

Specific Plan
for
Joaquin Ranch
and
Bear Creek Village

S.P. 128-W

AS RECOMMENDED BY
PLANNING COMMISSION
DECEMBER 13, 1979
AND
AS APPROVED BY
BOARD OF SUPERVISORS
JANUARY 8, 1980
RESOLUTION 80-8

prepared by

Albert C. Martin and Associates

September 3, 1979

SPECIFIC PLAN 128-W

for

JOAQUIN RANCH

and

BEAR CREEK VILLAGE

As recommended by
Planning Commission,
December 13, 1979

and

As adopted by
Board of Supervisors
January 8, 1980, resolution 80-8

Prepared by:

ALBERT C. MARTIN AND ASSOCIATES

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RESOLUTION NO. 80-8

ESTABLISHING A SPECIFIC PLAN OF LAND USE

WHEREAS, all environmental procedures pursuant to the California Environmental Quality Act have been completed, and public hearings have been held by the Board of Supervisors and the Riverside County Planning Commission, pursuant to Government Code Section 65500 et seq., to establish a specific plan of land use for certain lands in the Murrieta area of Riverside County known as Joaquin Ranch and Bear Creek Village, now, therefore,

BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Supervisors of the County of Riverside, State of California, in regular session assembled on January 8, 1980, that Specific Plan of Land Use No. 128-W on file with the Clerk of this Board entitled Specific Plan of Land Use for Joaquin Ranch and Bear Creek Village, dated January 8, 1980, including Exhibits, A, B, C, D, E, F, G, H and I, is hereby adopted as the specific plan of land use for the real property shown in the plan and said real property shall be developed substantially in accordance with the specific plan unless the plan is repealed or amended by the Board

BE IT FURTHER RESOLVED, DETERMINED AND ORDERED that copies of the specific plan of land use shall be filed in the office of the Clerk of the Board, in the office of the Planning Director and in the office of the Director of Building and Safety and that no applications for conditional use permits, tentative subdivision maps, building permits, or the like, shall be accepted for the land in the plan unless such applications are

1 substantially in accordance with the adopted specific plan
2 of land use.

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SUMMARY

Type of Proposal - A low density, planned residential community.

Location - Southwest Territory of Riverside County near the community of Murrieta.

Size - 2,130+ acres.

Proposed Uses

Residential	-	2,130 Units
Commercial	-	5 Acres for 40,000 Sq. ft.
Garden Office	-	5 Acres for 80,000 Sq. ft.
Golf Course	-	200+ Acres
Open Space	-	1,000+ Acres
Tennis & Swim Clubs	-	60,000 sq. ft.
Golf Course Club House	-	20,000 sq. ft.

Special Features

Championship Golf Course - An 18-hole, 200+ acre, golf course of a quality suitable for championship play will be constructed during the first phase of development.

Open Space System - A 1,100+ acre open space system will accommodate pedestrian, bicycle and equestrian circulation through the community.

Natural Drainage System - Site planning techniques were utilized to maximize groundwater recharge and reduce runoff and erosion.

Conservation Area - 150 acres of riparian woodland is to be retained in its natural state.

~~Co-operative Vineyard - A portion of an existing vineyard is to be retained and kept in agricultural use. *~~

*Deleted December 13, 1979 by Planning Commission

INTRODUCTION

The natural beauty of the 2,130 acre Joaquin Ranch prompted a leading golf course designer to approach the owners with a proposal to develop a championship golf course among the foothills and canyons of the property. To this end, a request for a General Plan Amendment (GPA) was filed with the County of Riverside, requesting a general plan designation that would allow the golf course and a low density residential community. A detailed Environmental Impact Report was written for this amendment request and has been reviewed and accepted by the County of Riverside and by the State Environmental Quality Agency. This EIR has been accepted as an acceptable report for this project. Public hearings on the general plan amendment request were held, and the request was approved by the Riverside County Planning Commission and by the Riverside County Board of Supervisors. Under the approved plan the site is designated for light urban residential uses under an overall gross density category of 0 up to a maximum of 1 dwelling unit per gross acre. In addition, the plan was amended to include a commercial subcenter, executive seminar site and commercial recreation uses.

The Joaquin Ranch and Bear Creek projects are located within the southwest portion of Riverside County. Situated within the Murrieta Valley, the site is immediately north of the Santa Rosa Plateau; more specifically, the project is located west of Interstate 15, between the unincorporated communities of Wildomar and Murrieta. The irregularly shaped site is south of Palomar Street and Washington Avenue, approximately two miles west of Murrieta. The site has access to Washington and Grand Avenues, and is traversed by Clinton Keith and Tenaja Roads. The site is bounded by Grand Avenue, Murrieta Creek and Washington Avenue on the north and east. The La Cresta development of Rancho California borders the property on the west. The unincorporated community of Murrieta generally borders the property to the east.

Planning Methodology

In the development of this Specific Plan for the Joaquin Ranch and Bear Creek communities, an ecological planning method was utilized. This process is based on the presumption that, in addition to its social framework, any landscape can be understood as the sum of the historical, physical and biological processes which formed it. By identifying and interpreting explicit natural phenomena which contributes to a balanced ecosystem, one is better able to specify the most and least suitable land use for a particular landscape.

In order to deal with the amount of data necessary to describe the dynamic process of the natural environment and the effect of the development on it, the ecological planning process for the project plan had the following steps:

1. Data inventory and interpretation;
2. Development of landscape tolerance to development;
3. Land use intensities;
4. Matching of development intensities to landscape tolerances and profiles to establish appropriate densities;
5. Synthesis of issues, objectives and adaptations; and
6. Preparation of land use plan.

Professional and scientific consultants, experts in hydrology, soils, vegetation, wildlife, archeology and air quality, prepared detailed reports on the natural processes of the site. These investigations were carried out as part of a detailed Environmental Impact Report prepared by Donald A. Cotton & Associates to meet the requirements for the project under the State Environmental Quality Act.

Most of the information was developed in the field. Soils information was augmented by information developed by the U.S. Department of Agriculture's Soil Conservation Service. Topographic maps based on aerial and field surveys were prepared at two-foot contour intervals. Colored aerial photographs were used to augment field surveys to locate and map vegetation types.

Ecological data was interpreted for limitations on development. The hydrologic and soils data was analyzed to gain an understanding of the drainage pattern and the implications of the hydrologic cycle. Strategies for impeding runoff, increasing percolation and maintenance of existing ponds were evolved. Vegetation data was interpreted for size, quality, composition, value of wildlife habitats and tolerance to change throughout the development. The different slopes of the site were interpreted in terms of categories developed in the Southwest Territory General Plan's Research and Analysis Report.

In the course of the field work and data interpretation, it became evident that the natural balance of the hydrologic regime and the slopes of the terrain were the keys to successful environmental planning and in organizing concepts for development.

2.1.2

Landscape Tolerance to Development

Landscape tolerance is defined in terms of its suitability for development. The requirements of the natural drainage system, the quality and adaptability of vegetation types, and the restrictions of slope are the major controlling factors. Sets of different landscape characteristics are grouped to define "profiles." Landscapes with characteristics and attributes corresponding with a particular profile are identified as having a certain suitability for development.

2.1.3

Land Use Intensities and Matching of Development Intensities to Landscape Tolerances

Land use programs, residential types and densities, golf courses and roads were examined for their landscape impact (see Appendix A). Each use was evaluated in terms of the amount of alteration to the existing terrain and the amount of impervious surface required. Appropriate density ranges for the different suitability profiles were developed by matching the impacts of different development types with the landscape tolerances of the profiles.

2.1.4

Issues & Objectives

With input from the County of Riverside and from the residents of the surrounding community, specific issues were defined and objectives developed that could guide the planning of the project (see Appendix B). For each objective, specific site planning adaptations were developed that, if employed, would help to meet the objective indicated.

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If any of the following conditions for approval differ from the commitment made by the developer in the Specific Plan text or map exhibits, the conditions enumerated herein shall take precedence.

1. The development of the property shall be in accordance with the mandatory requirements of all Riverside County Ordinances and State laws and shall conform substantially with that as shown on Specific Plan 128-W in the office of the Riverside County Planning Department, unless otherwise amended.
2. Prior to the issuance of a building permit for construction of any use contemplated by this approval, the applicant shall first obtain permits and/or clearances from the following agencies:

County Health Department
Regional Water Quality Control
Board No. 9
Rancho California Water District
Department of Airports

County Road Department
County Department of Fire Protection
County Flood Control District
State Department of Public Health
Department of Fish and Game

3. Prior to the recordation of the initial subdivision map the applicant shall submit to the County, for approval, the following documents:
 - a. A declaration of covenants, conditions and restrictions establishing a master or umbrella association, which will be an association of the various homeowners associations formed for each subdivision map, within the area covered by the specific plan. The master association shall be responsible for the care and maintenance of the following:
 1. Open Space Areas as shown on Exhibit A
 2. Equestrian trails
 3. Bicycle trails
 4. Archaeology preservation
 5. Such other matters as may be determined appropriate for care by the master association, rather than the subscribing associations.
 - b. A declaration providing that the vineyard area shall be maintained by the applicant and that the property shall not be a member of an individual homeowner's association unless the property is divided or developed, then a tract map shall be recorded and a tract owner's association for the owners formed. The tract association shall then be annexed to the Master Homeowner's Association for the provision of maintenance under paragraph 3.a.
 - c. A declaration by the owner of the land upon which the golf course, as shown in Exhibit "A" of the Specific Plan, which declaration shall be in the form of a covenant running with the land and in favor of all subdivided property on the north side of Clinton Keith Road as descri

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- In Exhibit "A." Said covenant shall provide that the owner of said golf course land shall maintain the golf course in a "manicured" condition while operated as a golf course and, if its operation as a golf course shall ever cease, that said land shall be maintained as open space in a "park-like" condition. Said covenant shall specifically provide that it may be enforced by any or all of the owners of the subdivided land on the north side of Clinton Keith Road as described in Exhibit "A" to the Specific Plan. Said covenant shall further provide that if the owners of the golf course land fail to maintain it as provided in the covenant then the master association referred to in paragraph 3a. above may provide for said maintenance itself and the cost of that maintenance shall be a lien upon the golf course land which shall be prior to any other lien against the golf course land other than liens for real property taxes or any other liens created by governmental action. The covenant shall provide a procedural method whereby the lien created to secure maintenance expenditures may be foreclosed to enforce collection.
- d. A declaration or declarations providing for the maintenance of the private roads, and any landscaped median strips in public roads, within the area shown on the specific plan. Said provision may be incorporated into the appropriate declarations of the various homeowners associations or may be separate declarations.
 4. Prior to the recordation of each individual subdivision map, or any phase or unit thereof, the applicant shall submit to the County, for approval, a declaration of covenants, conditions and restrictions that satisfactorily provide for the performance of the duties required by the master association and for the maintenance of the individual subdivision.
 5. The master association and the various individual subdivision homeowners associations shall each have the unqualified right to assess the owners of the individual units for reasonable maintenance cost for the required maintenance; shall be established and continuously maintained, until such time as a County service area may be established to assume any duties required of the associations. The associations shall have the right to lien the property of any owners who default in the payment of their assessments. Such lien shall not be subordinate to any encumbrance other than a first deed of trust provided such deed of trust is made in good faith and for value and is of record prior to the lien of the association.
 6. Construction of the development permitted hereby may be done progressively in phases provided adequate vehicular access is constructed for all dwelling units and further provided that such phase development conforms substantially with the intent and purpose of this approval for the provision of the drainage system, open space areas, equestrian trails, and circulation system.
 7. No construction of any building or any road shall be permitted that would not be in substantial conformance with the specific plan.

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8. All structures on the site shall comply with all County, State and Federal requirements for Energy Conservation that are in effect at the time of construction.
9. A fire station site shall be conveyed without cost to the County of Riverside by grant deed prior to the recordation of the first tract map. No building permits for over 200 residential dwelling units or for commercial construction shall be issued unless the developer has provided a fire station and rolling equipment, as approved by the County of Riverside.
10. No road construction shall take place in open space areas except as indicated on Exhibit A. All equestrian and hiking trails shall be included by the developer on the project site according to the standards and locations indicated on the County's General Plan of Equestrian and Hiking trails. These trails should be maintained by a Homeowner's Association.
11. Final slopes shall be contour graded and all grading shall be carried out according to the guidelines stated in the County Hillside Development Standards. Roadways shall be constructed with grades of 15% or less. Roads crossing slopes in excess of 15% shall use split road sections to minimize cut as approved by the Road Commissioner.
12. All applications for subdivisions and any other discretionary permits located within landslide deposits as defined by Section 4.2 and Figure 5 shall be accompanied by a geologic report addressing liquefaction and any other hazards associated with this deposit. Mitigation measures such as sub-surface drain pipes shall be utilized if they are determined to be necessary.
13. All applications for subdivisions and other discretionary permits shall be accompanied by:
 - a. A slope analysis using categories to 0-8%, 9-12%, 13-24%, over 24%.
 - b. A preliminary grading plan showing building pads, or finished floor elevation, and lot access.

When development is proposed on slopes of 15% or greater, measured over a horizontal distance of 30', retaining walls post and beam and split level foundations shall be utilized in preference to cut and fill techniques.
14. The Water Balance objectives and adaptations on pages B-4 and B-5 of the Specific Plan text shall be implemented whenever possible.

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15. Development shall not take place within any "floodway" as defined in Section 6(a), Ordinance No. 458, Floodplain Management Ordinance or as determined by the County hereafter, development shall not take place within any 100 year post-development floodplain areas on the site. All lot areas must be located outside of any 100 year floodplain boundary.
16. Prior to recordation of a subdivision or the approval of any discretionary permits or plot plans, Type B archaeological sites as described in Section 4.6 and Figure 9 of the Specific Plan text shall be mitigated in the following manner:

Map, collect and record surface material and test excavations, by controlled depth and location to be done by back hoe under direction of a qualified archaeologist.

A report of the findings shall be prepared and filed with the Planning Department.

17. Prior to recordation of a subdivision or the approval of any discretionary permits or plot plans, Type C archaeological sites as described in Section 4.6 and Figure 9 of the Specific Plan text shall be mitigated in the following manner. A report of findings shall be submitted to the Planning Department to determine the significance and boundaries of the site. The Department shall consult with the State Office of Historic Preservation and the Society for California Archaeology to assist in the determination. If the sites are found significant, one of the following measures shall be employed:
- a. Preserve significant archaeological resources in place by carefully capping with sterile soil to a depth to protect cultural deposits.
 - b. Preserve significant archaeological resources in place by designating the site area within a wilderness of natural open space zone.
 - c. If it is determined by the Planning Department that the suggested mitigation measures cannot be used, then a scientific salvage shall be conducted under a qualified archaeologist to remove adequate portions of the resources to realize the heritage represented. The salvaged archaeological resources shall be cataloged and offered to a public institution for permanent curation.
18. Any grading or construction within the boundaries of a significant archaeological site as set forth in Condition 16 above, shall be monitored by a qualified archaeologist.

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19. Existing oak groves shall be preserved whenever possible. All proposed tract maps shall indicate the location of the existing groves, isolated trees, and any tree to be removed over 6" in diameter, 2' above base. Any oak tree removed shall be replaced with 24" box tree specimens on a 3 to 1 basis. The measures recommended in Section 7.2 shall be utilized.
- 20a. Clinton Keith Road shall be improved within the northeasterly limits of the Specific Plan and to a point approximately 5,800 L.F. south-easterly, to provide an 86' divided roadway in accordance with Standard No. 100, and from a point approximately 5,800 L.F. south-easterly of the northeasterly limits of the Specific Plan to the southerly property line to provide a 48' interim improvement as approved by the Road Department.
 - b. Clinton Keith Road between the northeasterly boundary of the applicants property and Palomar Street shall be improved to provide a 40 foot paved section with A.C. dikes where required within the dedicated right of way in accordance with Standard No. 104, Section B, and Specific Plan of Alignment No 18-E-8. The applicant shall enter into an agreement to contribute \$30,000.00 toward the construction of Clinton Keith Road between Palomar Street and Interstate Highway 15 which shall be coordinated with Riverside County construction within the 1979-80 fiscal year.
 - c. Nutmeg Street from Clinton Keith Road through the commercial center to the first connecting street shall be improved within the dedicated right of way to a 76' paved roadway, in accordance with Standard No. 101, thence, from this connection to the northeasterly boundary of the applicants property, with a 64' paved roadway.
 - d. A secondary paved access 40' in width in accordance with Standard 104, Section B, from the northeasterly boundary of the applicant's property to connect with Palomar Street along the Nutmeg Street alignment as indicated on the Circulation Element of the Riverside County General Plan or any alignment as approved by the Road Commissioner shall be constructed prior to the recordation of any tracts that bring the number of dwelling units to 400.
 - e. A bridge crossing on Clinton Keith Road at Murrieta Creek crossing, or at a location to be determined by the Road Department, shall be constructed prior to the development of dwelling units exceeding 235 in Phase II of their Operational Plan.
 - f. Tenaja Road shall be improved to a 40' paved roadway section in accordance with Standard 104, Section B, within project boundary and from north-easterly boundary to Palomar Street during the fourth phase of development.

