup> dwelling unit. The developer may apply for a credit against the Development Impact Fee pursuant to Section 16.36.050 A of the Development Impact Fee Ordinance 196-98.

## **P. UTILITIES/SERVICE SYSTEMS**

### **Existing Conditions**

Electric Service. Electricity is provided to the City of Murrieta by Southern California Edison (SCE); service can be extended to the proposed project (Vargas, personal communication, 1999).

Natural Gas Service. Gas service is provided by the Southern California Gas Company (SCGC); service can be supplied to the Murrieta Oaks project (Mulligan, personal communication, 1999).

Telephone Service. Telephone service in the project area is provided by General Telephone Electronics (GTE); local service can be supplied to the proposed project by GTE or by other long distance carriers who may provide local service in that area (Wiggins, personal communication, 1999).

Cable Television Service. Media One Cable Company is Murrieta's cable service provider, and service can be provided to the proposed project (Murillo, personal communication, 1999).

Solid Waste Disposal Service. Solid waste collection is provided in Murrieta by USA Waste Management (Beretta, personal communication, 1999). This service would be available to the residents of Murrieta Oaks, and would include weekly curbside pickup. Curbside recycling pickup for green waste, glass, plastic, newspapers, cans, etc. would also be available, and recycling bins would be provided. There are three active landfills operated in the westernmost portion of Riverside County; El Sobrante, Badlands, and Lamb Canyon. Waste can be taken to any of these facilities (Gifford, personal communication, 1999).

While the City of Murrieta has no approved criteria for generation rate, the County of Riverside assumes a rate of 10 pounds/person/day based on residential population.

The El Sobrante landfill is located east of Interstate-15 and Temescal Valley Road at 10910 Dawson Canyon Road. The landfill has an overall capacity of approximately 9 million tons and a daily disposal capacity of 4,000 tons per day. In 1998, the landfill received an average of 1,692 tons per day of waste. As of March 31, 1999, the existing landfill had a remaining capacity of approximately 3.9 million tons, with an estimated site life of approximately 10 to 11 years.

The Badlands landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Ave. The landfill is currently permitted to receive 4,000 tons per day and has an overall disposal capacity of approximately 12 million tons. In 1998, the landfill received an average of 1,461 tons per day. Based on current usage, the landfill has approximately 12 to 14 years capacity.

The Lamb Canyon landfill is located between the City of Beaumont and the City of San Jacinto at 16411 Lamb Canyon Road. The landfill is currently permitted to receive 1,900 tons per day of trash for disposal and has an overall capacity of approximately 5.9 million tons. In 1998, the landfill received an average of 485 tons per day. Based on current usage, the landfill has approximately 20 years of capacity.

### **Impact**

Electric Service. Southern California Edison has indicated that service can be provided to the Murrieta Oaks project. Other than increasing demand for electricity, which can be met, the project would have no impacts on electric service.

Gas Service. Southern California Gas Company has indicated that service to the Murrieta Oaks project can be provided. Other than increasing demand for gas, which can be met, the project would have no impacts on gas service.

Telephone Service. General Telephone Electronics has stated that telephone service could be provided to the project; therefore no impacts to telephone service are anticipated.

Cable Television Service. Development of the Murrieta Oaks project would most likely increase the demand for cable television service. As this service can be provided by Media One, no negative impacts to cable service are expected.

Solid Waste Disposal Service. The proposed project is estimated to have 1,992 residents meaning 19,920 pounds of waste would be generated daily by the project. This waste would be taken to any one of three area landfills. USA Waste Management has indicated that service can be provided to the project. Other than increasing demand for solid waste disposal, which can be met, the project would have no impacts on solid waste disposal service.

### **Significance of Impact**

Electric Service. No impacts to electric service is associated with implementation of this project.

Gas Service. No impacts to gas service would result from the proposed project.

Telephone Service. There are no anticipated impacts to telephone service from project implementation.

Cable Television Service. No impacts to cable television service would result from the proposed project.

Solid Waste Disposal Service. No impacts to solid waste disposal service is associated with implementation of this project.

