ENVIRONMENTAL-DOCUMENTS

COUNTY OF SAN DIEGO
Department of Planning & Land Use

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FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT: Ram's Hill Country Club PERMIT/MAP SPA86-006, TM4613, R86-046
P86-062, P79-130W[1]

Log #86-11-01

The Environmental Planning Section has reviewed the enclosed Environmental Impact Report (EIR). Based on the discussion of the issues that follows, Environmental Planning recommends that the Board of Supervisors:

1. Certify that the attached final EIR has been completed in compliance with CEQA and was presented to your Board which reviewed and considered the information contained therein period to approving the project.

2. Make the recommended mitigation measures requirements of approval and direct their incorporation into the appropriate documents.

3. It be found that the project as proposed will not have significant impacts to Land Use, Climate/Air Quality, and Visual Resources, and that the following Major Issues will have the recommended environmental effects:

Major Issues	Environmental Planning Recommendation
1. Biology	Significant but Mitigable
2. Archaeology	Significant but Mitigable
3. Groundwater	Significant but Mitigable
4. Flooding/Hydrology	Significant but Mitigable
5. Landforms/Soils/Geology & Geologic Hazards	Significant but Mitigable

6.	Noise	Significant but Mitigable
7.	Traffic	Significant but Mitigable
8.	Public Services	Significant but Mitigable
9.	Dark Skies	Significant but Mitigable

Respectfully Submitted,

WALTER C. LADWIG, Director
Department of Planning and Land Use

By Gerald M. Hermanson

GERALD M. HERMANSON
Deputy Director

GMH:JB:pac

Enclosures:
A. Environmental Impact Report Discussion, Pages A-1 to A-8
B. Responses to Public and Other Agency Comment, Pages B-1 to B-12
C. Letters of Public and Other Agency Comment
D. Draft EIR prepared by PRC Engineering, Inc., 401 West A Street, Suite 2500, San Diego, CA 92101

cc: Project Planning (0650)
Lee Vance, Project Planner (0650)
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ENCLOSURE A-1

ENVIRONMENTAL IMPACT REPORT DISCUSSION

PROJECT: Ram's Hills Country Club; SPA 86-006, TM4613, R86-046, P86-062, P79-130W[1], Log No. 86-11-01

PROJECT DESCRIPTION

The project is a specific plan amendment, rezone, major use permit and tentative map for completion of the Ram's Hill Country Club. The amendment will allocate the remaining 790 dwelling units allowed by the General Plan in the areas which were previously designated as "future planning areas". A tentative map for 201 residential lots is included in this project, as well as a second 18-hole golf course and a 30-acre commercial area. Approximately 616 acres would be rezoned to conform with the densities detailed in the amended specific plan.

PROJECT LOCATION

The project is situated in the Borrego Valley unincorporated area 86 miles northeast of metropolitan San Diego. It is part of a 70-square mile privately owned enclave of land which is surrounded by the Anza Borrego Desert State Park.

LAND USE FACTORS AND SURROUNDING LAND USES

The Ram's Hill Country Club is located on a 3,140-acre parcel located on the south slope of the Borrego Valley about 5 miles southeast of the Borrego Springs business district. Yaqui Pass Road runs north to south along the western boundary of the property and Borrego Springs Road cross-cuts the panhandle in the northern portion of the property running from northwest to southeast. The area of existing development at Ram's Hill is confined to the western half of the property; the eastern half of the property is dedicated natural open space. The DiGiorgio Development Corporation has thus far completed construction of an 18-hole golf course and associated facilities, a wastewater treatment plant, flood control system, medical clinic, roads, and approximately 30 percent of the approved residential units.

Land uses surrounding Ram's Hill include the Anza Borrego Desert State Park to the south, largely unimproved residential parcels to the west and northwest, and the Casa del Zorro resort to the north. The Casa del Zorro resort is located at the intersection of Yaqui Pass Road and Borrego Springs Road; a residential subdivision is located immediately west of the resort. The Borrego Sink is located in the area to the north and east of Ram's Hill. Most of the land to the east is subdivided into large ownerships which are sparsely developed.

The project site has been designated as a Specific Planning area with an overall allowable density of one dwelling unit per two acres. The proposed amendment to the existing Specific Plan (83-05) conforms to this density requirement.

The project site is zoned to allow for various types of uses. The major change proposed by this amendment is to rezone 616 acres of the 928 acres now designated as "future planning areas" (S-88). Over 400 acres will be designated for open space (S-80) -- 233 of these acres will be set aside for biological and archaeological open space easements, while another 176 acres will be set aside for recreational (golf course) open space. The balance of the acreage to be rezoned will provide for some commercial use, as well as for an increase in certain residential categories.

BACKGROUND

Since the initial Ram's Hill proposal in 1974, a series of actions affecting the project have been taken by the County, including: 1) establishment of the Ram's Hill property as a specific plan area (GPA76-02); 2) adoption of the Ram's Hill Specific Plan by the Board of Supervisors on May 7, 1980 (SP80-01); and 3) most recently, approval of a set of relatively minor amendments to the Specific Plan (SPA83-05).

An EIR for the original Ram's Hill Specific Plan (80-01) was prepared in 1974 and was later certified as being completed in compliance with CEQA. Several major issues were identified in relation to the original project. Mitigation measures recommended in the EIR prepared at that time were adopted as conditions of project approval. Those issues identified previously, and the mitigation measures adopted, are still applicable. In order to address the impacts of the proposed changes to the Specific Plan, a Supplemental EIR has now been prepared. The major issues described in the following staff report are directed to the changes in the original project. Mitigation measures described in the staff report will therefore supplement and expand those measures which have already been made a part of the project.

MAJOR ISSUES

1. Biology (see the Following Mitigation Measures)

   Although no rare or endangered species would be affected by the proposed amendments, there is concern that two areas containing major undisturbed wildlife habitats and vegetative communities could be affected. One of these areas supports Mesquite Woodland and Alkali Sink Scrub communities. These resources are found in the northern portion of the Specific Plan area, bordering the offsite Borrego Sink. The majority of wildlife species identified were found in this area. The other resource of concern is a ridge and wash area, consisting of both desert wash and semi-succulent scrub communities, located in the southwest corner of the Ram's Hill property. These important biologic resources were identified in the prior (1979) EIR. The major portions of these resources will now be required to be preserved in dedicated open space. Over 200 acres will be set aside to protect these resources - this is in addition to 1,600 acres of natural open space which has already been set aside in the eastern half of the property.

Mitigation Measures

1-A. Prior to implementing the Specific Plan Amendments, use and reliance on the major use permit, recordation of the Final Map or obtaining any grading permits, the applicant shall grant to the County of San Diego, open space easements, to the satisfaction of the Director, Department of Planning and Land Use. These easements shall be as shown on the amended specific plan map. The easements are intended to protect biological resources and wildlife habitats in the northern and southwestern portions of the specific plan area.

These easements preclude grading, placement of structures, or any other thing, or vegetation addition or removal within the easement area, except that vegetation may be selectively removed upon written order of the appropriate fire control authority for the express purpose of reducing an identified fire hazard and except that activities reasonably necessary for the maintenance of the existing interceptor/diversion dikes and channels in the easement areas shall be allowed.

2. Archaeology (see the Following Mitigation Measures)

A portion of the subject property includes an archaeological site that includes San Dieguito "sleeping circles" and a Kumeyaay campsite. The circles are thought to date from 7,000 to 15,000 years old, while the Kumeyaay did not enter the area until 1000 years ago.

"Cal:E:15:4" is an unusual combination of features of two entirely distinct cultures. The circles are actually tent or house clearings in the gravel surface of the terraces. The late pioneer archaeologist Malcolm J. Rogers dated these features by geological associations. Some younger archaeologists have debated Rogers' dating, but no hard evidence has been brought forward to date. The later Kumeyaay are dated by their introduction of coil-paddle-and-anvil pottery, small arrow points, and milling equipment, which was thought to have spread west from the Colorado River area between 500 and 1000 A.D.

Mitigation Measures

2-A. Prior to implementation of the Specific Plan Amendments, use and reliance upon the major use permit, or recordation of the Final Map, the applicant shall to the satisfaction of the Director, Department of Planning and Land Use:

Dedicate an open space easement over Cal:E:15:4 with suitable prohibitions against any earth disturbances, excavation of roads, drilling of wells, grading, or other activities which would damage the archaeological site.

3. Groundwater (see the Following Mitigation Measures)

The Borrego Valley is not connected to the regional pipelines for imported water; therefore, development in the valley relies exclusively on groundwater resources. The USGS has estimated that about 5 million acre-feet (ac-ft) of water is contained within the Borrego Valley groundwater basin. About two-thirds of that amount is deemed to be extractable and usable. With a long-term annual recharge of 8,300 ac-ft/year and a 1985 water usage of approximately 10,200 ac-ft, it is apparent that some "mining" of groundwater is already occurring in the basin. The relevant question is how will future water consumption and the life of the aquifer be affected by the proposed amendments.

It is estimated that under a worst case scenario for the year 2000 the overdraft (excess of consumption over recharge) will increase from 6,468 to 8,025 ac-ft/yr as a result of the proposed new development at Ram's Hill. This increase will reduce aquifer life from 525 to 425 years(if projected future demand and recharge continue at the levels assumed). While this impact is deemed significant, it is seen as acceptable given the length of remaining aquifer life. Nevertheless, it is expected that stringent water conservation measures will be adhered to in order to conserve the finite and invaluable resource.

Mitigation Measures

3-A. Prior to implementation of the Specific Plan Amendments, use and reliance upon the major use permit, recordation of the Final Map or obtaining any grading permits, the applicant shall submit water conservation plans to the satisfaction of the Director, Department of Planning and Land Use and County Hydrogeologist. These plans shall be submitted in conjunction with landscaping plans required by mitigation measure 5-B below. The following water conservation measures shall be incorporated into design plans for the final project:

-- installation of the most efficient plumbing and irrigation devices. For the golf course, sprinkler heads will be controlled individually, allowing course operators to deliver water where it is needed and to avoid overwatering areas which do not dry out as rapidly. Meteorological parameters such as temperature, winds and evapotranspiration rate shall be keyed into a computer system to deliver appropriate water quantities and to avoid the lower humidity periods of the day.

-- drought resistant plants will be used to the maximum extent feasible for landscaping in common areas and in transition (non-turf) areas of the golf course. At a minimum, 28 percent of the golf course acreage (approximately 95 acres) will be planted in drought resistant native desert landscaping.

-- reclaimed water from the wastewater treatment plant onsite will be used to the maximum extent it is available in order to meet landscaping water requirements.

-- provision for an annual report to be submitted to the County Hydrogeologist, documenting the status of water conservation plan implementation, and setting forth water usage and reclamation data for the project.

4. Flooding/Hydrology (See the Following Mitigation Measures)

The Borrego Valley is subject to severe flash floods from the brief but intense summer thundershowers that characterize the area. The site itself, while not located at the mouth of a canyon, is subject to flooding from sheet flow. Numerous arroyos located above the 800 foot elevation in the southernmost portion of the site and outside of the southern property boundary present the potential for problems. In conjunction with ongoing development within the specific plan area, a serious of flood control channels have been designed and built to protect the project from flooding. These channels divert the flow of off-site runoff water away from the existing and proposed development.

Drainage within the development area of the project and downstream of the diversion channels has created some problems at the existing golf course, primarily due to the deposition of silt. In order to minimize the drainage and consequent maintenance problem at the golf course, a series of swales and detention/desilting basins have been incorporated into the project design. These basins, coupled with the existing runoff diversion system, serve to mitigate the potential hydrology impacts associated with the specific plan amendments. Nevertheless, as pointed out in the 1979 EIR, due to the unpredictable intensity and location of storms, it is still possible that the development could sustain major flood damage.

Mitigation Measures

4-A Prior to use or reliance on the major use permit for the golf course, the applicant shall design and install a series of swales and desilting/detention basins to the satisfaction of the Director, Department of Public Works.

5. Landforms/Soils/Geologic Hazards (See the Following Mitigation Measures)

Much of the developable area at Ram's Hill has already been graded to accommodate previously approved portions of the project. It is estimated that an additional 2.2 million cubic yards of earthwork would be required for the presently proposed development -- about half of that amount for the second golf course and the balance for the tentative map portion. Altogether, about 400 acres of grading is proposed. Cut and fill slopes will not exceed 30 feet and the land to be graded is generally under 6 percent in grade. Nevertheless, proper landscaping of graded areas will be required to further reduce impacts.

The Ram's Hill site is subject to moderate to severe geologic hazards including those due to earthquake. Although there are no fault traces located on the project site, the Borrego Valley is considered seismically active. This fact and the presence of some problem soils will require additional testing and careful attention to design and construction standards in order to minimize the potential for adverse impacts.

Mitigation Measures

5-A Prior to implementing the Specific Plan Amendments and obtaining any grading permits, the applicant shall conduct on site geologic/soil studies to the satisfaction of the Director, Department of Public Works to ensure appropriate soil treatment, foundation and structural design of proposed developments.

5-B Prior to issuance of any grading permit for the site, including for the golf course, a "desert sensitive" landscape plan for rehabilitation of graded and otherwise disturbed areas shall be submitted by the applicant for approval by the Director of Planning and Land Use. This plan shall include, to the maximum extent possible, utilization of non-irrigation dependent vegetation in accordance with the water conservation plans required by mitigation measure 3-A above.

6. Noise (See the Following Mitigation Measures)

Without mitigation, future noise conditions at the project site may exceed County standards for indoor and outdoor levels along Yaqui Pass Road and Borrego Springs Road. Establishment of "Noise Protection Easements" and eventual certification of construction plans by a registered acoustical engineer will assure that all applicable noise standards will be met.

Mitigable Measure

6-A Prior to implementing the Specific Plan Amendments, applicant shall place Noise Protection Easements on the Amended Specific Plan Map as follows: (1) Along Yaqui Pass Road - 160 feet wide from centerline for that portion north of the Ram's Hill Road, and 100 feet wide south of Ram's Hill Road; (2) Along Borrego Springs Road - 250 feet from centerline for that portion north of Kuhrts Road and 100 feet wide south of Kuhrts Road. At such time as development is proposed for these areas, site plans will be required together with additional acoustical data based on field tests. Studies shall include appropriate noise mitigation measures to the satisfaction of Environmental Planning.

7. Traffic

Two roads provide primary access to the Ram's Hill project -- Yaqui Pass Road on the west side and Borrego Springs Road on the east side. These two roads intersect just north of the project. Both are currently two-lane facilities but are classified as major roads on the circulation element. Present levels of traffic on these and other local roads indicate that, for the most part, they operate at a level of service below available capacity. However, there is a seasonal/weekend congestion problem which affects local roads and intersections, as well as access routes into the Valley.

The proposed amendments will add 19,052 daily trips to the local (external to the project) roadway network at full buildout. Most of this is attributable to the 30-acre commercial area. These volumes would seriously tax Yaqui Pass and Borrego Springs Roads as they exist today. The Department of Public Works is therefore recommending that two phases of road improvements be completed in order to mitigate traffic impacts to acceptable levels.

The first phase would be constructed prior to occupancy of any of the residential units; the second phase would be required prior to occupancy of any building in the commercial area. At the end of phase 2, the following improvements will be complete: (1) the improvement of Yaqui Pass to Major Road standards from the southwesterly corner of the project to Borrego Springs Road; (2) the construction of Borrego Springs Road to Collector Roadway standards from the northeasterly corner of the proposal to the intersection with Yaqui Pass Road; and 3) complete intersection and traffic signal improvements at the intersection of Yaqui Pass Road and Borrego Springs Road.

8. Public Services

Liquid Waste - The existing plant is underutilized. However, at full buildout, volumes of liquid waste from the Ram's Hill project coupled with flows from the Town Center Sewer could exceed the design capacity. The Ram's Hill project is obligated to pay for the debt service on bonds which were used to provide capacity for the initial 780 dwelling units approved. When maps are filed for the additional 790 units, the Borrego Water District will arrange for collection of additional fees sufficient to provide for the planned expansion of the Ram's Hill treatment plant.

Fire Protection - Implementation of the proposed project would significantly increase the demand for fire protection services within the District. A new fire station on site, together with additional personnel and equipment, may be required. The developer has dedicated the land for a fire station and paid for a fire truck, and has agreed to contribute financially to the construction and maintenance of the station and staffing of the station for one year.

Solid Waste - The amended specific plan would ultimately have an adverse effect on the life expectancy of the Borrego Landfill. Even though the population at Ram's Hill is expected to increase on a gradual basis, the increased number of dwelling units will contribute to the need for a new disposal site to serve the Borrego Community at some time in the future. The developer has agreed to cooperate with the County in their efforts to meet these future needs.

9. Dark Sky (See the Following Mitigation Measure)

Without mitigation, development of Ram's Hill could significantly impact the quality of the dark sky to the east of Mt. Palomar and Mt. Laguna Observatories. Both the Mt. Palomar Observatory operated by the California Institute of Technology, and the Mt. Laguna Observatory, operated by San Diego State University, are experiencing deteriorating viewing conditions due to the cumulative increase of background light produced primarily by high intensity outdoor lighting sources of the streetlight dawn to dusk class of lighting fixtures. Ram's Hill is located 32 miles east of Mt. Palomar Observatory and 24 miles northeast of Mt. Laguna Observatory. The eastern sky is currently undisturbed by light sources and consequently a relatively small light source such as the proposed project could have potentially more severe impacts than development to the west.

Mitigation Measure

9-A. As a condition of the Specific Plan Amendment and implementing major use permits, the applicant shall mitigate the potential impacts of outdoor lighting fixtures to dark skies by complying with the San Diego County Ordinance (No. 6990-New Series). The primary objectives of this mitigation are to minimize the amount of ultraviolet radiation emitted by outdoor light fixtures and to avoid emitting undesirable light toward the observatories, particularly any light above the horizontal plane. The following specific measures shall be taken to this end:

All outdoor lighting fixtures shall be shaded on top so that all light would shine downward. Cut-off luminaries shall be used which emit no light above 90 degrees, thereby eliminating unwanted light scattering into the atmosphere. The golf course shall not be lighted at night. Tennis courts shall be lighted only for a limited period each night. Cut-off luminaries using low pressure sodium lamps with flood light configuration shall be used to light the tennis courts. In addition to using the proper lamp type and shielding, the outdoor lighting for the pools, outside club house facilities and tennis courts shall be turned off from 11 p.m. to sunrise.

ENCLOSURE B-1

RESPONSE TO LETTERS OF PUBLIC COMMENT
SUPPLEMENTAL EIR FOR SPA 86-006, EAD Lob No. 86-11-01

During the 45-day public review period which lasted from August 26, 1986 to October 9, 1986, six letters of public comment were received.

1. On September 11, 1986, Borrego Water District wrote a letter with the following comments:

   a. The District agrees with the description of the potential impacts and the proposed mitigation of the Flooding/Hydrology Section (V-C).

   b. The District agrees with the data in the Groundwater Section (V-J) and concurs with the amended plan which proposes a second golf course where fully treated effluent can be disposed.

   c. The District will required the developer to extend water mains, increase storage and production capacity as necessary to meet the proposed water supply/demand (Table 20, p. 108).

   d. The District generally agrees with the Liquid Waste Section (V-K-1) but wants to clarify the fact that while the Reclamation Plant was designed to be expanded according to Waste Discharge Requirements (Order No. 85-35), the earthen basins used for discharge may be extended outside of the existing fenceline yet within the E1/2 of Section 23, T11S, R6E, SMB.

   e. Finally, the District will arrange for collection of fees sufficient to pay for the Reclamation Plant Expansion when maps are filed which extend the District's obligation to serve the additional 790 d.u.'s proposed by SPA-86-006.

   Staff Response:

   a. The comments on the Flooding/Hydrology Section (V-C) are noted.

   b. The comments on the Groundwater Section (V-J) are noted.

   c. The applicant will work with the Water District to meet their requirements associated with increased water consumption.

   d. The comments on the Liquid Waste Disposal section (V-K-1) are noted.

   e. The comments regarding the District's arrangements for collection of fees related to Reclamation Plant expansion are noted.

2. On September 23, 1986, a letter from Harriet Allen, Southern Desert Representative of the Desert Protective Council, Inc., was written with the following comments:

a. Mrs. Allen expresses concern over "the developer's mitigation by promises of assistance" such as: Sheriff services (p. 118), Fire Protection (p. 122), Solid Waste (p. 124) and Open Space (various pages).

b. Is there written evidence of assistance and will successors honor such obligations? Is recorded open space required?

c. Questions are presented referring to off-site open space for proposed Transfer of Development Credits (TDCs) and the legality of incorporating additional units of TDCs.

d. Mrs. Allen is concerned that the EIR depicts Anza Borrego Desert State Park as a recreation unit as well as a resource Park.

e. This letter questions the appropriateness of the environmental protection measures in the DEIR with respect to: Borrego Valley, the nearby observatories, Anza Borrego Desert State Park, wildlife and cultural resources.

f. States that unmitigated impacts such as Air Quality, Aesthetics, Dark Skies, Traffic, Public Services, and Flooding are being excused and endorsed.

Staff Response:

a. If SPA 86-006 is approved, in addition to the service letters provided in Appendix E, the applicant will get service agreement letters from the various public service agencies when construction begins. Regarding the Fire Department, as stated on page 122 of the EIR, the applicant has dedicated a 2.5 acre parcel, paid for a fire truck and will contribute to construction and maintenance of the fire station as well as staffing of the station for one year. As stated on page 124, the applicant will cooperate with the County in order to comply with the County's policies on solid waste.

b. Written letters of public service availability are included in the EIR. Public service agreements will be provided at the time of construction. The 1,600 acres of open space in the eastern half of the project was recorded on July 28, 1982 (File No. 82-231348). Another 232 acres of open space will be recorded as a condition of approval of the final map and major use permit for this specific plan amendment.

c. The issue of TDC's refers to the proposed Desert Subregional Planning Area Update (GPA86-03) prepared by the County of San Diego which is currently in process. The proposed update, if approved by the Board of Supervisors in November, will allow an increase of 160 acres of additional land to the Ram's Hill SPA. If this occurs, an additional amendment to the Ram's Hill Specific Plan will be required to determine the location of any additional units allowed by that action. In no case will either the update or any future SPA diminish any open space now granted or proposed by this amendment.

d. According to Fred Jee, one of the supervising rangers for the Anza Borrego Desert State Park, the primary operational goal of the Park is preservation of the desert resources (plants, animals, geology, etc.). Secondarily, the park provides certain types of recreation such as: walking, hiking, horseback riding, photography and camping.

e. The proposed Ram's Hill SPA 86-006 will allocate the remaining 790 d.u.'s which were approved in concept in the original Specific Plan (SP80-01 and SPA83-05). Staff considers that the mitigation measures prescribed for the present amendments will adequately reduce the significant impacts to a level of insignificance. These measures are described in the Final EIR.

f. Potential impacts which remain unmitigated are only those impacts which were considered to be insignificant.

3. On September 24, 1986, the Desert Protective Council, Inc. (D.P.C.) wrote a letter with the following comments:

a. Response to issues they raised in their review of the N.O.P. appears to be limited to the Anza Borrego Desert State Park (ABDSP)(page 5 and page 131). Also, they seek a quotable source for the identification of two operational goals of ABDSP.

b. The DEIR does not establish criteria for locating a new landfill (page 124).

c. Expresses a continued concern for groundwater mining.

d. The D.P.C. wants the issue of existing recorded open space clarified.

e. Asks for conditions to be placed on SPA86-006 to assure recorded open space for both biological and archaeological resources as well as the 12-acre strip of open space.

f. Expresses concern over the Transfers of Development (TDC's) from subarea 264 of GPA86-03.

g. Questions the adequacy of the DEIR in covering groundwater pollution as well as stating that the DEIR denies impacts of groundwater mining on the ABDSP.

h. Comments on the adequacy of the section on alternatives.

i. Addresses the adequacy and completeness of the DEIR and the lack of acknowledgement of impacts especially in relationship to ABDSP.

j. Requests that all of their previous comments be incorporated by reference.

Staff response:

a. The Desert Protective Council's letter responding to the N.O.P. is included in Appendix F of the EIR. All of their comments are covered within the appropriate report sections with the exception of the issue regarding the provision of recreational facilities for employees and families. This is responded to on page 5 of the EIR. According to Supervising Range Fred Jee, the primary operational goal of the Anza Borrego Desert State Park is preservation of the desert habitat. Secondarily, however, the park provides certain types of recreation such as walking, hiking, photogaphy, horseback riding and camping.

b. Establishment of criteria for locating a new landfill is outside of the scope of the EIR. As discussed in the service letters from the County Department of Public Works, Construction and Solid Waste Division, (Appendix E) the County has ultimate responsibility to ensure disposal of solid waste. Criteria for locating a new landfill site will be addressed when the County considers the purchase of a landfill site some years in the future.

c. Groundwater impacts are discussed thoroughly on pages 107-111.

d. The 1600 acres of existing open space was recorded on July 28, 1982 (File No. 82-231348) and is a matter of public record.

e. The additional 232 acres of open space proposed by this amendment will be recorded as a condition of approval of the final map and major use permit at which time it will become a matter of public record. The 12-acre strip of open space in question is located along the western edge of the easternmost interceptor channel as shown on the specific plan map and is part of the 232 acres which would be recorded.

f. See response to Allen letter #2(c) above.

g. The Reclamation Plant complies with State Health Department Title 22 standards. For a description of specific requirements and how they will be met refer to Appendix I of the 1979 EIR. The subject of ground water pollution is discussed on page 116. A thorough analysis of impacts to groundwater in Borrego Valley is presented in Section J-2 (pages 107-111).

h. The section on alternatives was written to address only those changes proposed by this specific plan amendment. Since the additional 790 D.U.'s were already approved in concept in SP 80-01 and SPA83-05 this EIR analyzed only the possibility of expansion without the additional golf course. This alternative was addressed in response to a request from the County of San Diego. The EIR alternatively looked at the "no project" option which more specifically refers to "no amendment of the existing SPA 83-05". The alternatives presented in the EIR for the original specific plan (SP 80-01) focused on whether or not to allow a second home/retirement resort in the valley.

i. The DEIR is a supplemental document which analyzed only those impacts related to the changes proposed by this SPA 86-006. For a more complete discussion of potential impacts of the Ram's hill project as a whole refer to the 1979 EIR.

j. The Desert Protective Council's comments on the N.O.P. are incorporated into the text of the EIR.

4. On September 30, the Mountain Defense League (MDL) offered the following comments:

a. The Ram's Hill project imposes a long-term, cumulative, irreversible and unmitigable impacts upon State Park and area resources by way of traffic impacts, air quality impacts, runoff water impacts, groundwater withdrawal, impacts of foot traffic and visual impacts.

b. The MDL finds the description of ABDSP contained on page 131, as a recreational area to be incorrect and misleading.

c. Alternative #2 "No Project" is confusing.

d. The DEIR is inadequate in terms of documenting environmental issues as they relate to both Borrego Valley and the State Park.

Staff Response:

a. See response #2(f) above.

b. See response #2(d) above.

c. Alternative #2 "No Project" would be more clearly defined as "No Amendment to the Specific Plan (SPA83-05)". This alternative was selected in order to address specifically only those changes proposed by this specific plan amendment and not the impacts of development of Ram's Hill as a whole. Such impacts were addressed in the 1979 EIR on the original specific plan.

d. The DEIR is a supplemental document to the original 1979 EIR. For a more detailed description of environmental issues related to Borrego Valley and the State Park, refer to the 1979 EIR.

5. On October 2, 1986, a letter from the State Department of Parks and Recreation was received with the following comments:

a. Concern that the development will impact that the State Park as a result of increased population and off-road vehicles (ORV) use.

b. Significant flooding of Borrego Springs Road has occurred and is a problem that did not occur prior to the development of the Ram's Hill project.

c. The potential for flooding hazards is understated. The storms of the winter of 1985-1986 suggested that potential flood hazard is severe (page 52 and 55).

d. Deposition of silt will also affect Borrego Springs Road (page 56).

e. How will the accumulated sediments in the desilting/detention basins be disposed of (page 57)?

f. Introduction of non-native plant species for landscaping will attract animal species that do not presently occur on the property. They recommend careful selection of landscape species and a trapping program for nuisance animal species (pages 62-63).

g. How does the developer propose to restrict ORVs in order to protect the archaeological sites (page 67)?

h. What provision has the developer made to insure that Ram's Hill residents will not use ORVs on the surrounding State Park property (page 82)?

i. What is the project's effect on the nearby State Park's "dark skies"? What is the night time limit for tennis court lighting (pages 83-86)?

j. What effect will the project have on County roads within the State Park? Recommends specific timetables be established for road improvements for the Ram/s Hill project and the other Borrego Springs area buildout (page 99).

k. What effect will the drawdown of groundwater have on the wells within the State Park? What are the long term effects on the composition of indigenous vegetation, especially phreatophytes (page 114)?

l. What is the projected life expectancy of the Borrego landfill (page 123)?

Staff Response:

a. The specific plan amendment does not propose an increase in population beyond that which was already considered and approved in conjunction with GPA 76-02. The SPA designation of 0.5 which was assigned to Ram's Hill at that time allows a total of 1,570 d.u.'s within the project. This specific plan amendment describes the allocation and physical planning of the total number of d.u.'s allowed. No increase in the total number of d.u.'s beyond the 1570 d.u.'s allowed is being proposed.