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21. The developer shall enter into a private contractual agreement with the Murrieta Elementary School District and the Elsinore Union High School District to mitigate school problems associated with the project. A record of said private contracts will be required prior to the approval of each tract.
22. The Objectives and Adaptations proposed for development design, as describe in a portion of Exhibit H (Appendix B of the Appendix booklet to the Specific Plan text), shall be used as a general guidelines of this project and selected adaptations can be incorporated in the project design if deemed appropriate by both the Planning Department and the developer.
23. The conservation and open space system associated with Cole Canyon and Murrieta Creek shall remain free of all obstruction including fencing to permit the free movement of wildlife.
24. Natural topographic features should be utilized when possible to screen high density land uses.
25. Prior to the issuance of building permits for the wastewater reclamation plant, the County Health Department and Water Quality Control Board #9 shall review the site and sytem for its adequacy and function including alternative processing systems and indicate their approval of such systems in terms of the Specific Plan Project as a whole.
26. Class I bike trail shall be constructed along all arterial, major and secondary roads as per Exhibit A & B. A Class II bike trail shall be constructed along all collectors. (Section 6.2, Page 50 of text)
27. If the County adopts a Road Fee Benefit Area for Rancho California after the approval of the Specific Plan, the requirements of the Road Fee Benefit area with respect to the cost of expanding the region's circulation system shall be applicable to this Specific Plan project.
28. Residential development proposed within the golf course shall be reviewed and modified, if necessary, to conform with the delineated post developmen 100 year floodplain limit.
29. Drainage system shall be located within open space areas and preserved whenever possible.
30. An Environmental Assessment shall be conducted for each tract, conditional use permit, public use permit, plot plan, or any other discretionary permit within the Specific Plan.

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31. Prior to the approval of any conditional use permit, recordation of any final map or any other discretionary permit a change of zone in conformance with the Specific Plan shall be approved by the Board of Supervisors and shall be effective.
32. Provided that the covenant referred to in paragraph 3c. above has been recorded, then Minimum Open Space Requirements for Planned Residential Development as required in Ordinance 348 may take the adjacent golf course into consideration on a basis that will equitably apportion the open space created by the golf course among the subdivided properties on the north side of Clinton Keith Road as described in Exhibit "A" to the Specific Plan.

EXHIBITS

Exhibit A	Land Use and Circulation
Exhibit B	Open Space and Recreation
Exhibit C	Utilities
Exhibit D	Drainage
Exhibit E	Grading
Exhibit F	Phasing
Exhibit G	Specific Plan for Joaquin Ranch and Bear Creek Village Text
Exhibit H	Appendices to Specific Plan for Joaquin Ranch and Bear Creek Village
Exhibit I	Proposed Conditions to Specific Plan for Joaquin Ranch and Bear Creek Village

KDD:sr

The allocation of densities and development types across the site, as well as the alignment of the circulation system, was prepared in an attempt to minimize impacts to the natural environment.

This was done by matching the development types and densities of the program with the areas of the site shown in the

Suitability Profiles to be most tolerant of development and by utilizing, where appropriate, the site planning adaptations.

In addition, a set of general objectives were developed and utilized by all consultants involved in the project.

These general objectives were as follows:

1. Preservation of the rural quality of the community;
2. Maintenance of the natural drainage system through the utilization of existing flood plains, drainage channels, ponds and recharge soils;
3. Preservation of certain areas of vegetation and wildlife habitat noted for species diversity, high quality, stability and uniqueness;
4. Protection of the cultural resources, including archeological and historic sites;
5. Avoidance of hazardous conditions; and
6. Minimized cost to the County of Riverside and to the project developer.

3.0 EXISTING SOCIAL ENVIRONMENT

3.1 Riverside County General Plan - 1965

The 1965 Riverside County General Plan designated the project site as Agricultural Reserve and Open Space and Other Agricultural Lands. This plan was amended in July, 1978 by GPA 127-778-L-40, which changed the designation to Light Urban (0-1 du/ac), Neighborhood Commercial, and Commercial Recreation.

Two roads which cross the site, Clinton Keith Road and Tenaja Road, are designated as County Scenic Highways in the 1965 Plan.

3.2 Southwest Territory General Plan

The subject property is located in the Southwest Territory of Riverside County. The Southwest Territory General Plan is still in preparation; however, the Research & Analysis Report, which is preliminary to the formulation of the general plan, has been published. This report is an extensive study of the physical, social and cultural attributes of the area. The following summarizes some of the key elements of this report:

3.2.1 Land Use

The Southwest Territory study area encompasses 235,182.7 acres, 96.53% of which is in open space uses such as agricultural, watershed or unused land. Only 8,165.1 acres (3.47%) is classified as urban or developed uses such as residential, commercial, public and quasi-public.

3.2.2 Total Developed Area: 8,165.1 Acres(3.47%)

	<u>Acres</u>
Residential	974.79 (.41%)
Industrial	56.55 (.02%)
Commercial	96.52 (.04%)
Public & Quasi-Public	1,849.00 (.79%)
Transportation & Utilities	5,188.10 (2.21%)

3.2.3 Population:

Present (1970)	2,688
Forecast (1990)	5,567

3.2.4 Circulation:

Tenaja	ADT	140
Washington	ADT	1,470
Trips Per Zone		3,804

3.2.5 Housing

81% of all housing is single-family (1970), but trends indicate possibly more high density residential in the future.

3.2.6 Open Spaces & Conservation:

The conservation element may include:

- 1) Reclamation of land and water;
- 2) Flood control;
- 3) Prevention and control of the pollution of water bodies;
- 4) Control erosion;
- 5) Protect watersheds; and
- 6) Maintain as open space areas which are hazardous to development.

3.2.7 Scenic Highways

Interstate 15 (Highway 71) is included in the California Master Plan of Scenic Highways but has not yet been officially designated. Designation would most likely lead to more signage control along the route itself but would not significantly impact the site.

3.2.8 Seismic Safety

The major active and potentially active faults are in the Elsinore Fault Zone, which includes the Willard fault. A northeast portion of the site is included in the Riverside County Hazard Management Zone.

Services, Utilities and Easements

Water, gas, telephone and electrical services are available at the site or in the immediate area. The nearest sewage treatment plant is located approximately 4 miles southeast in Temecula. Elementary school services are provided by the Murrieta and Elsinore school districts. Elsinore Union High School serves both Murrieta and Elsinore school districts.

Portions of the site are within a county-designated "fire hazard area." At present, fire protection facilities are not available at the site or within a 5-minute response time radius.¹

1. Source: EIR for Joaquin Ranch; EA Number 7781-Joaquin Ranch, prepared by Donald A. Cotton & Associates, 1978.

Water Jurisdictions

The project site is presently within the Western Municipal Water District and the Metropolitan Water District of Southern California, but it is currently in the process of being annexed to the Rancho California Water District. After annexation, the Rancho California Water District will be the purveyor of water to the site and will design, build and operate the sewer and water system serving the project.

Zoning

Property immediately north of the site along Clinton Keith Road is zoned R-R, except for a commercial-zoned area at the intersection of Palomar/Washington Streets and Clinton Keith Road. Property immediately east of the site and south of the site is zoned R-R. The entire project site is zoned A-1-10 (agricultural with a 10-acre minimum lot size), except for the northwest intersection of Clinton Keith Road and Grand Avenue which is zoned R-R.

Change of Zone Case 2919 was submitted and implements the Specific Plan by changing the A-1-1- and R-R zoning to R-1- $\frac{1}{2}$, R-1- $\frac{1}{4}$, R-A- $\frac{1}{2}$, R4, R5, A-1-10 and CP zones (see Exhibit Z-Zoning).

Land Use

The Joaquin Ranch site is composed of natural and pasture areas which collectively constitute more than 80 percent of the site. Three hundred (300) acres or approximately 14 percent of the site is vineyard. Adjacent areas are in the process of being developed into large lot divisions. Parcels located on the Santa Rosa plateau are being planted in avocado ranches or vineyards. Since Murrieta is a center for raising thoroughbred horses, it can be expected that equestrian activity will continue in the area.

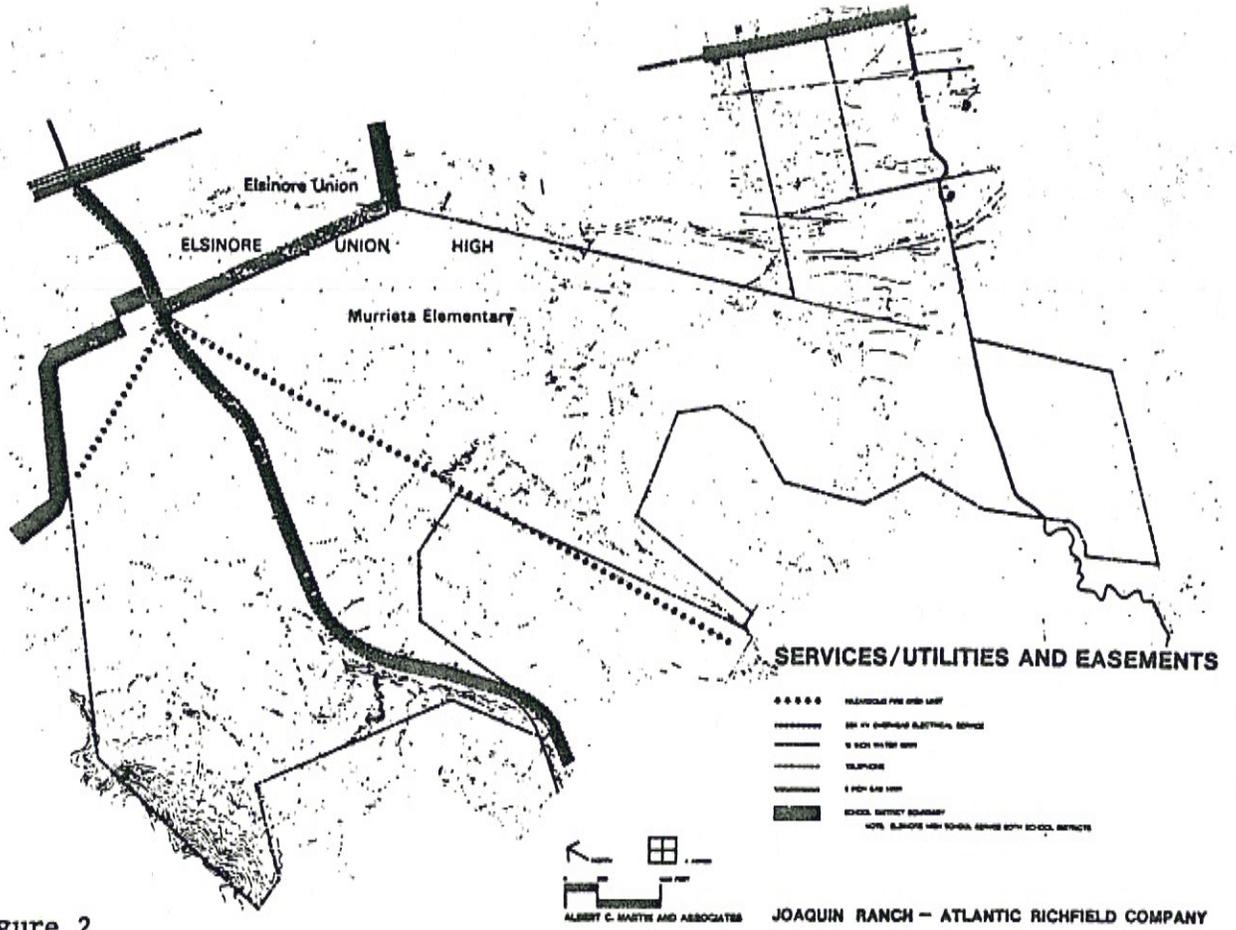


Figure 2

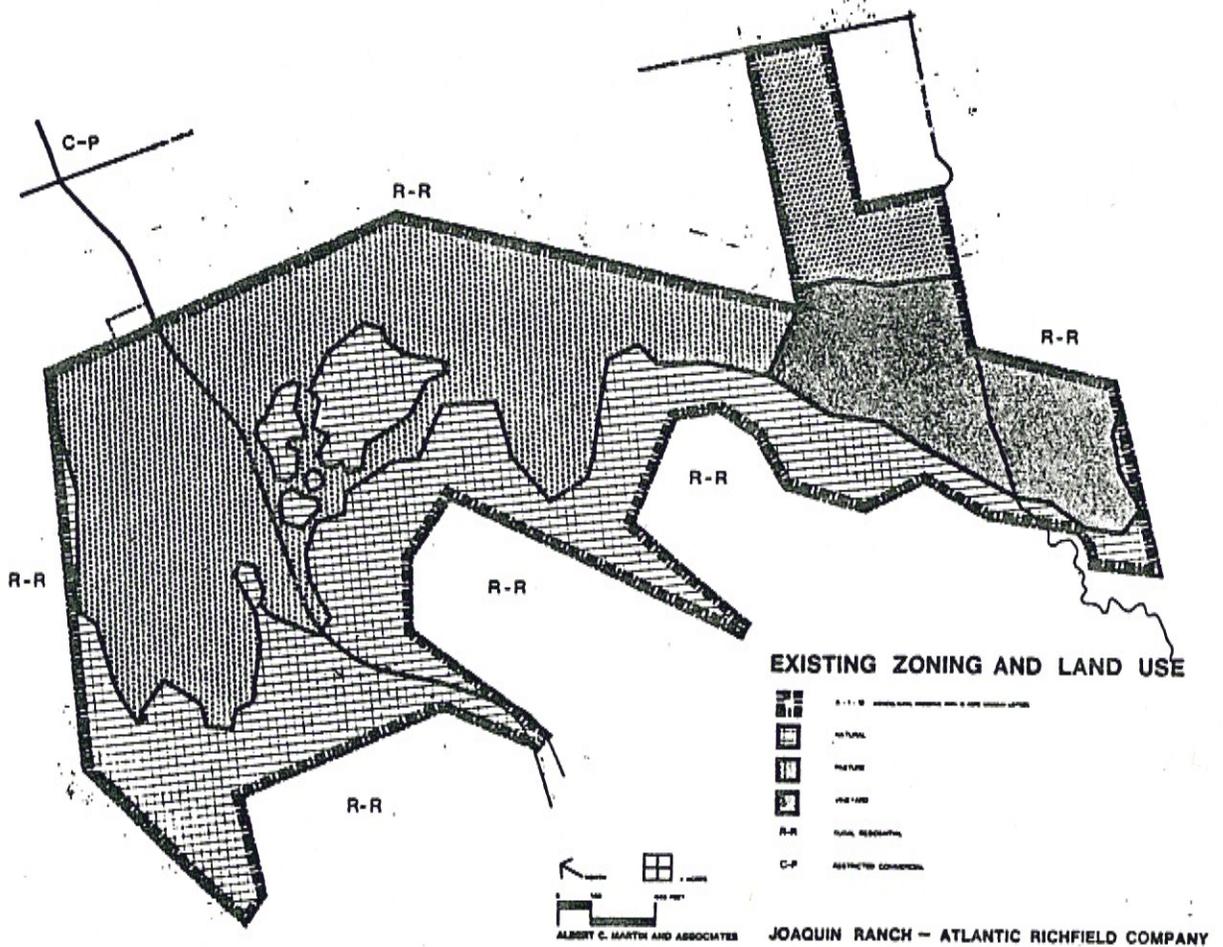


Figure 3

4.0

EXISTING NATURAL ENVIRONMENT

4.1

Soils

Soil types have been mapped for the Joaquin Ranch and Bear Creek Village development by the Soil Conservation Service of the U.S. Department of Agriculture. The soil profiles and descriptions of the soil properties are derived from the soil survey manual for the mapped areas. Interpretations of suitability for adaption to man's use have been made, and soil types have been grouped to more conveniently reflect these suitabilities.

In addition, a field survey was conducted.¹ Data from test pits indicate that the site is typically underlaid by loose, moderately dense silty sands. Isolated areas of clay sands were encountered. These clay sands are angular and non-plastic. Scattered areas of dense, decomposed granite rock and dense sandstone rock were encountered. Neither free ground water nor significantly expansive soils were encountered during the investigation. No superficial indications of landsliding soils or other forms of instability were noted. The sandy profiles of the soil indicate that most of the site is susceptible to erosion.