### **Mitigation Measures**

Electricity, Gas, Telephone, Cable Television, and Solid Waste Disposal Service. No impacts to these services are associated with implementation of this project, therefore no mitigation measures are required.

## **V. EFFECTS FOUND NOT TO BE SIGNIFICANT**

The foregoing analyses include all issues determined to be potentially significant for this project by the City of Murrieta during its Initial Study. These issues include Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Hazards, Hydrology/Water Quality, Landform Alteration, Land Use, Noise, Public Services, Recreation, Schools, Transportation, and Utilities/Services Systems.

Other effects found not to be potentially significant are not discussed in detail in this EIR, but may be reviewed in the Initial Study included in Appendix A. Among others, these issues include population and housing and mineral resources.

## **VI. ALTERNATIVES TO THE PROPOSED PROJECT**

The CEQA Guidelines (Section 15126[d]) require the discussion of a No Project alternative and of "reasonable alternatives to the project which could feasibly obtain the basic objectives of the project...." The discussion must focus on alternatives capable of eliminating significant adverse impacts or reducing such impacts to below a level of significance. The discussion of alternatives need not be exhaustive and is subject to the "rule of reason." The key issue is whether the selection of alternatives fosters informed decision making and informed public participation (CEQA Guidelines, Section 15126[d])

As discussed in Section III of this EIR, the primary objective of the Murrieta Oaks project is to provide an environmentally sensitive single-family residential project, while making use of the natural assets of the property. The proposed land use designation and zoning, alignment of structures and other improvements are located based on landform, compatibility with surrounding land uses, and current development standards. Potentially significant adverse effects related to Aesthetics, Air Quality, Biological Resources, Geology/Soils, Hazards, Landform Alteration, Land Use, Noise, Schools, and Transportation have been identified. Under the proposed project, these effects all would be mitigated to below a level of significance, with the exception of Air Quality.

Alternatives addressed here include the No Project Alternative (as required under CEQA), a Reduced Project Alternative, a Maximum Preservation Alternative, and a No School Site Alternative. An alternative analyzing a previous project proposed for the property at a much higher density (700 units) was considered but was rejected because the project applicant already has agreed to limit development to 600 or less units and because the previous project would not reduce any potentially significant impacts.

These alternatives were developed with input from ongoing meetings involving the immediate neighborhoods, the larger Murrieta community, and the Army Corps of Engineers.

## A. NO PROJECT

The No Project Alternative would entail retaining the property in its existing vacant condition. Under this alternative, the proposed single-family residences, active-use park, trail system, and associated project infrastructure would not be constructed. Portions of the property might be used for agriculture.

Aesthetics. The property would remain in its present vacant condition and the rural quality of the landscape and viewshed would remain as it is. Significant visual impacts associated with the proposed project would not occur.

Air Quality. No increase in emissions from the site would occur. Because the area is presently in a nonattainment zone for CO, a serious nonattainment area for PM<sub>10</sub>, and an extreme nonattainment area for O<sub>3</sub> under federal standards; it is a serious nonattainment area for CO, a nonattainment area for PM<sub>10</sub>, and an extreme nonattainment area for O<sub>3</sub> under state standards, and because the City General Plan assumes future growth, the site would continue to be subject to regional cumulatively significant, unmitigable air quality conditions.

Biological Resources. No large-scale removal of habitats would occur under the No Project Alternative, assuming the property would be left in its present condition. Agriculture might be resumed on the property, and this may infringe on habitats that appear to be recovering from past agriculture practices. Vacant land near residential areas is prone to greater recreational uses, and such uses tend to increase as cities grow and other open areas are built out. Some of these activities, such as off-road-vehicle and motorcycle uses, can be destructive to habitat, depending on the concentration of use.

Geology/Soils. No grading or cut-and-fill activities would occur with the property being left in its present vacant condition.

Hazards. Under the No-Project Alternative, portions of the Murrieta Oaks project would continue to be exposed to potential wildland fire hazards. Project-related fuel modification improvements, which would include reduction of fuel volume, planting of approved low-fuel ground covers, would not occur and the property would be subject to greater fire hazard impacts.

Landform Alteration. No grading would occur and the site would retain its undeveloped setting. Under the No Project Alternative, significant landform alteration impacts would not occur.