Ram's Hill is mainly a second home/retirement resort community which is frequented during the winter season. The primary residents are high income retired people who are generally not ORV enthusiasts. In any event, the use of ORVs is prohibited within the Ram's Hill property and this restriction is enforced by the 24-hour security guard force on-site. The applicant believes that the goal of restricting ORV use within the Park can best be accomplished through an educational program. The applicant would be willing to work with the park in preparing an educational program or pamphlet designed to limit ORV use. The applicant will also make known to all residents and visitors to Ram's Hill the Park's philosophy and policy regarding ORV use.

b. The primary flood control facility associated with Ram's Hill is the existing interceptor channel and its associated dikes and protective berms which are described on pages 55-56. With regard to Borrego Springs Road, the design of the existing flood control facility considered the four dip sections that are located along Borrego Springs Road. These dip sections which serve to distribute runoff water across the road will remain unchanged. The current proposal would include the 17 detention basins as described on page 56. These detention basins will reduce the present volume and velocity of runoff water reaching Borrego Springs Road and will serve to recharge the aquifer underlying the site.

c. The EIR acknowledges the potential for severe flooding hazards in any arid environment such as the Borrego Valley (page 54). This document is considered to be a supplement to the 1979 EIR which discusses flooding/hydrology more extensively. The current EIR serves to summarize the previous report. The existing interceptor channels are the primary flood control facilities at Ram's Hill. The interceptor channels and associated protective berms and dikes were built in 1983. They accept runoff water from upstream, divert it around the area of development and then back to the natural drainage channels (all within the project boundaries). The existing flood control facilities were reviewed and approved by the County Department of Public Works. The current specific plan amendment would not alter the current configuration or function of the existing interceptor channel. As mentioned above, the proposed detention basins will actually reduce the volume of runoff water exiting the project site since some of the runoff detained in the detention basins would percolate into the soil.

d. The problem of deposition of silt in undesirable areas as described on page 56 refers to the area of the Ram's Hill project that is located downstream of the diversion channels. On-site, silt laden runoff will be mitigated on site (pages 56-57) through a series of detention/desilting basins. As mentioned above, the volume and velocity of water that reaches Borrego Springs Road will remain unchanged as a result of this amendment.,

e. Maintenance of the desilting basins would occur in accordance with maintenance agreements established in conjunction with homeowner's associations for each development. To remain effective, the desilting basins should be cleaned on a regular basis consistent with the level of sediment buildup in the basins. All material retrieved from the basins would be disposed of within the project boundaries. Some of the material may be compacted and utilized to elevate building pads on the project site.

f. Ram's Hill will utilize native and drought tolerant vegetation for landscaping throughout the project. All landscape plans prepared in conjunction with the golf course MUP and future residential PDs must be reviewed and approved by the County landscape architect. Plant species that are likely to be rejected for landscaping are those that would promulgate throughout the desert. The animal trapping program mentioned in this comment was not identified as a necessary mitigation measure.

g. ORVs are not allowed on the Ram's Hill property which has full-time security force. Access to the property is via a gated entrance. The existing interceptor dikes also serve as a barrier to access along Yaqui Pass Road and along portions of Borrego Springs Road. The archaeological sites should be protected since ORVs are not allowed on the Ram's Hill property.

h. See response #5(a) above.

i. The applicant has indicated that the statement on pages 85 and 86 regarding the provision of lighted tennis court needs to be corrected to read that lighting of the tennis courts may be provided should it become necessary at a later date; however, at the present time lighting the tennis courts is not proposed. If this becomes necessary the lights will be turned off from 11 p.m. to sunrise. The only outdoor lighting at Rams Hill that could affect the "dark skies" at the State Park are the low voltage ornamental lights that would be located along the project roadways. Evening activities at Ram's Hill that require additional outdoor lighting have been limited to approximately two events per year. It is anticipated that this will remain unchanged and that the impact of the limited use of outdoor lighting will not significantly contribute to the deterioration of the Park's "dark skies". For a complete discussion of "dark skies" impact and mitigation, refer to the 1979 EIR and 1986 supplement.

j. The potential impacts of the proposed project on the local roadway network are presented on pages 89-95. The County of San Diego, Department of Public Works, is responsible for establishing timetables and the scheduling of road improvements. The developer will work with the County to complete the improvements outlined on pages 98 and 99.

k. The groundwater study conducted for the current EIR and the original 1979 EIR concluded that adequate groundwater would be available to serve the Ram's Hill development and other existing and anticipated water demand in the Borrego Valley for over 400 years. Although the specific effects of Ram's Hill development on wells within the State Park have not been considered in detail in these studies, according to Linden Burzell, of the Borrego Water District, drawdown would not significantly affect the wells in the Park due to the fact that these wells are located well above Rams Hill and because they are located several miles away from the project. Due to the abundance of groundwater in the Borrego Valley and the relatively minimal effects of Ram's Hill development on the groundwater supply, no significant effects on the Park's wells should occur. Since adequate groundwater supply would be available to serve the valley for over 400 years as identified in the EIR (page 110), potential effects on phreatophytes are considered to be insignificant.

l. The County of San Diego, Department of Public Works has projected that the landfill has a remaining life expectancy beyond the year 2000. The actual life expectancy will primarily depend upon how many people utilize the Anza Borrego Valley as a whole, not just the potential increase in solid waste that may be generated from Ram's Hill. The cumulative impacts to the landfill are monitored by the County.

6. On September 23, 1986, a letter from the State Department of Water Resources (DWR) was received which outlined staff recommendations related to water conservation and flood damage prevention. The letter suggests that consideration should be given to a comprehensive program to use reclaimed water for irrigation purposes.

   Staff Response: The Ram's Hill amended specific plan has followed many of the DWR staff recommendations related to water conservation and flood damage prevention. A variety of the recommendations outlined which are applicable to the project will be implemented. For example, low-water-using plants will be utilized for landscaping, slopes are graded so that runoff of surface water is minimized and development is being confined to the area within the interceptor channels. The feasibility of utilizing reclaimed waste water from the on-site reclamation plant for irrigation is thoroughly investigated in the groundwater section of the EIR (pages 100-114). Flood damage prevention for the proposed development will be handled by the existing interceptor channels. Detailed soils and engineering studies were conducted in conjunction with the original EIR (1979) as well as with the amended specific plan. As presented in the Flooding/Hydrology section of the EIR (pages 56-57) there will be a series of 17 desilting/detention basins designed to capture on-site runoff water. The basins will provide groundwater recharge to the aquifer underlying the site.

BORREGO WATER DISTRICT

September 11, 1986

San Diego County
Department of Planning and Land Use
5201 Ruffin Road
San Diego, CA 92123
Attn: Mr. Jeff Brinton

SUBJECT: Borrego Water District Comments on Draft Supplemental Environmental Impact Report - Ram's Hill SPA86-006

The following comments of the Borrego Water District relate to Sections V-C, V-J and the Liquid Waste Disposal portion of Section V-K.

Section V-C Flooding/Hydrology

The Borrego Water District is charged with the maintenance of the Ram's Hill flood control channels. Based on approximately three years of experience, the District agrees with the description of the potential impacts and the proposed mitigation which involves construction of swales and detention/desilting basins in the project.

Section V-J Groundwater

The Borrego Water District provided much of the groundwater data used in this section and agrees with the factors used to estimate consumptive use, reduced wastewater flows during the summer months and estimates of quantity of water to be reclaimed. One of the most significant comments from the District's perspective is found in Paragraph 3a on pages 111-112 where the author mentions that the winter time wastewater flows will be sufficient to irrigate at least two golf courses. The District concurs with a plan which gives it a second golf course to use for disposal of fully treated effluent.

The Borrego Water District will require the developer to extend water mains, increase storage and production capacity as necessary to meet the water supply demand associated with the forecast of water consumption noted in Table 20 on page 108.

Section V-K-1 Liquid Waste Disposal

The Borrego Water District generally agrees with this portion of Section V-K, however, it wants to clarify the point that the Ram's Hill Reclamation Plant was designed to be expanded and that Waste Discharge Requirements (Order No. 85-35) designated the discharge to be into earthen basins in the E 1/2 of Section 23, T11S, R6E, SBB&M. Accordingly, the discharge area may be extended outside of the existing fenced area yet within the E 1/2 of said Section 23.

The District has established a fee system to pay for Reclamation Plant expansions, as needed, which is deemed to be fair to all concerned. The land owners of Ram's Hill are obligated for the debt service on bonds which were used to provide Reclamation Plant capacity for 780 dwelling units of capacity. When maps are filed which extend the District's obligation to serve the additional 790 dwelling units contemplated in SPA86-006, the District will arrange for collection of fees sufficient to provide for the planned expansion of the Ram's Hill Treatment Plant.

Sincerely,

John Sasso
President

3750 El Canto Dr
Spring Valley, CA 92077
September 23, 1986

COMMENTS ON DEIR FOR RAMS HILL: SPA 86-006, et al

SPA 86-006 appears to complete the plan originally approved for Rams Hill.

However, the same concerns, the same issues surface year after year. Some appear to be mitigated by promises of assistance by the developer, such as:

Sheriff services	(K,2,c, pg 118)
Fire protection	(K,4,c, pg 122)
Solid Waste	(K, 5,c, pg 124)
Open space	(various pages)

Is there written evidence of assistance, the degree of such assistance? Are there bonds or recorded documents? Will the successors in interest honor such obligations? Is "recorded" open space required, or is this, too, just a promise?

How will off-site open space for proposed Transfer of Development Credits be handled? Is it legal for Rams Hill to incorporate additional units under TDCs? (The Planning Commission on 9-17-86 approved eighty units for subarea 264 for TDCs.)

Where will the public find a statement signed by the Director of California Parks & Recreation Department to the effect that Anza-Borrego Desert State Park is a recreation unit as well as a Resource Park?

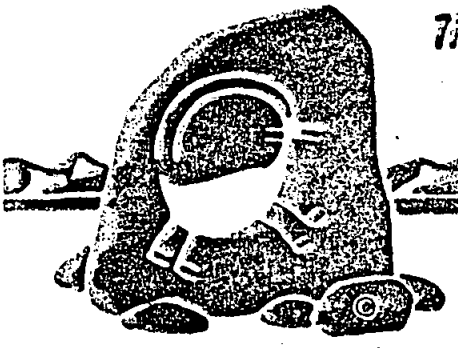
The DEIR appears to be written by and for the developer to justify his project. It does not appear to call for appropriate environmental protection for Borrego Valley, for the nearby observatories, for the Park and for widlife and cultural resources.

The unmitigated impacts such as air quality, aesthetics, dark skies, traffic, public services and flooding continue to accumulate. The DEIR admits to them while simultaneously endorsing and excusing them with over-riding by presumptuous, unmeasurable and unenforceable public benefits.

Please keep our name on the mailing lists for the DEIR and hearing agendas.

Respectfully submitted,

Mrs. Howard Allen



THE DESERT PROTECTIVE COUNCIL INC.

A NON-PROFIT ORGANIZATION

To safeguard for wise and reverent use by this and succeeding generations those desert areas of unique scenic, scientific, historical, spiritual and recreational value and to educate by all appropriate means children and adults to a better understanding of the desert.

BOX 4294 • PALM SPRINGS • CALIFORNIA 92263

DATE: September 24, 1986

REPLY TO:
3941 Clark Street
San Diego, CA 92103

STATEMENT FOR THE RECORD ON DEIR FOR RAMS HILL:
86-006, TM 4613, R86-046, P86-062, P79-130W1

The opportunity to comment on the DEIR is appreciated.

Response to issues, as presented in our NOI review, appears to be limited to Anza-Borrego Desert State Park (ABDSP) as per pages 5 and 131. Appendix F does not contain a quotable source for the identification of two operational goals for ABDSP.

The DEIR does not establish criteria for locating a new landfill, especially if sited near or adjacent to Park boundaries(Page 124)

Ground-water mining is a continuing concern, particularly in view of new and expanding golf courses at Rams Hill, Roadrunner Club and elsewhere.

The issue of recorded open space needs to be clarified. Open space, as a buffer between the project and ABDSP,is essential.
The DPC recommends that no approval for SPA86-006, amendments, permits or construction be granted until the 1600 acres of permanent open space provided in SPA80-01 and SPA83-05 is a matter of public record.

Furthermore, conditions should be placed on SPA 86-006 to assure recorded open space in perpetuity for Biological resources (a minimum of 70 acres in the pandhandle, page 132) and for archeological resources (a minimum of 150 acres in the south-west sector, page 132) prior to commencement of any grading. The balance of the open space (approximately 12 acres) should be identified and recorded.

While DPC recognizes that the above is not a function of the DEIR,

the issue must be brought forth in the Final EIR.

This organization expresses concerns about plans to add dwelling units (80) to Rams Hill as Transfers of Development Credit (TDCs) from subarea 264 of the Towne Center GPA86-03 as proposed by Rams Hill. Will the off-site open space in subarea 264 be used in lieu of "promised" open space under SPA80-01 and SPA 83-05? The Final EIR must address this proposal which was approved by San Diego county Planning Commission on 9-19-86.

The DEIR does not address, adequately, the ground water pollution from this project and/or its treatment plant. It denies impacts on ABDSP from ground water mining.

The section on Alternatives appears biased and inadequate, offering the reviewer poorly chosen options.

In summary, the DEIR appears to be inadequate, incomplete and internally conflicting. Significant, long-range, irreversible and cumulative impacts are but lightly acknowledged, especially in relationship to Anza-Borrego Desert State Park.

The DPC respectfully requests that all past comments, especially on the NOI and SPA83-05 and SPA 80-01, be incorporated by reference.

Please keep this organization on all mailing lists for Rams Hill.

Mary F. Swedelius, Ex. Director

cc: DPC President
So. Desert rep.

MOUNTAIN DEFENSE LEAGUE

P.O. Box 2267, San Diego, CA 92112
(619) 298-3738

September 30, 1986

TO: Department of Planning & Land Use

From: Mountain Defense League

MOUNTAIN DEFENSE LEAGUE COMMENTS REGARDING RAMS HILL DRAFT EIR, SPA 86-006, TM 4613, R86-046, P86-062, P79-1301 (Log No. 86-11-01)

FORWARD

The Mountain Defense League has been over the course of its existence a consistent and active witness on behalf of protecting Anza-Borrego Desert State Park from land uses in conflict with its designation and physical integrity. We have also served as a long term critic, and one time litigant of the Rams Hill project.

ADVERSE ENVIRONMENTAL IMPACTS

The Rams Hill project imposes long term, cumulative, irreversible, and unmitigatable impacts upon State Park and area resources by way of traffic impacts, deterioration of air quality, diversion of run-off waters, groundwater withdrawal, high volume of foot traffic on fragile desert environment, imposition of distracting urban environment, and drastic reduction in famed area aesthetics because of the projects gross presence and visibility from the Park's premier wondrous vista view points (designated and de facto).

MISLEADING PREMISE

The MDL finds the description of ABDSP, contained on page 131, as a recreational area to be incorrect and *misleading* to a potentially dangerous degree. The EIR falls into the continuing fallacy promulgated by those ignorant, insensitive or with dire designs for the Park, that the Park is a "recreational area". Either that or as incorrectly indicated on page 131, that the recreational mission of the Park is

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coequal with its role as a preserve. Not only is the Park not a recreational area as indicated, it is something very different...with very different import for surrounding land uses and consequent impacts. Again and again managers of Anza-Borrego SP and SPR authorities in the Southern Region Headquarters and Sacramento have had to forcibly state to those who's goals would be in conflict with ABDSP (off roaders, developers, etc.) that Anza-Borrego is a State Park not a Recreational Area and the legal difference is a profound difference in terms of management and resource protection. *No recreational usages or impacts that are in any way detrimental to the sensitive resources of the Park are allowed.* Unfortunately the State's ability to deal with detrimental impacts at their point of origin, if such is on private land is legally limited (as in the instant case...Rams Hill).

ALTERNATIVES SECTION

Alternative One, as presented is not acceptable. Alternative Two is confusing if not mute (already approved in effect via SPA 80-01).
The alternatives section needs to be rewritten.

CONCLUSION

The Draft EIR, as written, is self serving for the project and is grossly inadequate in terms of documenting and dealing with environmental issues as they relate to both Borrego Valley, and the State Park.

MOUNTAIN DEFENSE LEAGUE

Byron F. Lindsley, Jr
Director, Mountain Defense League

State of California

The Resources Agency of California

Memorandum

Date : October 2, 1986

To : Gordon F. Snow, Ph.D.
Project Coordinator
Resources Agency

From : Department of Parks and Recreation — Richard G. Rayburn

Subject: Rams Hill Country Club Specific Plan
Draft Supplemental Environmental Impact Report
SCH# 86082702

The Department of Parks and Recreation has reviewed the subject document. The proposed project would affect our adjacent property, Anza-Borrego Desert State Park.

We are concerned that the development, with its consequent population increase, will impact the State Park by:

1. increasing the impacts of off-road vehicles;
2. causing flooding of Borrego Springs Road;
3. increasing unauthorized motor and foot trails into the State Park; and
4. lowering the water table.

Our specific comments refer to the following pages:

44. Borrego Springs Road has experienced significant flooding, a problem that did not occur before the project was begun. The specific plan amendment is expected to cause environmental impacts on State Park lands from added population and off-road vehicles.

52 and 55. The potential for flooding hazards is understated. The storms of the Winter of 1985-1986 suggested that potential flood hazard is severe.

56. The described problem [deposition of silt in undesirable areas] also affects Borrego Springs Road.

57. How will the accumulated sediments in the [illegible] detention basins be disposed of?

62-63. The project anticipates the introduction of non-native plant species for landscaping and attraction of animal

species that do not presently occur on the property. We recommend careful choice of landscape species that will not "escape" the project site and compete with and displace native vegetation. A trapping program for nuisance animal species should be developed as mitigation.

67. How does the project developer propose to restrict off-road vehicles to the property in order to avoid impacts to the archeological sites?

82. What provision has the developer made to insure that Rams Hill residents and guests will not use ORVs on the surrounding State Park property? This is an essential provision because this Department does not have sufficient personnel to control access to the State Park from the Rams Hill property.

83-86. The "dark skies" so important to the astronomical observatories are also a special attraction to State Park visitors. What is the project's affect on the nearby perspective for State Park visitors? What is the nighttime limit for tennis court lighting?

99. What effect will the project have on county roads within the State Park? We recommend specific timetables be established for road improvements for the Rams Hill project and other Borrego Springs area buildout.

114. What effect will the drawdown of groundwater have on the wells within the State Park? What are the longterm effects on the composition of indigenous vegetation, particularly the phreatophytes?

123. What is the projected life expectancy of the Borrego landfill at the current load rate of 7,580 tons per year plus the additional gradual increase to 4,616 tons per year generated by Rams Hill at ultimate buildout?

131. Anza-Borrego Desert State Park currently comprises over 600,000 acres. It is important to note that OHV use, which is a popular recreational activity, is a major environmental problem is the State Park. Any project that causes an increase in population threatens to exacerbate the problem. The project developer is urged to address this impact in particular.

State of California

The Resources Agency

Memorandum

Date : SEP 2 3 1986

To : 1. Gordon F. Snow, Ph.D.
Assistant Secretary for Resources
2. County of San Diego
5201 Ruffin Road, Suite B
San Diego, CA 92123
Attention: Jeff Brinton

From : Department of Water Resources
Los Angeles, CA 90055

Subject: DEIR for Ram's Hill County Club, Specific Plan Amendment SPL 86-006, Log #86-11-01, SCH 86082702.

Recommendations of the staff of the Department of Water Resources on the subject document are attached. The recommendations are related to water conservation and flood damage prevention.

Consideration should also be given to a comprehensive program to use reclaimed water for irrigation purposes in order to free fresh water supplies for beneficial uses requiring high quality water.

For further information, you may wish to contact John Pariewski at (213) 620-3951.

Thank you for the opportunity to review and comment on this report.

Sincerely,

Carlos Madrid, Chief
Planning Branch
Southern District

Attachments

DRAFT
SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT
FOR THE
RAMS HILL COUNTRY CLUB
SPECIFIC PLAN AMENDMENT (SPA 86-006)
LOG #86-11-01

Lead Agency:

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road
San Diego, California 92123

Attn: Ms. Nancy Whalen

Project Applicant:

DiGiorgio Development Corporation
3230 Fifth Avenue
San Diego, California 92103

Discretionary Actions:

SPA 86-006
TM 4613
R 86-046
P 86-062
P 79-130 W[1]

August 1986

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I. INTRODUCTION

The Rams Hill Country Club is a residential/resort complex under development by the DiGiorgio Development Corporation on a 3,140 acre parcel located on the south slope of the Borrego Valley. A total of 1,600 acres in the eastern half of the property have been dedicated as permanent natural open space in the current specific plan (SP-A83-05). This open space will be increased to 1,832 acres in the proposed amendment to SP-A83-05. Two hundred twenty-one acres of the open space area are being dedicated in order to protect both biological and archaeological resources. This report provides an environmental assessment of a proposed amendment to the current specific plan (SP-A83-05). Currently approved plans would permit development of 780 units within the 612 acre Specific Plan area; a total of 1,570 units are permitted in 3,140 acres by the General Plan. To date, four residential subdivisions have been recorded providing for a total of 511 dwelling units (d.u.'s), in four different market categories, out of the 780 approved units. This amendment will allocate the remaining 790 d.u.'s allowed by the General Plan within the majority of the 928 acres which were designated as "future planning areas" (FPA's) in the original specific plan. These residential areas were addressed in concept in the Rams Hill Country Club Environmental Impact Report (EIR) (PRC, 1979). In addition to the residential development, a second 18-hole golf course and a 30-acre commercial area are being proposed. The new golf course was not included as part of the original EIR and will therefore be analyzed in detail in this document. The proposed development will complete the ultimate build-out allowed by General Plan Amendment 76-02. The Rams Hill Country Club site has been designated as a Specific Planning Area (SPA 0.5) with an overall density of one d.u. per two acres.

PURPOSE

This EIR is being prepared in accordance with the amended guidelines adopted by the San Diego County Board of Supervisors. It is prepared in compliance with applicable sections of the California Public Resources Code and related Guidelines for implementation of the California Environmental Quality Act (CEQA). This report analyzes the potential short-term and long-term environmental impacts

resulting from changes to the project proposed at this time. Figure 1 illustrates the project location, near Borrego Springs in the unincorporated area of eastern San Diego County. The project location along the south slope of the Borrego Valley and in the privately owned sections surrounded by the Anza Borrego Desert State Park is shown in Figure 2.

This report will address the potential environmental impacts associated with the following discretionary actions and applications which are proposed by the applicant:

- Amendment to SP-A83-05: for the allocation of the remaining 790 d.u.'s currently within FPA's and the replanning of 269 d.u.'s of the originally approved 780 d.u.'s; the planned addition of a second golf course and the 30-acre commercial area. Approximately 313 acres within the specific plan area will be retained as FPA's in conjunction with this specific plan amendment;

- Tentative Subdivision Map: to include the southeast portion of the development area showing lots, streets, grading and other information for approximately 278 single-family custom lots and planned development lots fronting golf course fairways;

- Rezone Application: to be prepared for submittal to the County for the areas contained in the amended specific plan. This amendment would allow for rezoning approximately 616 acres to conform with the densities detailed in this amended specific plan;

- Major Use Permits: This amendment would modify the current configuration of the golf course, adding approximately 177 additional acres of golf use to create two separate 18-hole courses on a total of 346 acres. The proposed golf courses can be termed the North Course and South Course. A major modification to the existing major use permit (MUP) (P79-130) for the proposed North Course and a new major use permit for the South Course are being processed;

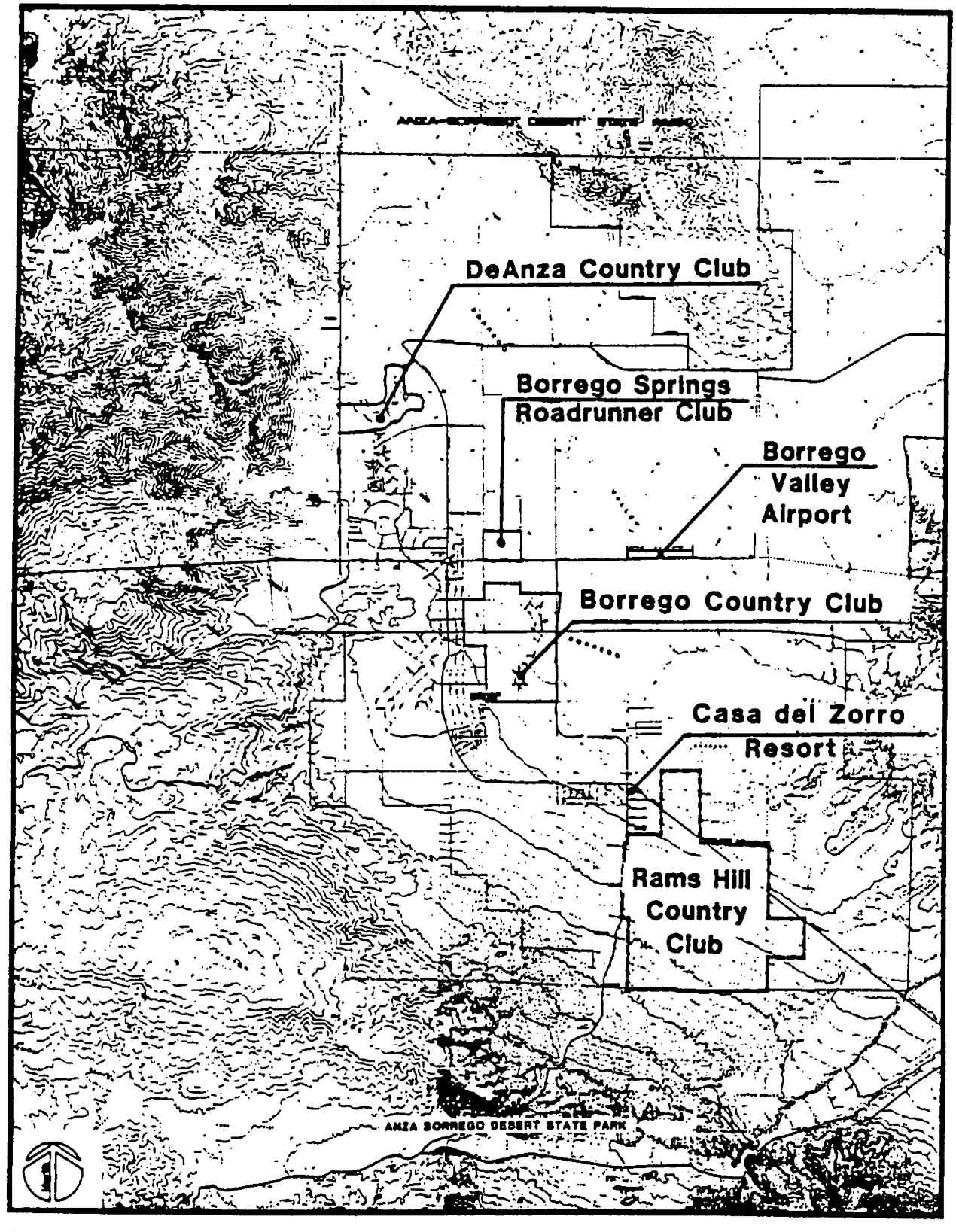


Figure
2

RAMS HILL

Project Location in Valley

- o Grading Permits: to allow for implementation of the above mentioned plans.

The major environmental issues addressed in this document include groundwater supply, traffic circulation and public services. Other issues include land use, landforms/soils/geology and geologic hazards, flooding/hydrology, biology, archaeology, climate/air quality, noise, dark skies and visual quality. Both direct and indirect cumulative project impacts will be analyzed in this report. Alternatives will be formulated in order to mitigate potential impacts associated with the proposed development.

In their response to the Notice of Preparation for this EIR, the Desert Protective Council has expressed concern for the potential impacts that the Rams Hill amended specific plan could have upon the Anza Borrego Desert State Park. One of the council's major concerns involves the provision of recreational facilities, other than golf, within the project and for employees and families off-site. Within the Rams Hill project there are extensive recreational facilities for all Single Family and Planned Development units. Each of the recreation areas include a swimming pool, spa, at least one tennis court and a bar-b-que. In addition to these recreation facilities, there will be a tennis center and spa located near the future resort hotel site. Rams Hill Country Club is designed as a self-contained resort with all necessary support facilities; any employee who lives on-site is eligible to use these facilities.

Off-site recreational facilities for employees and their families are available at the Community Center (formerly the Youth Center) which includes a softball/baseball field, clubhouse, track, tennis and swimming. The Community Center is located adjacent to the high school which also has a public swimming pool and tennis courts. The DiGiorgio Corporation has contributed to recent renovations at both of these facilities through parkland fees. DiGiorgio Corporation currently owns the 13-unit Airport Resort which includes a swimming pool, jacuzzi, sauna, table tennis and billiards. The employees of Rams Hill who reside at the Airport Resort as well as other Rams Hill employees have access to these facilities. The Draft Community Plan (see Section V.A.) proposes that this area be rezoned so that the motel could be expanded and the area behind the motel could be designated for residential use at 7 d.u.'s per acre. If this is approved it

would provide housing and recreation for employees, construction workers and the valley as a whole. Some of the Rams Hill employees reside at other DiGiorgio-owned units in Borrego Springs where on-site recreation facilities are present.

II. EXECUTIVE SUMMARY

PROJECT DESCRIPTION

The Rams Hill Country Club is a residential/resort complex located near Borrego Springs in eastern San Diego County. The DiGiorgio Development Corporation is proposing a series of discretionary actions and applications in order to complete this development including: an amendment to SP-A83-05, a rezone application, a tentative subdivision map, a major use permit, and a major modification to the existing major use permit for the golf course. To date, four residential subdivisions have been recorded providing for a total of 511 dwelling units (d.u.'s) within the specific plan area. In addition, an 18-hole championship golf course, a golf pavilion with a restaurant and pro shop, a medical clinic, a wastewater treatment plant and flood control facility have been built at the site. Rams Hill is mainly a second-home/retirement resort community which is frequented during the winter season.

The project is needed now as there are five products available at Rams Hill and two of these are almost gone. There are vacation homes (Casitas), moderately priced patio homes (Santa Fe), high-end patio homes (Santa Rosa), fairway lots and estate lots available at the present time. The high-end patio homes and the fairway lots are almost gone and thus need to be replaced as soon as possible. Planning for future replacement of the other three products must be done well in advance. It takes two or three years to do this with a specific plan, tentative maps, final maps, improvements, grading and building.

The proposed residential development at the Rams Hill site was reviewed in concept in the 1979 Rams Hill Country Club Environmental Impact Report (EIR). The 1979 EIR evaluated potential impacts associated with development of 780 dwelling units on approximately 612 acres within the specific plan area. An additional 790 dwelling units allowed by the General Plan were anticipated to be planned at some future date in areas which were designated by the 1979 specific plan as "future planning areas" (FPA's). The Specific Plan Amendment evaluated in this EIR designates residential land uses within approximately 544 of the 928 acres which were previously designated FPA's. In addition, 269 d.u.'s which were

approved as part of the original Specific Plan are being replanned as a response to current market demands. The 1,600 acres of land designated as permanent natural open space by the original specific plan will not be affected by the distribution of the remaining density associated with this specific plan amendment. The open space will actually be increased to 1,832 acres. The additional open space acreage includes an 11 acres strip of land along the eastern edge of the property as open space (adjacent to the protective berm), 72 acres located north of the seasonal storage ponds of the wastewater reclamation facility and 150 acres in the southwest portion of the property. Over one-half of the Rams Hill property will be dedicated as open space as a result of this specific plan amendment.

The objective of this specific plan amendment is to allocate the total number of dwelling units allowed by GPA 76-02 (1,570 units), within the specific plan area, including approximately 616 acres of the previously designated FPA's. Approximately 313 acres within the specific plan area will be retained as FPA's in conjunction with this specific plan amendment. To achieve this objective, the maximum residential density permitted by certain zones designated in the specific plan (R-S-3, R-V-6, R-V-11), has been assigned to the planned development and single family detached development areas. Residential densities in the estate lot areas have not been maximized and are, in fact, somewhat less than the 0.5 d.u.'s/acre allowed by the estate lot zone. In the R-S-3, R-V-6 and R-V-11 areas, the maximum residential densities have been assigned. Since actual development within these areas may occur at densities considerably less than permitted under the R-S-3, R-V-6 and R-V-11 zones, some dwelling units may be "left over" after development of the R-S-3, R-V-6 and R-V-11 areas designated in this specific plan amendment. Such "leftover" units, if they occur, would be developed in the approximately 313 acres of FPA's designated by this specific plan amendment. Such develoment in the FPA's would require another specific plan amendment.