Engineers and soil scientists have classified the soil series within the project area into four hydrologic groups. The grouping is based on estimates of the intake of water during the latter part of a storm of long duration, after the soil profile is wet and has had an opportunity to swell without the protective effect of any vegetation. Also considered are depth to the seasonal high water table and to

1. Preliminary Soil Investigation: Joaquin Ranch, Pacific Foundation Engineers Inc., Bloomington, CA, 1977.

a slowly permeable layer. Since these hydrologic groups indicate the relative recharge potential of the soil and thus its importance to maintaining the overall hydrologic balance, the soils of the site were mapped according to their hydrologic classification. These soil classifications are shown in the accompanying map and are as follows:

Class A and B Soils - These soils have a rapid to moderate infiltration rate when thoroughly wet. These are mostly deep, well drained soils. The soils found on the site that are part of this classification include the following:

AID, AIC, AkC, AkD, AIE, GdC, GyC2, GyA, HaC, HcC, Had, RaE3, Rab2, RaC2, RsC and TvC.

GdC, GyA, GyC2, RaB2 and RaC2 have a high degree of natural fertility. No soils of this group should pose any shrink/swell problems.

Class C - These soils have a low infiltration rate when thoroughly wet and moderate water storage capacity. They include the following soil types found on the site:

CaD2, CaC2, FaF2, C6F2, Cf, Ce, ChD2, ChC, CkF2, EcD2, FcD2, GtA, GuB, GyB, LaD2, LkF3, MmD2, MnD2, MnE3, MmC2, and YsE3.

However, LaD2 and LkF3 soils could present some shrink/swell problems.

Class D - These soils have a very low infiltration rate when thoroughly wet and little or no water storage capacity. They are mainly clay with a high swelling potential. Runoff of these soil types is high. This class includes the following soil types:

FwE2, LpF2, PoC and TeG.

There are two factors to consider when examining the relationship between soils types and the hydrologic cycle and development. The first is permeability of the soil; the second is the degree of impermeable coverage inherent in a certain development type and density.

Hydrologic Class D soils are the most impermeable, that is, they have greater runoff and less infiltration for a given rainfall than more permeable soils. The impact of development on runoff for D soils would be less than for more permeable soils, because the D soils have relatively little natural infiltration capacity to be lost by impervious cover. Therefore, from the standpoint of impact on the hydrologic cycle, this soil's tolerance to development is relatively high. At the other end of the scale, very permeable soils with excess storage capacity for storing runoff could be thought of as being the most sensitive to development since, by covering the soils with an impervious cover, the amount of soils available for recharge is reduced. Therefore, coverage of permeable soils should be avoided wherever possible. However, other studies, most notably the research work done for the Woodlands New Community in Houston, Texas, show that, because of their increased storage capacity, permeable soils can be tolerant of development if runoff is directed over the remaining permeable soils which have an excess storage capacity. Therefore, in terms of impact on natural infiltration, soil types A, B and D can be thought of as being the most tolerant, if in the case of A and B soils the runoff is directed over the remaining permeable soils.

Type C soils are soils with moderate permeability, but with little or no excess storage capacity. This combination of factors makes this soil the least tolerant to development in terms of impact on natural infiltration. This soil type possesses some recharge potential.

However, the soil does not contain enough excess storage capacity to handle any runoff generated if a part of the soil were covered with an impermeable surface. These factors mean that C soils are the most sensitive to development of all the different soil types.

Geology

The geologic character of the Joaquin Ranch is determined by its position near the boundary of two major geologic provinces: The Perris Block to the northeast and the Santa Ana Mountains to the southwest.

The geologic units which constitute the site range in age from the recent alluvium of the Holocene to the older metamorphic rocks of the Triassic. These units are listed below and shown in the accompanying map.

- Alluvium Colluvium and Slope Wash (Qal) - These are sands that present no problems for development. Alluvium may be located in flood zones.
- Pauba Formation (Qfp, Qps) - This is a sedimentary bed of conglomerate and sandstone which presents no problems for development but is easily eroded.
- Quartz Monzonite and Grandionite (Kgm, Kgmd, Kgd) - These are mostly decayed granite. Topographic protrusions may indicate the existence of solid granite formations which would require blasting if developed extensively. Inclined planes of metamorphic formations may present landslide problems if planes are undercut.
- Terrace Deposits (Qt) - These are clay-ey sands mixed with cobble conglomerates; they may contain some deposits of caliche. They also have some potential for containing expansive soils, but otherwise pose few problems for development.
- Metamorphic Rocks (Jm) - These are of sedimentary origin. Some areas may be overlaid with expansive soils. There is a possibility of landslides if the clay planes are undercut.

-Landslide Deposits (lsd) - This material dates from the mid-to-late Pleistocene and is overlaid with a soil mantle. Many clay planes exist here. They are inclined to the northeast and could generate landsliding problems if undercut. Trapped groundwater behind the planes would have to be drained.

-Landslide (Qls) - In this area, there are evidences of recent landslides which present a hazard to development.

4.3

Seismology

Joaquin Ranch lies along the west margin of the Elsinore fault zone and is generally within the Santa Ana Mountain Block rather than the Perris Block. The northeast portion of the site lies within the Riverside County Hazard Management Zone. Segments of the Willard fault are shown as passing through the Ranch. The Ranch is included in the Seismic Safety Element to the General Plan (Riverside County), but the recent trenching conducted by geologists in February, 1978, confirmed that all fault traces can be considered inactive for development purposes and should not pose a hazard to structures placed across them.



Figure 4

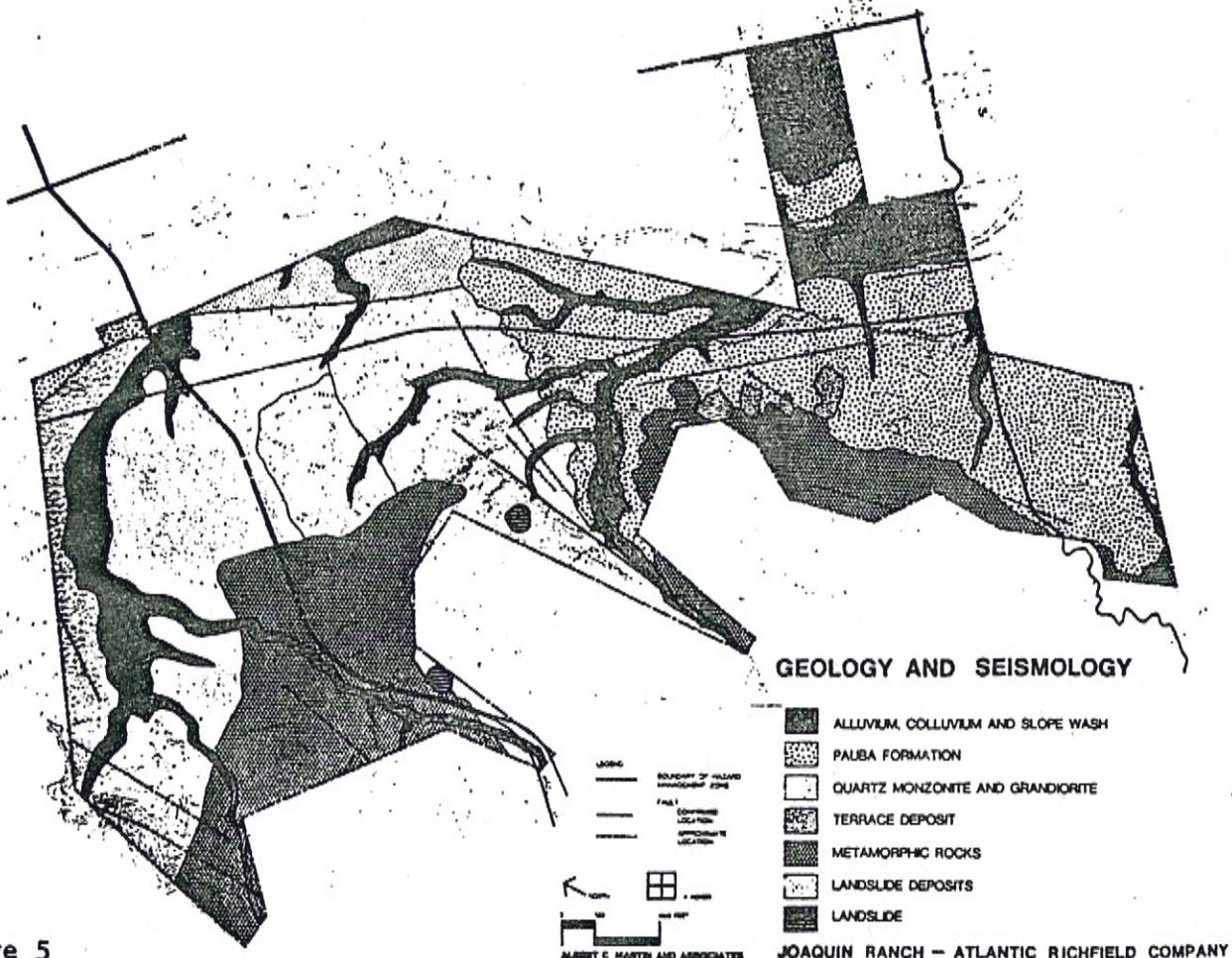


Figure 5

Topography and Slope

The slope of the site varies from less than one (1) percent slope for the land near Washington Street to almost 70 percent along the western slope. Of the 2,130 acres, nearly one-half consists of relatively flat areas with less than 8 percent slope, and one-quarter of the site consists of slopes within the 24-70 percent category. No areas within the site are identified with slopes more than 70 percent.

Slopes varying between 0-8 percent have few limitations for any type of land use, although there may be drainage problems with slopes less than 2 percent. Nine point nine percent of the site has slopes varying from 0-2 percent and 22.8 percent of the site has slopes varying from 2-8 percent. In total, 700 acres, or 32.6 percent of the site, consists of land with less than 8 percent slopes.

Slopes of 8-12 percent require some site modification for residential and commercial uses with resulting cost increases. There are some limitations on industrial, agricultural and recreational uses (i.e., playing fields). Roads require grading and slope cuts. Access for fire-fighting equipment is more difficult and the rate of fire spread increases with the slope.

Slopes of 12-24 percent require major site modifications for residential and most commercial uses with accompanying cost increases as well as major erosion and drainage problems. Industrial uses are generally precluded and agricultural uses are severely limited. Recreational uses such as golf courses, hiking and riding trails are possible. Ramped roads up to 15 percent are allowed but require costly engineering. These slopes are considered fire hazards, allowing only limited fire equipment mobility.

Slopes of 24-70 percent are generally unsuited for any type of development, except agricultural because of greater costs and serious environmental consequences, including erosion. Some agricultural uses such as citrus and avocado groves are possible.

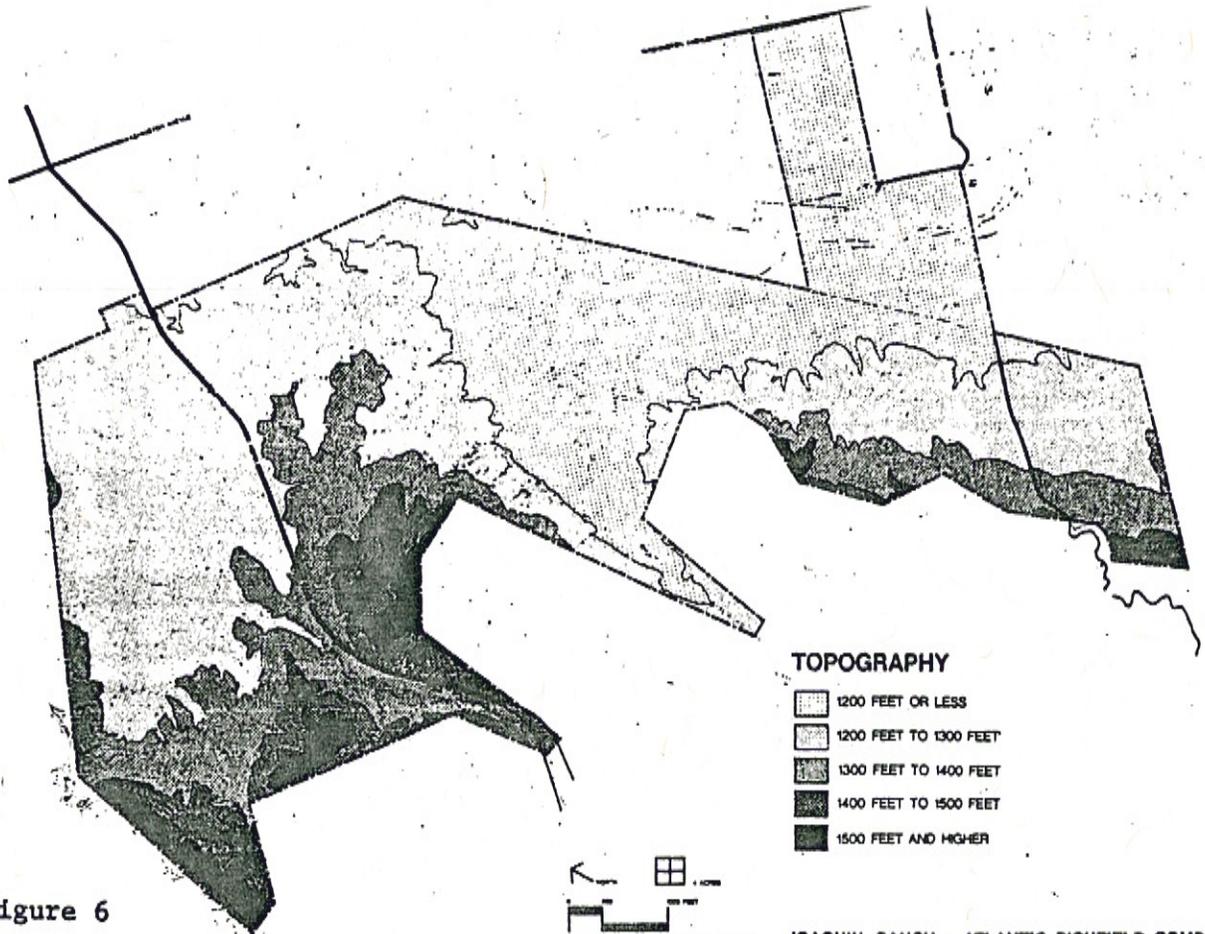


Figure 6

ALBERT C. MARTIN AND ASSOCIATES

JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

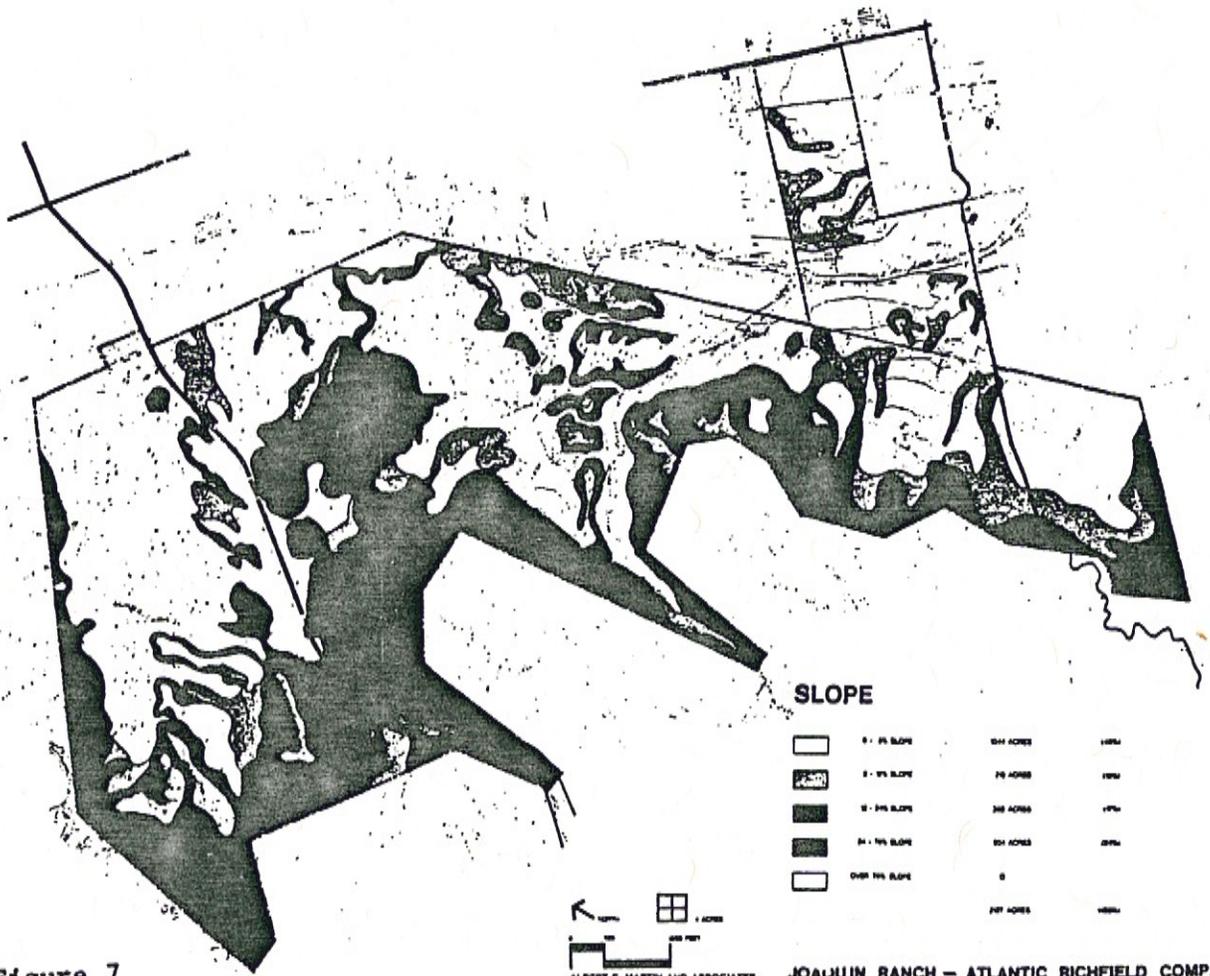


Figure 7

ALBERT C. MARTIN AND ASSOCIATES

JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

4.5 Hydrology

4.5.1 Groundwater

The Murrieta/Temecula groundwater basin occupies a large area which includes the project site in Murrieta, Pauba and Wolf Valleys. This basin receives inflow from both Murietta and Temecula Creeks and their tributaries. Within the project site, groundwater recharge areas occur along the lower portion of Slaughterho Canyon and Cole Creek. A local or seasonal groundwater table may be located along Slaughterhouse and Cole Creeks where the aluvium has been placed during periods of high precipitation. Local compartments of groundwater may exist within the slide debris in the northeasterly portion of the site due to confining clay planes in an old landslide.