Land Use. The property is designated for single-family residential use. Under this alternative the land would remain vacant or ultimately would be developed with housing in the density range of 2.1-5.0 dwelling units per acre. If left vacant, potential incompatibilities

with Interstate-215 would not occur; future developments might or might not experience similar impacts depending on their design configuration.

Noise. The site would continue to be subject ambient noise levels associated with traffic along Clinton Keith Road and Interstate-215; no increase in noise levels from the site would occur.

Schools. If the site was left vacant, the property would not generate an increase in students and project-related school impacts would not occur. Any future residential development would be expected to create impacts to schools. The Murrieta Valley Union School District probably would not purchase the proposed school site.

Traffic. No traffic would be generated on the site, if left vacant. Payment of Development Impact Fees for signalization of the intersections of Clinton Keith Road/Greer Road and Clinton Keith Road/McElwain Road to be paid by the proposed project would not occur.

Issues found not to have significant impacts under the proposed project include agricultural resources, hydrology/water quality, recreation, public services, and public utilities. There would be no impacts to these issues under the No Project Alternative, as well.

Conclusion: The No Project Alternative would avoid the significant impacts to aesthetics, biological resources, geology/soils, landform alteration land use, schools, and traffic that are associated with the proposed project. Noise impacts, which relate to Interstate-215, and fire hazard would remain significant; air quality impacts, which are tied to regional issues, would remain cumulatively significant and unmitigable. Overall, the No Project Alternative is environmentally superior, but it does not meet the objectives of the proposed project and it is not consistent with the City's General Plan Land Use Designation.

## B. REDUCED DENSITY ALTERNATIVE

The Reduced Density Alternative project would be a single-family residential development with 426 lots (as opposed to the 560 lots proposed by the project), adjacent park and school lots located in the northeast corner of the property next to Clinton Keith Road, and an interior trail system (See Figure VI.-B-1). Twenty-nine of the lots would be located north of Clinton Keith Road. The central ridge and higher elevations in the western and eastern portions of the project area would be preserved, as would all of the northwestern drainage (Drainage A). This alternative would feature a through street linkage to Toulon Drive, connecting the project with the Encanto development adjacent to the west.

Aesthetics. The Reduced Density Alternative would preserve more of the natural terrain, particularly in the northwest portion of the property than the proposed project, but would still require substantial grading and landform alteration. Since the alternative would require sound attenuating walls around its eastern and northern perimeters, short-range views from Interstate-215 and Clinton Keith Road essentially would be the same. Long range views would afford slightly more natural terrain, but aesthetic impacts still would be significant.

Air Quality. Because this alternative would allow for fewer houses, residential air quality impacts would be expected to be marginally less. Ultimately, this slight reduction is meaningless, because under any scenario the area would continue to be subject to regional cumulatively significant, unmitigable air quality impacts.

Biological Resources. Because it involves less surface disturbance, this alternative would impact less habitat. Approximately 185.6 acres of habitat would be impacted, with approximately 73.8 acres preserved. All of the southern willow scrub, 92 percent of the riparian forest, and 67 percent of the oak woodland would be preserved.

Geology/Soils. The amounts of excavation and surface disturbance necessary with this alternative would be expected to be similar to that of the proposed project. Excavation into bedrock would still be necessary. Removal of undocumented fill, topsoil, alluvium, and colluvium would remain necessary. Balance of cut-and-fill might be more difficult, with less overall area and fewer separate areas in the design.

Hazards. Potential fire hazards would be comparable to those associated with the proposed project. It is anticipated that any project constructed on-site would be subject to the Murrieta Fire Protection District regulations and that a fuel modification plan would be required.



SCHOOL / PARK



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REDUCED DENSITY ALTERNATIVE

FIGURE VI-B-1



Landform Alteration. Because less grading would be required in the northwestern portion of the property, fewer landform alteration impacts would occur under this alternative compared to the proposed project. Impacts would still be considered significant.

Land Use. Both the proposed project and this alternative are in compliance with the land use designation and zoning for the property. Land use impacts associated with the incompatibilities of the alternative with Interstate-215 would be comparable to those of the proposed project.