This amendment would modify the current configuration of the golf course, adding 177 additional acres of golf use to create two separate 18-hole courses on a total of 346 acres. The proposed golf courses can be termed the North Course and the South Course. The North Course will be comprised of 170 acres, including holes 1 through 9 of the existing course, incorporating minor modifications, and nine

additional holes in this area. The proposed South Course will be comprised of 176 acres, including holes 10-18 of the existing course, incorporating minor modifications, and nine additional holes in this area. The additional acres of golf use as well as a proposed 30 acre commercial site are considered in detail in this document.

ENVIRONMENTAL ANALYSIS

The proposed completion of this project will not constitute a major change in the character of the Borrego Valley since it is consistent with the existing development at Rams Hill. The construction of a new golf course will result in the addition of substantial irrigated green area. Much of the water needed to irrigate the golf course will be water reclaimed at the wastewater treatment plant on the Rams Hill property. This along with stringent water conservation measures to be implemented both during design and operation of the course would ensure that the impact of this course on groundwater supplies will not be significant. The increased human presence in the desert could potentially effect the existing biological habitat. This can be mitigated by restricting off-road vehicle activities in the 1,832 acres which are designated as open space. The developer has agreed to maintain the natural, pristine condition of this open space area. On-site flooding hazards have been mitigated to the extent possible by the existing water diversion channel that surrounds the area to be developed and by detention/desilting basins located through the golf course area. A significant archaeological site and a sensitive biological habitat are being protected within the open space easement in the southwest portion of the site. The site area has been subject to data recovery analysis. The sensitive biological habitat in the northernmost panhandle is also protected from potential impacts within an open space easement. Potential seismic hazards will be mitigated by proper construction techniques. Grading at the site will be in the central gently sloping area and will be kept to a minimum. Most of the rough grading for future home sites has already been completed.

The growth at Rams Hill is expected to occur on a gradual basis. This growth is consistent with the San Diego County General Plan and was approved in concept in the original Specific Plan. The majority of the residents and visitors at Rams Hill will be there only seasonally. The demand that the proposed development will have

on public services in Borrego Springs will therefore increase incrementally. The DiGiorgio Corporation has agreed to cooperate with local agencies when the level of public services needs to be upgraded. For example, they have dedicated acreage for a future fire station and will contribute financially to the construction costs of a new facility and one year's operational costs when it is needed. During the peak season, there could be significant impacts to the level of traffic on roads in the valley. Impacts to the Anza Borrego Desert State Park are not anticipated to be significant. The level of visitors to the park is already averaging approximately 27,440 vehicles and 136,932 people during peak season (January-April); any increase to this from Rams Hills residents would be insignificant.

Rams Hill would not have significant impacts on archaeology, biology, geology, soils, air quality/climate, noise, dark skies, liquid waste or schools. In conclusion, development of the amendment to the Specific Plan (SP-A83-05) could potentially result in certain adverse environmental impacts. These impacts will be mitigated to the extent feasible by project design. The ultimate build-out of Rams Hill would however, have beneficial economic impacts to the local economy and would increase recreational opportunities in the Borrego Springs area. Combined with the existing Scripps Clinic at Rams Hill, which is the only medical facility in the valley, the new uses would serve to enhance the socioeconomic well-being of the community.

III. ENVIRONMENTAL SETTING

A. LOCATION AND STATUS OF EXISTING DEVELOPMENT

The Rams Hill Country Club consists of 3,140 acres located 86 miles northeast of metropolitan San Diego and 30 miles west of the Salton Sea in the Borrego Valley area of San Diego County. The project is situated in an unincorporated area which is surrounded by the Anza Borrego Desert State Park (Figure 1).

The Rams Hill Country Club site has been designated on the San Diego County General Plan as a Specific Planning Area (SPA 0.5) with an overall density of one dwelling unit per two acres. The original Specific Plan (SP-80-01) included a total of 780 dwelling units, a hotel (350 suites), a tennis and retail shop complex, an 18-hole championship golf course, a medical clinic, a future fire station, a wastewater treatment plant, a flood control facility, 1,600 acres of open space and 928 acres of "future planning areas" (FPA's). The FPA's were analyzed in the 1979 Rams Hill EIR in concept only. The development analyzed in the 1979 EIR included approximately half of the ultimate build-out allowed by the general plan designations.

A Specific Plan Amendment (SP-A83-05) which was approved in 1984 outlined the following minor changes to the first specific plan:

1. Changed the road pattern and lot pattern in the estate area.

2. Reduced the area of the hotel site so that a portion may be used for a higher-density residential development site. Obtained that density by reducing the size of an adjacent residential area.

3. Relocated and/or removed certain roads and trails.

4. Redefined the open space area and relocated the rear entrance road to reflect changes resulting from the design of the flood control facility and improved technical information.

5. Made changes reflecting final construction on the project.

6. Made minor zoning changes required in conjunction with the proposed specific plan amendments.

To date, four residential subdivisions have been recorded providing for a total of 511 d.u.'s in four different market categories out of the 780 approved units. Approximately 30 percent of these units and their associated recreational areas have been built; the golf course and golf pavilion (which includes a pro shop, lounge and restaurant), wastewater treatment plant, flood control system, Scripps medical clinic, roads and associated grading activities have also been completed. Existing development within the specific plan area, and areas for which final maps for residential development have been approved, are shown in Figure 3.

B. ENVIRONMENTAL SETTING

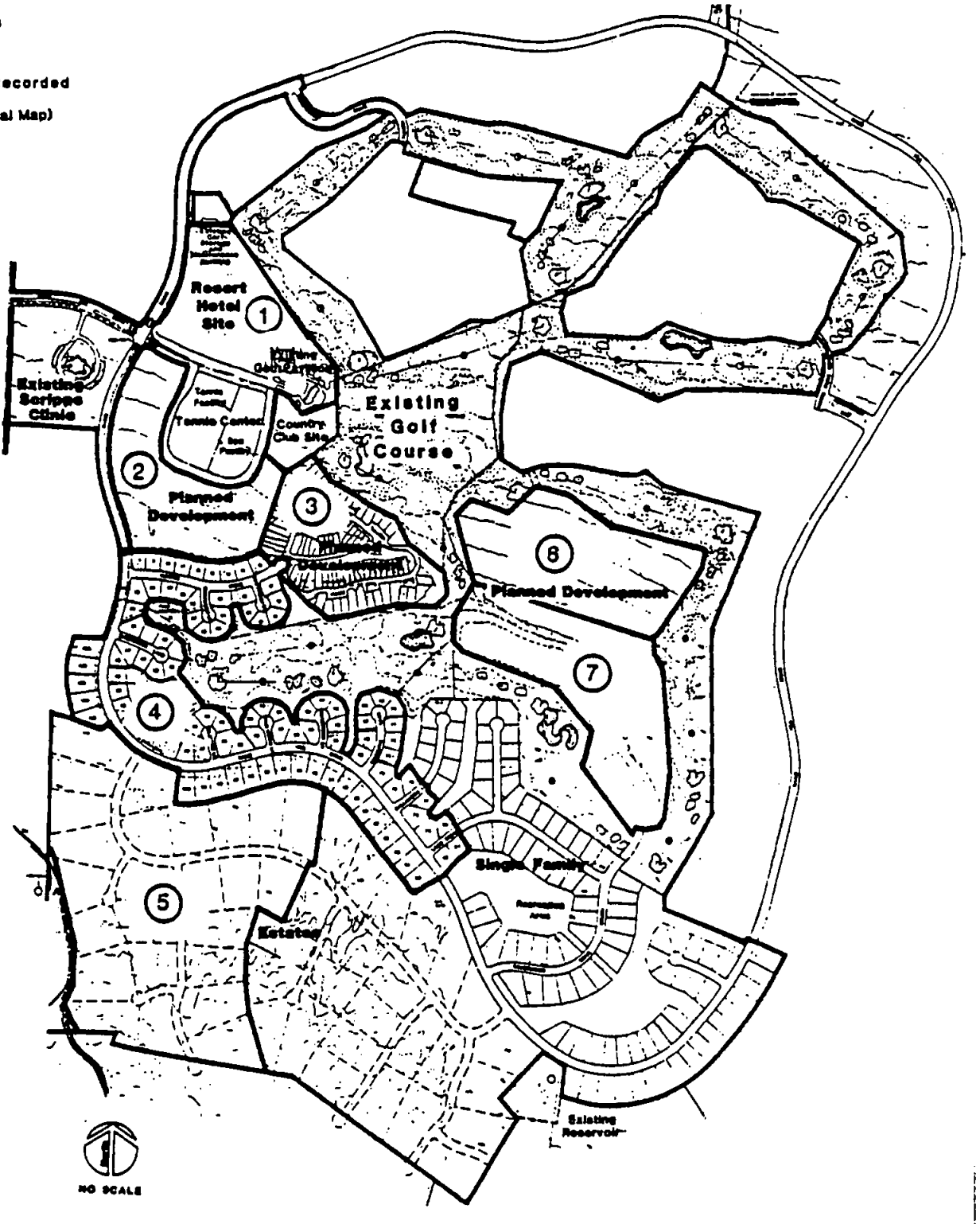
The Rams Hill Country Club is a vacation/residential resort located approximately five miles southeast of the business district of the community of Borrego Springs. It is part of a 70-square mile privately owned enclave of land which is surrounded by the Anza Borrego Desert State Park. Yaqui Pass Road runs north to south along the western boundary of the property and Borrego Springs Road cross-cuts the northern panhandle of the property running northwest to southeast. Borrego Springs is the major desert resort community in San Diego County. The area is geographically isolated and it has a limited economic base. Historically, agriculture was the primary land use in the Borrego Valley; the emphasis has since changed to retirement/resort related development. Rams Hill, being a second-home/retirement resort community, is consistent with the surrounding land uses. The project site is located immediately south of the Casa del Zorro Resort (Figure 2).

The portion of Rams Hill which is designated for development is located in the western half of the property. The eastern half of the project was dedicated as permanent open space. The terrain slopes gently upward from the northeast to southwest. Elevations range from 475 feet in the north to 1,150 feet in the

LEGEND

1. FM 11229 - Recorded
2. FM In Process
3. FM 10873 - Recorded
4. FM 10506 - Recorded
5. FM In Process
6. FM In Process
7. FM 11235 - Recorded

(FM - Final Map)



RAMS HILL

Figure 3

Existing Development / Final Maps Recorded or in Process

southwest corner. Slopes range from zero to six percent over 80 percent of the site with slopes of seven to 15 percent in the northwestern area. The site is characterized by a gently sloping smooth alluvial surface except for the steeper southwest corner which consists of a series of ridges and washes. Figure 4 is a USGS topographic map of the site and its environs. The creosote bush scrub community is the dominant vegetation type through the central portion of the site. The northern border of the site consists of mesquite woodland and alkali sink scrub while the southeast corner is made up of semi-succulent scrub.

C. PROJECT HISTORY

In 1974, the DiGiorgio Development Corporation initiated the first in a series of planned development plans for this 3,140 acre parcel. The following table (Table 1) provides a chronological summary of the various discretionary actions and procedures that apply to the project.

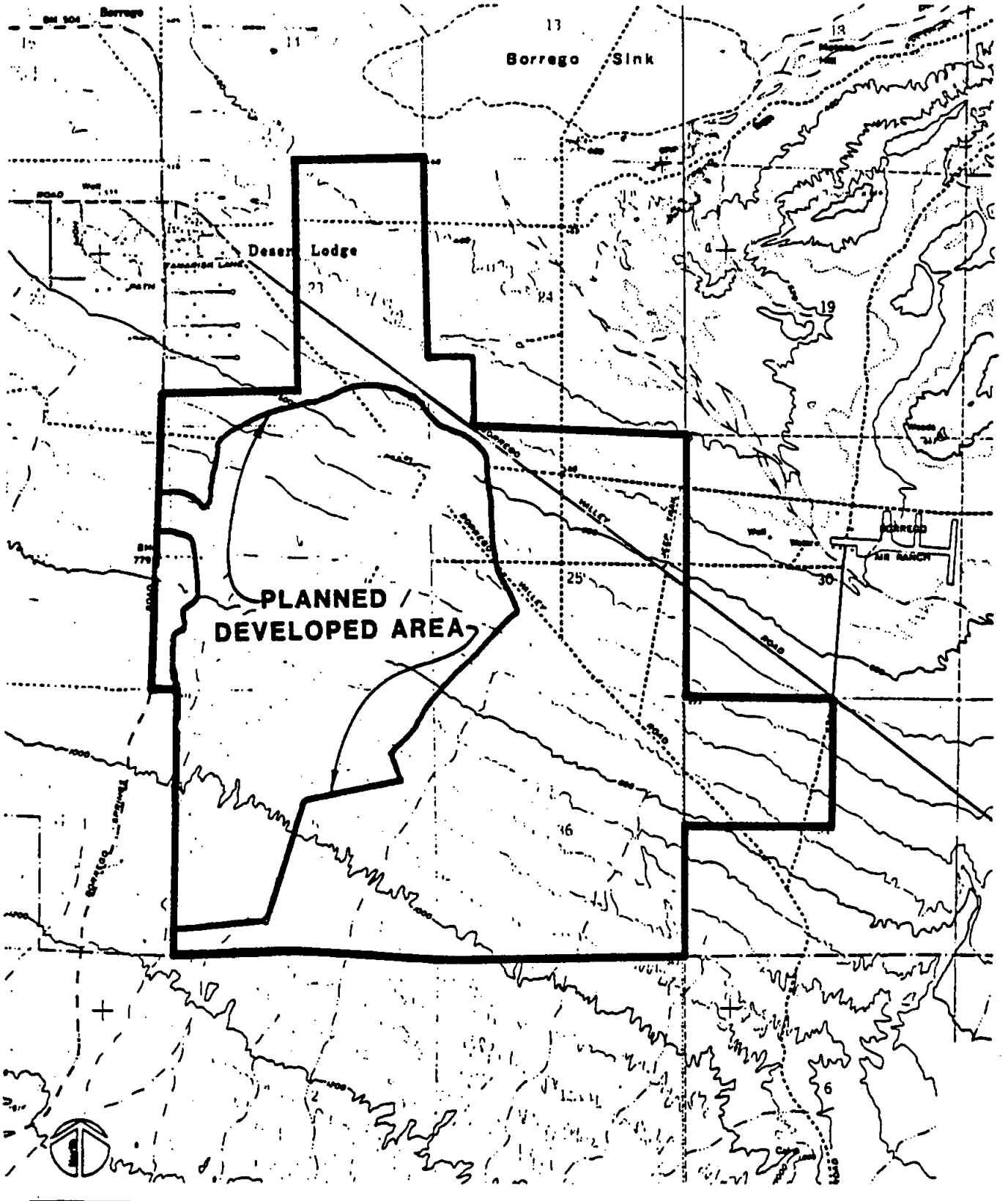


Figure 4

RAMS HILL
USGS Map of Site

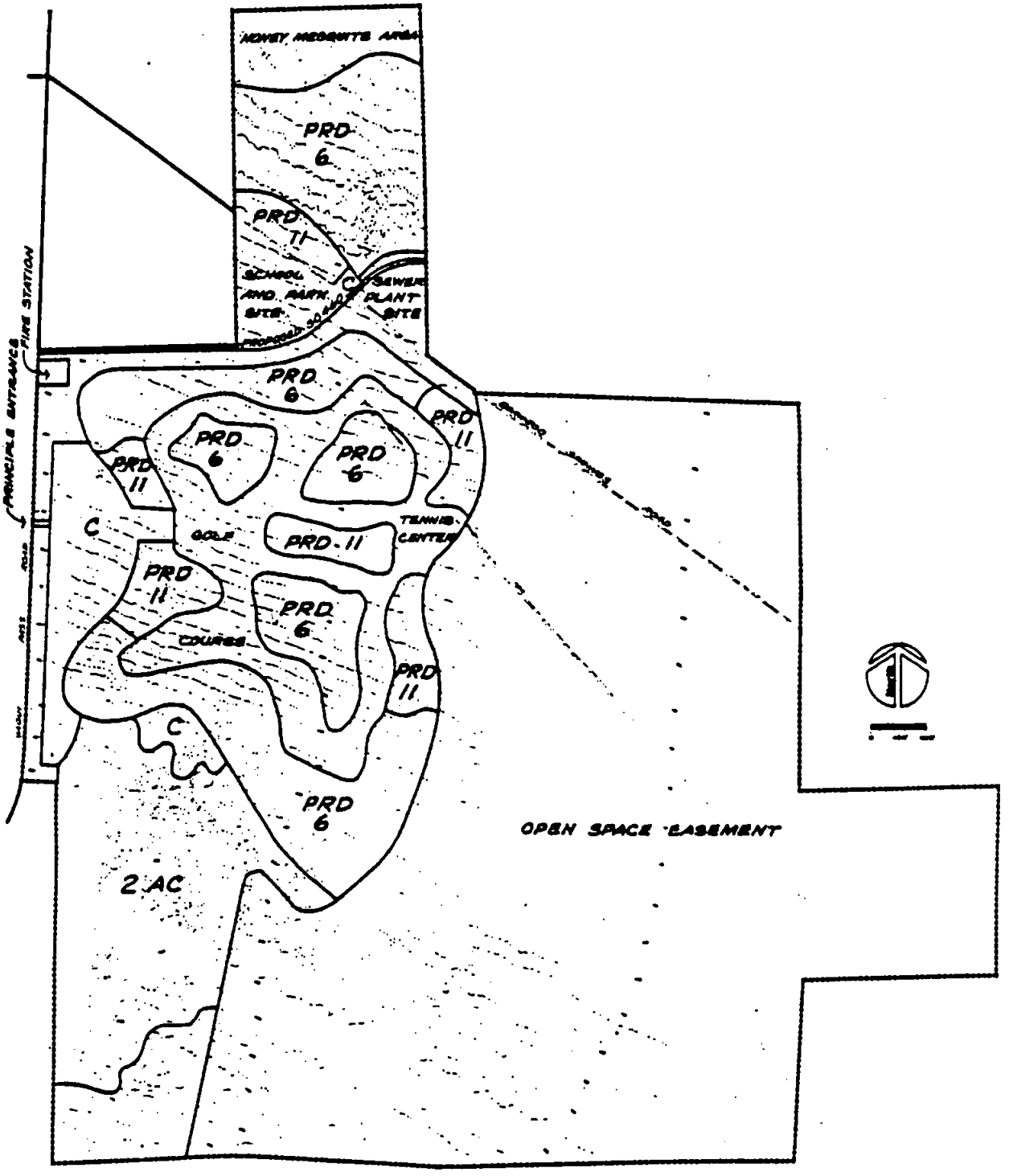
Table 1

Summary of Project History

Date	Action	Comments
974	Private Development Plan (PDP) submittal to County for development of entire 3,140 acres at a density of 1 d.u./acre.	Under PDP procedures this required a General Plan Amendment (GPA). During processing of PDP, changes in state laws made it necessary to process a GPA as well.
974-75	Processing of PDP/General Plan Amendment.	County replaced PDP procedure for review of large scale projects with Specific Planning process.
974-75	Board of Supervisors Policy I-59 (Large scale project review).	Defines the Specific Planning Process.
976	General Plan Amendment (GPA) 76-2; Rams Hill designated as SPA 0.5.	Adopted by the Board of Supervisors; as a compromise the eastern half of the project was dropped, area was designated as open space and overall density of project dropped from requested 1 d.u./ac to 0.5 d.u./ac. See Figure 5 (Exhibit C-9 of GPA).
1980	Initial Specific Plan (SP 80-01).	Outlined development on western half of property for a 5-year planning period and a "concept plan" for 928 remaining acres.
1984	Specific Plan Amendment (SP-A83-05)	Minor revisions to initial specific plan (SP-80-01).

During the two years since the approval of the Specific Plan (SP-A83-05), market conditions have changed. The specific plan amendment evaluated in this document has been proposed in response to the changes in market conditions. Figure 6 shows the development that was approved by the current Specific Plan (SP-A83-05). This EIR documents the environmental impacts of the changes proposed by this specific plan amendment and the planning of 616 acres of the 928 acres previously designated FPA's.

The objective of this specific plan amendment is to allocate the total number of dwelling units allowed by GPA 76-02 (1,570 units), within the specific plan area.



RAMS HILL

Exhibit C-9 of San Diego County General Plan - Amendment 76-02

Figure 5

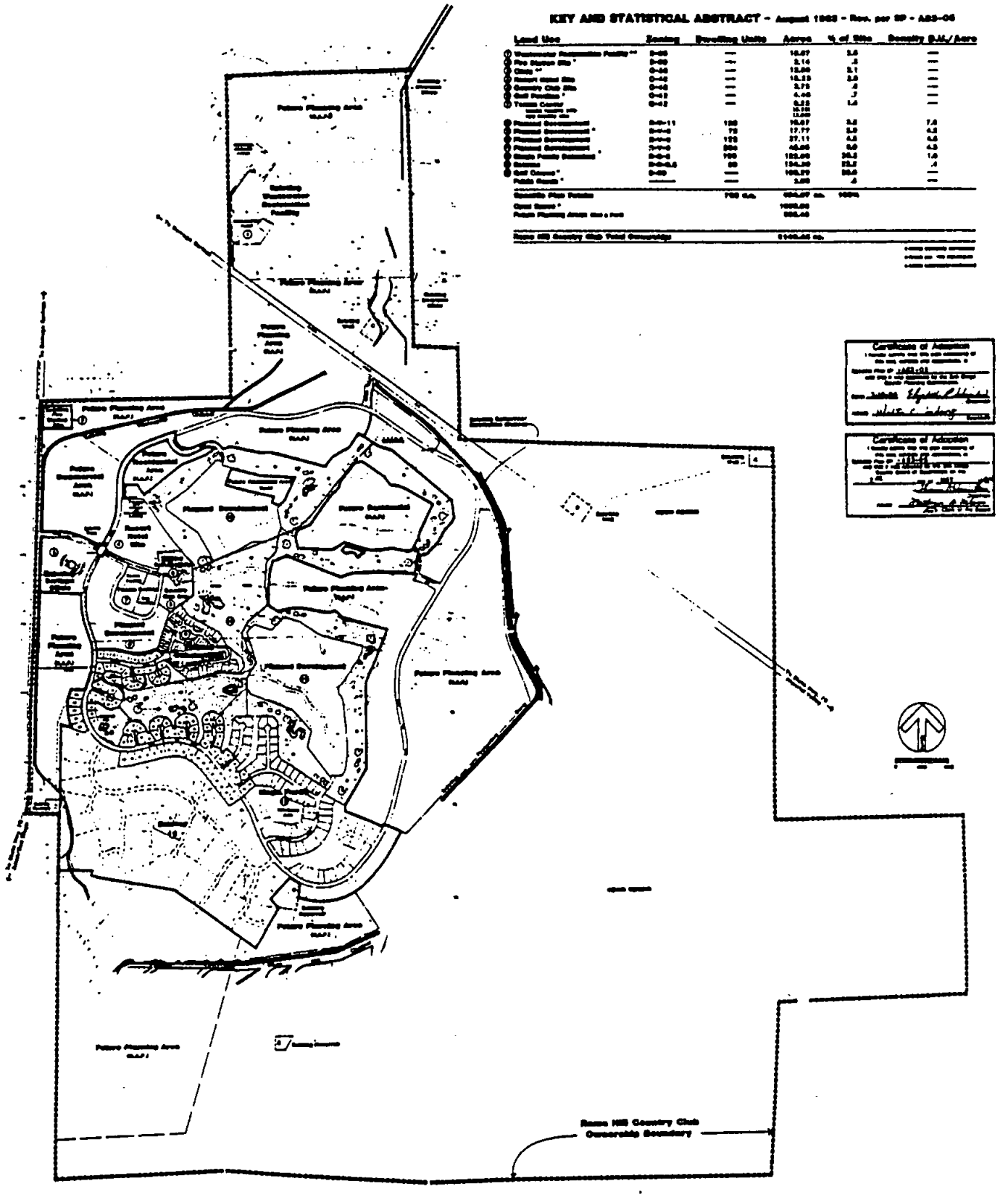


Figure
6

RAMS HILL

Current Specific Plan Map

Approximately 313 acres within the specific plan area will be retained as FPA's in conjunction with this specific plan amendment.

IV. PROJECT DESCRIPTION

A. DESCRIPTION OF PROPOSED LAND USES

The current amendment to the Rams Hill Specific Plan (SP-A83-05) proposes the following revisions to the original specific plan:

1. Assign density levels to areas designated Future Planning Areas (FPA's)

The Rams Hill development, approved in concept, designated Rams Hill as a specific plan area with an overall gross residential density of 0.5 d.u.'s/acre. This general plan designation would allow development of 1,570 dwelling units within the specific plan areas. The initial specific plan approved in 1980 (SP 80-01) and amended in 1983 (SP-A83-05), calls for development of the initial 780 dwelling units on approximately 612 acres within the specific plan area. In SP 80-01 and SP-A83-05, approximately 928 acres within the specific plan area are designated as future planning areas (FPA's). These areas were not planned in detail in the original specific plan. This amendment, however, will allocate the remaining 790 dwelling units allowed by the General Plan within approximately 544 acres of these FPA's. The 1,600 acres of land designated as permanent natural open space by the original specific plan will not be affected by the distribution of the remaining density associated with this specific plan amendment. The open space area will actually be increased by approximately 233 acres.

The objective of this specific plan amendment is to allocate the total number of dwelling units allowed by GPA 76-02 (1,570 units), within the specific plan area, including approximately 616 acres of the previously designated FPA's. Approximately 313 acres within the specific plan area will be retained as FPA's in conjunction with this specific plan amendment. To achieve this objective, the maximum residential density permitted by certain zones designated in the specific plan (R-S-3, R-V-6, R-V-11), has been assigned to the planned development and single family detached development areas. Residential densities in the estate lot areas have not been maximized and are, in fact, somewhat less than the 0.5 du's/acre allowed by the estate lot

zone. Since actual development within these areas may occur at densities considerably less than permitted under the R-S-3, R-V-6 and R-V-11 zone, some dwelling units may be "left over" after development of the R-S-3, R-V-6 and R-V-11 areas designated in this specific plan amendment. Such "leftover" units, if they occur, would be developed in the approximately 313 acres of FPA's designated by this specific plan amendment. Such development in the FPA's would require another specific plan amendment.

When the tentative map for the estate lot area is submitted it will be subject to supplemental environmental review prior to approval by the County of San Diego. The emphasis of the County's review will be on the potential impacts of grading with respect to slope stability, erosion potential and visual resources as well as the compatability of the design with surrounding land uses. If the proposed 42 d.u.'s cannot be accommodated in the estate lot area due to environmental concerns then the "leftover" units will be relocated in accordance with the provisions of this specific plan.

2. Alteration and expansion of the existing golf course facility

The current Specific Plan (SP-A83-05) text identifies a 169-acre, 18-hole championship golf course which has been in operation and open to the public since October 1982. The existing golf course encircles the planned development areas of the Rams Hill Resort Complex. This amendment would modify the current configuration of the golf course, adding approximately 177 additional acres of golf use to create two separate golf courses on a total of 346 acres.

The proposed golf courses can be termed the North Course and the South Course. The North Course will be comprised of 170 acres, including holes 1 through 9 of the existing course, incorporating minor modifications, and nine additional holes in this area. In the process of designing and planning these additional holes, some acreage previously approved for residential development will be included in the golf course. This North Course facility is contiguous to both the future resort hotel site and the existing golf pavilion. A major modification to the existing golf course Major Use Permit (MUP) (P 79-130) is being processed for the North Course. This is intended to remain a public course serving visitors and residents in the Borrego Valley.

The proposed South Course will be comprised of approximately 176 acres, including holes 10-18 of the existing course, incorporating minor modifications, and nine additional holes in this area. The South Course facility is located in the southern portion of the specific plan area and is bounded by residential lots. A new MUP is being processed for the South Course. This is intended to serve as a membership golf course for Rams Hill and other valley residents.

The Country Club site for the South Course is proposed to be located in the northwestern portion of the MUP area. The site for the Country Club is shown as a separate lot on the MUP but is considered to be inseverable from the South Course. It is anticipated that the South Course will be developed prior to construction of the actual clubhouse on the Country Club site. Until a clubhouse is constructed for the South Course, the existing golf pavilion and parking facilities for the existing course will serve both the North Course and the South Course. Based on parking standards, it is anticipated that the approximately 144 spaces at the existing golf pavilion will be adequate to serve both the North Course and the South Course.

In conjunction with this specific plan amendment, a D-designator has been included in the zoning box for the Country Club site, requiring site plan review for future development of the Country Club site. Such site plan review would ensure that adequate parking facilities are provided in conjunction with development of the Country Club site and that the site design conforms with the remaining development within the specific plan area.

3. Shift in product type emphasis

The new plan will continue to provide for a variety of product types including patio homes in varying price ranges and additional fairway and estate lots. The market is anticipated to be similar to that currently underway, however, as there is an extended build-out period, the plan provides for shifting of units between various areas in response to changing market demands.

In place of large blocks of planned development appearing to be islands surrounded by the golf course, the future development areas are designed

more as ribbons along the fairways. The approved total of 1,570 dwelling units from SP-A83-05 remains unchanged.

4. Road changes

The specific plan details all the road locations and entrances for the Rams Hill Resort Complex. The proposed changes are minor in scope and will aid in the movement of vehicular traffic through the complex as well as provide greater access to the peripheral collector roads. The changes will also encourage traffic generated from the eastern portion of the complex to enter and exit through the existing secondary or service entrance to the Rams Hill development, located on Kuhrts Road. This shift in traffic flow will assure easy accessibility into and out of the development without congesting the main entrance on Rams Hill Road.

B. DISCRETIONARY ACTIONS AND APPLICATIONS COVERED BY THIS DOCUMENT

1. Specific Plan Amendment

The currently proposed specific plan amendment proposes a variety of changes in the adopted Specific Plan for the Rams Hill Country Club Project (SP-A83-05). The DiGiorgio Development Corporation is proposing the following changes in order to meet these demands: the replanning of 269 of the 780 previously approved d.u.'s, changes in the existing golf course configuration as well as the addition of a second golf course, road changes, specific development proposals for 616 acres of previously designated "future planning areas," one Tentative Map (TM) proposal and rezoning to conform with the aforementioned changes. The proposed Amended Specific Plan Map to SP-A83-05 is shown in Figure 7. A large scale amended Specific Plan Map is also enclosed in a map pocket in the back of this report.