4.5.2 Surface Water

The two major surface drainage channels on the project are Slaughterhouse Creek on the western portion of the site and Cole Creek on the central portion. These drainage ways run roughly south to north and west to east. Both of these creeks empty into Murrieta Creek, which crosses a portion of the site to the east and which flows north to south. Slaughterhouse Creek enters the development along Clinton Keith Road through a well-defined channel until it reaches a point approximately mid-way through the site. Here, runoff from another drainage area joins the creek and proceeds through the site as a wide flood plain. Anticipated post development runoffs for the 100-year storm have been calculated by J.F. Davidson & Associates for this drainage area and the others on the site. The flood plains and drainage flows are shown on the accompanying map. Cole Creek, which carries the surface flow from the mid-portion of the site, follows a well-defined profile to Murrieta Creek. The hydrologic study shows that runoff will be entering the site at a rate of 2,246 cubic feet per second from Slaughterhouse Creek and its tributaries. At the point where it exits the

site, runoff is calculated to be 3,150 cubic feet per second. At Cole Creek, runoff will be entering the site at the rate of 2,896 cubic feet per second and at the point where it exits the site, it will be approximately 3,320. These figures show that, even in this worse case situation, the runoff contribution of on-site development is relatively slight. This impact can be reduced even further through the distribution of densities to ensure maximum possible groundwater recharge and to increase the lag time for the surface runoff entering the stream. Minimum cost solutions would be to fully protect areas of high recharge value and to locate high intensity uses as far away from major creeks as possible.

Cultural Resources

A recent archaeological survey conducted in December, 1977 and January, 1978 revealed 21 archaeological sites on Joaquin Ranch and Bear Creek Village. Eighteen (18) sites are of minor significance but the remaining sites are villages and campsites of potential significance. The archaeological survey also found five historical features, all of minor importance.

The most significant archaeological site is located in Cole Canyon; it is a major village of the Shoshonean tradition with pictographs, numerous bedrock milling features and one or more extensive and deep cultural deposits containing a great variety of archaeological materials.

In order to preserve these historical sites, the following mitigation measures were recommended by the archaeologist, ranging from minimum protection to maximum protection.

Type a: No further measures necessary.

Type b: Map, collect and record surface materials. Use back hoe for controlled depth and location test excavations under the direction of a qualified archaeologist.

Type c: The archaeological materials on the surface of each site should be preserved by mapping, collecting, and analysis under the direction of a qualified archaeologist. A public report should be prepared on the analyzed material from each site. The collection should be catalogued and offered to a public institution for permanent curation.

The subsurface resources of each site with a cultural soil deposit containing archaeological materials should be tested to determine the extent, depth, contents, and significance of the subsurface resources present.

Type c(1): Each site with subsurface deposits containing significant archaeological resources should be preserved in place by carefully capping it over with sterile soil to a depth adequate to protect the cultural deposit from disruption by grading and construction, after an index sample of the archaeological resource to be preserved has been recovered, recorded, and a public report has been prepared under the direction of a qualified archaeologist. An easement deed dedicating the future preservation and administration of the buried cultural deposit should be conveyed to a suitable agency.

Type c(2) Each site with a subsurface deposit containing significant archaeological resources should be preserved in place by designating the site area within a wilderness or natural open space zone. An easement deed dedicating the future preservation and administration of the archaeological resources should be conveyed to a suitable agency.

Type d: The archaeological materials in each site with subsurface deposits containing significant archaeological resources should be preserved by a scientific salvage under the direction of a qualified archaeologist to remove an adequate proportion of the resources to realize the heritage represented. The salvaged resources should be analyzed and a public report prepared. The salvaged archaeological resources should be catalogued and offered to a public institution for permanent curation.

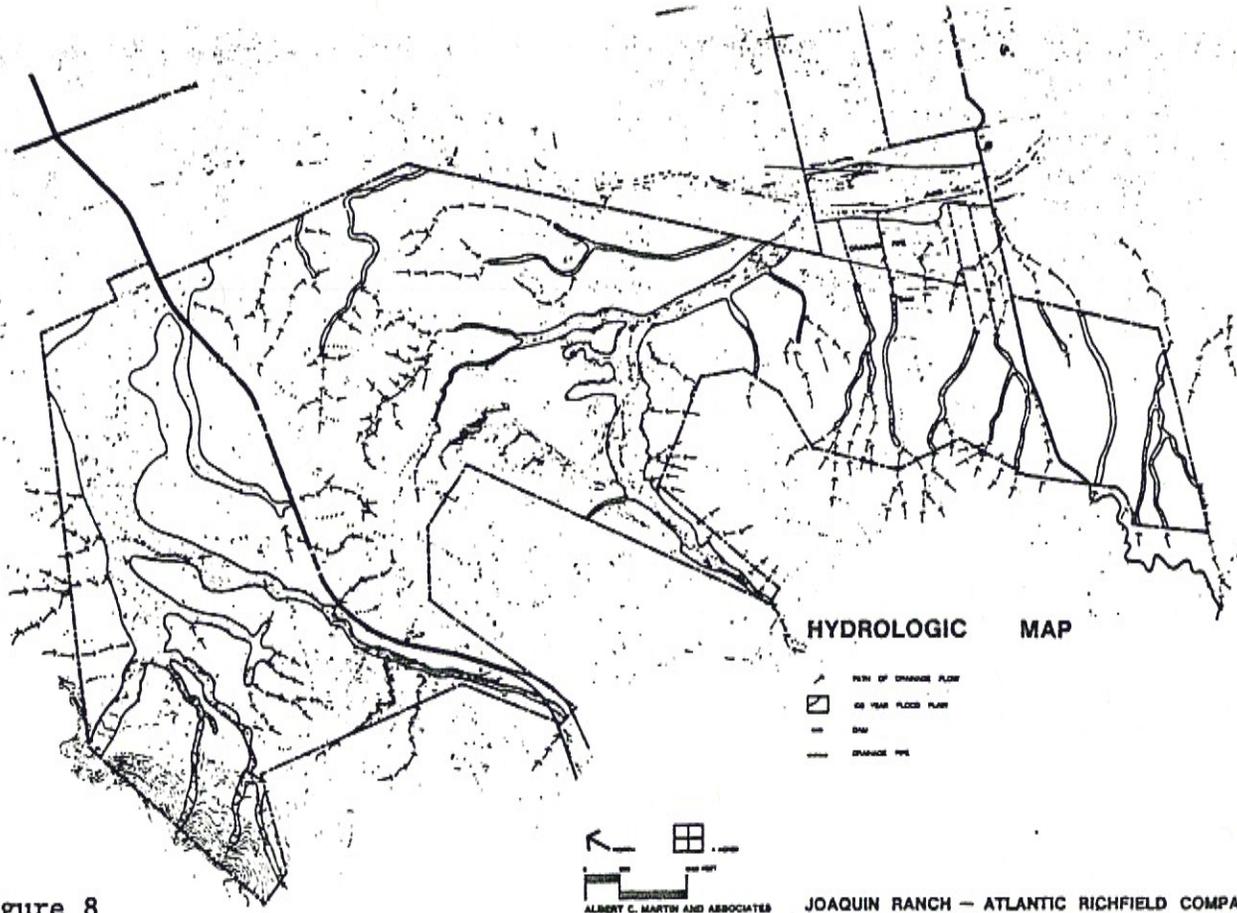


Figure 8

ALBERT C. MARTIN AND ASSOCIATES JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

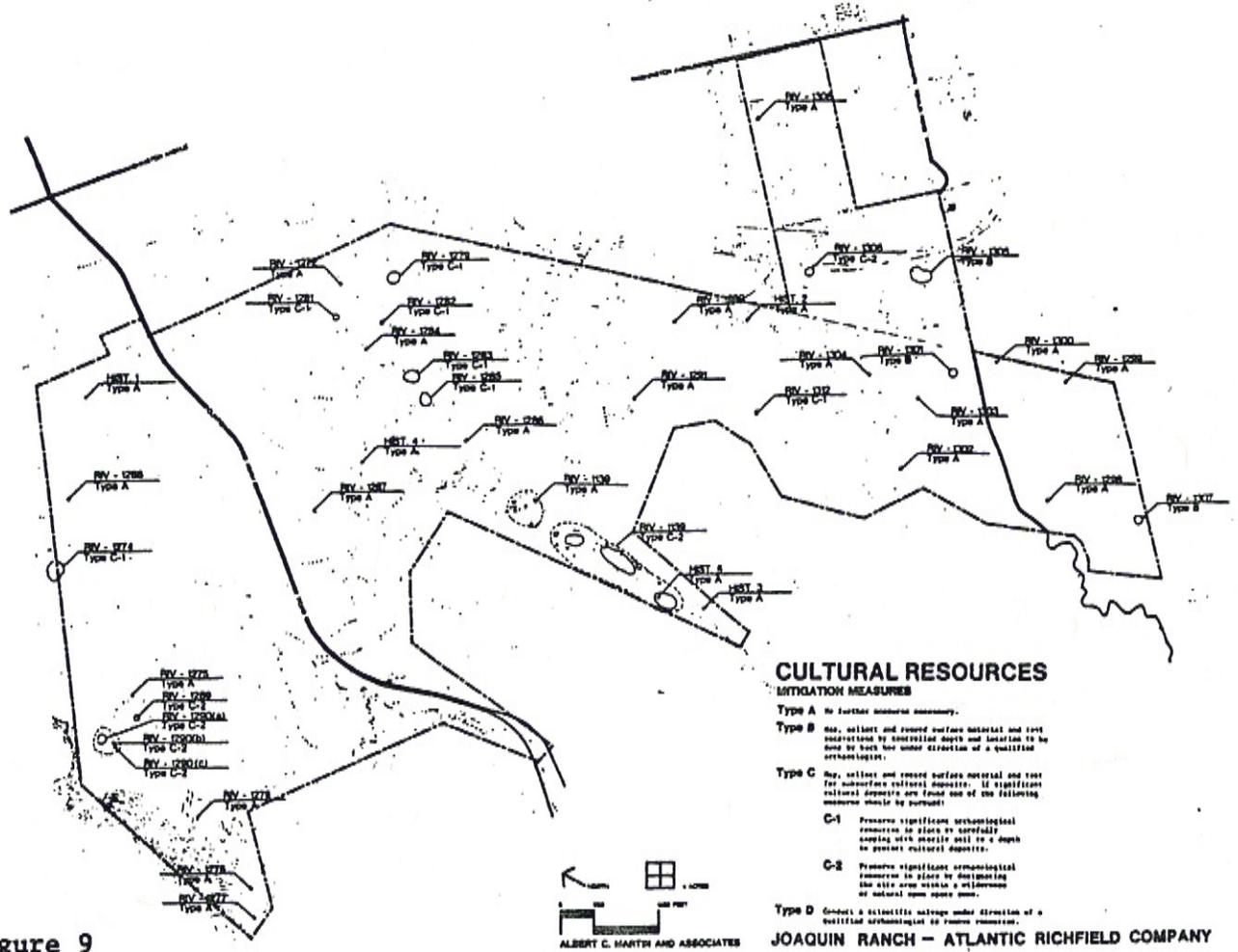


Figure 9

ALBERT C. MARTIN AND ASSOCIATES JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

Climate

The climate of the area is mediterranean with varied exposure to marine influences. There are southerly and southwesterly afternoon breezes that range from 6 to 15 miles per hour.

Precipitation levels for the area are approximately 10 to 13 inches per year with the heaviest concentration occurring in the winter months. Because of the complex topography of the site, temperature distribution is varied. Temperatures in the mountains to the west are warmer in the summer and cooler in the winter than those found in areas exposed to direct oceanic effects. Average maximum summer temperatures are 80-90 degrees Fahrenheit and average minimum winter temperatures are 30-40 degrees Fahrenheit.

In winter, the natural topographic features create cold air pockets and the ground fog forming in the valley bottoms on cool nights could cause severe restrictions in visibility and be quite hazardous to vehicular traffic. There are portions of the site immediately adjacent to the Murrieta Creek that are susceptible to cold air drainage.

Vegetation and Wildlife

The site is comprised of chaparral, coastal sage, pastureland and riparian woodland. Chaparral predominates in the southwest portion of the property; however, as the elevation decreases toward the northeast pastureland areas, coastal sage begins to predominate. Along the major drainage channels, such as in Cole and Slaughterhouse Creeks, are belts of riparian woodlands containing live oaks and sycamores.

The chaparral occurs in sheltered gulleys and north-facing slopes and consists of ceanothus, toyon, scrub oak, chamise and redberry, with some sugar bush and lemonadeberry. The coastal sage scrub consists principally of California buckwheat and black sage. The present pastureland comprises various European grasses and mustard.

The full complement of wildlife, characteristic of Southern California inland foothill chaparral and riparian woodlands, can be expected on the site. Wildlife includes the California ground squirrel, Audubon's cotton tail, muledeer, and skunk. There are no endangered species on the site.

Representatives of the Sierra Club and the University of California have surveyed the site with the project planners. Of utmost concern to these representatives was the conservation of the site's live oak specimens and protection of the riparian woodland communities.

Visual Analysis

Joaquin Ranch contains many scenic canyon areas, wooded hillsides and creek areas, with views of the nearby San Jacinto Mountains.

In analyzing the site visually, many features emerge as being of primary importance. First, the undulating topography of the site is punctuated by predominant crests which act as landmarks and points of orientation, and which also provide dramatic views across and beyond the property limits. In some cases, these topographic features form natural gateways which impart a sense of entry into various portions of the site and which, because of a shared feature or a sense of enclosure, can have an individual identity. View areas tend to be of two kinds. In some cases, there are views framed by natural features which call attention to one specific area; in other cases, there are areas of broad, panoramic views.

Some portions of the property are marked by cliffs and sharp changes in elevation which, if used properly, can add an element of drama to the site.