Noise. The primary noise generator for the project is Interstate-215, which operates independent of project density. Because the lot configurations for this alternative are identical to those of the proposed project, noise impacts would be the same as well. Under the alternative, those lots adjacent to the main through street connecting to Toulon Drive, would probably be subject to greater noise impacts due to traffic than under the proposed project.

Schools. This alternative would be slightly less impactful than the proposed project because it would generate fewer students.

Traffic. This alternative includes 426 lots, approximately 82 percent of that in the proposed project. This alternative would be expected to generate approximately 18 percent less traffic. Approximately 78 percent of the lots will not have access to the Clinton Keith Road/Greer Road intersection. This traffic will have to take access via the Clinton Keith Road/McElwain Road intersection, or travel west to the existing subdivision and utilize Toulon Drive to gain access to Clinton Keith Road.

Issues found not to have significant impacts under the proposed project include agricultural resources, hydrology/water quality, recreation, public services, and public utilities. There would be no impacts to these issues under the Reduced Density Alternative, as well.

Conclusion: Impacts to biological resources, landform alteration, schools, and traffic would be somewhat reduced under this alternative. Impacts to aesthetics, geology/soils, fire hazard, land use, and noise would be comparable to the proposed project. Air quality would remain regionally cumulatively significant and unmitigable. Overall, the Reduced Density Alternative is slightly less impactful than the proposed project, but is not fiscally viable.

### C. MAXIMUM PRESERVATION ALTERNATIVE

The proposed project will require a permit from the U.S. Army Corps of Engineers, as it places fill in jurisdictional Waters of the United States, notably within the intermittent stream drainage north of the on-site ridgeline. The Maximum Preservation Alternative was developed with the Army Corps as an alternative that minimized fill into the drainages.

This alternative would retain the 29 lots north of Clinton Keith Road. Twenty-one lots would be created on a cul-de-sac off Clinton Keith Road near the extension of the realigned McElwain Road. A cluster of 65 lots would be placed south of Clinton Keith Road with access provided by the extension of Greer Road, giving a total of 115 lots (Figure VI-C-1).

Aesthetics. The Maximum Preservation Alternative would leave all the property as it is, except for the cluster of lots north of Clinton Keith Road, south of Clinton Keith Road near the extension of McElwain Road, and south of Clinton Keith Road near the Greer Road extension. Compared to the proposed project, this alternative would be less visually impactful. The rural character presently experienced from Interstate-215 would be unchanged as the development would be blocked from view by intervening topography. Views from Clinton Keith Road would be comparable to those of the proposed project.

Air Quality. Because this alternative would allow for far fewer houses than the proposed project, residential air quality impacts would be expected to be less. Ultimately, this reduction is meaningless, because under any scenario the area would continue to be subject to regional cumulatively significant, unmitigable air quality impacts.

Biological Resources. Because it involves much less surface disturbance, this alternative would impact less habitat. Approximately 43.3 acres of habitat would be impacted, with approximately 216.1 acres preserved. Of the impacted habitats, approximately 18.5 acres are coastal sage scrub, approximately 18.6 acres are ruderal, and approximately 6.1 acres are chamise chaparral. All of the oak woodland would be preserved, and 95 to 100 percent of the riparian habitats would be preserved.

Geology/Soils. Less excavation and surface disturbance would be necessary with this alternative than with the proposed project, as it covers less area. Less excavation into bedrock would likely be necessary. Removal of undocumented fill, topsoil, alluvium, and colluvium would remain necessary. Balance of cut-and-fill would be more difficult, with less overall area and fewer separate areas in the design.

Hazards. Potential fire hazards would be greater than those associated with the proposed project, because more unmodified landscape would remain, exposing the development to higher fire risk. It is anticipated, however, that any project constructed on-site would be



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ARMY CORPS OF ENGINEERS MAXIMUM  
PRESERVATION ALTERNATIVE

FIGURE VI-C-1



subject to the Murrieta Fire Protection District regulations and that a fuel modification plan would be required.

Landform Alteration. Because substantially less grading would be required to develop the property, fewer landform alteration impacts would occur under this alternative compared to the proposed project. Impacts would still be considered significant.