This amendment allocates the remaining 790 d.u.'s allowed by the General Plan. 616 acres within the 928 acres not planned in detail in the original Specific Plan, are being planned at this time. Approximately 313 acres will remain as "future planning areas." These areas are generally located

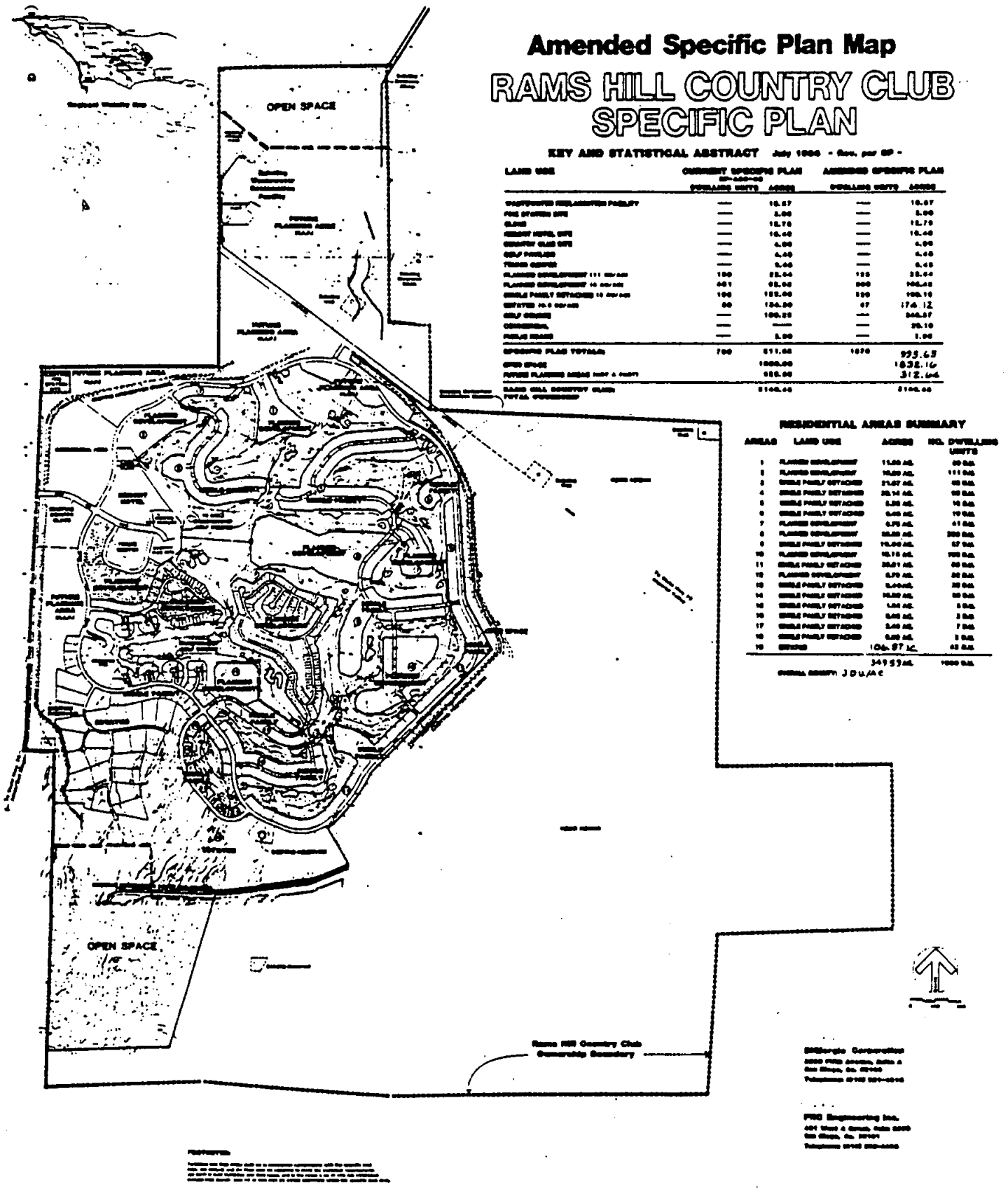


Figure
7

RAMS HILL
Amended Specific Plan

adjacent to the previously designated "planned development area" within the 1,080 acres protected by flood control facilities. The maximum residential development permitted by GPA 76-02 (1,570 units), is being assigned to the 616 acres of FPA's and to previously designated residential areas, and the maximum density permitted by the assigned zone has been allocated to each development area. If development occurs at a lesser density than that assigned, such "leftover" units may be developed at some future date within the designated 313 acres of "future planning areas." A second 18-hole golf course and modifications to the existing golf course are also proposed. The golf course facilities will be able to handle all on-site sheet flow within the interceptor channel. In addition, a 30-acre commercial site is planned in the northwest portion of the project near the main entrance. This will likely be the site of community retail stores.

With full implementation and maximum theoretical occupancy, the population at Rams Hill could reach 2,229. The visitor/resident occupancy rate at Rams Hill has grown quite slowly up to the present time and it is expected to continue to increase at a gradual pace. The purpose of the proposed amendment to SP-A83-05 is, however, to provide areas for the replacement of the initial types of products, high-end patio homes and fairway lots, which will soon be sold out and to provide for future expansion of other products. Actual occupancy will vary seasonally, with the majority of users/residents being at the project only during mid-winter. Detailed information on population projections and phased growth is presented in the 1979 Rams Hill EIR section on growth inducment.

Table 2 is a summary of proposed land uses under this specific plan amendment.

Table 2

Rams Hill Country Club Proposed Complete Specific Plan Land Use

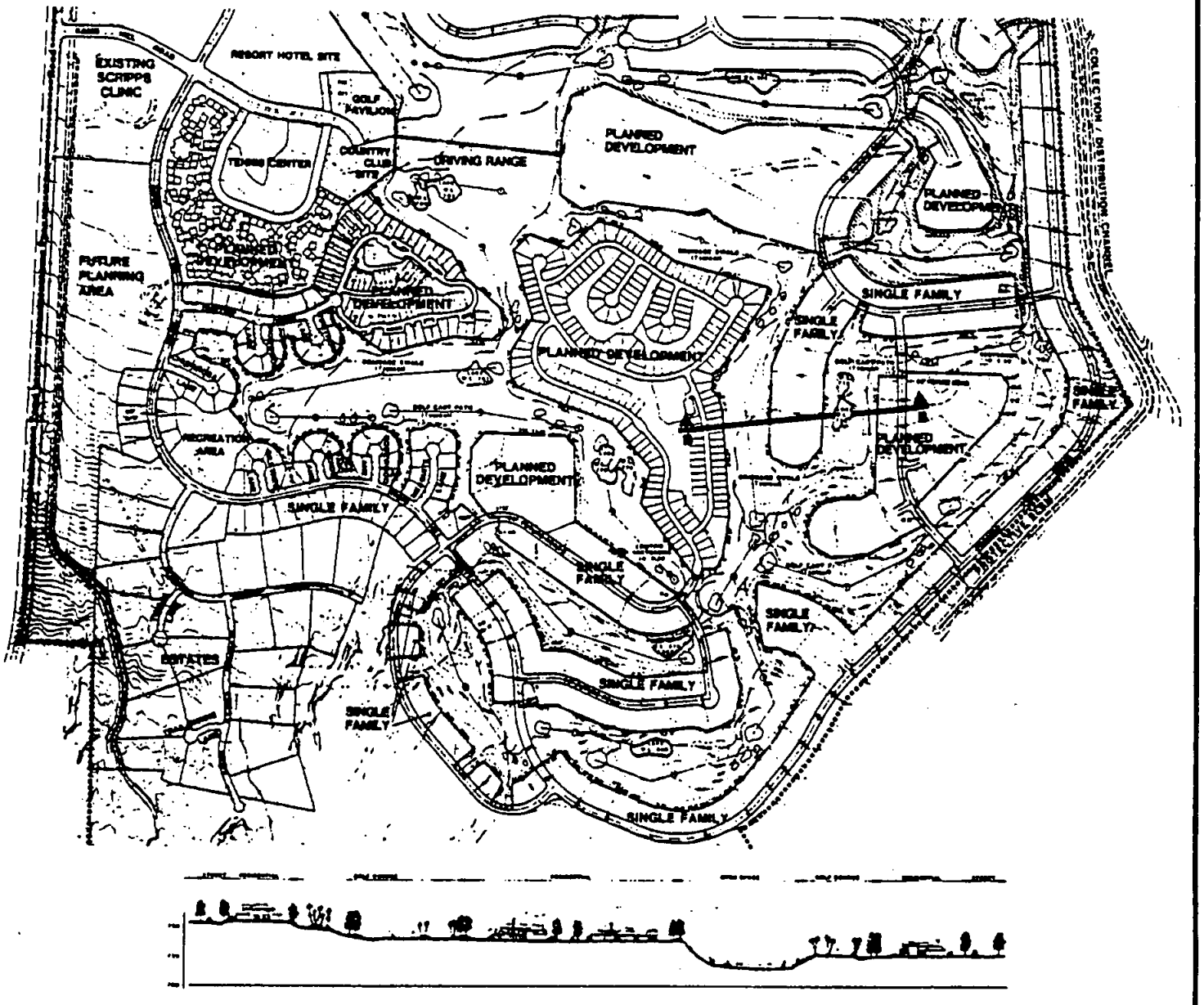
Land Use	Acres	Dwelling Units
Planned Development (11 d.u.'s/acre)	22.54	123
Planned Development (6 d.u.'s/acre)	163.43	860
Single-Family Detached (3 d.u.'s/acre)	190.19	520
Estates (0.5 d.u.'s/acre)	174.12	67
Golf Course	346.37	
Commercial	29.10	
Water Reclamation Facility	16.67	
Fire Station Site	3.00	
Clinic	12.78	
Resort Hotel Site	16.40	
Country Club Site	4.09	
Golf Pavilion	4.48	
Tennis Center	9.48	
Public Roads	3.00	
Specific Plan Totals	995.65	1,570
Permanent Natural and Naturalized Open Space	1,832.16	
Future Planning Areas	312.64	
TOTAL	3,140.45	

2. Major Use Permits (MUP's)

The following MUP actions are covered in this EIR:

(a) modified major use permit for the proposed modification to the existing 18-hole championship golf course. Figure 8 illustrates the modified major use permit area.

(b) new major use permit for the second 18-hole golf course. Figure 9 illustrates the location of the new major use permit area.

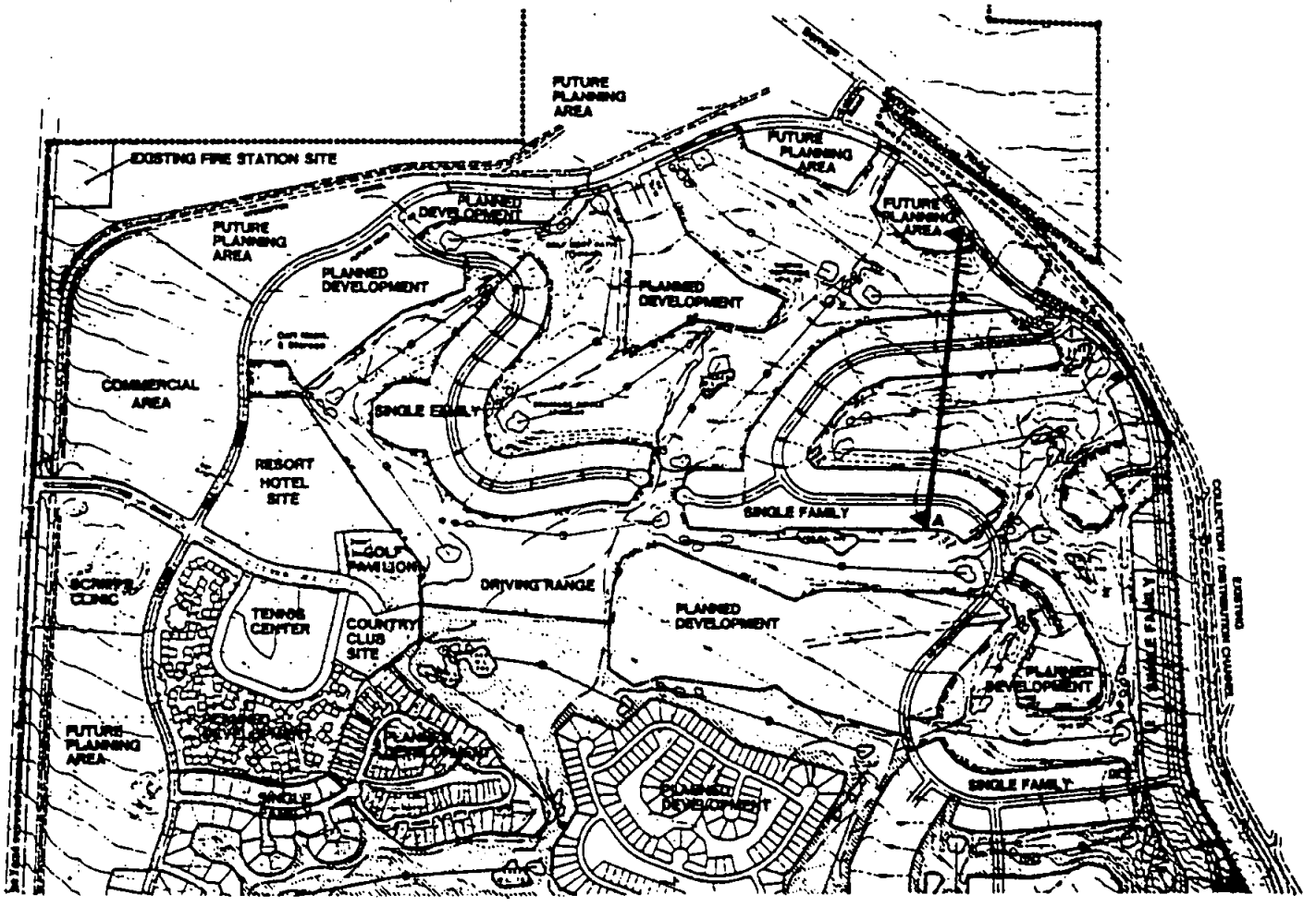


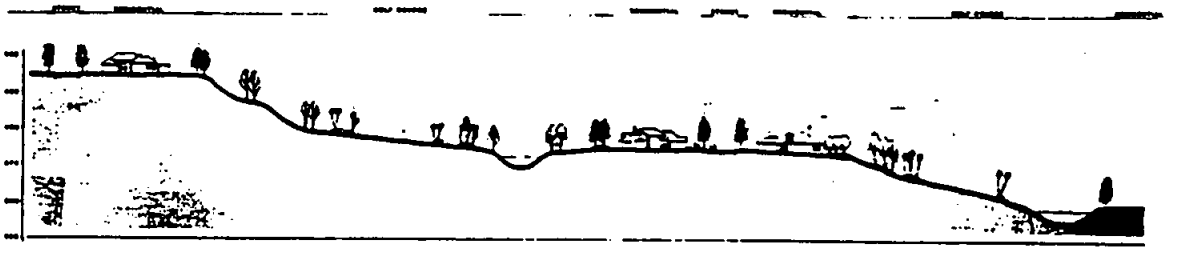
SECTION B

RAMS HILL GOLF COURSE

Amended Major Use Permit

Figure 8





SECTION A

Figure 9

RAMS HILL GOLF COURSE

Major Use Permit

3. Tentative Map

The proposed tentative map includes the southeast portion of the property. It delineates lot lines, streets, grading, and other information for approximately 278 single-family custom lots and planned development lots fronting golf course fairways. The proposed tentative map is included as Figures 10a, 10b, and 10c.

4. Zoning

The existing Specific Plan designates 928 acres of land S-88 for future planning. Under the proposed rezone, these areas would conform with the densities detailed in the proposed amended specific plan. A total of 233 of these acres will be zoned S-80 for inclusion within open space easements. Other rezones include changing some areas of residential zoning to open space for the expansion of the North Course and the designation of a 30-acre parcel in the northwest portion of the property as commercial. The rezone package will be prepared for submittal to the County of San Diego for the replanned areas contained in this amended specific plan. Figure 11 is a current zoning map and Figure 12 is a proposed zoning map.

5. Phasing

This amendment to the specific plan constitutes the final phase of the Rams Hill project specific plan. The first specific plan detailed the development of the property for a projected five-year period. That is consistent with the requirements of Board Policy I-59.

This phase of development of the Rams Hill Country Club is being proposed in an effort to complete the resort/residential community. One of the goals of the project is to maintain a long-term commitment to providing planned growth with adequate facilities and a diversity of uses. This final phase of the development is designed so that that goal may be reached.

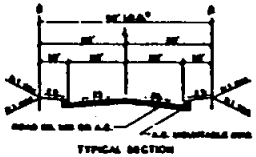
Figure 10a

RAMS HILL

COUNTY OF SAN DIEGO TRACT No.

TENTATIVE MAP

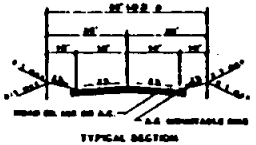
RAMS HILL FAIRWAY LOTS



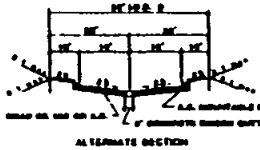
TYPICAL SECTION

ALTERNATE SECTION IN CURVES OR WHERE DESIRABLE FOR DRAINAGE

RAMS HILL DRIVE

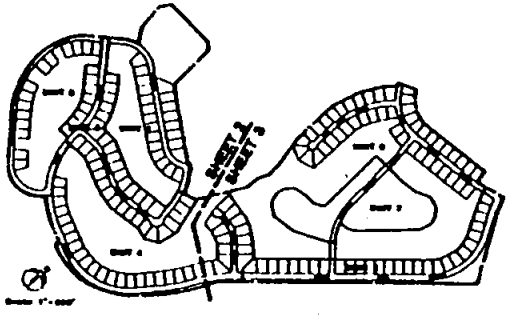


TYPICAL SECTION

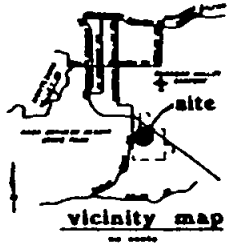


ALTERNATE SECTION

DESERT ORIOLE DR., QUAIL RIDGE LANE, KIT FOX LANE, COYOTE CHASE DR., FOX POINT DRIVE ROADRUNNER DRIVE SOUTH



INDEX MAP



vicinity map

GENERAL NOTES

1. TOPOGRAPHY SOURCE: 1" = 40' SCALE AERIAL TOPOGRAPHY DATED 1985.
2. TOTAL GROSS ACREAGE IS 200 ACRES. TOTAL NET ACREAGE IS 163 ACRES.
3. TOTAL NUMBER OF LOTS IS 204 EXCLUDES OPEN SPACE AND GOLF COURSE OPEN SPACE.

UNIT 1 :	16 LOTS
UNIT 2 :	13 LOTS
UNIT 3 :	16 LOTS
UNIT 4 :	88 LOTS
UNIT 5 :	28 LOTS
UNIT 6 :	46 LOTS
UNIT 7 :	41 LOTS
TOTAL :	204 LOTS

4. OVERALL DENSITY WILL BE 1.25 UNITS PER ACRE.
5. ZONING - EXISTING: S-88, S-88 & S-3.3. PROPOSED: S-7.4, S-3.3 & S-88.
6. TAX RATE AREA CODE: 9061
7. ASSESSOR'S PARCEL NUMBERS: PORTIONS OF 269-140-04, 269-140-10, 12, 269-281-01, 10 AND 269-271-7.
8. THE SAN DIEGO COUNTY GENERAL PLAN/COMMUNITY PLAN DESIGNATION FOR THIS PROPERTY IS SPECIAL STUDY AREA/SPA 6.1, PORTION OF SP 80-1 AND SPA 83-05.
9. WAIVERS

   WATER: RAMONA MUNICIPAL WATER DISTRICT
   SEWER: RAMONA MUNICIPAL WATER DISTRICT
   FIRE: RAMONA MUNICIPAL FIRE PROTECTION DISTRICT
   SCHOOLS: RAMONA UNIFIED SCHOOL DISTRICT
   ELECTRICITY: SAN DIEGO GAS & ELECTRIC CO.
   TELEPHONE: PACIFIC BELL
   CABLE TV: TELE-CABLE TV COMPANY
   REFUSE DISPOSAL: PRIVATE CONTRACTOR
   POLICE: SAN DIEGO COUNTY SHERIFF'S DEPARTMENT

10. STORM DRAINS WILL BE PER SAN DIEGO COUNTY STANDARDS.
11. GRADING SHALL BE PER SAN DIEGO COUNTY STANDARDS.
12. ALL GRADED SLOPES SHALL BE 2:1 UNLESS OTHERWISE NOTED.
13. UNLESS DESIGNATED, GRADED SLOPES OF 4' OR LESS ARE NOT SHOWN ON THE PLAN.
14. ALL CUL DE SAC AND KNUCKLE RADII SHALL BE 50 FEET UNLESS OTHERWISE SHOWN.
15. ALL ROADS SHOWN ON THIS TENTATIVE MAP ARE TO BE DEDICATED PUBLIC STREETS.
16. THE EXISTING IRREVOCABLE OFFERS OF DEDICATION FOR RAMS HILL DRIVE AND ROADRUNNER DRIVE SOUTH ARE TO BE VACATED.
17. THE MINIMUM LOT SIZES BEING CREATED BY THIS MAP ARE:

    6000 SQ.FT. IN UNIT 1, LOT 1, 6 UNIT 7 (LESS 10 SQ.FT. IN UNIT 1, LOTS 2-15, AND UNITS 2 THROUGH UNIT 6.

18. SOLAR ACCESS: THIS IS A SOLAR SUBDIVISION AS REQUIRED BY SECTION 81.401 (M), SUBDIVISION ORDINANCE. ALL LOTS HAVE AT LEAST 100 SQ. FT. OF UNOBSTRUCTED ACCESS TO SUNLIGHT ON THE SUBSTANTIAL PORTION OF THE LOT.
19. DEVELOPER PROPOSES TO PAY PARK FEES IN LIEU OF PARKLAND DEDICATION.
20. THERE ARE NO EXISTING STRUCTURES WITHIN THE BOUNDARIES OF THIS PROPOSED TENTATIVE MAP.
21. THE SUBDIVIDER DOES NOT PROPOSE TO REQUEST EXEMPTION FROM THE BOARD OF SUPERVISORS TO INITIATE PROCEEDINGS UNDER A SPECIAL ASSESSMENT ACT FOR CONSTRUCTION OF THE SUBDIVISION IMPROVEMENTS. HE HAS, HOWEVER, REQUESTED PERMISSION FROM THE BOARD OF DIRECTORS OF THE RAMONA WATER DISTRICT TO INITIATE PROCEEDINGS UNDER A SPECIAL ASSESSMENT ACT OR MELLO-ROOS PUBLIC FINANCING TO CONSTRUCT WATER AND SEWERAGE FACILITIES.
22. UPON APPROVAL OF THIS TENTATIVE MAP, THE SUBDIVIDER HAS AUTHORITY TO:
    A. RECORD FINAL MAPS IN ANY SEQUENCE SUBJECT TO APPROVAL BY THE DIRECTOR, DEPARTMENT OF PLANNING AND LAND USE, WITH LOTS NUMBERED IF NECESSARY TO REVISE OR RECOMBINE LOTS IN NUMERICAL SEQUENCE;
    B. REMOVE EARTH FROM OR PLACE EARTH ON ANY LOT WITHIN THIS TENTATIVE MAP AS NECESSARY TO GRADE OUT ANY RECORDED FINAL MAP, ALL CONSISTENT WITH, BUT NOT EXCEEDING COMPLYING, THE GRADING SHOWN ON THIS TENTATIVE MAP AND ALL TO THE SATISFACTION OF THE DIRECTOR, DEPARTMENT OF PUBLIC WORKS.
23. ENGINEER UNIT TABLE:

UNIT 1: LOTS 1	THROUGH 16
UNIT 2: LOTS 17	THROUGH 27
UNIT 3: LOTS 28	THROUGH 43
UNIT 4: LOTS 44	THROUGH 131
UNIT 5: LOTS 132	THROUGH 159
UNIT 6: LOTS 160	THROUGH 205
UNIT 7: LOTS 206	AND 207

WAIVERS

THE FOLLOWING WAIVERS FROM STANDARD SAN DIEGO COUNTY MAP REQUIREMENTS ARE GRANTED:

A. SEC. 81.404(d) MAXIMUM DEFLECTION OF LOT LINES: LOTS 1/2, 13 PLUS.

B. SEC. 81.404(f) REQUIRING THAT NO FINAL MAP SHALL BE APPROVED UNLESS THE STREET OR STREETS PROVIDING PRIMARY ACCESS TO THE SUBDIVISION ARE DEDICATED TO AND MAINTAINED BY A CITY, COUNTY OR STATE.

C. SEC. 81.404(f) REQUIRING THE CONSTRUCTION OF A STREET LIGHTING SYSTEM TO COUNTY STANDARDS.

LEGAL DESCRIPTION

BEING PORTION OF SECTIONS 13, 24 AND 25, TOWNSHIP 11 SOUTH, RANGE 3 EAST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF SAN DIEGO, CALIFORNIA, AND BEING ALSO A PORTION OF PARCEL 1 OF PARCEL MAP NO. 10960 FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY FEBRUARY 2, 1981.

OWNER / SUBDIVIDER

Ballantyne Development Corporation
[illegible]
[illegible]
[illegible]

BY: _____ DATE

ENGINEER

[illegible]
[illegible]
[illegible]
[illegible]

GARY W. WEBER, R.C.E. 27575 DATE

LEGEND

SUBDIVISION BOUNDARY
UNIT BOUNDARY
LOT NUMBER — 199
PAD ELEVATION — 648*
SLOPES (AS SHOWN ON GRADING PLAN)
PROPOSED CONTOUR/ELEVATION — 640
EXISTING CONTOUR/ELEVATION — 700
DRAINAGE SWALE
GOLF CART PATH

SINGLE FAMILY SITES

UNIT 1, LOTS 2-13 & UNITS 2-6

USE REGULATIONS		RS4
NEIGHBORHOOD REGS		A
DEVELOPMENT REGULATIONS	Density	2.0
	Lot Size	12,000
	Dwelling Type	S
	Max Flr Area	—
	Flr Area Ratio	—
	Height	G
	Coverage	—
	Setback	A
	Open Space	—
SPECIAL AREA REGS		—

GOLF COURSE SITES

LOTS 84, 94, 133, 198 & 199

USE REGULATIONS		S-88
NEIGHBORHOOD REGS		A
DEVELOPMENT REGULATIONS	Density	—
	Lot Size	—
	Dwelling Type	M
	Max Flr Area	—
	Flr Area Ratio	—
	Height	G
	Coverage	—
	Setback	A
	Open Space	—
SPECIAL AREA REGS		—

PLANNED DEVELOPMENTS

UNIT 1, LOT 1 & UNIT 7

USE REGULATIONS		RPD
NEIGHBORHOOD REGS		A
DEVELOPMENT REGULATIONS	Density	8
	Lot Size	7,000
	Dwelling Type	S
	Max Flr Area	—
	Flr Area Ratio	—
	Height	G
	Coverage	50%
	Setback	A
	Open Space	E
SPECIAL AREA REGS		—