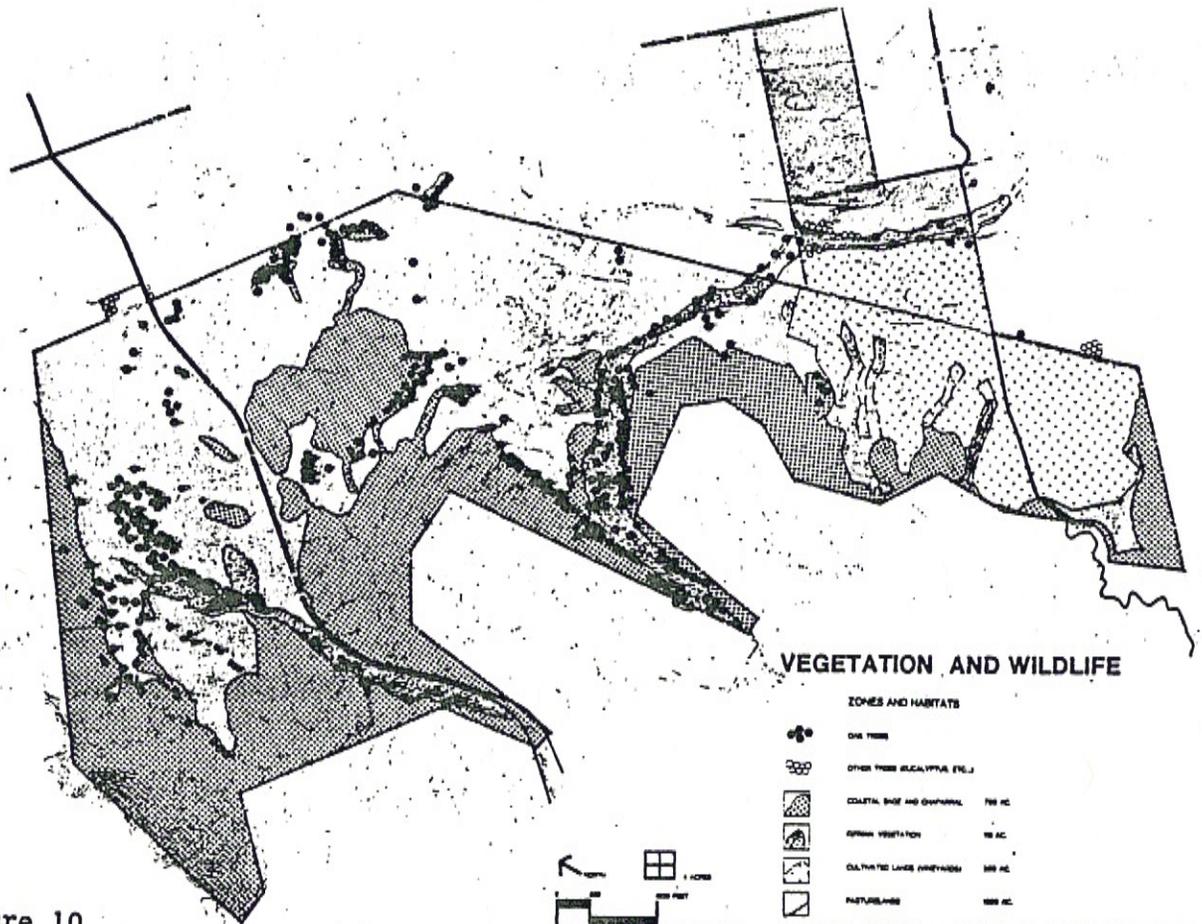


Figure 10

ALBERT C. MARTIN AND ASSOCIATES JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

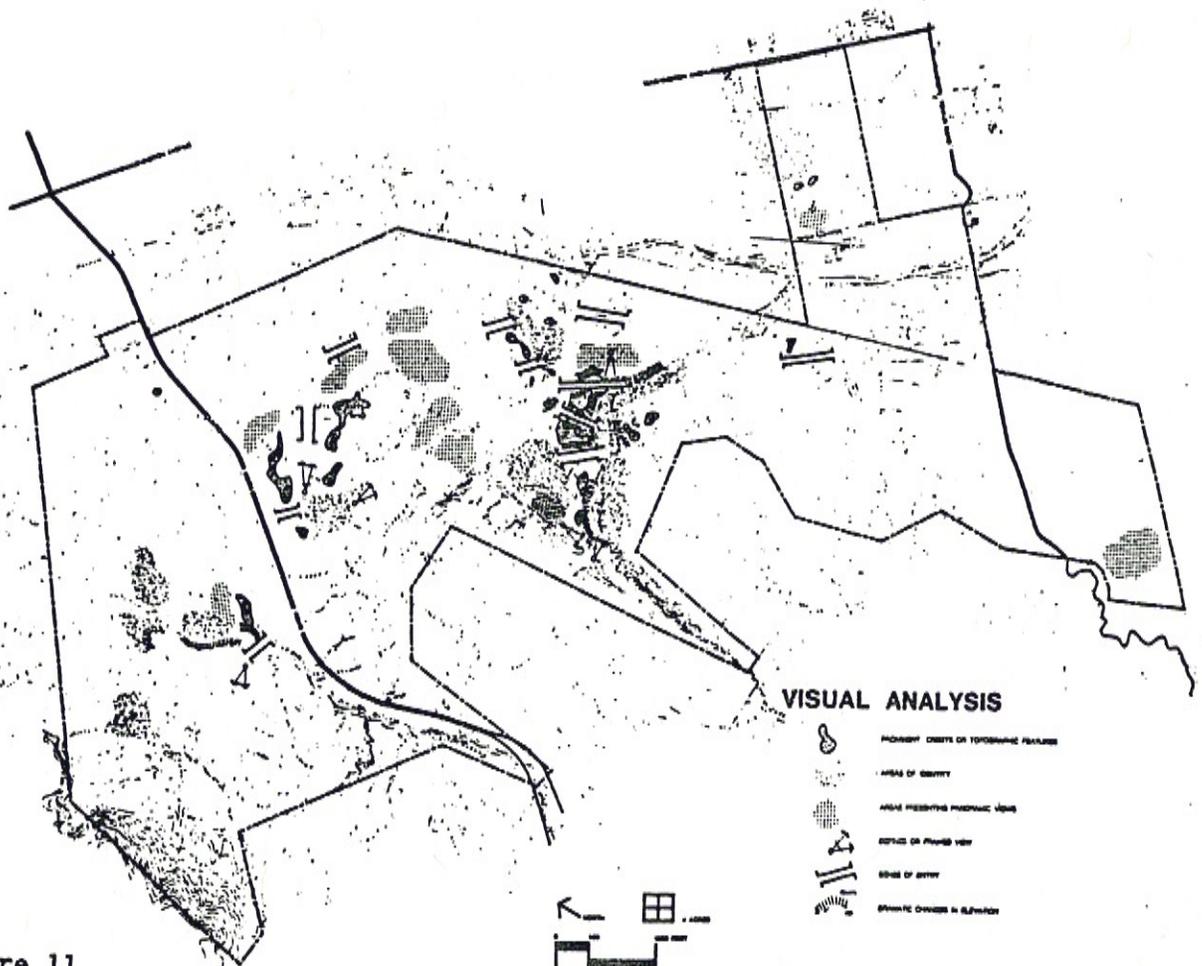


Figure 11

ALBERT C. MARTIN AND ASSOCIATES JOAQUIN RANCH - ATLANTIC RICHFIELD COMPANY

Air Quality

There are two primary sources of air flow for the project site: Air from Orange County and Southern Los Angeles County via Santa Ana Canyon and coastal air via Santa Margarita Canyon. Because of the constant source of coastal air, the study area has relatively clean air except when atmospheric conditions create an inversion layer.

Sources of air pollution would come from mobile and stationary sources. Mobile sources could contribute approximately 2 percent of the total motor vehicle emissions projected for Riverside County by 1990; stationary sources will consist of the combustion of natural gas for heating and would contribute only negligibly to the total stationary emissions for Riverside County.¹

¹ Environmental Impact Report for
Joaquin Ranch: GPA-127-778-L-40

LAND USE ELEMENT

The Land Use Element of the Specific Plan seeks to accomplish two primary objectives. The first is to allocate land uses and densities within those areas of the site where the natural landscape is most tolerant to development (see Appendix A: "Suitability Profiles"). Secondly, it addresses the issue outlined by the County of Riverside in the General Plan Amendment which establishes the 0-to-1 dwelling units per acre density across the site. To accomplish these objectives, development is concentrated in those areas most tolerant to development, with the rest of the site remaining as open space (see Appendix A: "Suitability Profiles"). This space is organized within the Plan into an open space system which, in addition to accommodating the natural drainage system of the site, also acts as an open space network to help define the neighborhoods of the development, join them into a cohesive whole and link them to the surrounding community.

Residential Development

A market study conducted by the Natelson Company, Los Angeles, indicated that a wide mix of housing types would be most appropriate for the project in order to capture its share of the existing market. The land uses of the Specific Plan reflect this mix.

The highest concentration of development is centered around Clinton Keith Road at the northwest portion of the site. North of Clinton Keith, a private, gated community will be located adjacent to an 18-hole championship golf course. The fairways of the course are located in the lower elevations of the site, with the residential lots located on the higher elevations overlooking the fairways. South of Clinton Keith Road, a spine road enters the site between two knolls, which form a natural gateway to this portion of the property. Hillside villas will be located on the knolls, taking advantage of the view from these higher elevations. In the saddle formed by the three knolls, a commercial area will be located. By locating the commercial area here, it is made easily accessible to the residential areas surrounding this portion of the site while, at the same time, it is shielded from off-site views by the surrounding knolls. In the flatter portions of the property north of Cole Canyon, residential lots ranging in size from 2-to-3 acres estates to low density single family lots will be located on the plateau areas, with the green belt and open spaces running along the creek beds and drainage swells located in the lower elevations. The residential development south of Cole Creek will include rancho estates and low density residential development, with some villa and patio home development. Residential lots back onto green belt open spaces. ~~The setting of this portion of the community will focus upon the 170+ acre vineyard, which will be retained as part of the development~~

The residential land use categories are as follows:

1. Rancho Estates - This category includes 5 to 10 acre rancho lots, which are located primarily in the upper reaches of the existing vineyard. These rancho estates will include portions of the existing vineyard sold as agricultural lots and kept in that use.
2. Estates - This category includes 2 to 3 acre lots with an overall density of approximately .3 to .5 dwelling units per gross acre. This low density residential type is used primarily in those areas of higher elevations where it is desirable to keep development impact to a minimum.
3. Very Low Density Single Family - This category includes lots which range from 18,000 square feet to 60,000 square feet, with an overall density of approximately .6 to 2.0 dwelling units per gross acre. This type of development includes some of the area around the golf course and some of the area just to the north of Cole Canyon. This type of development is designated to occur in areas of high to moderately high landscape tolerances (see Appendix A: "Suitability Profiles"). In isolated areas slopes may exceed 24%. Some of the designated areas could encroach upon the 100 year flood plain as it now exists. One particular area just to the west of the proposed waste water reclamation facility may contain a high perched water table. Various adaptations as outlined in the "Drainage and Grading" component of this plan will be employed to mitigate these conditions.

3A

Half Acre Very Low Density Single Family *

This category is single family homes on lots no smaller than 20,000 square feet, with an overall density of two dwelling units per acre. This type of development is located in those areas of the project between Washington Street and Murrieta Creek.

*Added by Planning Commission on December 13, 1

comprises approximately 30% of all *

4. Low Density Single Family - This category includes lots that range in size from 10,200 square feet to 16,500 square feet, with an overall density range of between 2 to 3 dwelling units per gross acre. This land use category is the most common of the development and ~~comprises approximately 44% of all~~ the residential units. It occurs in those areas with very tolerant landscape characteristics (see Appendix, "Suitability Profiles"). Slopes in isolated areas may reach 24%, but these instances do not persist over long horizontal distances. In one area east of Murrieta Creek the designated development area may encroach upon the current 100 year flood plain. These situations will be handled using the various adaptations outlined in the "Drainage and Grading" component of this plan.
5. Patio Homes - This category includes densities that range from 4 to 6 DU's per gross acre, with lots that range in size from 3,500 square feet to 4,400 square feet, with lot widths 40 feet and up. These areas will be designed as Planned Residential Developments and built according to the standards outlined in Article XIII of Ordinance 348.
6. Villas - This land use category includes those areas designated for the development of attached residential units. For the most part this designation occurs in and around the 18 hole golf course and on the knolls surrounding the commercial area. They will also be designed as Planned Residential Developments. Detailed geological and soils reports will be prepared prior to development in these areas and adaptations as outlined in the "Grading and Drainage" component and other components of this plan will be used to diminish the impacts of development.

*Changed by Planning Commission December 13, 19

5.2

Conservation Area

One of the major elements of the Specific Plan is the 150+ acre conservation area located along the upper reaches of Cole Canyon. By concentrating development in areas of the property more tolerant to development, the Plan makes it possible to retain this valuable resource in its natural state. Residential development adjacent to the conservation area is kept to a very low density, in order to reduce the impact of development immediately around it. Further discussion as to how this conservation area will be treated is given in the Landscape and Open Space element of this plan.

5.3

Golf Course

A 200+ acre, 18-hole championship golf course will be located north of Clinton Keith Road. This course, projected to be one of the finest in the country, will act as the focal point and the open space system for the community north of Clinton Keith Road. Further information concerning the course is given in the Landscape and Open Space element of this plan.

5.4

Open Space

Over 400 acres of the project will be left as open space over and above the golf course, conservation ~~and vineyard~~ * areas. This open space system, along with the overall low densities of the development, will help to maintain the rural quality of the surrounding community. Further information concerning the treatment of this open space system is given in the Open Space and Landscaping element of this plan.

*Deleted by Planning Commission on December 13,

5.5

Commercial

Approximately 5-10 acres of the site will be used for commercial and community uses. This will include 40,000 square feet of neighborhood commercial development and approximately 80,000 square feet of garden/office. In addition, approximately 1½ acres of this land will be set aside for the construction of a County Fire Station.

5.6

Golf Course Club House/Executive Seminar Center/Swim & Tennis Clubs

In addition to the club house complex constructed in conjunction with the golf course, several swim and tennis clubs are located at various points throughout the project. These swim and tennis clubs will be constructed in conjunction with the adjacent residential areas and will be for the use of the area residents. The location of these sites are indicated on Exhibit A: Land Use and Circulation.

6.0

CIRCULATION ELEMENT

The Joaquin Ranch and Bear Creek Village Specific Plan recognizes that the automobile will be the dominant mode of transportation for the proposed development in the years ahead, but at the same time attempts to integrate into the Plan of the community alternate modes of travel, such as bicycling and equestrian trails as alternates to the automobile-oriented transportation facilities.

6.1

Motorized Circulation

The objectives of the streets and roadways component in this Plan is to articulate the road network, both functionally and visually, to accomplish the following:

1. Promote driver and pedestrian safety.
2. Provide better visual identity and orientation for motorists.
3. Facilitate response by emergency vehicles.
4. Minimize off-site impacts of traffic.
5. Maintain to as great an extent as possible the rural and residential quality of the community.

The network is composed of four categories of streets; restricted local streets, general local streets, the collector road and the existing roadways which cross the site.

6.1.1

Restricted Local Streets

Restricted local streets of the Specific Plan are those streets having a 50-foot right of way. These streets serve a restricted number of building sites or residential sites and are, in many cases, cul-de-sacs. These cul-de-sac streets will have a turn-around right of

way diameter of not less than 100 feet. No cul-de-sac will exceed 1,320 feet in length. Cul-de-sacs exceeding 660 feet in length will be provided with a fire lane at the end of the cul-de-sac, connecting it to an adjacent restricted local street or an adjacent general local street.

6.1.2

General Local Streets

General local streets are shown on the Specific Plan as those streets having a 60-foot right-of-way. While some lots face on these streets, their primary function is to link the restrictive local streets to the major collector roads or directly to one of the existing roadways which cross the site. All general local streets will have 40-foot wide paving and cross sections will be designed and constructed in conformance with Ordinance 461, Standard No. 104, Section A.

6.1.3

Major Collector Street

General Plan Amendment 154 of the Circulation Element of the General Plan calls for an 88' R.O.W. secondary highway to traverse the northern portion of the site between Clinton Keith Road and Cole Creek. As planned, the highway would run from a point on Clinton Keith Road south to a point north of Cole Creek. From here it veers east and exits the property at approximately the large eastern corner of the rancho. After exiting the property, the highway, as planned, will continue east crossing I-15 and continuing to reconnect with Clinton Keith east of I-15.

This plan incorporates this roadway and makes it the major collector for that portion of the community between Clinton Keith Road and Cole Creek. It will be designed using suggested County Roadway Standards for a secondary roadway in rolling topography with the exception that grades in some areas will approximate 8%.

Traffic studies conducted for the project indicate that traffic volumes for this road generated by the residential uses of this project would amount to 5,330 vehicles per day. Commercial and office uses were sized to bring the anticipated loads to approximately 7,500 vehicles per day. Based on these loads, Riverside County Road Standards suggest a 66-foot wide R.O.W. containing two lanes of moving traffic on a paved surface 44 feet wide.

That part of the road which enters the site at Clinton Keith and extends through the commercial area of the project comprises the initial section of the road. In the design of this section, the need to accommodate the turning movements generated by the commercial uses had to be taken into consideration. In addition, the alignment of the road needed to avoid, as much as possible, destroying a nearby grove of California live oaks which are located directly in

front of the road's entry point at Clinton Keith Road. Taking all these factors into consideration, it was decided that a road cross section of 100 feet could provide an adequate cross section to handle the anticipated traffic loads at this point in the road. Such a section would provide four lanes of moving traffic, plus a median area that could function as a left turn lane. By using a curve radius of 850 feet and tangents of 100 feet, it was determined that most of the live oak grove could be saved and that a reasonable vehicle speed of between 40-45 miles per hour could be maintained. Once past the commercial area, it was assumed that a left turn lane would no longer be required. For this reason, from this point on the collector assumes the cross section of 88 feet.