Land Use. Under this alternative, no lots would be placed adjacent to Interstate-215, eliminating the land use incompatibilities associated with the proposed project. No land use impacts would result from this alternative.

Noise. Those lots located adjacent to Clinton Keith Road would be subject to significant noise impacts. However, because there are no lots located next to Interstate-215 under this alternative and because there are far fewer lots proposed than the project (115 versus 260), noise impacts would be considered less.

Schools. With only 115 lots, the Maximum Preservation Alternative would generate substantially fewer students, resulting in less impacts to schools than under the proposed project.

Traffic. The alternative would generate approximately 20 percent of the traffic of the proposed project, as it has approximately 20 percent of the number of dwelling units proposed. Project traffic impacts would be mitigated through payment of Development Impact Fees. This alternative would be much less impactful, as it would generate one-fifth the traffic compared to the proposed project.

Issues found not to have significant impacts under the proposed project include agricultural resources, hydrology/water quality, recreation, public services, and public utilities. There would be no impacts to these issues under the Maximum Preservation Alternative, as well.

Conclusion: Under the Maximum Preservation Alternative substantially fewer impacts to aesthetics, biological resources, geology/soils, landform alteration, schools, and traffic would occur. Noise impacts would be lessened; adverse impacts to land use would be avoided. Impacts to fire hazard would be comparable to the proposed project, and air quality impacts would remain regionally cumulatively significant and unmitigable. While lessening environmental impacts, this alternative is economically infeasible.

#### **D. NO SCHOOL SITE ALTERNATIVE**

The Murrieta Valley Union School District has expressed an interest in placing a school on the project site, and the proposed project includes such a school. But no final decision has been made by the District at this time, leaving a reasonable possibility that a school site may not be placed on the property. Accordingly, an alternative was generated that did not include the school site.

This alternative replaces the school site with a maximum of 40 additional lots (VI-D-1). It is very similar to the proposed action in that the overall project design, including streets, access, drainage, and phasing remains the same

Aesthetics. Because this alternative differs from the proposed project only in the replacement of the school site with 40 units, views of the development from Clinton Keith Road and Interstate-215 would be comparable to those of the proposed project.

Air Quality. Under the No School Site Alternative, air quality impacts would be comparable to the proposed project. Impacts would remain regionally cumulatively significant and unmitigable.

Biological Resources. Impacts to biological resources with this alternative as the same as described for the proposed action, as both propose to develop the same amounts and same locations of habitats.

Geology/Soils. Impacts with this alternative would be the same as described for the proposed action. Earthwork would be done on the same locations, in the same magnitudes.

Hazards. Potential fire hazards would be comparable to those associated with the proposed project. Any project constructed on-site would be subject to the Murrieta Fire Protection District regulations and a fuel modification plan would be required.

Landform Alteration. A comparable amount of grading would be required under this alternative relative to the proposed project. Impacts would also be considered significant.

Land Use. Because an identical number of lots would be located adjacent to Interstate-215, land use impacts for this alternative and the proposed project would be the same.

Noise. Noise impacts under this alternative would be comparable to the proposed project.

Schools. With 40 more lots, slightly more students would be generated.

Traffic. This alternative would result in approximately 600 lots, compared with the 560 of the proposed project. The extra dwelling units would generate incrementally (less than 4

percent) more traffic than would the proposed project. The traffic analysis assumed 600 dwelling units on the property, and resulted in no significant, unmitigable impacts.

Issues found not to have significant impacts under the proposed project include agricultural resources, hydrology/water quality, recreation, public services, and public utilities. There would be no impacts to these issues under the No School Site Alternative.

Conclusion: Overall, this alternative has almost identical impacts to that of the proposed project. It does not avoid or reduce any impacts and therefore is considered comparable to the proposed project.