Transportation system to be determined with a planning level assessment

Figure 10b

RAMS HILL

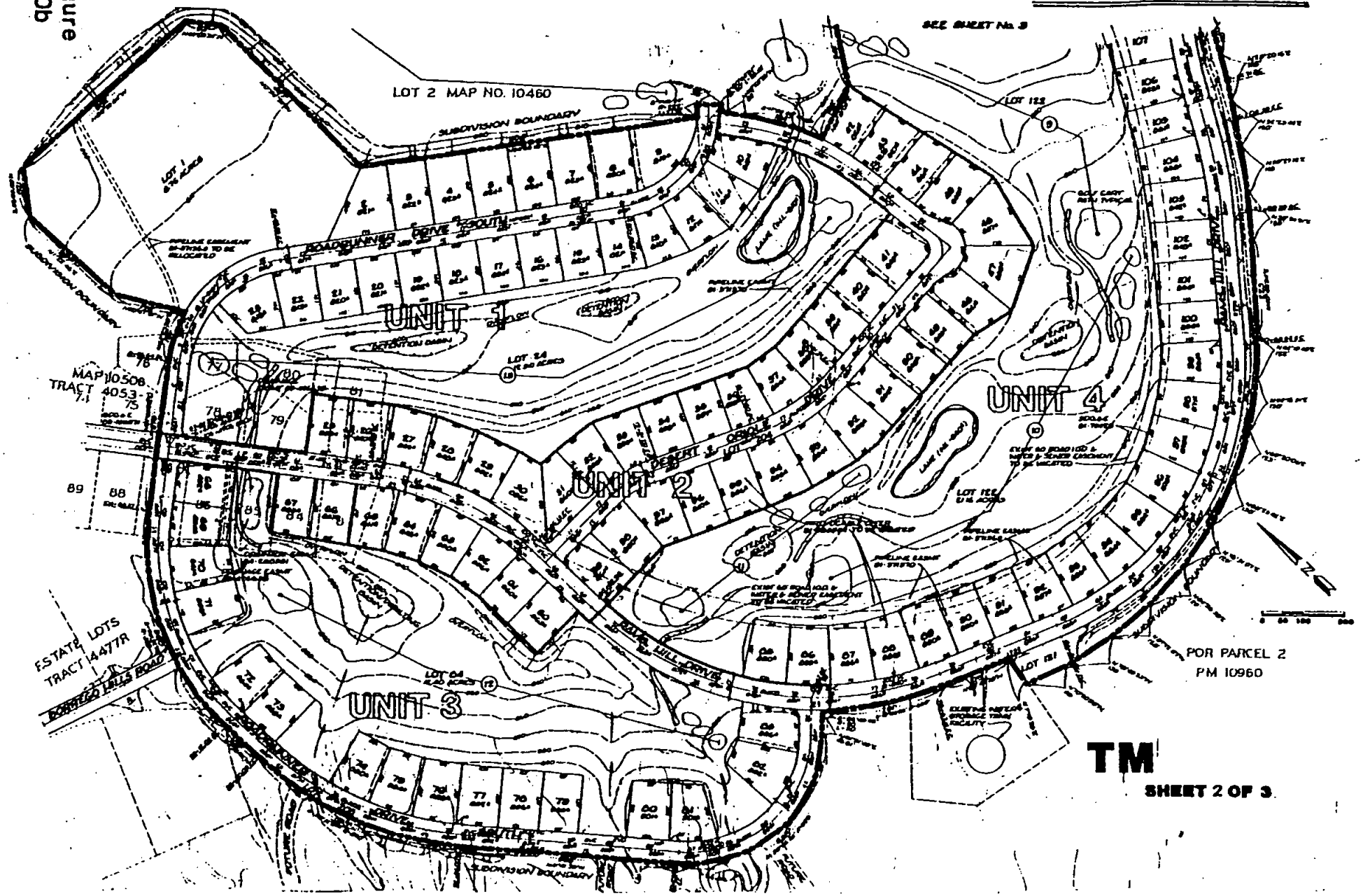


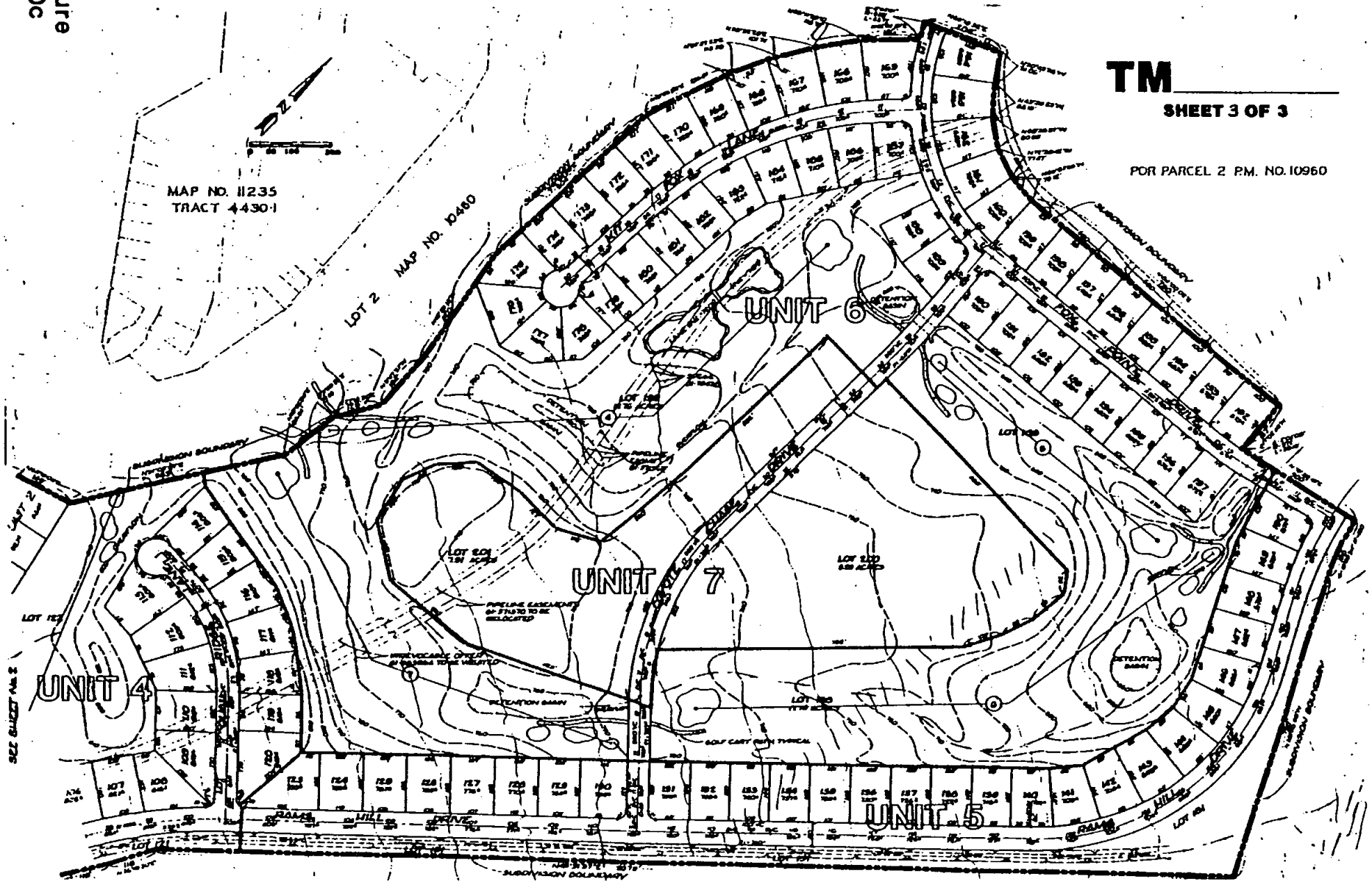
Figure 10c

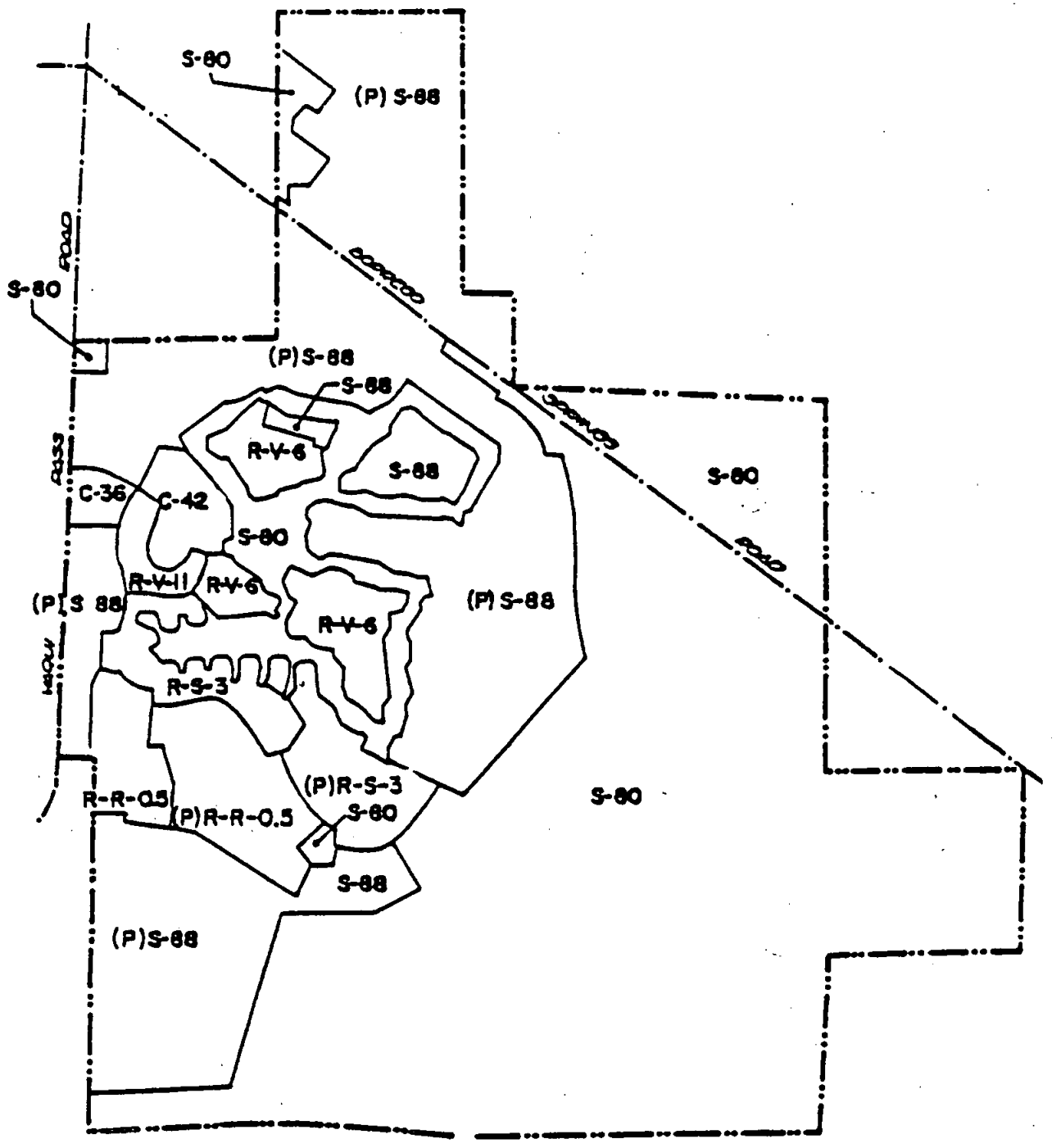
RAMS HILL

TM_____

SHEET 3 OF 3

POR PARCEL 2 P.M. NO. 10960



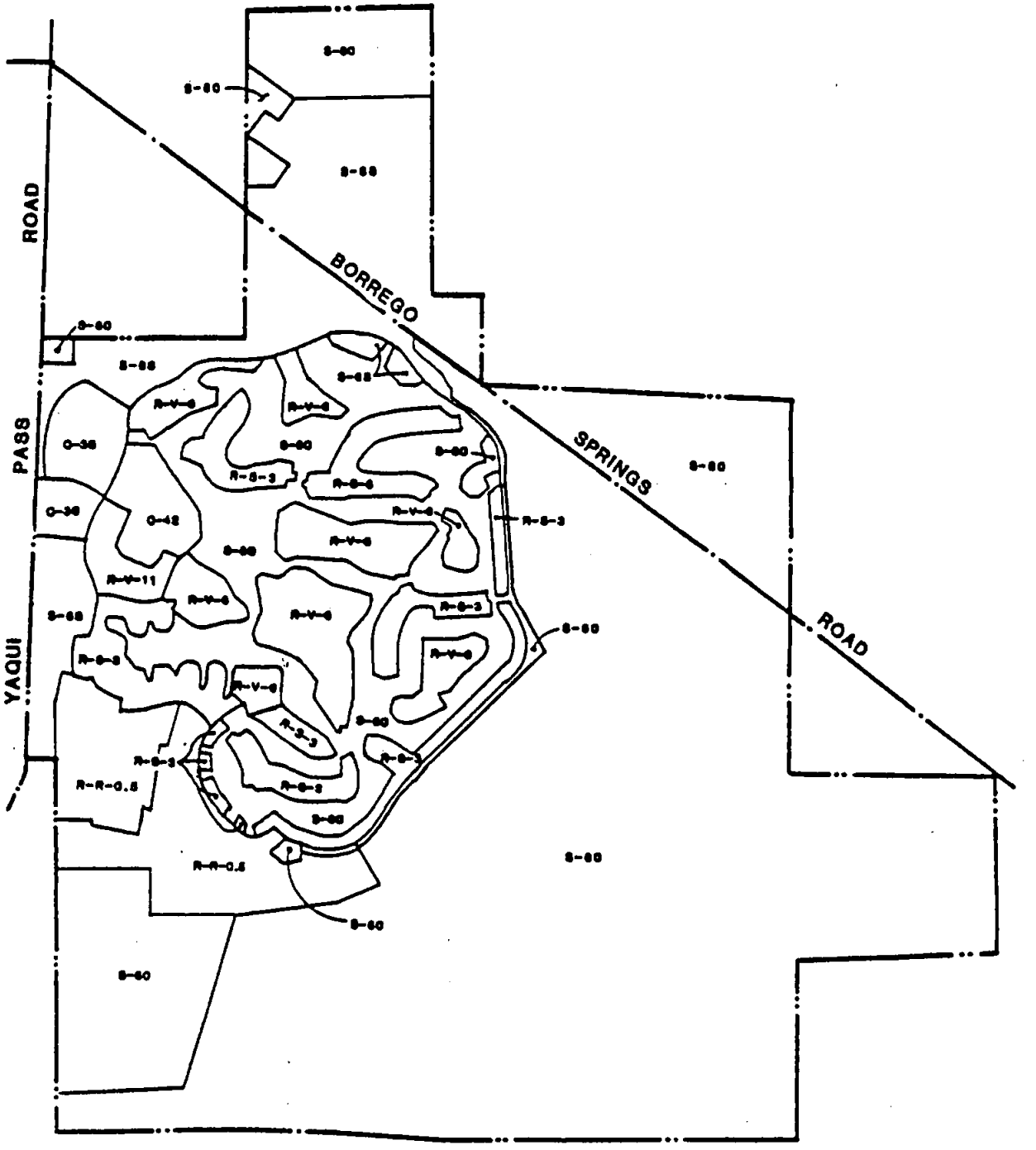


NO SCALE

Figure 11

RAMS HILL

Current Zoning Designations



NO SCALE

Figure 12

RAMS HILL

Amended Zoning Designations

6. Continued Maintenance

The maintenance of the open space, landscaping, private streets, and recreational facilities will be done through private assessments. There will be homeowners' associations for the various PRD units. The landscaping of the single-family homes will be privately maintained. Fees will be established for meeting the requirements of each unit and the pro-rata costs of certain commonly held facilities or commonly used services, such as the basic circulation streets, the natural open space area and security services. The major public facilities, such as the golf courses and commercial areas, will be maintained by the owners or operators of those facilities.

7. Grading

Although this project was designed to minimize grading to the extent possible, extensive earthwork will be required. The main area that will be developed is under six percent slope. The steeper areas will only be graded for roads and pads of the estate homes. These homes would be custom built, thereby minimizing grading and erosion potential by maintaining as much of the natural terrain as possible.

Precise grading plans will be completed as final designs and tentative maps are prepared. Based on preliminary grading studies, it is estimated that grading for the streets, single-family homes, PRD units, the commercial site and the golf course would require 2.2 million cubic yards of earthwork. Significant grading would be required to construct the new golf course, to redesign the existing golf course, and the associated detention/desilting basins and water features. The maximum cut slope from the pads to the surrounding golf course would be 30 feet. The maximum slope gradient on the site will be 2:1. The landscaping and sculpturing would require contour grading. Although extensive grading would be required, earthwork would be balanced on-site with no import or export of graded material.

V. ENVIRONMENTAL ANALYSIS

A. LAND USE

A complete discussion of existing land use is provided in the original Rams Hill Country Club EIR (PRC, 1979:31). This section will serve as a summary and update of that information.

1. Existing Setting

The Rams Hill Country Club is located on a 3,140 acre parcel located on the south slope of the Borrego Valley. Yaqui Pass Road runs north to south along the western boundary of the property and Borrego Springs Road cross-cuts the panhandle in the northern portion of the property running from northwest to southeast. The area of existing development at Rams Hill is confined to the western half of the property; the eastern half of the property is dedicated natural open space. The DiGiorgio Development Corporation has thus far completed construction of an 18-hole championship golf course, a golf pavilion with a restaurant, lounge and pro shop, a wastewater treatment plant, flood control system, medical clinic, roads, and approximately 30 percent of the approved residential units.

Table 3 provides a summary of the land uses which were approved for development under SP-A83-05.

Table 3

Adopted Specific Plan (SP-A83-05) Land Use Table

Land Use	Acres	Dwelling Units
Residential:		
Estates	134.2	50
R-S-3 (zone)	122.7	199
R-V-6 (zone)	92.9	401
R-V-11 (zone)	22.5	130
Commercial:		
Clinic	12.8	-0-
Hotel, Country Club, golf pavillion and Tennis Center	34.5	-0-
Public facilities/Golf Course	189.1	-0-
Public Roads	3.0	-0-
SPECIFIC PLAN TOTALS	611.7	780 d.u.
Permanent Natural Open Space	1,600.0	
Future Planning Areas	928.8	
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

Land uses surrounding Rams Hill include the Anza Borrego Desert State Park to the south, largely unimproved residential parcels to the west and northwest, and the Casa del Zorro resort to the north (Figure 2). The Casa del Zorro resort is located at the intersection of Yaqui Pass Road and Borrego Springs Road; a residential subdivision is located immediately west of the resort. The Borrego Sink is located in the area to the north and east of Rams Hill. Most of the land to the east is subdivided into large ownerships which are sparsely developed. The main development in this area is the Fletcher Air Ranch which consists of approximately 50 one-acre parcels, a small airstrip, numerous residential units and auxiliary buildings.

The pattern of development in the Borrego Valley is distinctly nodal. While a portion of the residential development is scattered somewhat randomly across the valley on individual lots, the major concentrations of development form separate nodes.

The commercial center of the community of Borrego Springs is an area extending from Christmas Circle west to The Mall Shopping Center. Primary residential development occurs in an arc extending north and south from this area.

A significant residential node is the De Anza Country Club in the northwest corner of the valley, three to four miles from Christmas Circle. This node is distinctive both in its separation from the commercial center and its characteristic as a golf course "oasis."

A second major residential concentration point is the Roadrunner Mobile Home Park, about a half mile east of Christmas Circle on Palm Canyon Drive. This node contains the most dense development in the valley.

The third node is formed by the Casa del Zorro Resort, the Rams Hill Country Club project, and the partially developed residential subdivision immediately west of the resort. This node is about five miles southeast of Christmas Circle.

A fourth node, located on the east and west sides of Borrego Springs Road, is formed by a partially developed subdivision and the beginnings of the Borrego Country Club development two miles south of Christmas Circle. This property was the subject of a general plan amendment, GPA 77-02 and a Specific Plan approved in 1983.

Desert Subregional Community Plan Update: As illustrated in Figure 13 the Borrego Valley is a 70-square mile private enclave which is surrounded by the Anza Borrego Desert State Park. The Borrego Valley did not have a community plan or precise zoning study until one was approved for fiscal year 1985-86. The study has recently been completed and will be considered by the Planning Commission and Board this fall (1986).

The valley had general land use designations applied as part of the initial Countywide General Plan study done in 1968. When the Regional Growth Management Plan was adopted in 1978 the area was designated as a Special Study area due to questions of available groundwater.

While the groundwater study was underway a limited community plan was prepared for the town center area to adjust inappropriate land use desig nations. The community plan was adopted in 1979. With the exception of the town center area most of the valley remained "multiple rural use" with S-87 zoning. S-87 was an updated designation for the old "LC" or "limited control" zoning applied to all previously unzoned areas of the County in the early 1970's.

Following the completion of the groundwater study in 1985 the Board of Supervisors designated the Borrego Valley and the surrounding desert sub-regional planning area for preparation of a comprehensive plan in fiscal year 1985-86. That has recently been completed in draft form. According to the County Department of Planning and Land Use, the proposed plan will not specifically affect the Rams Hill project except that it would be shifted from the regional category "rural development area" into the "country town" regional category. Zoning designations and regional land use categories that are out of conformance with the General Plan or that are obsolete are being updated. For example, the S-87 zoning designation which is now obsolete is being replaced with the S-92 zone. The series of 100 minor revisions to the Desert Subregional Community Plan will be recommended by the County to the Planning Commission in September and to the Board of Supervisors in December 1986.

2. Potential Impacts

This amendment to the Specific Plan (SP-A83-05) conforms to the SPA 0.5 requirements of GPA 76-02. A total of 790 residential units are being proposed in the previously designated "Future Planning Area"; they were included as part of the concept plan included in the original Specific Plan (SP 80-01 and SP-A83-05). Although some 269 d.u.'s out of the originally approved 780 d.u.'s are being replanned there are no substantial changes that would result in negative land use impacts. The land uses proposed are consistent with those allowed for the Rams Hill project as specified in GPA 76-02. The maximum build-out of the 1,570 d.u.'s is proposed and as required is in general conformance with the concept plan illustrated in Exhibit C-9 dated November 12, 1976 (Figure 5).

The proposed addition of the second golf course and the 30-acre commercial site are considered acceptable land uses under GPA 76-02. The general plan amendment specified that the Specific Plan(s) could allow for other land uses as may be necessary or convenient for recreation and for the provision of commercial and other support services for the future residents of the specific planning areas and other properties. (PRC, 1979:17) The redesign of the existing golf course configuration will require a modified major use permit and the construction of a new golf course will require a new major use permit. This mixture of residential, recreational and commercial land uses will not result in negative land use impacts. None of the above changes will require an application for a change in the General Plan.

Table 4 provides an acreage comparison of the current specific plan and the proposed specific plan amendment. As shown the proposed specific plan amendment allocates the remaining 790 units within the specific plan area. The golf course acreage within the specific plan area would also be increased from 169 acres to 346 acres.

The land uses proposed by this amendment will be consistent with the surrounding desert resort/second-home development complexes (Casa del Zorro, Fletcher Air Ranch and Borrego Country Club). The developer agrees to contribute financially to the upgrading of public services at such a time when the population growth at Rams Hill requires the increased or upgraded level of service.

Table 4

Comparison of Land Use for the Current Specific Plan and the Complete Amended Specific Plan

Land Use	Current Specific Plan Dwelling Units	Current Specific Plan Acres	Amended Specific Plan Dwelling Units	Amended Specific Plan Acres
Wastewater Reclamation Facility	--	16.67	--	16.67
Fire Station Site	--	3.00	--	3.00
Clinic	--	12.78	--	12.78
Resort Hotel Site	--	16.40	--	16.40
Country Club Site	--	4.09	--	4.09
Golf Pavilion	--	4.48	--	4.48
Tennis Center	--	9.48	--	9.48
Planned Development (11 d.u.'s/acre)	130	22.54	123	22.54
Planned Development (6 du's/acre)	401	92.93	860	163.43
Single Family Detached (3 d.u.'s/acre)	199	122.69	520	190.19
Estates (0.5 d.u.'s/acre)	50	134.20	67	174.12
Golf Course	--	169.29	--	346.37
Commercial	--	--	--	29.10
Public Roads	--	3.00	--	3.00
Specific Plan Totals	780	611.65	1,570	995.65
Open Space		1,600.00		1,832.16
Future Planning Areas		928.80		312.64
Rams Hill Country Club: Total Ownership		3,140.45		3,140.45

Zoning: Except for the residentially subdivided "Town Center Area" the majority of the Borrego Valley falls within the regional "rural development area" (RDA) category and is zoned as S-87 (the old "Limited Control Zone"). The land use categories and zoning for Borrego Valley are being updated by the proposed Desert Subregional Community Plan Update. Existing zoning designations at Rams Hill are described in detail in the 1979 Rams Hill EIR. The following table (Table 5) provides a summary of the existing zoning designations approved under SP-A83-05.

Table 5

Existing Zoning Designations at Rams Hill

Land Use	Zoning	Acres
Wastewater Reclamation Facility, Fire Station Site, Golf Course	S-80	189
Clinic	C-36	13
Resort Hotel Site, Country Club Site, Golf Pavilion, Tennis Center	C-42	34
Planned Development	R-V-11	23
Planned Development	R-V-6	93
Single Family Detached	R-S-3	123
Estates	R-R-0.5	134
Public Roads	—	3
SP-A83-05 TOTALS		612
Open Space	S-80	1600
Future Planning Areas	S-88	928
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP		3140 Acres

The current amendment to Specific Plan (SP-A83-05) proposes the zoning of 616 acres of the 928 acres of the "Future Planning Areas"; 233 of these acres will be zoned S-80 for open space easements. The rezoning of property planned for some 269 d.u.'s out of the originally approved 780 d.u.'s. The proposed commercial area and additional golf course will also be included in the rezoning application. The following table (Table 6) summarizes the zoning designations that are proposed in this amendment to SP-A83-05. Existing and proposed zoning designations are illustrated in Figures 11 and 12.

Table 6

Proposed Zoning Designations at Rams Hill

Land Use	Zoning	Acres
Wastewater Reclamation Facility, Fire Station Site, Golf Course, Open Space	S-80	2,198
Clinic, Commercial	C-36	42
Resort Hotel Site, Country Club Site, Golf Pavilion, Tennis Center	C-42	34
Planned Development	R-V-11	23
Planned Development	R-V-6	163
Single Family Detached	R-S-3	190
Estates	R-R-0.5	174
Public Roads	--	3
Future Planning Areas	S-88	313
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP		3140 Acres

3. Analysis of Significance/Mitigation

The proposed completion of the Rams Hill project will contribute additional acreage within the protective flood control channels on the property to recreation resort uses. In most cases this land lies adjacent to the existing golf course and was graded as part of the original development project. These proposed uses are consistent with the existing land uses at Rams Hill as well as with the smaller scale projects in the surrounding area. All of the residential units would be clustered within the area protected by the flood control channel. To minimize grading and land conversion the new golf course is located throughout this same area. The eastern half of the property remains dedicated as permanent undeveloped open space. An additional 233 acres of open space easements are being dedicated within this proposed specific plan amendment. The proposed project conforms to the San Diego General Plan and provides a wide variety of housing, recreational and commercial resort opportunities. No significant adverse land use impacts would result from the proposed specific plan amendment.

B. LANDFORMS, SOILS, GEOLOGY AND GEOLOGIC HAZARDS

1. Existing Setting

Several studies of the geology of the Rams Hill area have been conducted. A preliminary geological investigation of the Rams Hill site was conducted in 1973 by Woodward-Gizienski and Associates. In 1977 this study was updated by Woodward-Clyde Consultants. Dr. Richard Threet presented a geological description of the south slope in his report "Hydrology of the Southern Borrego Valley" (County of San Diego, 1960). The reader who desires a detailed presentation of on-site geology is referred to the original Rams Hill Country Club EIR (PRC, 1979).

The Rams Hill property is located on a north-facing alluvial fan. The property is characterized by a gently sloping terrain which ranges from 475 feet above mean sea level (AMSL) in the northeast section near the Borrego Sink to 1,150 feet AMSL in the southwest quarter which is disected by a series of ridges and washes (Figure 4). A spatial analysis revealed that 80 percent of the site is relatively flat with slopes ranging from 0 to 6 percent; the southern portion of the site is markedly steeper with slopes ranging from 7 to 15 percent. The southwest corner of the site is the steepest area. Maps showing the spatial analysis and slope analysis are presented as Figures 14 and 15, respectively.

a. Surface Features

The Rams Hill site is characterized by braided alluvial fans above the 800 foot elevation in the southern portion of the site and by a relatively smooth alluvial surface across the remainder of the site. A greater percentage of cobbles can be expected to occur in the steeper area. Dense caliche zones resulting from cementation of calcium carbonate occur in a random pattern at various depths across the entire site (County of San Diego, 1972).

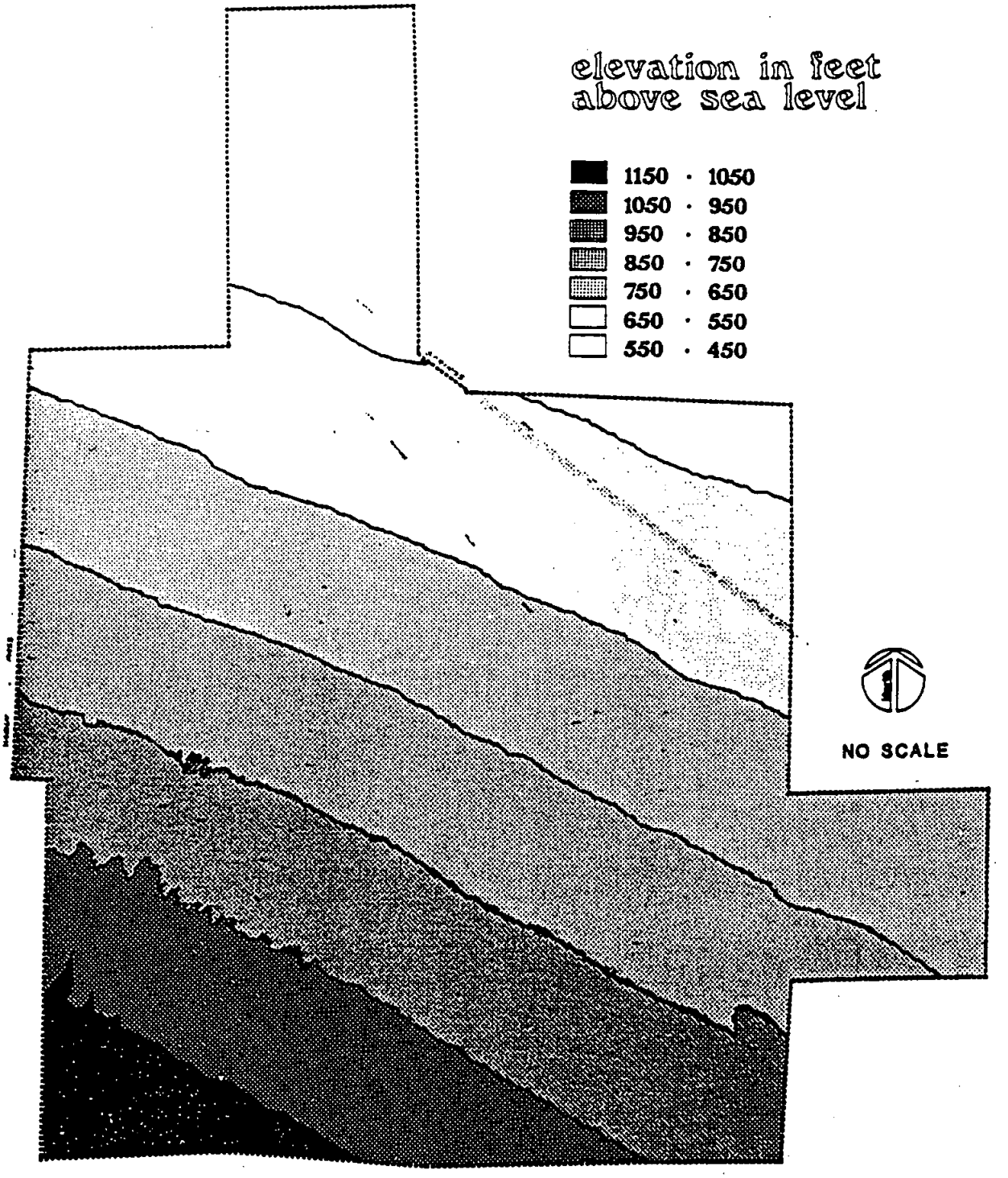


Figure
14

RAMS HILL
Spatial Analysis

b. Subsurface Conditions

The Rams Hill property is underlain by predominantly alluvial deposits of medium dense to dense sands with gravel, sandy silts and silty clays lying at depths of 50 to 1,150 feet. (PRC, 1979:46)

The geologic formational units on the site are as follows: The southwest corner of the site consists of crystalline basement rocks composed of schists and granitic rocks at shallow depths. These rocks probably extend beneath much of the Borrego Valley. The basement rock is thinly covered by terrestrial clays and fine sand of the non-marine Palm Springs Formation. Moving toward the northeast, the Palms Springs Formation becomes thicker and is gradually covered by a thicker layer of "older alluvium." A "younger alluvium" has been deposited in structural and topographic depressions in and on all the older formations. (PRC, 1979:42)

A geologic cross section of the site is provided in the first Rams Hill Country Club EIR (PRC, 1979).

c. Economic Geology

Based on a review of the California Division of Mines and Geology publication "Mines and Mineral Resources of San Diego County, California, County Report 3" (County of San Diego, 1978). There are no commercial size deposits of minerals or aggregates on the Rams Hill property.

d. Soils

According to the U.S. Department of Agriculture San Diego Soil Survey (County of San Diego, 1976) the following soil types are present on the site:

- Carrizo Very Gravelly Sand (CEC): This slightly calcareous, mildly alkaline soil which is derived from granitic alluvium covers the moderately sloping fans and floodplains. The majority of existing development at Rams Hill is within this area.

- Sloping Gullied Land (SrD): This soil, which consists of a wide variety of materials derived from igneous, sedimentary and meta

morphic rocks, is found in the alluvial fans in the south and southwest corners of the site. Some of the existing estate lots are located in this area.

- Mecca Sandy Loam, Saline (MoA): This is a slightly calcareous and moderately saline soil located at the northern boundary of the property adjacent to the Borrego Sink.

The characteristics of these soil types are listed in the following table (Table 7). For a soils map refer to the original Rams Hill Country Club EIR (PRC, 1979).