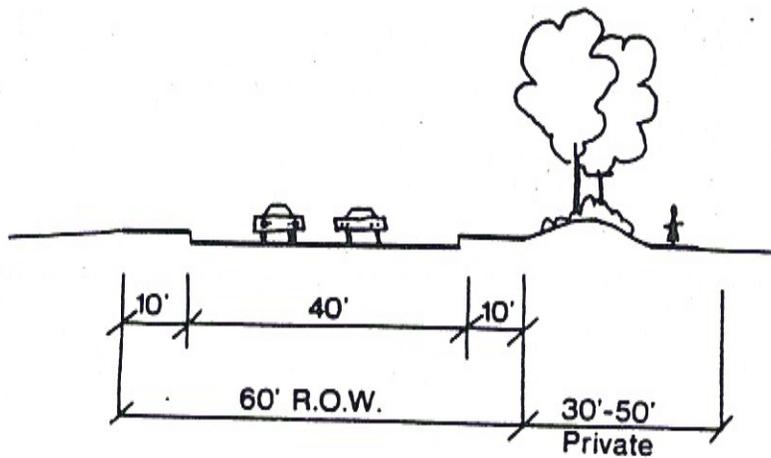


Figure 12 Typical General Local with Buffer Area (Where Occurs)

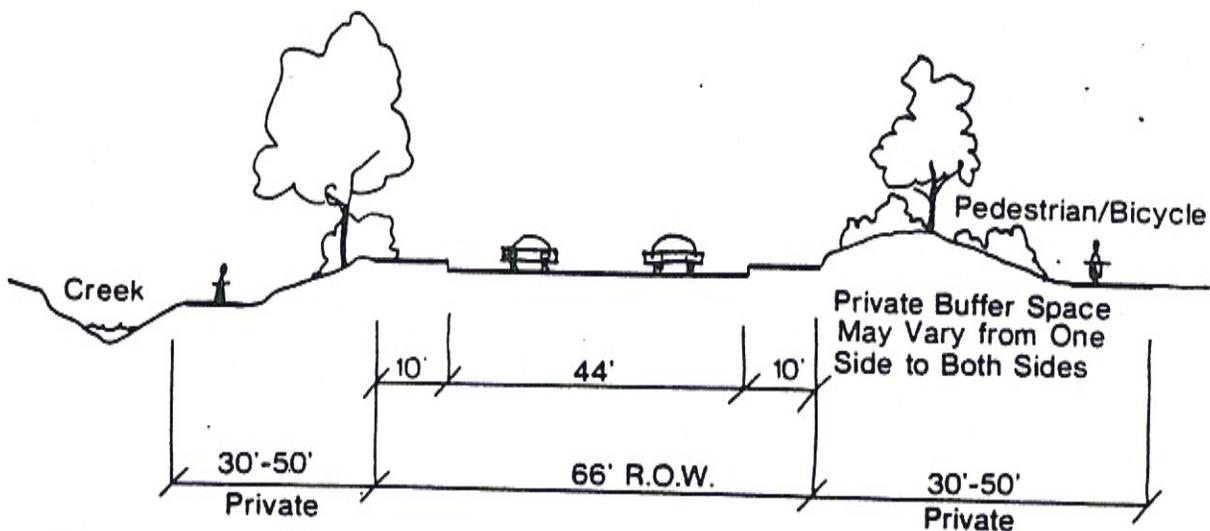


Figure 13 Typical Collector Road with Buffer Area

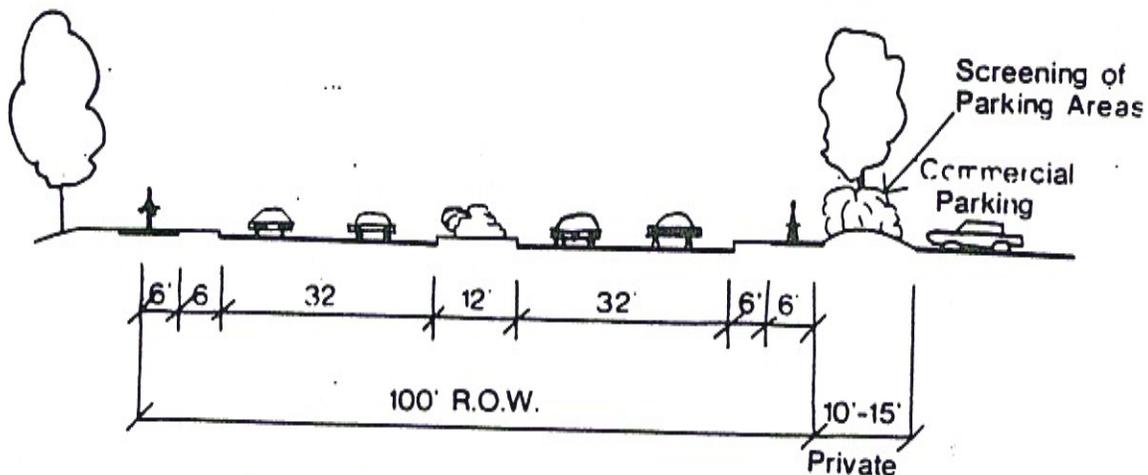


Figure 14 Typical Section of Spine Road at Commercial Area

6.1.4

Clinton Keith Road

Clinton Keith Road will become the project's primary east/west roadway. It is currently a 40 foot wide, two lane rural road extending into the property from its eastern origin at Palomar Street. Clinton Keith Road is designated as an arterial highway on the circulation element of the Riverside County General Plan. According to Cal Trans officials, a full interchange will be constructed at Clinton Keith Road. This interchange is now under construction. According to the Riverside County staff, the specific alignment for that section of Clinton Keith Road between Palomar Street and Interstate 15 has been adopted, and local road improvements and freeway improvements will be completed concurrently. According to Riverside County Road Standards, the projected cross sectional right of way for Clinton Keith Road arterial will be 110 feet, with a four lane 86 foot curb-to-curb roadway. Complementing this 110 foot right of way, the Plan calls for a privately-owned and maintained landscaped buffer area on either side of the road as it crosses the site. This landscaped buffered area will help shield the adjacent residential areas from the traffic noise generated by Clinton Keith and provide an area for possible alignment of pedestrian and bicycle paths.

6.1.5

Tenaja Road

Tenaja Road will be the project's other major east/west roadway and will provide traffic service to the site's southern area. Tenaja Road is currently a two lane rural roadway, varying in width between 12 feet and 16 feet. Tenaja Road is classified as a secondary highway on the circulation element of the Riverside County General Plan. This General Plan classification designates a four lane, 64 foot curb-to-curb roadway within an 88 foot right-of-way width. In addition to this right-of-way, this Plan calls for a privately-owned and maintained landscaped buffer area between the Tenaja right-of-way and residential areas adjacent to the road. This would provide the same amenities as described for the buffer area along Clinton Keith Road, but would be on a smaller scale.

The street system of the proposed development will connect to Clinton Keith Road and Tenaja Road at a minimum number of locations. The street system will not connect to the north or west of proposed or existing developments due to the extremely steep grades. Additional right-of-way will be provided where necessary to accommodate roadway slopes, drainage structures and other facilities related to land division improvements. Dead-end streets will only be permitted in those areas where future development will occur on this project. Due to the need to maintain a secure community, all streets north of Clinton Keith Road will be private streets but their design will be subject to County review. The private streets will be constructed and maintained by the developer until an owners association has been established with adequate funds to maintain the streets. Landscaped buffer areas adjacent to streets will be maintained by the owner until such time as the adjacent Homeowners Association is able to assume maintenance costs. The County will be provided with full documentation upon the completion of the owners association's rules of operation.

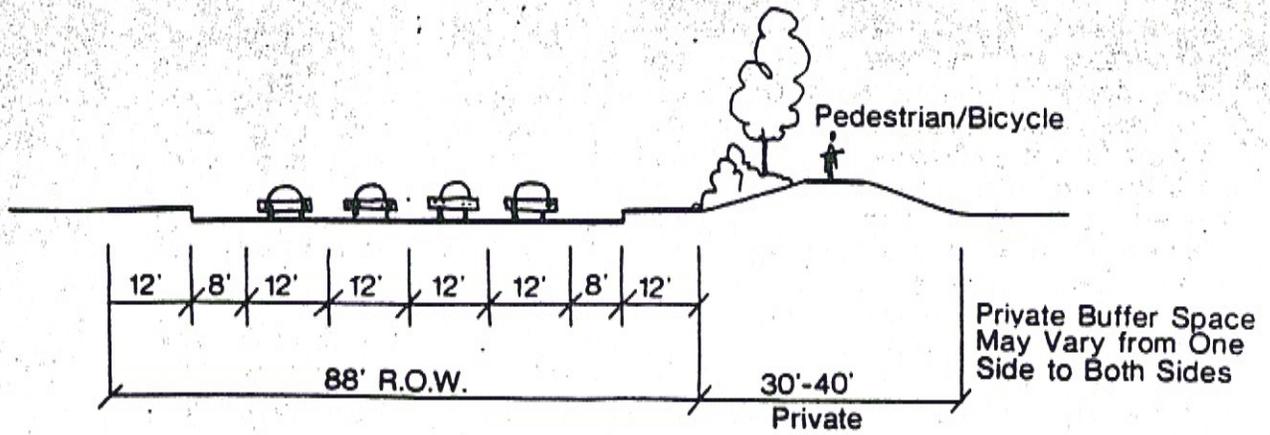


Figure 15 Tenaja Road with Buffer Area and Bicycle Path

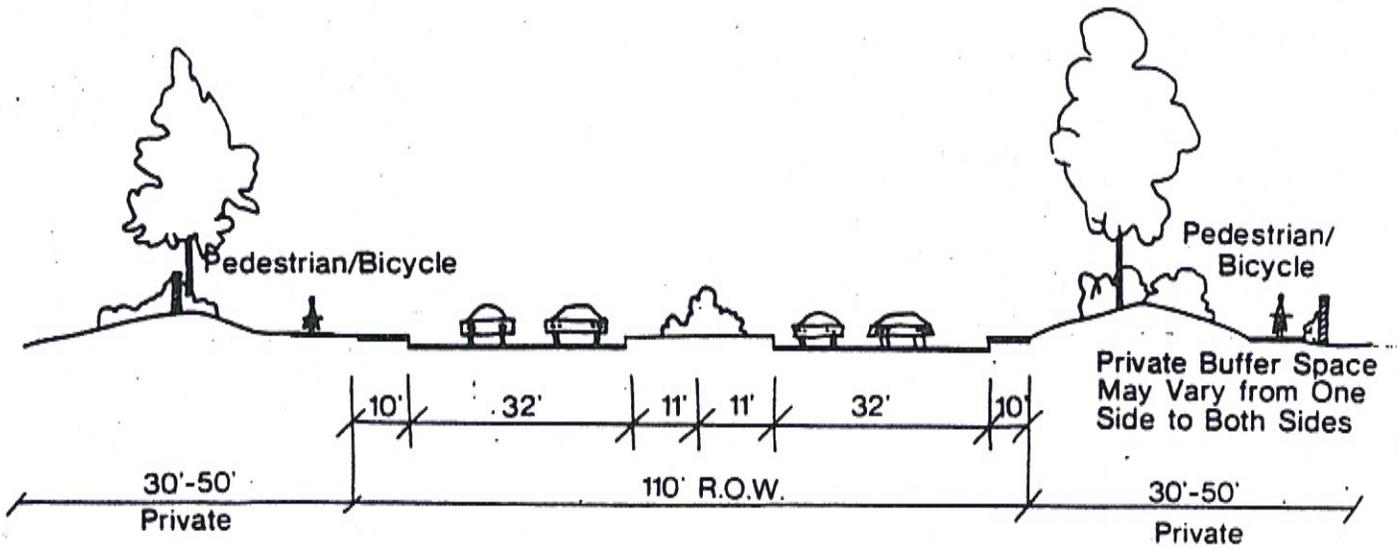


Figure 16 Clinton Keith Road and Buffer Areas

6.2

Non-Motorized Circulation

Because of the low density character and distances involved with the project, the non-motorized component concerns itself with bicycle paths and bridle trails. Pedestrian circulation, it is assumed, will utilize the open space system for circulation through the project. In addressing the problem of non-motorized circulation, the Plan seeks to accomplish the following objectives:

1. Provide a safe and efficient alternative to the automobile in order to minimize energy consumption and impacts on air quality.
2. Offer an aesthetically pleasing riding and bicycling pathway.
3. Recognize community-wide circulation patterns.

6.2.1

Bike Trails

The plan assumes that localized bicycle traffic will utilize the general local and restricted local surface streets. In locating the bicycle paths, the Plan provides links between the major portions of the project. To do this, it calls for a major north/south bikeway path running from south of Clinton Keith to the end of the collector road. For some of this distance the path utilizes the buffer zone located to one side of the major collector street that runs across the site. At one point it dips down behind the wet weather treated affluent storage area to take advantage of the gentler slopes located here. One branch of this major north/south path circles around one of the knolls located near Clinton Keith Road and serves the higher density residential development located in this area by connecting it to the north/south path and to the commercial area. The major east/west paths run along the open space buffer on Clinton Keith and Tenaja Roads. In addition, one east/west component crosses Murrieta Creek and follows the open space system through

the part of the project located east of Murrieta Creek, and connects it to Washington Avenue on the east. To the north of Clinton Keith Road the system assumes a slightly different character and becomes a private, restricted system, primarily for the use of golf carts. Due to the security requirements, the paths in this area will not have any off-site connections. In cross section, the paths will have a center crown and will be graded to drain. They will be approximately 5 feet in width and will not have an edge curb but will be constructed of a durable surface, which will most likely be decomposed granite.

6.2.2

Equestrian Trails

This portion of the Plan seeks to provide a clearly defined equestrian network through the project to not only serve the project residents, but to also allow a continuation of the equestrian network that extends across the entire southwest territory of Riverside County. It also seeks to keep these paths as isolated as possible from motorized circulation. The primary north/south path runs along Murietta Creek and along a portion of Cole Creek. At this point it begins to follow one of the greenway systems until it reaches the higher elevations toward the north end of the site. To the south of Cole Canyon, a north/south trail threads south to a point west of the major north/south collector road and follows the higher elevations of the property until it reaches Tenaja Road and then again turns in a westerly direction to follow Tenaja Road. At this point another branch follows an open space drainage system to the east.

These trails will be designated by markers and underbrush will be cleared where needed.

7.0

OPEN SPACE AND LANDSCAPING

One of the primary objectives of the Plan has been to maximize open space. In doing so, the Plan has sought to accomplish the following objectives:

1. Retain as much existing vegetation as possible.
2. Provide cover food and water in areas which are accessible to wildlife.
3. Provide for wildlife movement.
4. Buffer wildlife from disturbance by humans.
5. Conserve existing live oak stands.
6. Preserve significant archeological sites.
7. Provide a cohesive on-site open space system which can be easily maintained by project residents.
8. Make the open space system as accessible as possible to the project residents and to the surrounding community.

7.1

Open Space Types & Landscaping Standards

The primary open space system consists of categories characterized by uses and landscaping treatments. These categories are as follows:

- Conservation Area - This area includes the riparian woodland habitat of the upper regions of Cole Canyon. This area will be left in its natural state with limited access to the residents of the project and to the community. This area is approximately 150 acres in size. In addition, other areas, including some of the riparian woodland areas of the golf course, will be left in a natural state.

-Hillside Area - These are the chaparral and sage areas within the steeper portions of the site. Intrusion into these areas will be limited to that needed for fire protection and the alignment of equestrian and bicycle trails. In addition, five to ten acre rancho estates may extend into these areas. This area will comprise approximately 291 acres.

-Open Space Corridors - These open spaces run adjacent to the developed areas and will be utilized as active and passive recreation areas, as well as drainage ways. In order to reduce maintenance costs and to preserve the rural character, intensive landscaping will be limited to specific areas while the rest will be seeded in natural, self-maintaining grasses, trees and shrubs. The primary elements of this category will comprise approximately 375 acres, while it is estimated that secondary elements of this system will add another 100+ acres when subdivision plans are finalized.

-Golf Course and Developed Areas - Intensive landscaping will be limited to those areas immediately adjacent to roads, buildings and to the golf course. Plant materials will be in keeping with the natural setting and character of the community. Some area will be left in its natural state.