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NO SCHOOL SITE ALTERNATIVE

FIGURE VI-D-1



## VII. CUMULATIVE IMPACTS

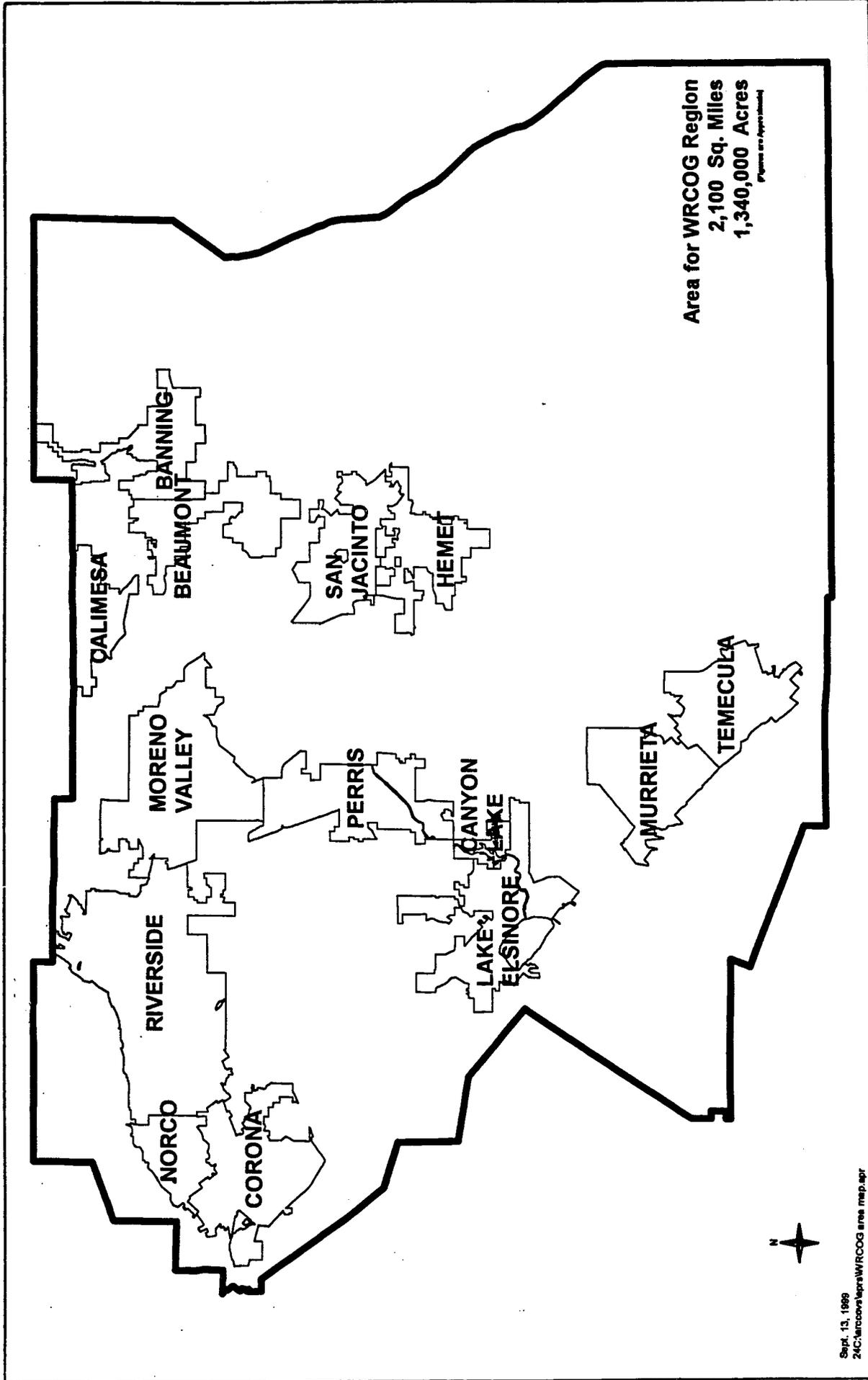
The CEQA Guidelines define cumulative impacts as two or more individual effects, which, when considered together are considerable, or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines, Section 15355). The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects, or in conjunction with subregional and General Plan buildout projections. The latter method has been used to analyze cumulative impacts in this EIR.