Table 7

Characteristics of Soil Types

	Carrizo Very Gravelly Sand	Sloping Gullied Land	Mecca Sandy Loam Saline
Symbol	CeC	SrD	MoA
Percent on Property	77	20	3
Natural Drainage	Excessive	Good to somewhat excessive	Slight
Subsurface Permeability	Rapid to very rapid	Moderate	Moderate
Erosion Susceptibility	Moderate	Severe	Slight
Shrink Swell Potential	Slight	Slight	Slight
Sewage Effluent Disposal Limitation	Slight	Severe	Moderate
Runoff Potential	Very slow to slow	Moderate	Slow
Inherent Fertility	Low	None	Medium

e. Geologic Hazards

Seismic hazards at Rams Hill are considered to be similar to those for the entire County. Geologic hazards which exist at Rams Hill include seismicity, erosion, slope failure and soil shrinkage. Although there are

no fault traces located on the project site, the Borrego Valley is considered seismically active. Two of the largest and most active fault zones in San Diego County are located in the vicinity of the valley. Studies indicate that earthquakes having a Richter magnitude of 7.3 could occur along either of these faults once every 60 years. The San Jacinto fault zone is located approximately eleven miles northeast of the site. This fault has a maximum probable earthquake magnitude of 7.5 to 7.8. The Elsinore fault is located approximately 15 miles southwest of the site and has a maximum probable earthquake magnitude of 7.6 (County of San Diego, 1978). In addition, numerous smaller faults lie within 10 miles of the site. In 1968, one of the smaller faults, Coyote Creek fault, was the site of an earthquake which was measured at 6.8 near Ocotillo Wells. This fault is located along Coyote Canyon and the northeast face of Borrego Mountain. One structure in Borrego Springs was damaged and extensive minor damage occurred as a result of this earthquake.

Based on the San Diego County Soil Survey, 80 percent of the on-site soils are susceptible to moderate erosion. The transport of the smaller grains downslope will occur at relatively low velocities (approximately 1.75 feet per second). This will result in hydrologic sorting which should eventually reach an equilibrium flow condition after some sediment transport has occurred. Slope stability at Rams Hill is not a major concern due to the gentle slope gradient over 80 percent of the site. The Woodward-Clyde analysis of slope stability noted that slope gradients can be as steep as 2:1 before deep-seated slope failure becomes a serious hazard. The site's sandy soils create a moderate to severe surface sloughing hazard. Soil shrinkage after excavation and recomposition also tends to occur on the site. Much of the area of development at Rams Hill has already been graded for the streets, single-family homes, PRD units, clinic, golf course, waste water treatment plant and flood diversion system, and these soil factors were taken into consideration during that construction.

2. Potential Impacts

While the above mentioned on-site grading has already been completed, additional grading will have to be performed for the proposed new golf course, additional single-family homes, PRD units, and the commercial area. Proposed grading will take place in the flat, central portion of the site. This will result in moderate alterations to the smooth alluvial fan surfaces where grading will take place. The steeper areas of the site are not going to be graded for the estate lots at this time. When this is done however, grading for streets and pads is anticipated to be minimal.

It is estimated that 2.2 million cubic yards of earthwork will be required for the proposed specific plan area. The detention/desilting basins and water features located throughout the new golf course will require soil excavation and recompaction. The maximum fill bank height would be 30 feet and maximum cut depth would be 30 feet for the detention basins. The new golf course will require the grading of 200 additional acres. Maximum slope gradient on the golf course would be 2:1. Excavation and grading of soil will result in shrinkage which was estimated by Woodward-Clyde to be less than 5 percent to over 20 percent.

The proposed tentative map (TM) area in the southwest portion of the property includes a total of 206 acres. Approximately 1.1 million cubic yards of earthwork will be required for the tentative map portion of the project. The maximum fill bank height would be 30 feet and the maximum cut slope height would also be 30 feet. Existing slopes in the TM area range from 3 to 6 percent except in the southwest portion where a series of drainages exist at slopes ranging from 7 to 15 percent. One of these drainages is markedly steeper with side slopes over 20 percent (Figure 15). The maximum slope gradient in the TM area is proposed to be 2:1.

The 1973 Woodward-Gizienski report analyzed the potential on-site impacts of a 7.3 Richter magnitude earthquake with an epicenter five miles from the property. They concluded that due to the varying soil depths at Rams Hill, ground motion characteristics are likely to vary considerably. The maximum bedrock acceleration was calculated at 0.4 g. This could result in slope

failures, fissures, soil compation or settlement and liquefaction. The potential for damage from slope failure would not be severe as long as graded slopes do not exceed a 2:1 gradient. The potential for erosion resulting from rainfall in the flat areas is slight. Erosion damage to slopes could, however, cause gullying, deposits of alluvium in undesirable locations, and possible roadbed and foundation damage. While potential flooding hazards are slight, due to the existing Rams Hill runoff interceptor system, some surface erosion and sloughing will occur even with extensive mitigation and continuous maintenance will be necessary (County of San Diego, 1972).

Liquefaction is not likely at the site due to the dryness and high relative density of the soils. The on-site soil is made up of medium-dense, well-graded medium to fine sands with about 10 percent fine grained silt and clay. The soils is somewhat chemically cemented in character. An earthquake could cause soil compaction and settlement damage. Finally, a 7.3 magnitude earthquake could cause extensive structural damage and possible loss of life if calculated earthquake impacts are not incorporated into proposed building design.

3. Analysis of Significance/Mitigation

All grading at the Rams Hill project will conform to the County grading standards. Grading impacts have been mitigated by project design. The development that is being proposed will take place in the flat, central portion of the property which is under 6 percent slope. The estate lots which are planned for the steeper southwest portion of the property are not being delineated at this time. The estate homes will be custom built in order to maintain the natural terrain; only access roads and pads will be graded.

Although the Rams Hill site is subject to moderate to severe geologic hazards these can be mitigated to the greatest extent feasible through proper design and construction. The County Building Code will be followed and building design will be based on a maximum bedrock acceleration of 0.4 g. If a severe earthquake were to occur it is possible that some damage could occur. Seismic hazards are not, however, significantly greater than at other locations in San Diego County.

Short-term potential impacts of grading during the construction phase will be mitigated when the landscaping is completed. Though the erosion hazard is slight in the areas that are going to be developed this could be mitigated by planting grass throughout the landscaped areas and on the graded slopes. The grass would serve to stabilize surface soil, but would require extensive water use for maintenance. The detention basins which are being designed for the proposed golf course will serve to mitigate impacts from on-site run-off water and the associated silting problem. The above-mentioned mitigation measures will also serve to mitigate potential slope failure. Potential shrinkage impacts will be mitigated as construction occurs, through testing by a qualified soils engineer. Balance areas will be provided to accommodate for any shrinkage in excess of what was originally assumed.

C. FLOODING/HYDROLOGY

1. Existing Setting

The following discussion is a summary of the hydrological information presented in the original Rams Hill EIR (PRC, 1979). That document should be referred to for supplemental data. The Borrego Valley is subject to severe flash floods from the brief but intense summer thundershowers that characterize the area. During these storms large quantities of runoff water, originating in the mountain canyons, move at high speeds and result in flooding conditions in the valley. The topography in this area shows evidence of past flooding. As the runoff water spreads across the alluvial fans at the base of the mountains it creates a sheet flow which results in unpredictable water courses.

Sizeable floods have occurred in recent years in the vicinity of Rams Hill as a result of relatively minor storms. Most of these storms are tropical in nature and drop large amounts of precipitation within a short period of time. In 1972, the San Diego County Department of Sanitation and Flood Control did a detailed study of the flooding hazard in the Borrego Valley (County of San Diego, 1972). The Rams Hill project area was not included in this study because, unlike the surrounding area, it is not located at the mouth of a canyon. Rams Hill is however, subject to flooding from sheet flow. Potential flooding problems could occur at the site due to the numerous arroyos located above the 800 foot elevation in the southernmost portion of the site and outside of the southern property boundary.

Due to the small size of the drainage area (6.5 square miles) above Rams Hill the County Department of Sanitation and Flood Control recommended that the "rational method" be used to analyze the on-site flood hazards. This method is outlined in the Design and Procedure Manual for Flood Control and Drainage, prepared for the San Diego County Department of Special Districts (County of San Diego, 1960). This analysis provided a worst case estimate of flood hazards at Rams Hill. The percent of runoff which is not absorbed by the soil was determined to be 0.55. The intensity of the 100 year storm was set at 2.08 inches per hour and the time of concentration was 39 minutes.

Seven drainage channels were identified on-site; they originated in the area south and southwest of Rams Hill. A hydrological map as well as a table summarizing the calculations of the potential flood hazard from the 100-year storm are presented in the first Rams Hill Country Club EIR (PRC, 1979).

Rams Hill was estimated to have a lower potential for flooding than the other areas of Borrego Valley. The design flood for the project is 1.5 cubic feet per acre per second while the most severe flood for any major channel analyzed by the previous County study was 1.27 cubic feet per acre per second. The total size of the watershed which can contribute to flooding on the site is considered relatively small at only 6.5 square miles.

In conjunction with ongoing development within the specific plan area, a series of flood control channels have been designed and built to protect the project from potential flooding. Three gabion-reinforced earthen channels were constructed around the periphery of the development area. These channels were designed to divert the flow of off-site runoff water away from the existing and proposed site development. The diversion channels which can accommodate the 100-year storm levels are intended to completely separate the watercourses from the development areas. The existing flood control facilities are illustrated on both the existing and amended specific plan maps (Figure 6 and Exhibit 1).

The flood control channel located in the southern portion of the project just south of the estate lots, carries water from west to east out into the open space area. The width of the southern channel varies from 30 feet to 100 feet and it is 10 feet deep. The channel which runs from the south to the north along Yaqui Pass Road and then turns to the east diverts water to the north side of Borrego Springs Road. This channel runs along the western project boundary; it is 25 feet wide and 5 feet deep. There is also a channel which runs basically from the south to the north along the eastern edge of the area proposed for development. Water from this channel is also diverted to the area north of Borrego Springs Road. This channel is between 15 and 20 feet wide and 3 to 5 feet deep. These channels were built according to County standards. Flood protection was also provided for the sewage treatment plant and percolation basins located north of Borrego Springs

Road. The flood control channels and structures are being maintained by the Borrego Water District.

2. Potential Impacts

The proposed development at Rams Hill is protected, to the greatest feasible extent, by the existing flood control structures. These channels have served their purpose in diverting flood waters which originate in the canyons south of the site away from the developed areas. It should be noted however, that due to the unpredictable nature of flash storms in the desert that the Rams Hill development could sustain major flood damage. The water diversion channels were designed with a wide margin of safety and should have the capacity to carry the predicted flow of water. Flooding of the major traffic arterials to the west and north of the property could be expected during a heavy storm. It should be noted that the amount of water that would reach the Borrego Sink in the form of run-off would remain the same as it is now.

Drainage within the development area of the project and downstream of the diversion channels has created some problems at the existing golf course. The deposition of silt in undesirable areas has been the primary problem. This is a potential problem for the proposed golf course. The on-site runoff water from upland areas is laden with silt which has been an ongoing maintenance problem at Rams Hill. This can and will be mitigated as an integeral part of the design of the new golf course.

3. Analysis of Significance/Mitigation

In order to minimize the drainage and consequent maintenance problem at the golf course, swales and detention/desilting basins will be incorporated into the proposed project design. On-site runoff water will be contained within the detention basins. There are a series of 17 basins located throughout the roughs of the new golf course area. The southernmost detention basin will be situated so as to catch the initial runoff water from the alluvial area south of the development area and north of the diversion channel. As the water sits in this first basin the heavy sediments will sink to the bottom of the basin. In this manner this pond serves as the major desilting basin as well as a detention basin. The basins will provide

groundwater recharge to the aquifer underlying the site. The excess runoff not contained within the basins will be discharged via swales which will be located throughout the golf course. The water will eventually be directed to the existing water diversion channel located along the eastern edge of the development area and thence out into the open space area and Borrego Sink. The proposed desilting/detention basins would minimize the anticipated on-site runoff water problems at both the existing golf course and the newly proposed golf course. These basins, coupled with the existing runoff diversion system, serve to fully mitigate potential hydrology impacts associated with the specific plan amendment.

D. BIOLOGY

1. Existing Setting

The Rams Hill property was subject to a complete biological reconnaissance in the late Spring of 1977 by Pacific Southwest Biological Services. Both botanical and zoological surveys were conducted at that time. For a detailed description of the survey refer to the 1979 Rams Hill Country Club EIR and the biological technical appendix B (PRC, 1979). In the Spring of 1980 supplemental biological investigations were conducted in order to comply with Condition of Approval #26 of the Rams Hill Specific Plan. In particular, the Cryptantha ganderi as well as other rare annuals were looked for during this survey. Aside from the sensitive plants identified in the original survey, no other sensitive plants were noted on the site.

a. Botany

Three major habitats were originally noted on the Rams Hill property. The majority of the project area supports the creosote bush scrub community. This habitat is located in the central portion of the site and covered approximately 70 percent of the project area prior to construction of the existing development. A ridge and wash area, consisting of both the desert wash and the semi-succulent scrub communities, is located in the southwest corner of the Rams Hill property. This habitat accounts for approximately 27 percent of the site. Finally, a mesquite woodland habitat is located in the northeast corner of the site, covering 3 percent of the site area. Figure 16 is a map showing the location of each of these habitats in relation to the existing development at Rams Hill.

The creosote bush scrub community is composed primarily of creosote bush, burro weed and silver cholla. The ridge-and-wash area supports the desert wash community in the gullies and semi-succulent scrub along the ridges. The desert wash community is dominated by desert lavender, chuparosa and maguey. The semi-succulent scrub community is dominated by pencil cholla, ocotillo, burro weed, desert barrel cactus, and teddy bear cactus. Mesquite is the only species comprising

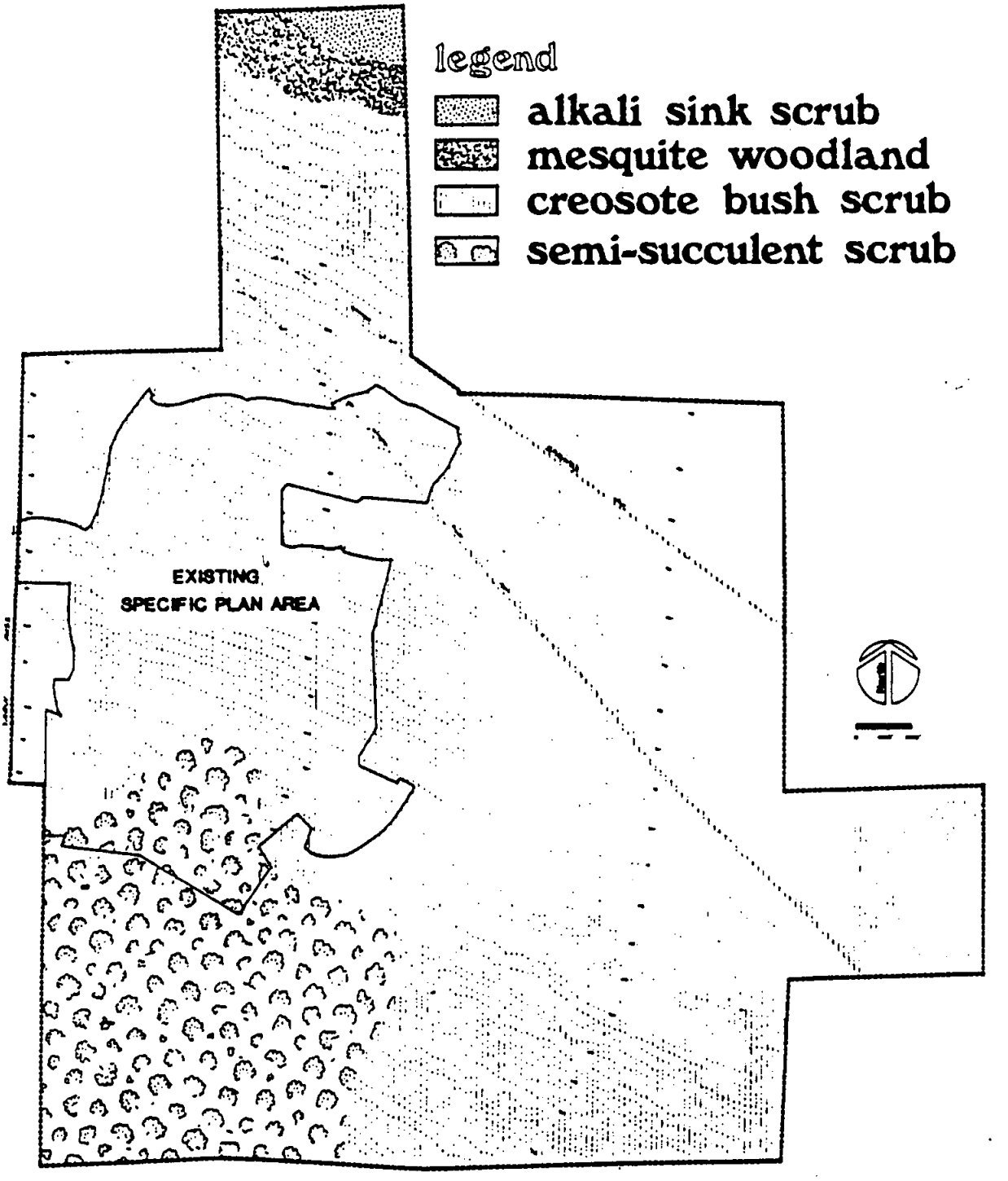


Figure
16

RAMS HILL
Vegetation Map

the mesquite woodland community. There is a narrow strip of land which runs adjacent to the northern border of the Rams Hill property line in which the alkali sink scrub community exists. The dominant genera in the alkali sink are Haplopappus, Atriplex, and Cleomella.

It was noted in the 1979 Rams Hill EIR that all of the project area provides a good quality habitat for desert animals. The mesquite woodland and the ridge-and-wash complex were judged to be the most significant habitats. The variety of species and individual numbers were greater in the woodland than on any other portion of the property.

The rugged ridge-wash area is a significant habitat for predatory animals and their prey due to the density of the vegetation and the varied topography (PRC, 1979:71). The majority of the development at Rams Hill has taken place in the former cresote bush scrub area. A small portion of the estate lots area is located within the semi-succulent scrub community.

A singular occurrence of the sensitive plant species Lyrocarpa coulteri var. palmeri was noted on the site. While this species is not rare or endangered, it is listed by the California Native Plant Society as being of limited occurrence in the deserts of San Diego.

b. Zoology

A combined total of 54 bird, mammal, amphibian and reptile species were observed at Rams Hill during the 1979 survey. It was estimated that 50 additional species could be expected on the property. None of the species observed are considered rare, endangered or threatened. Thirty-three species of birds were observed on the property. Nineteen of these are permanent residents. Twenty additional bird species which are common to the area could be expected on the site. The most common species noted were the Gambel's quail, Wilson's warbler, and mourning dove. Two raptors were also noted, the American kestrel and the great horned owl. The majority of these species were noted in the mesquite woodland/alkali sink scrub communities in the northernmost portion of the site.

Ten mammal species were noted on site and an additional fourteen species could be expected to occur. The list of mammals includes: desert cottontail, white-tailed antelope ground squirrel, desert pocket mouse, desert kangaroo rat, desert woodrat and coyote. One amphibian, the California toad, and ten reptile species were also noted on or in the vicinity of the project. The reptiles included five lizard and five snake species; an additional fifteen species could be expected. One additional amphibian species could be expected to occur at the site. The ringtail cat, a possible visitor to the site, and the Golden Eagle, a confirmed site visitor, are considered sensitive species. They are fully protected by California State law. Three Blue Listed bird species were noted: the American kestrel, loggerhead shrike and yellow warbler. Three additional Blue Listed species are expected to use the site.

2. Potential Impacts

The significant habitats at Rams Hills have been identified as the mesquite woodland in the northernmost portion of the site and the ridge-wash area in the southwest portion of the site. The existing development at Rams Hill occurred almost entirely within the less sensitive creosote bush scrub. This included 457 acres. A small portion (124 acres) of the semi-succulent scrub community was affected by the existing estate lot area. An area of 1,600 acres in the eastern half of the property was dedicated as permanent open space. An additional 221 acres of open space are being dedicated as permanent open space in order to preserve the mesquite woodland habitat and ridge-wash area.

The additional development that is currently proposed at Rams Hill will also be centered in the less sensitive creosote bush scrub. In compliance with Condition of Approval #24 of the Specific Plan and Condition #13-n of TM 4053 the sensitive ridge-wash area will be set aside as open space in order to preserve this habitat. This encompasses an area of 150 acres in the southwest portion of the property. It includes everything south of the existing east to west trending water diversion channel as well as an area which extends approximately 800 feet north of the diversion channel in the area directly below the existing estate lots (see Figure 7). The alkali sink and

mesquite woodland is the northernmost panhandle of the property will also be preserved in permanent open space. This area includes the 72 acres that lie north of the seasonal storage ponds of the existing wastewater reclamation facility.

While there will not be any construction in these open space areas, the developer will retain the right to reasonable use of these areas for necessary maintenance of the flood control facilities and utilities. The provision of these open space easements will protect the sensitive biological habitats from potential impacts.

Although Rams Hill is designed to preserve much of the natural desert habitat there could be some potentially indirect impacts to biological resources, as documented in the previous EIR. Increased water availability on site, both that used to irrigate the golf course and landscaping and the increase in discharged waste water at the percolation ponds, could facilitate the introduction and spread of non-native species in the mesquite woodland. Development would also interrupt the natural foraging behavior of raptors, large mammals and snakes. The increased availability of surface water on the site would likely attract many species to the site which do not presently occur on the property. Grading and construction will irreversibly damage the creosote bush scrub habitat. The increased number of people in the area could create additional impacts, particularly due to off-road vehicle activity.

3. Analysis of Significance/Mitigation

There will be no additional impacts to biological resources beyond those impacts identified in the 1979 Rams Hill EIR. The mitigation measures set forth in the original plan have been complied with and will continue to be complied with during this phase of the project.

In compliance with both Condition of Approval #24 of the Specific Plan and Condition #13-n of TM 4053, the potential impacts of future development of the estate lots to the ridge-wash habitat will be mitigated by dedicating an open space easement in order to preserve this habitat. The open space easement is delineated on the proposed Amended Specific Plan map (see

Figure 7). Grading of the two- to five-acre estate lots will be minimized in order to maintain as much of the natural habitat as possible. The other sensitive biological habitats in the northernmost portion of the project will also be preserved as permanent open space.

Over the entire development area, drought tolerant vegetation will be used for landscaping purposes. In addition, the percent of turf and green areas in the golf course area will be reduced in order to increase the areas of desert landscaping. This will result in a decrease in the total acreage that requires irrigation, and will partially mitigate the loss of natural desert habitat.

E. ARCHAEOLOGY

Two archaeological reconnaissances have been conducted on the Rams Hill property. In 1973, Dr. Paul Ezell of San Diego State University conducted an archaeological investigation of Borrego Springs. At that time four sites were recorded at Rams Hill. PRC Toups Corporation surveyed the property in 1977 and 1978. Seven archaeological sites were recorded as a result of the PRC survey. Two of the sites were located in the area that was planned for development and the other five sites were within the area designated as permanent open space. For a more detailed discussion of this survey and the record search data refer to the 1979 Rams Hill Country Club EIR and its accompanying technical appendix.

1. Existing Setting

The Borrego Sink which forms the northern boundary of the property is a dry lake bed. The prehistoric lake shore environment would likely have been exploited by Paleo Indian and Early Archaic populations. During the late Archaic era (up until Spanish contact) people could have subsisted on the available plant and animal life. A records search at San Diego State University documented at least six sites in the vicinity of the project as well as one site (C-490) which has been nominated to the National Register of Historic Sites.

The 1978 PRC survey of the 3,140 acre Rams Hill parcel resulted in the relocation of five previously recorded sites; Cal:E:15:7 (SDi-4601), Cal:E:15:4, Cal:E:15:1 (SDi 4598), Cal:E:15:2 (SDi 4599), and Cal:E:15:3 (SDi 4600). Two new sites were located (site 6 and site 7). Two previously recorded sites could not be relocated (Cal:E:15:5 and Cal:E:15:6). Dr. Ezell had recorded these sites in 1973. They consisted of 20 pot sherds and a remnant of a recent cabin respectively. The following is a description of the sites that were located on the Rams Hill property as a result of the 1978 survey.

Site 1 (Cal:15:7 or SI-4601)

This site is made up of a recent stone chimney and is therefore not archaeologically significant.

Site 2 (Cal:E:15:4)

This site consists of 61 unlined "sleeping circles", trails, pottery sherds, one blade fragment, flakes, cores, scrapers, choppers, metates, manos, an anvil, bedrock milling features, (2) rock cairns, a possible ground drawing and a petroglyph. It is located in the southwest corner of the property in an area originally designated as a "future planning area".

Site 3 (Cal:E:15:1 or SDi-4598)

This site consists of two sleeping circles, one of which is lined, and some flakes. It is located on top of a low-lying north/south trending ridge in the southeast corner of the property which was originally designated as a "future planning area."

Site 4 (Cal:E:15:2 or SDi-4899)

This site was originally reported by Dr. Ezell as consisting of pottery and stone tools. Due to the location of the site, in a wash area, it has been subjected to extensive erosion. Several very large Tizon Brown Ware pottery sherds are all that remained intact at the site. This site is located in the area designated as permanent open space.

Site 5 (Cal:E:15:3 or SDi-4600)

This site consists of two unlined sleeping circles, three stone-lined circles, four flakes (one utilized) and one core fragment. This site is located in the area dedicated as permanent open space.

Site 6

This site consists of a single unlined sleeping circle located on top of a small berm near the southern boundary. This site is located in the area designated as permanent open space.

Site 7

This site consists of a single stone-lined circle situated on top of a small hill near Old Borrego Valley Road. It is located in the area designated as permanent open space.

2. Potential Impacts

In 1980 ACT, Inc. conducted additional archaeological investigations of Site 2 (Cal:E:15:4). This was the only archaeological site on the property that was located in an area of proposed future development; the other sites are located in the open space area. The purpose of this work was to mitigate direct and indirect impacts to the site. It was conducted in response to Condition of Approval #13-q of TM 4053. The northern portion of the site would have been directly disturbed by the interceptor channel. Indirect impacts to the site may have occurred as a result of the increased number of people in the area. The information on the data recovery at Site 2 (Cal:E:15:4) was obtained from ACT's report "Archaeological Survey and Recovery of a surface site at Rams Hill, Borrego Springs, CA" (ACT, 1981).

The site is described as consisting of 66 features. This includes 61 "sleeping circles", two trails, two cairns, and one possible "ground drawing". The site was mapped in detail and the surface artifacts were collected. Only four quartz flakes were recovered from the excavation of eight features. In addition, three test trenches were excavated near the bedrock with milling. One mano was recovered from Trench 1. A total of 138 artifacts were collected on the site. These included an anvil, cores, flakes, multi-use tools, choppers, scrapers, a blade fragment, a metate, a mano, Tizon Brown Ware and Colorado River Buff Ware pottery sherds. A small petroglyph was also noted. The site is assigned to the San Dieguito Tradition of the Paleo-Indian Stage (approximately 15,000 to 7,000 years ago). The pottery and grinding implements also indicate that the site was used during the Late Archaic period. This site was probably used as a seasonal campsite. For a more detailed discussion of the mitigation program and its results refer to the 1981 ACT report which is on file with both the County of San Diego and San Diego State University.

The DiGiorgio Development Corporation has agreed to preserve Site 2 (Cal:E:15:4) within an open space easement in the southwestern portion of the property. This open space easement encompasses 150 acres which includes all of the area south of the east to the west trending flood control channel as well as an area which extends approximately 800 feet north of the diversion

channel in the area directly below the existing estate lots (See Figure 7). The dedication of this open space easement should adequately protect Site 2 (Cal:E:15:4) from any potential impacts of future development in the estate lots area of the Rams Hill project. This specific plan amendment does not propose any development in this area.

3. Analysis of Significance/Mitigation

Cal:E:15:7 (SDi-4601) is not considered significant and no mitigation measures were recommended for this site. Cal:E:15:2 (SDi-4599), Cal:E:15:3 (SDi-4600), Site 6 and Site 7 are located in the area which was dedicated as permanent open space. It was recommended that off-road vehicle activities be limited on the property in order to avoid impacts to these sites.

Site 2 (Cal:E:15:4) is considered a significant site due to its size and complexity. The integrity of the site was good as it was not disturbed by off-road vehicle activities or by vandalism. This site was fully mitigated by the above mentioned data recovery project. Even though the site was located in an area which was only planned in concept at the time, a resolution of approval #13-q of the first Tentative Map (TM 4053) required that the site be mitigated. The archaeological recovery report recommended that the site be preserved as open space in future specific plans. It also recommended that the future estate lots planned for the area where Site 2 (Cal:E:15:4) is located should be relocated to the designated permanent open space in the eastern half of the project (ACT, 1981). This recomendation was set forth as a condition of adoption #24 of the Rams Hill Country Club Specific Plan. Condition #24 states that an open space easement should be dedicated to the County of San Diego and that

> "...this open space to be maintained under developer ownership until total project is submitted to allow for a potential shift of development from southwest portion of concept plan site to other adjoining areas within that open space, if future environmental analysis of subsequent development plans indicates that such action is necessary to preserve the archaeological or biological resources of the southwest portion."

The site will not be disturbed by the currently proposed development and any potential impacts of future development would be mitigated by dedicating this area as permanent open space. The site area is also within the sensitive semi-succulent scrub biological habitat. The open space area is designated on the proposed Amended Specific Plan map (See Figure 7). The developer will retain the right to reasonable use of the open space for necessary maintenance of the existing water diversion channel. The water diversion channel is reached via an existing access road.

F. CLIMATE/AIR QUALITY

The following discussion is based on the report "Air Quality Impact Analysis Rams Hill Development, Borrego Valley, California" which is included in full as a technical appendix.

1. Existing Setting

a. Meteorology

Although there are no known on-site aerometric measurements at the Rams Hill site, general climatic conditions of the Borrego Valley have been documented in a number of studies that well describe the arid, warm climate and its driving mechanisms. Prominent weather features include the semi-permanent high pressure center over the Pacific Ocean, the thermal low pressure trough over the Imperial Valley, and the blocking action of the coastal mountains that further exacerbate the semi-arid conditions found in Southern California coastal plains. Climatic conditions are characterized by very hot summers, mild winters, negligible rainfall, minimal cloudiness, moderate winds, and strong vertical mixing from "thermals" and wind-induced mechanical turbulence. Except at night in winter when cold air pools near the ground and winds become light, dispersion meteorology is very good. Violations of clean air standards may occur when the remnants of urban emissions from coastal regions reach the project area, and possibly from large quantities of dust generated from natural and man-made soil disturbance activities, but otherwise, air quality in the Borrego Valley is probably much, much better than most areas of Southern California.

Long-term climatic measurements at Borrego Springs (data most representative of the project site) confirm the general expectation of a very desert-dominated climatic distribution. Temperatures near the project site average 70° annually, and range from the upper 30's on cool winter mornings to around 105° on summer afternoons. Extremes of temperature may range from 20 to 120°. With very dry air and little cloudiness, sharp daily temperature oscillations may occur. Outdoor comfort may require a sweater early in the morning while bathing

attire may be the order of the day by early afternoon. Freezing or slightly sub-freezing temperatures occur on about 20 days per year, while one-half of all days of the year reach or exceed 90°F.