All open space areas, with the exception of the golf course, will be appropriately maintained by the current owners until the local Homeowners Association can assume ownership and maintenance. This maintenance will include those landscaped areas within road right-of-ways not required by the County. In the case of the Conservation Area, special arrangements may be made for its acquisition and maintenance by an appropriate public agency other than the County of Riverside.

The Master Association will be composed of Tract Associations who participate and contribute to the regional maintenance in direct proportion to the number of units in the tract. The Master Association will be responsible for the required maintenance of the chaparral hillside, the equestrian trail the bike trails and the open space system.

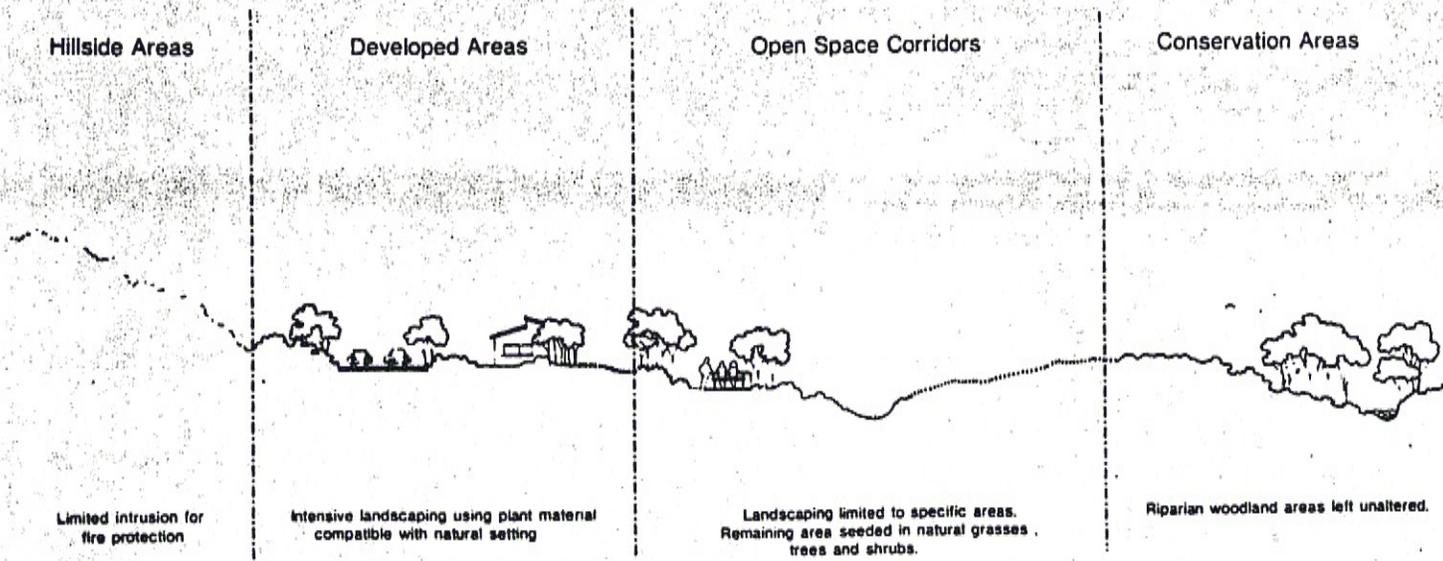
The Tract Associations will be composed of the units within each tract, and will be structured in the customary manner and will be responsible for intract greenbelts, community amenities, i.e., pools, tennis courts etc.

The commercial center will not be a member of the Master Association, but will maintain the center and the median on Calle de Oso Oro east of Clinton Keith Road.

Bear Creek Properties will not be a part of the Master Association and will maintain the golf course and drainage system of Slaughterhouse Canyon through the project site.

The Bear Creek Association will not be a member of the Master Association and will be composed of all the units to the west of Clinton Keith Road, and will maintain the private street system.*

*Added by Planning Commission December 13, 1979.



LANDSCAPING TREATMENTS AND OPEN SPACE TYPES

Figure 17

Live Oak Protection

The project site contains many excellent specimens of different varieties of the California live oak. In order to preserve this valuable resource, the project plan seeks to protect and preserve as many of these trees as possible, both during and after construction. The Plan includes most of the significant live oak stands in open space or conservation areas. Major road alignments have been situated such that they avoid these stands as much as possible. In addition to these planning techniques, the following adaptations will be incorporated in the design and construction of the project to ensure further protection of the existing trees.

1. In lieu of special protection measures, stock piling of fill or building materials and cut and fill activities are not recommended within an area circumscribed by a radius equal to double the distance from trunk to drip line.
2. When cut or fill must occur within recommended buffer areas, the following special protection measures will be used:
 - a. Terracing and retaining walls will be utilized to minimize the impact of grade changes on root systems. The lowering of the grade immediately around the tree will be done by hand. Any cutting of feeder roots will be immediately sealed. Runoff will not be impounded near a live oak nor will it be directed such that a live oak will be in standing water. Directional sprinklers and gravel drainage ditches will be used in such areas as the golf course to avoid over-watering of the trees.

- b. Individual trees near heavy construction traffic shall be wrapped with burlap and two-by-four planks wired vertically as armor around the trunks, spaced no more than two feet apart to a height of five feet above the ground.
- c. All other trees in groups near construction traffic shall be protected by fencing, which shall be placed around the outer perimeter of the spread of tree branches. The fence shall be a standard 48" high snow fence, mounted on standard steel posts set not more than six feet apart.
- d. Fires shall not be made within fifty feet of any tree and shall be limited in size and kept under constant surveillance.
- e. If, at the developer's discretion a live oak must be removed, new live oaks will be planted at a minimum ratio of 3-to-1. Such new plantings will be clustered in such a manner as to encourage the development of self-maintaining stand.

Golf Course Design

While the construction of the golf course will require grading changes to accommodate the golf course play, wherever possible the golf course layout will take maximum advantage of existing terrain and vegetation. A great amount of planning and construction control will be exercised to minimize the loss of oak trees throughout the golf course. It is the desire of the developer to maintain as many of these magnificent trees as possible to enhance the beauty of the course.

All golf course areas will be provided with a sophisticated automatic sprinkler system to insure the establishment of the finest quality turf. The streams throughout the golf course will be modified to accommodate the 100-year flood. This modification will be as minimal as possible and will be handled in such a manner so that its configuration will not detract from the natural beauty of the site.

The golf course will also include a number of ornamental lakes. The lakes will be constructed in the natural soil and lined with clay material or a layer of polyvinyl chloride to prevent percolation into the soil. The water levels will be maintained by supplements from domestic water and will be kept in a pristine condition and at a depth of not less than five feet. As planned, the lakes will be above the 100-year flood elevation and will not be a part of a flood control program, however, some minor drainage areas may discharge into the lakes and out through a specific spillway location. The maintenance of the golf course and its water features will be the responsibility of the owners of the golf course and club.

Climate Control Through Landscaping Design

Of concern to the County of Riverside and the project developers is the issue of energy consumption. Through adaptations in landscaping, heating loads and cooling loads on buildings can be significantly altered. Such alterations can result in fuel and energy savings for the heating and cooling of structures and help to moderate the micro-climates across the different portions of the site. As a component of this plan, certain landscaping adaptations will be utilized to meet this end. These adaptations include:

- The orientation of cleared or planted corridors of vegetation to increase air flow.
- Locating structures away from cold air sinks, or protecting them with tree rows that would block the flow of cold air coming out of the canyon areas.
- Locating landscaping around structures so as to reduce summer heat while allowing passive solar heating in the winter.

~~7.5~~ Agricultural Open Space *

~~In addition to the open space categories discussed earlier, the Plan also calls for large amounts of the site to be retained in agricultural uses. The Plan calls for the retention of 196 acres of the existing vineyard. Of this, 177 acres will be contiguous and retained and operated either by the owner or by an agricultural cooperative comprised of residents living adjacent to the vineyard. The remainder of the retained vineyard acreage will be sold as five to ten acre rancho estates, which would most probably be maintained in their present vineyard use.~~

7.6 Archaeological Sites

Most of the major archaeological sites as outlined in An Archaeological Survey: Joaquin Ranch by M.A. Brown and Paul G. Chase & Associates and by Joaquin Ranch Archaeological Survey Addendum Report by M.A. Brown are included in the open space system of the plan. Those sites of lesser importance and not included in open space areas will be protected by utilizing the minimum mitigation measures as outlined in the aforementioned survey with the following exceptions:

- the decision to grant archaeological easement deeds will rest entirely with the owner and conveyance of such deed will not be a condition for development, or subdivision of land.
- mitigation measures C (1) and C (2) shall not be carried out unless following a review of a test for subsurface cultural deposits the County Archaeologist determines that the site is of sufficient significance to warrant such measures.
- an "interpretive display" as suggested for RIV-1306 will not be required.

*Deleted by Planning Commission
December 13, 1979

8.0

UTILITIES AND PUBLIC SERVICES

The utilities and public services element of this Plan identifies the manner in which the site will connect to and complement the existing service systems of the community. These have been designed with the following objectives in mind:

- To minimize the growth inducing impacts on surrounding areas.
- To minimize the impact upon and complement the existing services.

8.1 Sewer and Water System

8.1.1 Wastewater Collection, Treatment & Reuse System

The Rancho California Water District will design, construct and operate the wastewater collection, treatment and reuse system for the project.

To serve the anticipated development, the District proposes to construct a 600,000 gallon per day capacity wastewater reclamation plant at the site shown in Exhibit 3. Facilities to be installed will be comprised of a biological secondary sewage treatment system, followed by disinfection. A forebay reservoir will be included on the plant site, from which reclaimed water will be pumped to the golf course for direct application. The treatment facilities will be designed to meet waste discharge requirements and the standards of Title 22 of the California Administrative Code.

The proposed operating plan for the system is as follows:

1. RCWD will be the owner and operator of the collection system, treatment works, reclaimed water pumps, reclaimed water transmission mains and seasonal storage reservoir.
2. Appropriately certified operators will supervise and operate the system.
3. Oxidized, disinfected secondary effluent will be pumped directly to the golf course under sufficient pressure for direct application via the golf course irrigation system.
4. Golf course irrigation will take place at night, except under unusual circumstances.

5. When open-space and landscaped areas are irrigated, oxidized, disinfected secondary effluent will be pumped directly to the area under sufficient pressure for direct application via the irrigation system; as previously stated, golf course irrigation has priority over open-space irrigation.
6. When irrigation cannot be practiced, secondary effluent will be pumped to seasonal storage facilities, which will be designed to store 0.6 MGD output of the plant throughout a 90-day period; this system will automatically actuate should the irrigation forebay become full.
7. Stored reclaimed water, less evaporation and percolation losses, will be transmitted back to the reclamation plant for use during periods when irrigation demand exceeds plant output.
8. Sludges produced at the wastewater reclamation facility will be processed aerobically. Digested sludge will be stored on site temporarily and, preferably, made available as a soil conditioner to farmers and landscapers.
9. In the event of a plant malfunction, a 24-hour alarm system will alert District personnel. In the event of a commercial power outage, a standby power generator with sufficient capacity to operate one aerator, both clarifiers, return activated sludge pumps, disinfection equipment and one irrigation pump, will be automatically actuated.
10. In the event of an extended plant malfunction, it will be possible to pump partially treated sewage to long-term storage for later use following the procedure described in '7' above.

A seasonal storage reservoir with minimum capacity of 165 acre feet will be constructed at a location approximately 6,000 feet southwest of the plant site, as shown in Exhibit 3. Surface runoff will be diverted away from the storage reservoir by means of ditching. The storage area is located at a site protected from flooding due to 100-year storm runoff by virtue of its elevation. Where needed, riprapping or similar protection will be provided to protect the storage ponds from erosion by local flow. Overflow facilities will be installed only to avoid damage to the physical structure of the ponds in the unlikely event of an overflow.

Capacity of the seasonal storage reservoir is based upon the recommendation in the Regional Board's adopted water quality control plan prohibiting stream discharge of chemically altered wastewater.

The wastewater reclamation plan provides for ultimate development of the residential-recreational community only.

8.1.2

Primary Water Facilities

The anticipated water demand for the project is 3000 acre feet annually. Assuming a peaking factor of 2.5, the maximum day consumption will reach 3,500 gpm full development. Water will be supplied from existing Rancho California Water District sources and by two new wells, as shown in Exhibit 3. These wells are at an excess of 600 feet below the surface. Water lines will connect to the existing 16" water main which currently runs along Clinton Keith Road. A three million gallon reservoir will be constructed so that a maximum water level of 1500 feet above sea level will be maintained (see Exhibit 3). The system will be capable of delivering 300 gallons per day per single family lot, and 450 gallons per day per lot for all other lots.

An Environmental Impact Report is currently being prepared, with the Rancho California Water District as the lead agency that will investigate the impacts of this system.

8.2

Fire Protection

Because a portion of the site is considered to be within a hazardous fire area, as determined by the County Fire Department, and the response times to the area at present are excessive, the project will require a fire station site on the property or within the immediate area. County Fire Department officials have indicated that a site of approximately 1½ acres will be adequate for this station facility. Therefore, a 1½ acre area within the project site adjacent to the commercial area has been designated for this use. In addition, the project will be serviced by a comprehensive hydrant system and appliances as they are required by the County of Riverside Fire Department. Hydrants will provide adequate levels as determined by the Riverside County Fire Department, and will be capable of delivering the necessary pressures to ensure adequate protection to all portions of the development. In addition to these measures, other measures will be carried out by the developer or required by CC&R's to reduce fire hazard. Some of these measures included:

- Fire resistive planting in those areas where development abuts hillside containing chapparal and sage.
- Use of fireproof or fire resistive building materials, especially fire proof roofing materials.
- Exterior sprinkler systems.
- Personal fire protection measures such as smoke detectors and fire extinguishers.

8.3 Security

As indicated earlier in this report, certain areas of the project will be designed as secure areas. This will include the area of the golf course north of Clinton Keith Road. Entry into this area will be by means of a single-gated station, with all other entrances designed for emergency use only or exiting and emergency use only. This community will, of course, maintain its own private security force and while the area south of Clinton Keith Road will not be a gated community, it will maintain a private security force also. This security protection will be maintained by the project developer until such time as a residents association is capable of maintaining the service on its own.

8.4 Sanitary Services

Trash collection and refuse removal will be handled on a contract basis and paid for by the developer until such time as a residents association is established and able to assume the costs.

8.5 Schools

The objective of this plan as it regards education is to mitigate in a fair and equitable manner the project's impacts on local school districts. To this end the developers will work with the local school districts to develop an arrangement suitable to both the school district and the developer, whereby all development within the districts will proportionately share the responsibility of mitigating the impacts on local schools.

GRADING AND DRAINAGE

As an intrinsic part of the project plan, the grading and drainage element seeks to address the major issues of concern as expressed by the project developer, the County of Riverside and by the residents of the community. These issues included water quality, water balance, rural character/design, erosion control and the avoidance of hazardous conditions. In addressing these issues, the Plan seeks to satisfy the following objectives:

1. Reduce impact of water polluting runoff.
2. If established, maintain water bodies which will be neither eutrophic or hazardous to health.
3. Minimize increase in off-site discharge.
4. Retard runoff and maximize recharge to even base flow of streams.
5. Minimize destruction of natural terrain and drainage patterns.
6. Minimize erosion and siltation during construction.
7. Minimize erosion and siltation of drainage system.

Storm Drainage

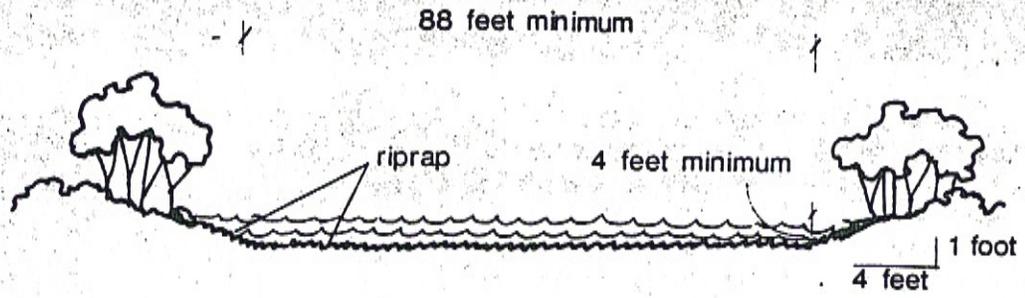
The maintenance of the natural drainage system has been one of the key objectives of this Specific Plan and has been instrumental in the allocation of land uses and densities across the site. The drainage system for the project seeks to utilize and complement the existing drainage system in an attempt to strike a hydrological balance, and thus reduce the impact of the project on the hydrological cycle. This system utilizes the natural creeks, drainage channels and drainage swells in addition to the existing soils and vegetation. For the most part, the existing natural system is very well defined across the site, with deeply profiled drainage channels carrying water to the major drainage ways of Slaughterhouse and Cole Creeks. Permeable soils located along the major drainage ways and in other critical areas help to reduce peak flows and recharge ground water. Except in engineered channels, the Plan will maintain this natural system through the utilization of the following adaptations:

- Minimizing concentration of flows by backing lots, where possible, onto drainage areas so that runoff will flow directly into drainage ways, instead of collecting in streets thereby concentrating discharge into the drainage ways.
- Preservation of most of the existing drainage swells and streams by stabilizing banks where necessary with planting and by creating new landscape drainage swells in open space areas.
- Direct runoff over permeable soils with excess storage capacity.
- Utilize roads, berms and check dams in swells to retard runoff by slowing flows over permeable soils.