SCAG Projections. Data from the Southern California Association of Governments (SCAG) projects population, household, and employment growth for the Western Riverside County subregion, including the City of Murrieta, which is part of the Western Riverside Council of Governments' Southwest Planning Area District (Figure VII-1). The SCAG information also provides the basis for regional traffic projections formulated by the Riverside County Transportation Commission.

This cumulative analysis is predicated on buildout data relevant to the City of Murrieta. Population and household projections associated with the City under buildout conditions are shown in Table VII-1; cumulative buildout projections for the subregional planning areas are shown in Tables VII-2 and VII-3.

As shown below, the proposed project is well within the household and population projections for the City of Murrieta as well as for the Southwest Area Planning District. Cumulative impacts that would result from implementation of the proposed project are summarized below; project impacts for each issue are detailed within the relevant portions of Chapter IV, Environmental Analysis. Based on the analyses of Chapter IV, no impacts that would contribute to a cumulatively significant impact have been identified for the issues of Aesthetics, Agricultural Resources, Cultural Resources, Geology/Soils, Hazards, Hydrology/Water Quality, Landform Alteration, Land Use, Noise, Public Facilities, Recreation, Schools, Transportation/Traffic, and Utilities/ Service Systems. The proposed project, if constructed, would contribute to cumulative impacts within Air Quality and Biological Resources.

Air Quality. Because the region is considered a nonattainment area for ozone, any and all increased impacts to air quality would be considered cumulatively significant and not fully mitigable. Under the nonattainment scenario, cumulative effects could only be minimally reduced and not eliminated by not building any project on the property, which would not be consistent with the objectives of the project.



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**WESTERN RIVERSIDE COUNCIL OF GOVERNMENTS  
 AREA PLANNING DISTRICTS**

**FIGURE VII-1**

Sept. 13, 1989  
 24C:\arcocov\lepra\WRCOG area map.spr

Table VII-1 City of Murrieta Cumulative Buildout Assumptions

	Households	Population
Existing	10,112	40,221
2005	12,203	44,974
2010	14,293	49,726
2015	15,971	53,962
2020	18,127	58,377

Table VII-2 Subregional Area Cumulative Buildout Household Projections

	2000	2005	2010	2015	2020
City of Murrieta	10,112	12,203	14,293	15,971	18,127
Subregional Planning Area	424,600	504,800	585,000	647,800	730,900

Table VII-3 Subregional Area Cumulative Buildout Population Projections

	2000	2005	2010	2015	2020
City of Murrieta	40,221	44,974	49,726	53,962	58,377
Subregional Planning Area	1,315,300	1,564,900	1,814,100	2,033,900	2,264,00

Biological Resources. Conversion of project habitat to developed lands contributes incrementally to the overall diminishment of regional habitat. Compliance with the project's proposed mitigation measures will reduce cumulative impacts to biological resources to below a level of significance.

## **VIII. UNAVOIDABLE SIGNIFICANT IMPACTS**

Potentially significant adverse effects related to Aesthetics, Air Quality, Biological Resources, Geology/Soils, Hazards, Landform Alteration, Land Use, Noise, Schools, and Traffic have been identified. Mitigation measures have been identified to reduce these impacts to below a level of significance, with the exception of cumulative Air Quality. Significant, unmitigable impacts to Air Quality would result from the implementation of the Murrieta Oaks project.

## **IX. GROWTH INDUCING IMPACTS**

CEQA Guidelines require that an EIR discuss ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Increases in the population may further tax existing community service facilities, so consideration must be given to this impact. The EIR must discuss project characteristics which may encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The Murrieta Oaks project would not be considered growth inducing. The infrastructure planned for the project would primarily benefit the residents of the proposed project; all streets proposed are intended for internal circulation. The land use is consistent with the General Plan and zoning designations for the property. While it would introduce new residents into Murrieta, overall growth is assumed by the General Plan and regional growth forecasts. New residents would be expected to contribute to local economic growth, but this is not viewed as a detrimental effect. Further, residential projects typically are not considered to be growth inducing in and of themselves.

## **X. IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WILL RESULT FROM THE PROPOSED PROJECT**

Development of the property would create an irreversible change from vacant and agricultural land to developed land. It is unlikely such development would ever be removed.



## XI. REFERENCES

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