Annual rainfall amounts are extremely low because of the rainshadow effects of the Peninsular Coastal Range further reducing the limited moisture supply from the fringes of mid-latitude storms. Rainfall in Borrego Springs averages 3.5" annually. Small amounts of rain fall in winter as storms dissipate over the desert area, and isolated summer thunderstorms may create locally heavy rainfall and flooding. The light winter rains are widespread while the summer "gullywashers" are very localized with a random pattern of occurrence. Only 8 days per year experience light rain (0.1") while just one day per year has moderate to heavy rainfall (0.5" or more). As with other desert resort areas, Rams Hill therefore has a predominantly outdoor-oriented climate where extreme summer afternoon heat and occasionally cold, windy winter weather are the only two noticeable climatological constraints to outdoor comfort.

b. Air Pollution Meteorology

Winds, which control horizontal transport, and temperature structure, which governs the vertical depth through which pollutants can be mixed, are the most important parameters in characterizing local dispersion meteorology. In the absence of on-site measurements of these parameters, they can only be described in terms of regional patterns.

Local wind patterns are mainly controlled by meso-scale climatic features such as the Pacific High and the Sonoran Low pressure centers. These features produce winds from the west and northwest in the cooler months, especially at night, and winds from the southeast in summer, especially by day. Locally, these regional winds are steered by the east-west topography of the Borrego Valley, and thus produce a predominantly east-west airflow through the valley. Daytime winds are moderately strong and turbulent from the intense thermal heating that creates convective overturning (up- and down-drafts). Nocturnal winds

H. DARK SKIES

1. Existing Setting

"Dark skies" refers to issues that relate to light pollution impacts resulting from proposed project lighting on the research capabilities of local astronomical observatories. The Mt. Palomar Observatory, operated by Hale Observatories, is located 32 miles northwest of Rams Hill. The Mt. Laguna Observatory, operated by San Diego State University, is located 24 miles southwest of the project. Figure 17 illustrates the locations of the observatories in relation to the project.

The Mt. Palomar Observatory houses the world-famous 200-inch Hale Reflector telescope. This is the world's second largest reflecting telescope. The Mt. Laguna Observatory houses a 60-inch telescope. The natural night sky at the Mt. Laguna site is believed to be the nation's second best dark sky site. Observatories have to be located in an area where night skies are both clear and dark; in addition, the air mass must be stable. The mountain area of San Diego is one of the very few suitable locations for astronomical observatories in the United States. The following factors make the Palomar location outstanding: approximately 300 clear nights each year, a stable atmosphere at night (low levels of turbulence) and a naturally dark night sky.

With the rapid rate of urbanization in San Diego County the quality of the dark sky is deteriorating. The natural darkness of the sky depends upon the brightness of the moon, the degree of radiation from the ionosphere and artifical illumination. The light which is of most concern to astronomers is the artifical light toward the blue end of the spectrum, where most astronomical photographic emulsions and photoelectric detectors have their peak sensitivity. (PRC, 1979:11) Although the major sources of light pollution are generated from San Diego and Los Angeles the smaller communities, such as Borrego Springs, which are closer to the observatories also contribute to diminishing the natural darkness of night skies.

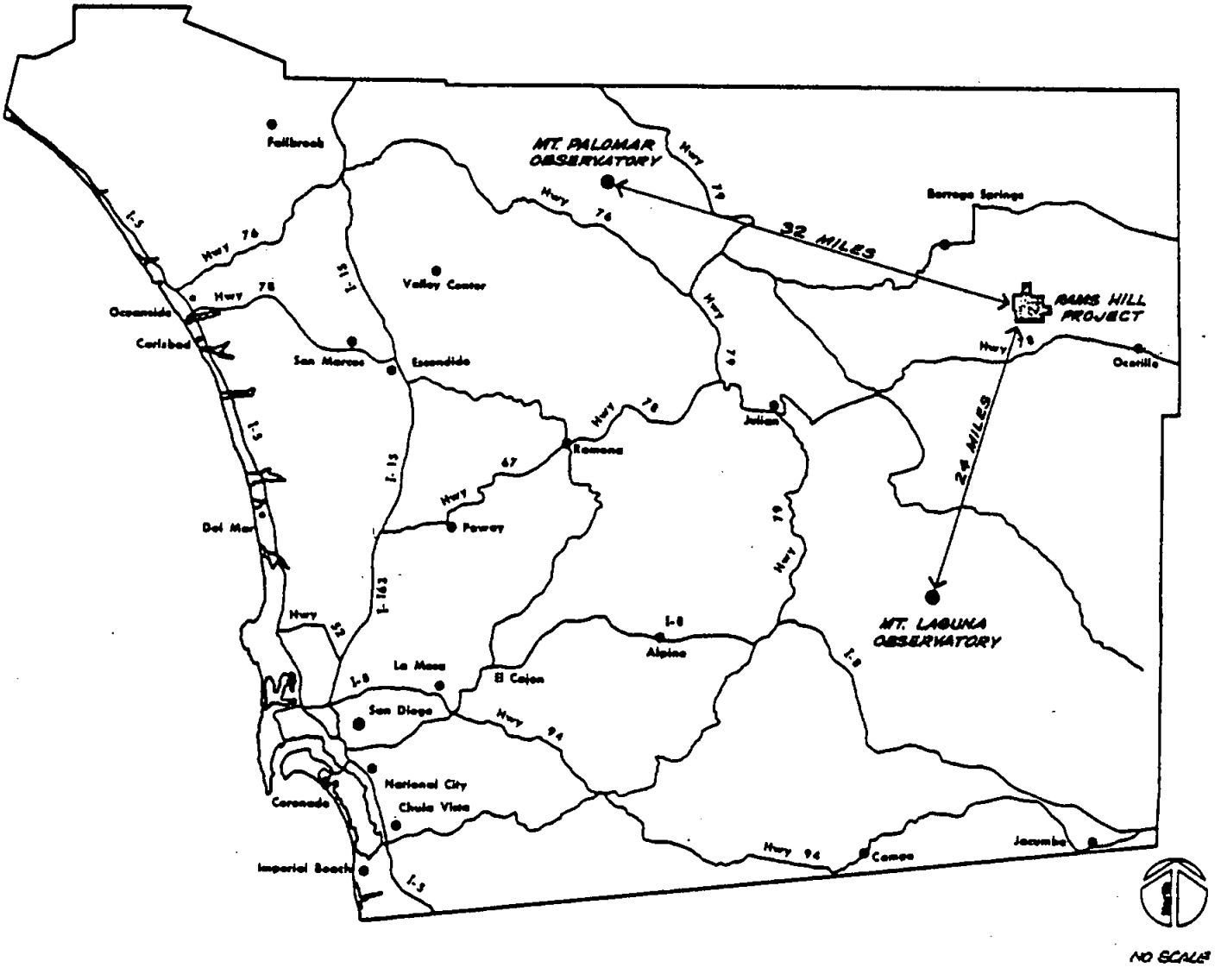


Figure 17

RAMS HILL

Location of Observatories

2. Potential Impacts

The proposed development at Rams Hill could potentially impact the dark sky to east of the Mt. Palomar and Mt. Laguna Observatories if proper mitigation measures are not taken. The eastern perspective from the observatories is particularly sensitive to an increase in artifical illumination because the best observations are made along the eastern horizon. The closest major development in this direction is in the Imperial Valley; however, the lights in the Imperial Valley are too far away to pollute the dark skies at the observatories.

The development at Rams Hill will include 790 new homes, with associated recreational areas that include lighted tennis courts. The lights that will be installed at the site would contribute to light pollution in the dark skies located east of the observatories, unless mitigation occurs. This proposed development will approximately doubled the number of light sources at Rams Hill.

3. Analysis of Significance/Mitigation

The potential impacts of outdoor lighting fixtures to dark skies will be mitigated in accordance with the San Diego County Ordinance (No. 6900-New Series), the Building Code and the Electrical Code. The primary objectives of this mitigation are to minimize the amount of ultraviolet radiation emitted by outdoor light fixtures and to avoid emitting undesirable light toward the observatories, particularly any light above the horizontal plane.

All outdoor lighting fixtures will be shaded on top so that all light would shine downward. According to the proposed Specific Plan, cut-off luminaries could be used which emit no light above 90 degrees, thereby eliminating unwanted light scattering into the atmosphere. The golf course will not be lighted at night. Tennis courts would be lighted only for a limited period each night. Cut-off luminaries using high pressure sodium lamps with flood light configuration would be used to light the tennis courts.

The following table (Table 11) summarizes the shielding requirements that apply to outdoor lighting at Rams Hill.

Table 11

OUTDOOR LIGHTING SHIELDING REQUIREMENTS

LAMP TYPE	CLASS I LIGHTING[1]	CLASS II LIGHTING[2]
High Intensity Discharge		
Low Pressure Sodium	Partial or Full Shield	Partial or Full Shield
Mercury Vapor		
Total Lamp Wattage Per Property 176 w or greater	Full Shield	Prohibited
Total Lamp Wattage Per Property Up to 176 w	Full Shield	Full Shield
Other	Full Shield	Prohibited
Fluorescent		
Total Lamp Wattage Per Property 40 w or greater	Full Shield	Prohibited
Total Lamp Wattage Per Property Between 21 w and 40 w	Full Shield	Full Shield
Incandescent - over 150 Lamp Watts Per Fixture	Full Shield	Full Shield
Luminous Tube	Allowed	Allowed

Notes 1. All outdoor lighting when color rendition is important, such as for outdoor sales areas, signs, decorative effects, and recreational facilities.

2. All other outdoor lighting when color rendition is not important, such as illumination for roadways, equipment yards, parking lots and otudoor security.

In addition to using the proper lamp type and shielding, the outdoor lighting for the pools, outside club house facilities and tennis courts will generally be turned off from 11 p.m. to sunrise. If these mitigation measures are adhered to, then the Rams Hill project should not significantly impact the dark sky quality.

I. TRAFFIC

The following discussion is based upon the traffic analysis included as a technical appendix to the EIR. The report assesses existing traffic conditions, estimates the additional traffic generated by the Rams Hill project for the year 2000, analyzes the resulting traffic situation and recommends appropriate mitigative measures needed to accommodate future travel demand.

1. Existing Setting

Rams Hill Country Club consists of 3,140 acres located 86 miles northeast of metropolitan San Diego and 30 miles west of the Salton Sea in the Borrego Valley area of San Diego County. The project is situated in an unincorporated area which is surrounded by the Anza Borrego Desert State Park.

The two roads adjacent to the project site are Yaqui Pass Road and Borrego Springs Road. Both are currently two lane facilities but are classified by the San Diego County Circulation Element as major roads. Although the paved width of these roads varies from 24 to 40 feet, both roads have 102 feet of right-of-way and 82 feet of roadbed. Yaqui Pass Road (S3) enters the Borrego Valley from points to the south, such as Julian, Agua Caliente, and some of the more densely populated areas of San Diego County. Borrego Springs Road connects the project area with points to the southeast, such as Ocotillo Wells and El Centro, and with the commercial areas of Borrego Springs to the northwest. These two facilities serve as the main access points to the Rams' Hill project. Entry and exit from the west side of the project is accomplished via Yaqui Pass Road, while access from the east side is accomplished using Borrego Springs Road.

Due to the project's close proximity to the Anza-Borrego Desert and the Salton Sea recreational areas, there is a distinct peak season during which visitors to the area significantly increase the number of trips made in the Borrego Valley. During this time, January through April, visitor traffic from the south along Yaqui Pass Road occasionally may experience congestion from reduced speeds due to the steep grade and winding nature of this narrow, two-lane rural road. These conditions are not related to the project,

but rather are the result of the topographical characteristics of the area. Within the Borrego Springs area, however, peak traffic conditions have not created significant congestion to date.

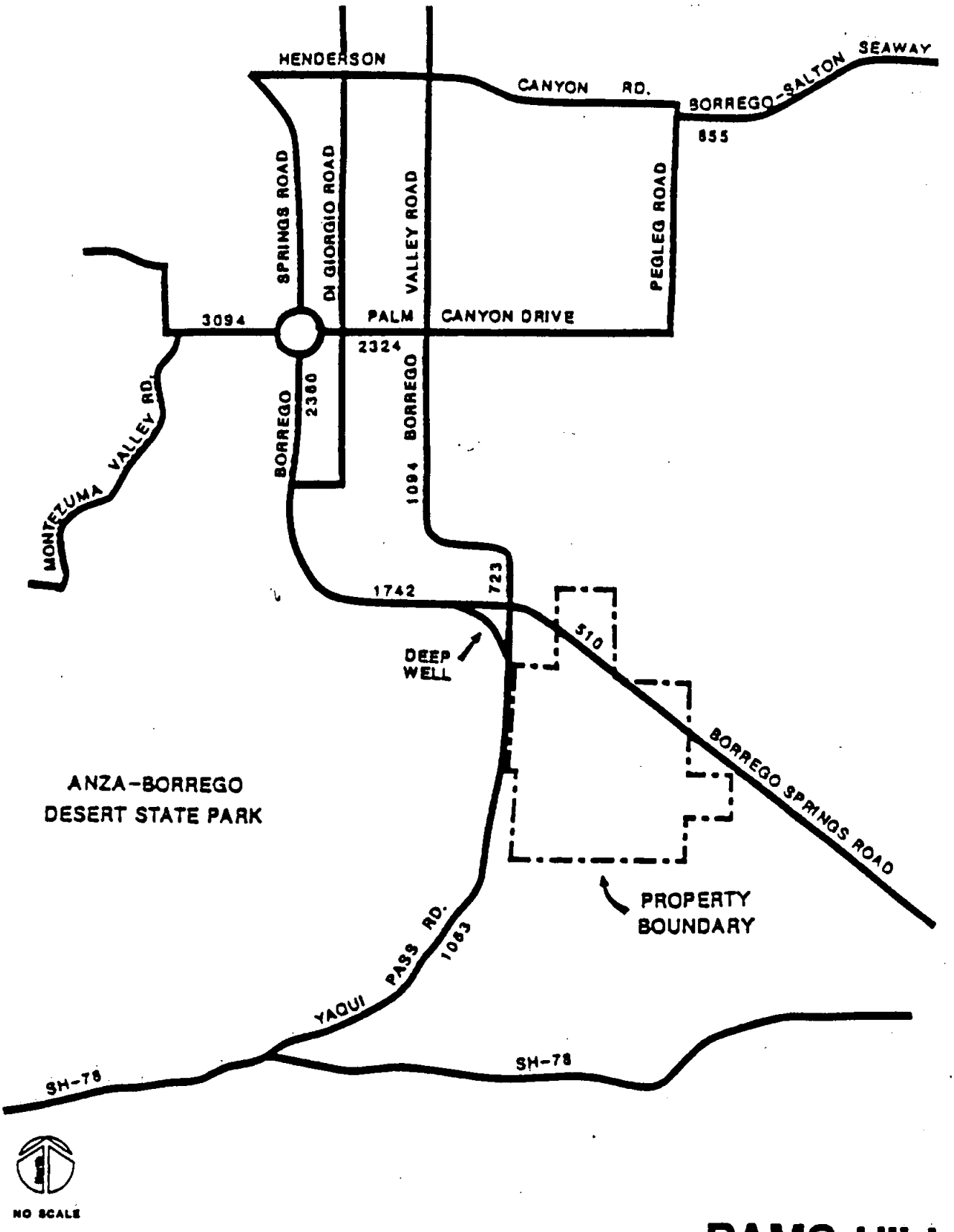
Traffic counts for the Borrego Springs area were obtained from the Traffic Engineering Division of the County of San Diego. These traffic volumes are shown in Figure 18 and represent counts conducted during the peak month of April 1986. Analysis of these existing conditions indicates that, for the most part, all streets in the immediate vicinity of Rams Hill presently operate at a level of service far below the available capacity of each roadway.

The existing daily traffic count on Yaqui Pass Road north of Borrego Springs Road is 723. South of Borrego Springs Road, the count is 1,063. About 20 percent of these 24-hour volume occurs during the peak hours, between 11:00 a.m. and 1:00 p.m. The existing daily traffic counts on Borrego Springs, east and west of Yaqui Pass are 1,742 and 510, respectively. Again, about 20 percent of these 24-hour volumes occur around the noon hour. However, because of the relatively small number of permanent residents in the Borrego Valley and because of the dispersed location of the major trip attractors in the area, there is no significant congestion problem on any of the local Borrego Springs roads today. This holds true even during the peak periods of park visitation.

2. Potential Impacts

a. Without Proposed Rams Hill Specific Plan Amendment - 2000

In order to determine the background traffic for the projected build-out year of 2000, local population and housing growth estimates were



NO SCALE

RAMS HILL

Figure 18

Existing 1986 Average Daily Traffic (ADT) Volumes

examined for the Borrego Springs area. Table 12 summarizes the estimated growth for the Desert Subregion of San Diego County. This subregion is predominantly comprised of the Borrego Springs area.

Table 12

San Diego Regional
POPULATON AND HOUSING ESTIMATES
January 1, 1986

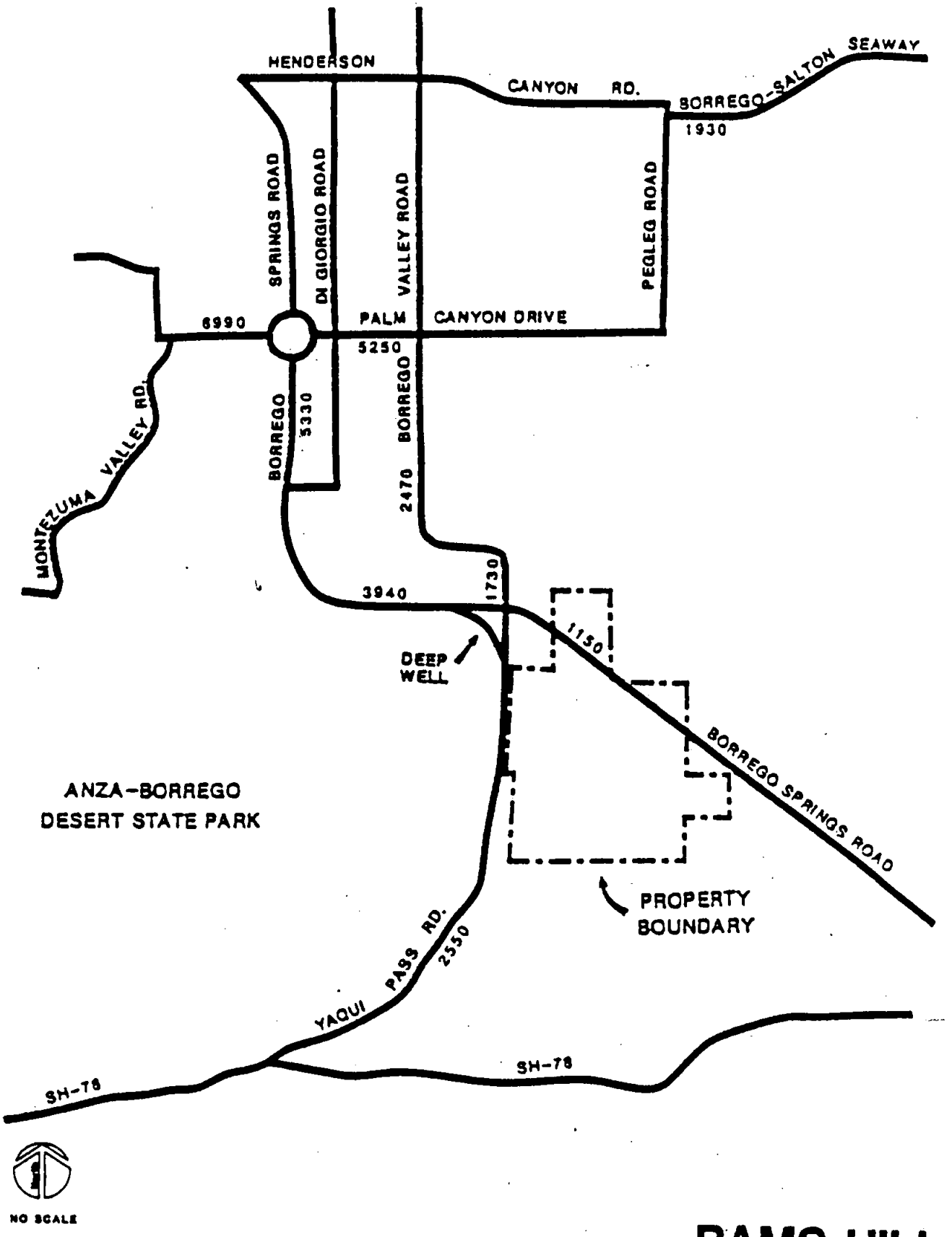
Borrego Springs Area

	1980 Census	Jan. 1 1985	Jan. 1 1986	1980-Current Numeric Change	1980-Current % Change	1985-Current Numeric Change	1985-Current % Change
Total Housing Units	2,204	2,200	2,353	154	7.0	158	7.2
Occupied Housing Units	969	1,125	1,146	177	18.3	21	1.9
Total Population	2,191	2,562	2,712	521	23.8	150	5.9

Source: San Diego Association of Governments, 1986.

The population for the Borrego Springs area has grown on average by 3 to 4 percent each year. Similarly, occupied housing has grown during the same period by approximately 3 percent per year. For the purposes of this analysis, traffic was projected to grow by a factor of 6 percent each year between 1986 and 2000. This growth assumption is consistent with the 4 percent per year population growth experienced in the Borrego Springs area since 1980. The traffic growth rate was increased by an additional 2 percent beyond the population growth rate to account for growth in the regional attractiveness of the Borrego Springs area. The 2 percent assumption is consistent with the overall 3 percent population growth projected by the San Diego Association of Governments for the San Diego region as a whole, although officials at the Anza Borrego State Park, the main regional attraction, do not project any growth in attendance over the next few years.

The projected traffic volumes based on these assumptions are depicted in Figure 19. The forecast volumes indicate that all Borrego Springs roads will continue



RAMS HILL

2000 Forecast ADT (Without Proposed Rams Hill Specific Plan Amendment)

Figure 19

to operate at acceptable levels of service given their current capacities of 7,100 vehicles per day.

b. 2000 Traffic Analysis

A traffic analysis was conducted for this proposed amendment for the Rams Hill Specific Plan. The amendment will add 790 dwelling units to the current specific plan along with a second 18-hole golf course and 30 acre commercial area.

It should be noted that standard trip generation figures have proven to be high for the first Rams Hill Specific Plan. Development level and occupancy rates have not been as high as anticipated. Nevertheless, for this proposed project, standard trip generation rates have been used with only slight modifications. Based on these rates, a total of 31,120 trips will be generated by the project. However, because of the self-contained nature of the Rams Hill development a significant number of these trips will be made wholly within the Rams Hill project site. Table 13 shows the number of gross trips which will be generated by the project and the number of external trips which will travel on the surrounding road network. It is estimated that the amendment proposed for the Rams Hill development will add 19,052 daily trips to the local (external) roadway network at full build-out. This will add 93,206 vehicle miles travelled (VMT) to the Borrego Springs area and 38,038 VMT to the San Diego region.

The projected increases in daily traffic volumes attributable to Rams Hill and future local growth are summarized in Table 14 and depicted in Figure 20. Table 14 shows the existing ADT volumes, the increase of local background traffic for the year 2000, and the total increase of traffic for the year 2000 which includes Rams Hill. As indicated in Table 14, it is clear that the Rams Hill development is a significant contributor to future traffic in the project area. The most significant traffic increases occur on Borrego Springs Road and Yaqui Pass Road where projected volumes range between 8,000 and 14,500 ADT. Most of this traffic is attributed to the 30 acre commercial area.

The original EIR and specific plan required several road improvements which were also conditions of Final Map 10460. The improvements have been bonded for, contracts have been let, and they will be complete within the next three months. They include: (1) Borrego Springs Road within the project boundary to the intersection of Yaqui Pass Road: graded to 60' width with 40' paved; (2) Yaqui Pass Road adjacent to project: graded to 61' width with 53' of pavement; and (3) Yaqui Pass Road from northern project boundary to Borrego Springs Road: graded to 48' width with 40' of pavement.

Table 13

Trips Generated by Proposed Rams Hill Specific Plan Amendment

Trip Generator	Rate	Units	Trips Generated	External Trips	VMT Borrego	VMT Regional
Residential	8 Trips/DU	790 DU's	6,320	5,372	38,678	34,918
Commercial	800 Trips/AC	30 AC	24,000	13,200	52,800	N/A
Golf Course	4 Trips/AC	200 AC	800	480	1,728	3,120
Totals			31,120	19,052	93,206	38,038

ASSUMPTIONS:

RESIDENTIAL - 15% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMT Borrego trips multiplied by 8 mile average trips length
VMT Borrego trips multiplied by 65 mile average trip length

COMMERCIAL - 45% of trips are internal
100% of external trips for VMT Borrego
There is no commercial VMT regional
VMT Borrego trips multiplied by 4 mile average trip length

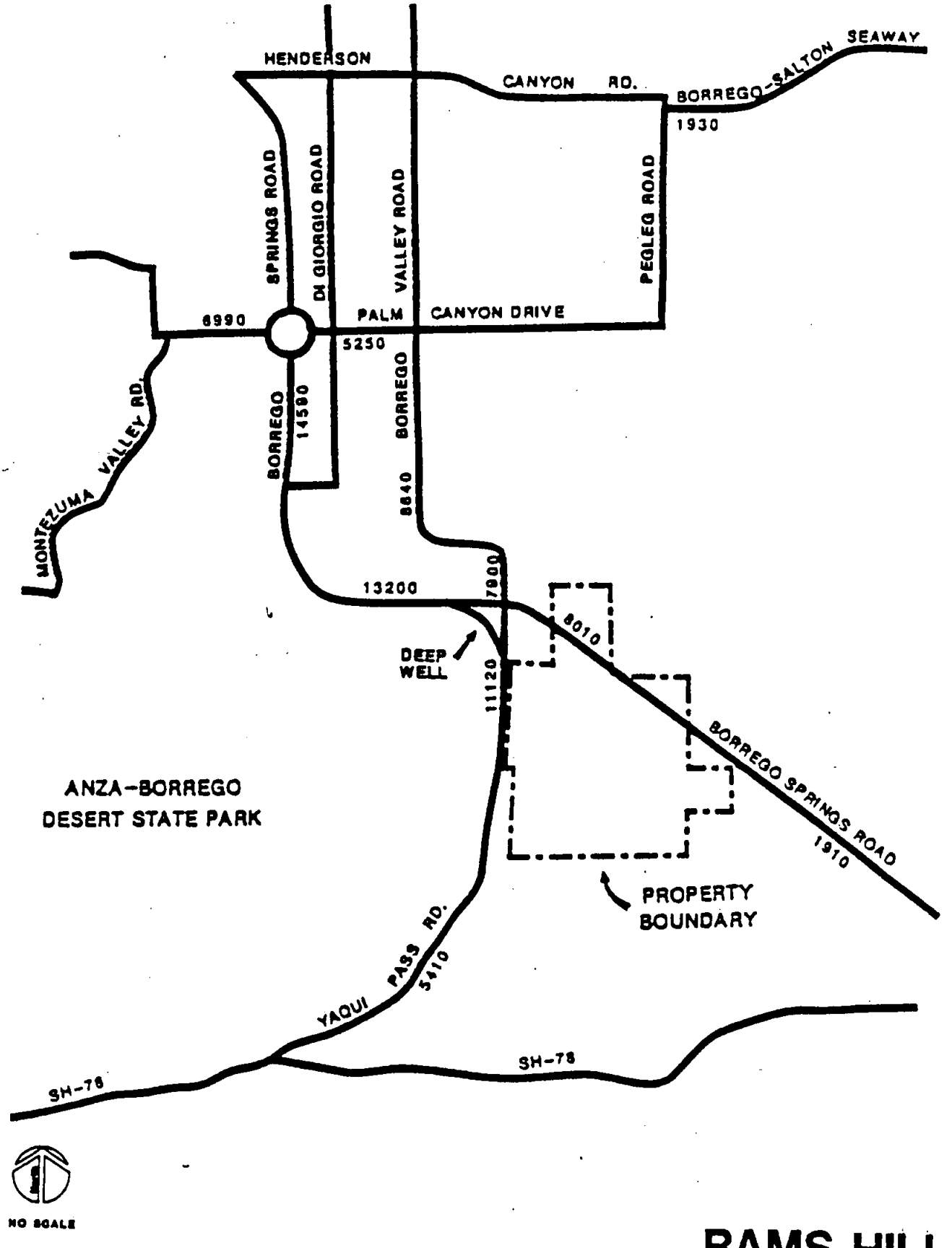
GOLF COURSE - 40% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMP Borrego trips multiplied by 4 mile average trip length
VMT regional trips multiplied by 65 mile average trip length

Table 14

Rams Hill ADT Comparison

Count Location	1986 Existing	2000 Background[1]	2000 with Proposed Specific Plan Amendment
Borrego Spring Road S. of Yaqui Pass Road	510	1,150	8,010
Borrego Springs Road S. of Project Site	510	1,150	1,910
Borrego Springs Road N. of Ynez Path	1,742	3,940	13,200
Borrego Springs Road S. of Christmas Circle	2,360	5,330	14,590
Borrego-Salton Seaway E. of Henderson Canyon	855	1,930	1,930
Borrego Valley Road S. of Palm Canyon Drive	1,094	2,470	8,640
Palm Canyon Drive W. of Borrego Valley Road	2,324	5,250	5,250
Palm Canyon Dr. E. of Five Diamonds Rd.	3,094	6990	6,990
Yaqui Pass Rd. N. of Borrego Springs Rd.	723	1,730	7,900
Yaqui Pass Road N. of SH-78	1,063	2,550	5,410
Yaqui Pass Road S. of Borrego Springs Road	1,063	2,550	11,120

Note: 1. Assumed to include trips from approved Rams Hill Specific Plan.



RAMS HILL

Figure 20

2000 Forecast ADT (With Proposed Rams Hill Specific Plan Amendment)

3. Analysis of Significance/Mitigation

The analysis of the impact of the Rams Hill development on the Borrego Springs Road network focussed on the project's impact on Yaqui Pass Road, Borrego Springs Road and the intersection of these two roads. Although Yaqui Pass Road is currently paved to only 24 feet and Borrego Springs Road is currently paved to 40 feet, they are both classified as major roads in the Circulation Element of the County General Plan. Built to this standard, these roads would have four travel lanes and 102 feet of right-of-way containing 82 feet of paving with an 18 feet median strip.

While the level of contribution is significant, Rams Hill traffic would be more than adequately accommodated if Yaqui Pass Road and Borrego Springs Road were built to major road standards as provided in the County Circulation Element. However, the existing roadways are more aptly described as Light Collectors by County road standards with a corresponding capacity of 7,100 ADT (see Table 15). This being the case, Rams' Hill-generated traffic would seriously tax Yaqui Pass and Borrego Springs Roads as they exist today (particularly that traffic attributable to the commercial area).