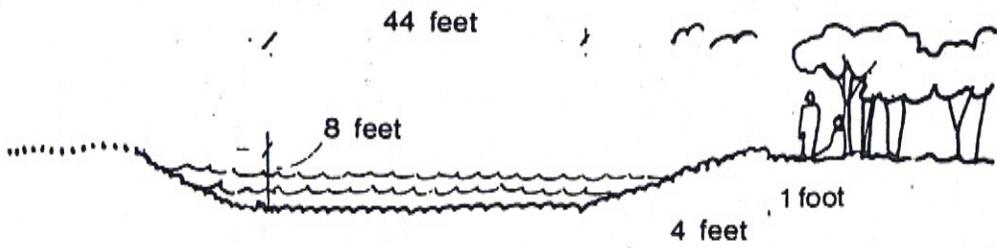
- Utilize perforated or open jointed storm pipe in A and B soils.
- Utilize lattice work or porous pavements over A and B soils or use gravel where permitted.
- Construct subsurface drains in those areas where the water table is sufficiently high to pose a threat to urban development through liquefaction.

The accompanying map shows in a conceptual form how this drainage system will work across the site. The engineered drainage channel shown carrying the water up Slaughterhouse Creek through the golf course development will be sized for the ultimate 100-year discharge. These discharges have been developed by J.F. Davidson & Associates and are calculated using post development figures. The channel will be designed so that its visual character or impact will be minimized and will blend with the natural surroundings. This will be done through varying the creek cross sections and by using natural materials for the drainage ways construction. Velocities within the channel are high enough that rock protection will be required on all sides and bottoms. The 100-year discharge was analyzed by a U.S. Army Corp of Engineers program for backwater. The output from this computer program, based upon preliminary channel cross sections and profiles, is shown in the Appendix of this report, as are the preliminary profiles of the flow line and the water surface.

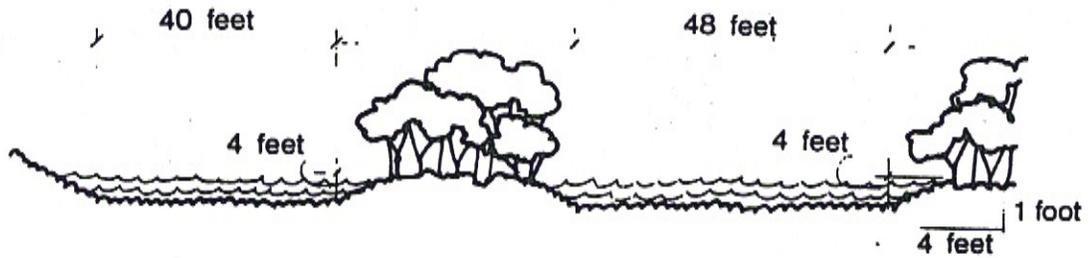
Most surface drainage ways are located in open space areas. Where runoff flows across or between lots, drainage easements will be provided in order to protect flow. In some instances the curbed and guttered streets may be used to carry small amounts of runoff short distances before transferring it into drainage ways.



TYPICAL



VARIATION



VARIATION

CHANNEL CROSSECTIONS

Figure 18

Grading

The primary objective of the grading plan is to develop the site while minimizing disruption of the natural terrain and drainage patterns. To this end, the following adaptations utilized:

-Development will be located wherever possible on flatter land, avoiding steeper areas of the site. Where development does occur within the steeper elevations, the dwelling units will utilize retaining wall or pier and beam foundations or the densities will be kept very low. In some cases, when lot lines extend into the steep slope areas, the lots themselves will contain areas of gentler slopes, the concept here being that construction would be limited to the area most suitable for development.

-Retaining walls, split level, and pier and beam foundations are to be encouraged in preference to cut and fill building pads, especially in those areas where slopes exceed 12% over a sustained horizontal distance. Where such pads do occur, they will be limited to the area needed for the construction of the structure only.

-In areas of cut and/or fill, final slopes must be contoured graded with rounded, contoured edges and a variety of slope bank gradients.

-During construction and grading, adequate measures will be taken to ensure that silt entering the drainage system from a site will be kept to a minimum. This might include the use of hay bales, interceptor dikes and the covering of stripped areas with a jute matting or similar cover. Stripped areas shall not remain uncovered for longer than 30 days during the months of November through April.

9.2.1

Projected Grading Impacts

In order to gauge the impact of grading upon the site, the following grading categories were developed to ascertain the extent of alteration the site could be expected to undergo if developed under this Specific Plan. These categories were developed using the assumption that the amount of grading necessary for any given area is directly related to the type and density of development to occur and the slope of the land which is to be developed. The amount of area to be altered and the amount of area to be rendered impermeable was ascertained for a particular housing type or development type by using the Housing Type Study in Appendix A: Suitability Profiles. Using these figures and the aforementioned assumptions, the following grading categories were developed (see Exhibit E):

Unaffected

Areas which will not be graded but natural contours will be left intact. Land may be scarified for landscaping purposes. Drainage swales may be enhanced or small dikes constructed for the impediment of runoff over permeable soils. These areas comprise approximately 857 acres or over 40% of the site.

10%-37% of the Area to be Affected by Grading

Those areas where one of the following combinations occur:

- Estates and Very Low Density Residential Development (1 D.U./gross acre, maximum density) occurring on slopes of 0-12%.

- Ranchos (1 D.U./5 gross acres maximum density) occurring on slopes of 0-24%.

Grading in these circumstances can be expected to be limited by the low densities and/or the moderate slopes. Larger lots reduce amount of roads necessary. By referring to the housing type study included in the "Suitability Profiles" section of this plan's Appendix, it was computed that the amount of area to be affected by grading in some way to gross areas should be low with between 10% to 37% of the net area affected. 12% to 24% of the effective permeability can be expected to be rendered impermeable with 76%-88% remaining permeable or nearly so. These areas comprise approximately 385 acres or 18% of the site.

65%-80% of the Area to be Affected
by Grading

Those areas where one of the following combinations occur:

-Patio Homes and Villas (6-7 D.U./gross acre, maximum density 3) on slopes of 0-8%.

-Low Density Residential (3 D.U./gross acres, maximum density) on slopes of 0-12%.

-Very Low Density and Estates (3-2 D.U./gross acre, maximum density) on slopes 12%-24%.

Areas affected by grading within this category can be expected to run between 65% to 80% but because of the gentle slope and/or the low densities, cut and fill should be minimal. Approximately 31%-43% of the effective permeability can be expected to be rendered impermeable. These areas comprise approximately 455 acres or 21% of the site.

80% to 100% of the Area to be
Affected by Grading

Those areas where one of the following combinations of possibilities occur:

-Patio Homes and Villas (6-7 D.U./gross acre, maximum density) on slopes over 8%.

-Low Density Residential (3 D.U./gross acre, maximum density) on slopes over 12%.

-Areas of high intensity use such as commercial.

-Areas where the flood plain has been altered.

-Areas that have been substantially altered for extensive landscaping such as golf courses.

In these areas, large amounts of earth may be moved and cut and fill may be substantial. In most cases, 80%-100% of the area will be affected by grading. Forty-five to eighty-seven percent of the effective permeability can be expected to be rendered impermeable. Special care will be taken to preserve natural drainage courses when possible, prevent erosion during construction, and keep new grading as natural as possible. In some areas, such as in the golf course, this grading will enhance the esthetic quality of the landscape, assist in runoff, flood and erosion control and help to protect existing live oaks and other trees. These areas amount to approximately 433 acres or 20% of the site.

DESIGN

The overall level of design of the project will have much to do with its impact on the surrounding community. All of the components of this Plan contain a design dimension and all have sought to maintain the rural quality of the community and minimize the impact of this project. However, certain issues have not been addressed. These issues, materials, building form and placement, and signage deal with the manner in which the project will be realized architecturally. In addressing these issues, the Plan seeks to satisfy the following objectives:

- Reduce energy consumption.
- Conserve exhaustable natural resources.
- Relate to natural rural setting.
- Relate to the human scale and the existing scale of the community.
- Recognize indigenous building types and details that reflect local historical influences.
- Minimize impact on natural land forms and environment.
- Encourage neighborhood identification.
- Preserve and protect cultural resources.
- Avoid and prevent natural hazards.

To meet these objectives, the Plan will incorporate the following adaptations through project design or the utilization of design control devices, such as architectural review boards and codes, covenants and restrictions, included as part of the deeds in the sale of lots:

-Limit structural materials to wood, plywood, gyp board and concrete. Steel sections should be used only where structural considerations and building codes require it. Limit finished materials to wood, stone, brick, tile, glass and other biodegradable low-energy consuming material. Avoid, where possible, materials such as steel panels, rolled steel sections (except where required by structural considerations), aluminum (may be used as hardware or in window sections), chlorinated foams and immense areas of plate glass.

-Limit color range of primary building color to natural tones and stains. Primary bright colors should only be used as trim; prohibit reflective, mirror glass or other highly reflective materials.

-Limit the height of all structures to two stories. Three stories are acceptable if the building cascades down the side of a hill, or if the special use or landmark location of the structure would be enhanced by the extra story.

-Articulate building forms to include projections and recesses, including balconies, walkways, exterior stairs, etc., and discourage box-like and unarticulated building forms.

-Utilize thick walls, large overhangs, enclosed patios and arcades of the Spanish traditions. The covered porch, horizontal roof silhouette, low eaves, rock foundations and simple detailing of the early Anglo ranch house could also be utilized.

-To as great an extent as possible, limit cut and fill. Instead of building on large pads, utilize split level, retaining wall or post and beam foundations and vary elevations to follow land forms.

-Define the boundary of the building cluster, neighborhood or precinct through entrance transitions, such as gateways, the repetition of a common element or design theme, or a wall or ring of vegetation.

-Require techniques for protecting significant archeological sites that fall within private lots, such as covering, documentation and removal, fencing or establishing no build zones.

-Keep signage to pedestrian scale in most of the community. Restrict size and placement of commercial signs. Avoid the use of shiny or obtrusive materials.

In conjunction with the development, a set of covenant codes and restrictions will be developed to be included as part of the various purchase contracts. It is expected that within the CC&R's the major adaptations will be incorporated. These CC&R's will be submitted upon their completion to the County of Riverside for their inspection and approval.

PHASING

The phasing program for the development recognizes the following goals:

1. Maintain a reasonable mix of housing unit types to maximize housing options.
2. Maximize utilization of infrastructure and minimize cost.
3. Minimize impact on community services and supplement existing systems.

Two development entities will be developing the site simultaneously. To as great an extent as possible, these efforts will be coordinated to meet the phasing objectives.

The phases presented here are intended to show the projected sequence of development with the approximate dates in which these phases may be commencing. However, because it is impossible to predict market conditions precisely, the dates may fluctuate with some phases starting before and some phases starting after the dates indicated. In any case, the sequence should remain fairly constant.

11.1

Phase I 1980 - 1982

Phase I will include development on both sides of Clinton Keith Road. North of the road, development will include the construction of the golf course and the club house. Residential development around the golf course will include a mix of very low density single-family units, patio homes and villas.

To the south of Clinton Keith Road, development will be restricted, for the most part, to the lower elevations on the eastern portion of the site. This residential development will include very low density and low density single-family development. In addition, a small quantity of villas will be added to the housing mix. Phase I contains no development south of Cole Creek.

Phase I infrastructure placement will include construction of the collector road north of Clinton Keith to a point just to the north of Slaughterhouse Creek. This will be a private road. South of Clinton Keith, the collector road will be constructed from Clinton Keith to a turnaround point immediately north of Cole Canyon. Local roads necessary for circulation within each parcel will be constructed and will connect either to the collector road or directly to Clinton Keith. In some cases, where dead end roads may present problems of fire protection access, temporary as well as permanent fire roads will be constructed to provide necessary fire lane circulation.

As part of the Phase I construction, the first portion of the 600,000 gallon per day package sewer treatment plant will be constructed prior to the development and construction of any residential units, but not necessarily before the subdivision and sale of land. Water lines extending from the 16 inch water main along Clinton Keith Road will be constructed as necessary.

Phase I will include 669 units, with a project population of 1,505. It should be noted, however, that these figures do not represent in-place units or actual population that would be existing on the site at the end of the phase period. These figures represent only the number of units and population represented by the area entering the development phase. Actual build-out times and population increases will probably span a 10-15 year period.

11.2

Phase II 1982 - 1984

Like Phase I, Phase II will include development both north and south of Clinton Keith Road. North of the road, the villa development on the eastern property line will come on line. Very Low Density Residential development will be expanded into the areas around the western portions of the golf course. The area south of Clinton Keith Road will undergo similar development. The rest of the areas designated for low density residential development will come on line during the phase as will a portion of the designated villa development along the sides of the knolls. Phase II will also include Low Density Residential development south of Cole Creek in the area between Washington Avenue and Murrieta Avenue. The expansion of the 600,000 gallon per day package treatment plant will also be a part of this Phase II expansion. In all, Phase II will amount to an increase of 715 dwelling units to the residential inventory and will represent a projected population increase of 1,609 persons.

11.3

Phase III 1984 - 1986

Residential development in Phase III will primarily be concentrated along Clinton Keith Road. The residential inventory around the golf course will be expanded slightly and the rest of the area designated for villa development will be added to the area immediately south of Clinton Keith Road. Within Phase III, the projected commercial and office area will also come on line, although the parcels will be part of a Phase I subdivision. This commercial area represents approximately 40,000 square feet with 80,000 square feet of garden office. If it hasn't been already, title to most of the major open space areas will be transferred to either the appropriate Homeowners Association or public entity. Phase III represents an increase of ~~499~~ dwelling units to the residential inventory and a projected increase to the population of 1,122 persons.

484 *

11.4

Phase IV 1986 +

Phase IV represents the final projected phase of the development. Phase IV development is restricted to the area south of Cole Canyon and will be comprised primarily of low density single family housing. Some villa units will be constructed as part of a swim and tennis club in the area south of Tenaja Road. By keeping this area as part of the last development phase, the existing vineyard located here would be retained for as long a period as possible. Phase IV will increase the residential inventory by ~~247~~ units and the projected population by 557 persons.

262 *

*Changed by Planning Commission December 13, 19

TABLE 1 PHASE SUMMARY

Phase I (1980-81)	669 D.U.S.
Phase II (1982-83)	715 D.U.S.
Phase III (1984-85)	484 D.U.S.
Phase IV (1986 +)	262 D.U.S.
Total	<hr/> 2130 D.U.S.

REFERENCES

1. An Archaeological Survey: Joaquin Ranch (Paul G. Chace & Associates for M. A. Brown, Riverside, California, 1978).
2. Design Guidelines for Developing Areas (Department of Urban Planning, Dallas, Texas, 1975).
3. Engineering Geology Investigation of Hazard Management Zone and Preliminary Geology Investigation for Environmental Impact Report, Joaquin Ranch, Riverside County, California (Gary S. Rasmussen & Associates, San Bernardino, California, 1978).
4. Environmental Impact Report for Joaquin Ranch: GPA-127-778-L-40 (Donald A. Cotton & Associates, Los Angeles, California, 1978).¹
5. Hopkins, Lewis D., "Methods for Generating Land Suitability Maps: A Comparative Evaluation," AIP Journal, October, 1977, Volume 43, No. 4, Pages 386-399.
6. Lynch, Kevin, Site Planning (M.I.T. Press, Cambridge, Massachusetts, 1974).
7. McHarg, Ian L., Design with Nature (The Natural History Press, Garden City, New York, 1969).
8. Preliminary Soil Investigation (Pacific Foundation Engineers, Inc., Bloomington, California, 1977).
9. Soil Survey: Western Riverside Area, California (U.S. Department of Agriculture, Soil Conservation Service, U.S. Printing Office, Washington D.C., 1971).

10. Southwest Territory General Plan, Research & Analysis Report (Riversi County Planning Department, Riverside California, 1977).
11. Woodlands New Community: An Ecolog Plan (The Woodlands Development Corporation, Houston, Texas, 1972).

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