Table 15

Average Daily Vehicle Trips Standards

Road Class	Road X-Section	Level of Service A	B	C	D	E
Prime Arterial	106/126	#22,200	37,000	44,600	50,000	57,000
Major Road	82/102	#14,800	24,700	29,600	33,400	37,000
Collector	64/84	#13,700	22,800	27,400	30,800	34,200
Light Collector	40/60	# 1,900	4,100	7,100	10,900	16,200

Source: San Diego County Public Road Standards, June 11, 1986, page 9 (Draft).

The future traffic volumes clearly exceed the capacity of the existing roadways. Based on the capacities exhibited in Table 15 the County of San Diego recommends road improvements to Yaqui Pass Road and Borrego Springs Road to be completed in two phases. The first-phase road improvements will mitigate the impacts resulting from increased residential-generated traffic and must be completed prior to occupancy of any residential units within the proposal. The second phase of road improvements will mitigate the impacts resulting from commercial generated traffic and must be completed prior to occupancy of any buildings within the commercial area of the proposal.

The mitigation measures set forth by the County are as follows:

Phase I

- Yaqui Pass Road is to be constructed to collector road standards from the southwesterly property line of the proposal to Borrego Springs Road intersection prior to occupancy of any residential units.
- Yaqui Pass Road is to have a left turn pocket constructed in addition to the Collector Road at the entrance of Rams Hill Road. The left turn pocket is to be 200 feet long and 12 feet wide. Transitions of 250 feet are to be required north and south of the left turn pocket. The left turn pocket is also to be fully constructed prior to occupancy of any residential units.
- Borrego Springs Road is to be constructed with a left turn pocket 12 feet in width 200 feet long with 250 transitions northerly and southerly of its intersection with the Rams Hill connection. This construction is to be completed prior to occupancy of any residential units within the proposal.

Phase II

- Yaqui Pass Road is to be completed to Major Road standards from the southwesterly corner of the proposal to Borrego Springs Road prior to occupancy of any buildings in the commercial area of the proposal.
- The complete intersection and traffic signal improvements at the intersection of Yaqui Pass Road and Borrego Springs Road are to be

constructed prior to occupancy of any buildings within the commercial area of the proposal.

- The construction of Borrego Springs Road from the northeasterly corner of the proposal to the intersection of Yaqui Pass Road is to be constructed to Collector Roadway standards prior to occupancy of any buildings in the commercial area of the proposal.

Although the proposed Rams Hill specific plan amendment is expected to generate 19,052 external daily trips by the year 2000, the improvement measures summarized above will fully mitigate the traffic impact these additional trips will have on local roads. These improvements, in conjunction with continuing improvement by abutting land developers and by the County to Borrego Springs Road between Yaqui Pass Road and Palm Canyon Road, will provide a high level of service on these facilities toward the year 2000 horizon.

J. GROUNDWATER

This section updates the detailed water analysis set out in Section O. of the January 1979 Environmental Impact Report (EIR) accompanying the Specific Plan for Phase I of the Rams Hill development project. In addition, the potential impacts of the total build-out of the Rams Hill project are assessed. Three major sources of information have been incorporated into this analysis. Two are reports published since the 1979 EIR was completed: (1) U.S. Geological Survey, Water Resources of Borrego Valley and Vicinity, California: Phase 1 — Definition of Geologic and Hydrologic Characteristics of Basin, November 1982; and (2) California Department of Water Resources, Borrego Valley Water Management Plan, June 1984. The third is actual water use data available for that portion of the Rams Hill project which has been completed as of May 1986.

1. Existing Setting

a. Hydrogeology of the Borrego Valley

A complete hydrogeologic description of the Borrego Valley was presented in Addendum A to the January 1979 Rams Hill Environmental Impact Report. That analysis was based on the series of studies on groundwater conditions in the Borrego Valley carried out over the last 35 years. In summary, the formational units which are important in the southern Borrego Valley are the crystalline basement rock, the red clay and sand of the Palm Springs Formation, and the older alluvium and younger alluvium. The older alluvium underlies most of the valley floor and consists mainly of moderately sorted gravel, sand, silt, and clay. It is permeable, extending below the water table in most areas, and it is the principal water-bearing unit in the valley area.

The U.S. Geological Survey (USGS) categorizes the alluvium-fill underlying the valley into the upper, middle, and lower aquifers. The upper aquifer ranges in thickness from 0 to 1000 feet, the middle aquifer 0 to 700 feet, and the lower aquifer 0 to 1800 feet. Specific capacities estimates for each aquifer at its maximum thickness range from 100 gallons per minute for a foot of drawdown in the upper aquifer to 10 gallons per minute in the lower aquifer. The USGS estimates that 5.5

million acre-feet of water were contained in the Borrego Valley groundwater basin in 1945. Approximately 330,000 acre-feet of water were withdrawn from the basin in excess of recharge between 1945 and 1980 leaving aproximately 5.2 million acres-feet currently available. (Recharge is defined as groundwater inflow to the aquifer from all sources.) The Department of Water Resources (DWR) assumes that at least two-third of this amount, or 3.4 million acre-feet, can be extracted and used.

Estimates of the annual recharge to the Borrego Valley aquifer vary significantly depending on the methodology used. Estimates calculated by the USGS and the DWR for their studies range from 2,200 to 13,000 acre-feet per year. However, the USGS took an average of these estimates and indicated a figure of 8,300 acre-feet per year as representative of the long term annual recharge to the Borrego Valley. This number was also used as a basis for analysis by the DWR.

b. Water Consumption

Table 16 shows the Department of Water Resources data on applied water use in the Borrego Valley in 1980. Based on these data, estimates are also given for 1985 water use. In order to update the valley-wide estimates to 1985, 1980 information was amended by first, adding in actual water use data for Rams Hills in 1985. This is an aggregate number reflecting all categories of users including the golf course, landscape irrigation, domestic and commercial uses. Second, the municipal water use for the Borrego Valley was modified to reflect a 3 percent per year increase in population over the five years from 1980 to 1985. The DWR report assumed a municipal water applied use rate of 270 gallons per capita per day. A population of 1,405 was calcualted for the Borrego Valley by the DWR by modifying the U.S. Census tract data for the Anza-Borrego area to correspond to the study area. (Personal communication with Harry Iwanaga, California Department of Water Resources, May 19, 1986.) According to information provided by the San Diego Association of Governments (1986) the population for this census tract increased from 2,191 in 1980 to 2,562 in 1985. Since this

reflects approximately a 3 percent per year increase, that growth factor was used to update the Borrego Valley population figure used by the DWR for the 1980 base year to 1,629 for 1985. Total water use was then calculated as follows:

1,629 x 270 gallons/capita/day x 365 days =
160.5 million gallons/year
160.5 = 492.7 acre-feet/year (million gallons/year x 3.07)

Agricultural water consumption was not changed since the amount of acreage under cultivation has not changed significantly between 1980 and 1985.

Table 16
Applied Water Use in the Borrego Valley[1]
(Acre-feet per Year)

Use	1980 [2]	1985
Municipal	430	493
Agricultural	10,600	10,600
Golf Course	2,100	2,100
Rams Hill Project	-0-	1,362 [3]
TOTAL	13,130	14,555

Notes:

1. "Applied water" is defined as the total quantity of water delivered to users. "Consumptive use" is equal to applied water less return water, that is water which percolates back to the ground water table.
2. California Department of Water Resources.
3. Actual applied water, calendar year 1985.

are usually lighter, especially in winter. Thus, while daytime winds are generally strong enough to adequately ventilate the local area, long, clear and calm winter nights in desert environments can lead to localized pollution stagnation if there are any significant sources of emissions located in the immediate area. The Borrego Valley thus has the potential for nocturnal pollution stagnation, but there are no significant sources of emissions that currently lead to any air quality concerns.

The sometimes light nocturnal cool season winds lead to cool air pooling in lower elevations while the air aloft remains warm. These radiation inversions that form at night further inhibit microscale dispersion processes. They may contribute to early morning haze and concentrations of dust, odor and other contaiminants in developed desert areas until these inversions burn off after sunrise. Such inversions are also probably prevalent in the Borrego Valley, but the limited development creates few emissons that would create any observable air quality problems.

Regional dispersion parameters thus suggest that there may be occasional periods of limited dispersive potential, but emission levels near the project site should be so exceedingly low that air quality should be pristine except during the intrusion of pollutants from non-local sources. The impacts of such sources on project area baseline air quality are discussed in more detail in the following section.

c. Air Quality Setting

Ambient Air Quality Standards (AAQS): In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous

work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Baseline Air Quality: The Borrego Valley is located within the San Diego Air Basin such that the San Diego Air Pollution Control District (SDAPCD) is responsible for air quality monitoring, planning, rule enforcement, and other requirements. Air quality monitoring and other activities generally occur if there is a perceived air quality problem and if there is a significant population exposed to such problems. Neither condition is met at the Rams Hill project site. There are, therefore, no known on-site data by which to characterize baseline air quality.

In the absence of definitive data, existing air quality and future projections must be estimated from known distributions in similar environments. With negligible emissions sources and good dispersion meteorology, air quality should be excellent except when pollutants from other source areas are transported into the Borrego Valley. Measurements by the California Air Resources Board along the western side of the Salton Sea has shown that aged smog from the South Coast (Los Angeles) air basin may cause violations of the hourly ozone standard, though certainly not as severe as within the Los Angeles Basin. If such smog levels exist near the Salton Sea and are carried into the Borrego Valley during summer winds from the east, then nominal violations of the ozone standards could occur of concern to retirees who might move to the project site to enjoy the normally pristine air quality. The existence of such levels slightly above the standard is obviously conjectural, but observed violations throughout the Coachella Valley and at Westmoreland in Imperial County indicates that the isolated Borrego Valley may not be completely immune from the pervasive intrusion of urban source emissions.

The second potential air quality problem that may exist would be due to dust generated from Imperial Valley agricultural activities and from ORV travel in the Ocotillo Wells ORV area. With summer winds from

the east, fine dust particles that remain suspended for long periods of time may reach the Borrego Valley from these sources. While the ORV activities are closest to the project site, the heaviest concentration of such activities occurs during the cooler season when winds are often from the project site toward the ORV area instead of the other way around. Monitoring by the Imperial County APCD in the late 1970's at Burro Bend indicated that average dust levels are usually quite low (only about 30 percent of the levels typically found at El Centro or Calexico), but there is nevertheless a small chance that either the California state standard for total suspended particulates or the standard for respirable (10-micron diameter or less) particulates might be threatened from man-made activities or from occasional winter wind storms that disperse loose dust even in undisturbed desert areas.

Except for isolated cases of polluted air transport into the Borrego Valley from the Southeast Desert Air Basin (SEDAB) or the South Coast basins, air quality at Rams Hill is normally excellent. Despite the valley's inclusion in the SDAB, few of San Diego County's emissions affect the project area because they are markedly diluted in crossing the Coast Range, and then they do not easily descent into lee-side valleys because of aerodynamic constraints. Although any local emissions are included in the SDAB's inventory and are considered in the project's air quality impact analysis, such inclusion is purely to maintain administrative consistency and does not reflect the reality of air pollution dynamics in the County's desert airshed.

2. Potential Impacts

Air Quality Management Planning: The continued violations of national AAQS in the SDAB, particularly those for ozone in inland foothill areas, requires that a plan be developed outlining the stationary and mobile source pollution controls that will be undertaken to improve air quality. In San Diego County, this attainment planning process is embodied in a regional air quality management plan developed jointly by the APCD and SANDAG with input from other planning agencies. This plan, originally called RAQS (Regional Air Quality Strategies), is now called the 1982 State Implemen-

tation Plan Revisions (1982 SIP Revisions). The underlying premise of this plan is that the County can have continued economic and population growth and still achieve basinwide clean air. The plan outlines the analysis methodology and charts the necessary steps to reduce the current excess emissions burden plus offset the air pollutants associated with continued growth.

Rams Hill relates to the 1982 Revisions through the growth projections and associated transportation-related air pollution emissions generated by such growth. To the extent that the level of growth represented by the proposed Specific Plan Amendment has been anticipated within the growth projections used to generate the 1982 SIP Revisions, that growth will not generate a significant air quality impact. In that regard, however, it should be noted that most Borrego Valley transportation activity emissions will not affect areas of unhealthful County air quality because there is negligible intermingling of local and coastal area emissions. Vehicles driving to and from Rams Hill may contribute incrementally to the coastal area emissions burden, but those vehicles driving within Borrego Valley will have little or no effect on any areas of the County where concentrated coastal area emissions are causing any violations of ozone standards. Any air quality impacts of the proposed level of development may therefore be far less than what they would be if the same level of development were to occur along the coastal strip, regardless of whether such development is consistent with the 1982 SIP Revisions or not.

Air Quality Impact: Expansion of the Rams Hill project, including additional residential units, commercial space, and another 18-hole golf course, will increase vehicular traffic and its concomitant air pollution emissions. Secondary emissions sources associated with project growth include increased power demand from regional power plants, on-site combustion of natural gas for heating, hot water, and cooking, and a variety of small, miscellaneous sources such as additional landscaping equipment, gas-powered carts, cleaning and maintenance fluids and solvents, and temporary emissions during construction from fugitive dust and construction equipment. These sources are either temporary or much less significant than the mobile source contribution, and are thus acknowledged only as an indication that growth

generates small amounts of air pollution from a variety of miscellaneous sources.

It should be noted that due to golf course irrigation a small amount of moisture will be added to the atmosphere as a result of evaporation. Due to the fact that the humidity in this area is so low the small amount of moisture that will be added to the atmosphere from evaporation off of the golf course will not degrade the visibility or clarity of the air. The air shed has the capacity to accept the small amount of additional moisture; therefore there will be no observable impact. (Personal communication with Hans D. Giroux, Meterologist, August 11, 1986.)

The project-related mobile source emissions from the additional growth can be readily calculated by combining trip-making characteristics from the project traffic analysis with the emissions characteristics from identified trip types to generate a project-related emissions inventory. Project-related trips fall generally into two categories. One is for permanent residents who drive throughout the area for goods and services, and the other is for temporary visitors who arrive after a much longer than average trip across the county, but then may drive very little after arrival. For air emissions, the number of separate trips generated which begin in a very pollution inefficient "cold start" mode are as important as longer trips in the "hot-stabilized" driving mode. More than 70 percent of an average trip's emissions occurs within the first 2-3 miles of travel as a car warms up to maximum operating efficiency. Long trips to and from Rams Hill therefore do not add as much air pollution as if the same vehicle miles traveled (VMT) were accumulated in a series of short trips starting in the "cold-start" mode.

In the absence of specific data on operating characteristics of any project-related traffic, local short haul trips with both trip ends in the Borrego Valley were assumed comprised of typical California arterial roadway mixes. Long haul trips with one trip end in San Diego or other non-valley location were assumed operating in a typical California freeway mode (predominantly "hot-stabilized"). Emission factors for these two traffic mixes were then combined with the VMT predictions from the project transportation planner generate a cumulative project vehicular emissions burden. Table 8 sum-

It is difficult to translate emissions into ambient air quality without complicated computer models far beyond the scope of a single project EIR. One can, however, gain some insight into a project's potential significance through a comparison of "new" vehicular exhaust with existing levels. Table 9 presents such a comparison. Within the Borrego Valley, the addition of almost 100,000 VMT is seen to be a major emission increase. Given the low existing emission level upon which any project addition will be superimposed, the project will not create any unhealthful air quality impacts because the project emissions increase is well within the dispersive capacity of the local airshed. On a regional scale, the added 38,000 daily VMT of destination traveler traffic generates only a small, but not completely insignificant emissions increase. On a regional scale, any resulting air quality degradation is correspondingly minimal.

Table 9
Analysis of Mobile Source Emissions Significance

	Non-Project	Rams Hill[1]	Project Share
Borrego Valley			
Reactive Organics	1.76	0.114	6.5%
Carbon Monoxide	8.29	1.625	19.6%
Nitrogen Oxides	1.24	0.236	19.0%
San Diego Air Basin			
Reactive Organics	89.3	0.018	0.02%
Carbon Monoxide	766.6	0.296	0.04%
Nitrogen Oxides	117.6	0.125	0.11%

Note: 1 includes all of the 1,570 dwelling units

3. Analysis of Significance/Mitigation

As previously noted, it is not the magnitude of the ambient air quality impact of any development that determines its environmental significance, but rather whether such growth has been anticipated within the regional air quality planning framework. The 1982 SIP Revisions are based on the current general plan designation and any specific plans in effect for the project site. The proposed development plan of 1,570 dwelling units on 3,140 acres retains the 0.5 d.u./acre general plan density, and the proposed project is therefore consistent with the SIP Revisions. The finding of consistency with the SIP indicates that the regional air quality impact of the proposed Specific Plan is negligible. The minimal project impact is further mitigated by several additional considerations. The highest project-related emission levels will occur during the cooler weather period when county smog levels are lower. Maximum traffic will also occur on weekends when normal commuting emissions are lower. Another consideration is that if Rams Hill is not developed as proposed, there are or will be other destination resorts that will attract the same traffic. Development in Borrego Valley will not really accelerate development in coastal areas of San Diego County where emission increases are a much greater concern than increased traffic in the valley itself. The Rams Hill development as proposed will therefore not create significant traffic-related air quality impacts that would not occur without project development.

Impact Mitigation: While the proposed development does not create any unacceptable air quality impacts requiring special impact mitigation, any possibilities for reducing project-related air emissions should nevertheless be aggressively pursued. Measures that might nominally reduce both transportation as well as point source emissions include:

1. Planning major grading in concert with prevailing wind patterns as so minimize construction dust exposure for existing residents.
2. Encouraging the development of local commercial facilities at Rams Hill that can be accessed by walking, bicycles, or electric golf carts rather than driving elsewhere for goods and services.

3. Promoting aircraft or multiple-occupant vehicle access to Rams Hill from coastal urban areas through tours and other promotional visitor programs.

4. Utilizing solar-assisted residential utility systems to reduce electrical and gas consumption and to off-set high utility rates in Borrego Valley.

5. Developing a natural gas powered jitney system between the golf clubhouse, commercial facilities and residences, or between Rams Hill and Borrego Springs to eliminate the need for short, but highly polluting automobile trips.

Development may currently be insufficiently intensive to support some of these concepts, but as growth continues and more people (especially retirees) make Rams Hill their permanent homes, the above measures may become viable and should be given full consideration.

G. NOISE

1. Existing Setting

A noise analysis was completed for the proposed amendment to SP-A83-05 by San Diego Acoustics, Incorporated. The full report is included in the appendix and is summarized below.

Existing noise levels over the site are quite low. The primary noise sources in the vicinity of the project site include aircraft operating in and out of the Borrego Valley Airport, off-road vehicles, and automative traffic on Yaqui Pass Road and Borrego Springs Road.

Rams Hill is not in the direct flight path of the Borrego County Airport. Aircraft flyovers are an intermittent source of noise at the project site and thus, are not addressed in the noise analysis. Off-road vehicles, operating mainly on the weekends, create noise impacts throughout the Borrego Valley. Motorcycle trails are evident in the open space areas on site; however, information on the number and time of use of ORV's operating in the vicinity of the site is unavailable. Due to the random nature of the off-road vehicle use, this noise source is not addressed in the noise analysis.

2. Potential Impacts

The proposed project, like the existing development at Rams Hill, is designed to preserve a serene desert atmosphere for the residents and visitors at the development. Large areas of open space, extensive landscaping, setbacks of buildings pads from internal roads and complete separation of residences from major roads are all design features which serve to preserve a quiet, ambient noise level.

The existing and future major on-site noise source is automotive traffic on the two major roads influencing the project site: Yaqui Pass Road and Borrego Springs Road. This analysis of on-site noise was based on a traffic mixture consisting of 2 percent medium trucks and one percent heavy trucks. Current and future noise levels associated with the traffic on these two roads were calculated based on the 1986 and year 2000 traffic volumes. The noise levels resulting from this traffic are shown in Table 10.

Table 10

Expected Noise Levels Adjacent to Yaqui Pass and Borrego Springs Roads - CNEL

Road	Noise Contour	Distance from Centerline of Road 1986	2000 W/O Project	2000 W Project
Yaqui Pass Road				
N. of Rams Hill Rd.	55	74	86	352
	60	34	40	163
S. of Rams Hill Rd.	55	74	86	219
	60	34	40	102
Borrego Springs Rd.				
N. of Kuhrts Rd.	55	87	103	550
	60	40	48	255
S. of Kuhrts Rd.	55	87	103	209
	60	40	48	97

These traffic-related noise levels do not exceed the County standards as defined in the General Plan Noise Element.

3. Analysis of Significance/Mitigation

No significant noise impacts will result with implementation of the Rams Hill project. The County requires that all residential and outdoor recreational areas receiving noise levels in excess of 60 CNEL, must be mitigated. As indicated in Table 10, the 60 CNEL noise contours will occur at distances varying from 97 to 255 feet from the centerline of Borrego Springs Road and 102 to 163 feet from the centerline of Yaqui Pass Road. It is not anticipated that residential development or recreational areas will be located this close to either of the roads. While Ed Kamps of San Diego Acoustics concluded that no mitigation of noise impacts would be required, the County of San Diego has determined that the following noise mitigation measures should be provided:

1) Provide a noise protection easement 160 feet wide (from the centerline of Yaqui Pass Road) north of Rams Hill Road and 100 feet wide south of Rams Hill Road.
2) Provide a noise protection easement 250 feet wide (from the centerline of Borrego Springs Road) north of Kuhrts Road and 100 feet wide south of Kuhrts Road.

These mitigation measures apply to all property remaining under DiGiorgio ownership. The proposed noise protection easement will not affect the Scripps Clinic or the future Fire Station site which are no longer owned by DiGiorgio Corporation. The noise protection easement will serve to mitigate any potential noise impacts above 60 CNEL noise level (See map pocket at end of report). Any future development within these areas will be subject to site plan review.

Noise from off-road vehicles could increase due to recreational use of ORV's by Rams Hill residents and visitors. Although no Rams Hill residents have ORV's, this could be mitigated if necessary by prohibiting ORV use on the project's open spaces, including the 1,600 acres in the eastern half of the project. Although there are no formal agency-imposed restrictions on ORV use within this area, the developer has agreed to maintain the natural, pristine condition of the open space. The developer's security service prohibits ORV use within the Rams Hill property. ORV activity is regulated within the Anza Borrego Desert State Park which surrounds the Rams Hill property.

Development of the Rams Hill project has proceeded at a slower rate than was originally projected in the 1979 EIR. As of May 1986, about 150 homes have been built. In addition, the golf course with some adjacent commercial development (maintenance center, restaurant and pro shop) and the medical clinic have been completed. The wastewater treatment plant has also been built but is not yet fully operational. Table 17 presents a detailed breakdown of Rams Hill water use comparing the 1979 EIR projections for 1985 and actual 1985 use data.

Table 17
Rams Hill Project Consumptive Water Use
(Acre-Feet)

User	1979 EIR Projected use for 1985	1985 Actual Use
Domestic	509	42.8
Landscape Irrigation	480	127.9[1]
Golf Course	720	795.1[1]
Hotel	35	-0-
Clinic	5	0.2
Less reclaimed water	165	-0-
TOTAL	1,584	966.0

Note: 1. Assumes consumptive use is 70 percent of applied use. This factor is taken from the Department of Water Resources Borrego Valley Water Management Plan.

The 1979 EIR projections for domestic and landscaping use reflect the assumption that Phase I development would be completed in 1985. The actual golf course water use is higher than was projected primarily because of the intensive watering required during course development. During 1985 the golf course grasses were just being established and so required more water than will ultimately be needed to maintain the

course. Table 18 gives a breakdown by month of actual applied water use at Rams Hill from July 1984 through April 1986. These data show that during the first four months of 1986 golf course water use decreased 36 percent compared to use during the same period in 1985. This is partially attributable to the fact that the grasses were better established in the second year, and is also the result of concerted water conservation efforts on the part of golf course management staff.

c. Water Reclamation

As stated above, construction of the wastewater treatment plant has been completed. Reclaimed water cannot be recycled, however, until effluent flows reach at least 25,000 gallons per day. A plan has been approved by the Borrego Water District to send sewage flow from Town Center Sewer to the Rams Hill treatment plant for recycling. Construction of this trunk sewer line is nearly complete. The Casa del Zorro resort is already connected to the line. Table 19 presents data on the estimated quantities of reclaimed water that will be available by the year 2000. The projected number of dwelling units are based on the assumption that residential development will expand to meet existing maximum density levels and that most of the existing development on septic tanks will hook up to the sewer. Based on this level of development and full build-out at Rams Hill, it is estimated that 1,080 acre-feet of reclaimed water will be available annually. The annual estimate was calculated based on 70 percent of the estimated peak wastewater flow since flow rates will be below peak levels during the summer months when occupancy is low at resort areas.

RAMSHILL

TOTAL MONTHLY/ANNUAL WATER USE

(Acre-feet)

USER	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
YEAR 1984													
GOLF COURSE	---	---	---	---	---	---	58.19	119.57	69.25	137.06	68.45	31.80	484.32
IRRIGATION	---	---	---	---	---	---	9.72	15.40	18.10	16.70	11.24	2.50	73.66
DOMESTIC	---	---	---	---	---	---	1.73	3.85	2.67	3.35	2.28	1.03	14.91
Subtotal	---	---	---	---	---	---	69.64	138.82	90.02	157.11	81.97	35.33	572.89
YEAR 1985													
GOLF COURSE	36.06	60.46	81.75	132.59	122.64	151.65	111.90	115.72	96.48	108.34	83.95	34.30	1135.84
IRRIGATION	3.89	7.77	5.26	17.11	20.93	22.91	26.75	25.42	23.28	10.56	11.71	7.11	182.70
DOMESTIC	1.76	1.99	1.99	3.73	3.64	4.35	4.49	5.58	7.11	3.30	3.33	1.70	42.97
Subtotal	41.71	70.22	89.00	153.43	147.21	178.91	143.14	146.72	126.87	122.20	98.99	43.11	1361.51
YEAR 1986													
GOLF COURSE	42.34	37.30	41.53	77.37	---	---	---	---	---	---	---	---	198.54
IRRIGATION	14.84	12.55	11.92	21.43	---	---	---	---	---	---	---	---	60.74
DOMESTIC	4.43	5.81	4.49	6.97	---	---	---	---	---	---	---	---	21.70
Subtotal	61.61	55.66	57.94	105.77	---	---	---	---	---	---	---	---	280.98

Table 19

Projected Quantity of Water to be Reclaimed from Town Center and Rams Hill Development in the Year 2000

Participant	Estimated Dwelling Units by 2000
DiGiorgio Development Corporation	350
Roadrunner Club	132
Clar Alf Trust	100
Palm Canyon Estates	100
Copley Newspapers	100
Borrego Development	75
Other Original Participants in Town Center Sewer	135
Other, within Borrego Water District (Improvement District #2) based on existing density of undeveloped area and conversions from septic tanks to sewer	3,000
Rams Hill Service Area	1,500
TOTAL	5,505

	Estimated Reclaimed Water by 2000
Gallons/day reclaimed water[1]	1,376,250
Acre-feet/day reclaimed water[2]	4.23
Acre-feet/year reclaimed water[3] based on 70% estimated peak flow	1,080

Source: Linden R. Burzell, District Engineer, Borrego Water District.

Notes:

1. 5,505 estimated dwelling units x 250
2. Millions of gallons/day x 3.07
3. Acre-feet/day x 365 x .7

2. Potential Impacts

The Borrego Valley is not connected to the regional pipelines for imported water, therefore development in the valley relies exclusively on groundwater resources. An analysis of the potential impacts of the completion of the Rams Hill project must take into account the volume of water which will be used in the valley, assuming a certain level of growth, as well as the volume of water which will be consumed by Rams Hill uses. This total volume can then be compared to the annual recharge to the basin to estimate any overdraft and project the life of the aquifer.

Table 20 summarizes the water use projected for Rams Hill by the year 2000 showing "Worst Case" and "Probable Case" scenarios. Both cases assume total build-out of the project by 2000 including 1,570 dwelling units, approximately 240 acres of irrigated landscaping, two 18-hole golf courses totaling 346 acres, a 350 suite hotel, and adjacent commercial facilities. The difference between the two scenarios is reflected in the golf course and reclaimed water use. The Probable Case assumes a more aggressive water management program to include golf course design and management techniques aimed at water conservation. These techniques are being implemented at Rams Hill and are discussed more fully in Section 3 where mitigation measures are addressed. The Worst Case assumes smaller quantities of reclaimed water will be available for golf course irrigation. The reduced number was calculated by assuming that only 50 percent of the units shown in Table 19 as projected development for Town Center would actually be built by 2000.

Table 20

Rams Hill Project: Full Build-Out

Estimated Consumptive Water Use for Year 2000

(Acre-Feet)

	Worst Case	Probable Case
Residential[1]	785	785
Commercial[2]	60	60
General Landscaping[3]	960	960
Golf Course[4]	1,604	1,455
Hotel[5]	35	35
Clinic[6]	5	5
Subtotal	3,449	3,300
Less Reclaimed Water	687	1,080
TOTAL	2,762	2,220

Notes:

1. 1570 (dwelling units) x .5 (acre-feet/unit/year) = 785
   Factor of .5 acre-feet/unit/year was derived by dividing actual annual residential use by current number occupied houses.
2. 30 (acre-feet/year actual commercial use May 85 - April 86) x 2 = 60
   This is a rough estimate since the 30 acres of new commercial facilities planned will include some different types of users than that reflected in the existing commercial development.
3. 120 acres (planned Phase I general landscape area) x 2 (full development calls for twice the number of residences planned in Phase I) = 240 acres x 4 (acre-feet/acre/year) = 960
4. 1146 (acre-feet/year actual use 18-hole course) x 2 = 2292 (acre-feet/year applied use 36-hole courses) x .7 = 1604 acre-feet/year consumptive use.

   2078 (acre-feet/year applied use for 346 acres 36-hole course with reduced water consumption through increased desert landscaping) x .7 = 1455 acre-feet/year consumptive use.
5. 350 rooms x .1 acre-feet/room/year = 35
6. Projected inside water use by clinic in 1979 EIR.

Table 21 combines the forecasts of water use for Rams Hill with projections for water use in the Borrego Valley. Two sets of Rams Hill water use numbers are listed. The first two columns give estimated Rams Hill water use assuming full build-out of the project. For comparison, two additional columns are included showing estimated Rams Hill water use without development of the remaining 616 acres. These estimates are based on the assumption that all the approved Phase I development will be completed by the year 2000. Projections of future water use in the valley are based on data presented in DWR's Water Management Plan. As in the Rams Hill projections, Worst Case and Probable Case scenarios are presented. The two scenarios reflect different assumptions about future population and agricultural growth rates in the Borrego Valley. Because of the difficulty in projecting future growth trends, the DWR report contained six different scenarios based on population growth rates of 4, 8, and 12 percent and for each rate, two agricultural trends: steady growth and declining growth. The moderately high and high growth scenarios have been chosen for this analysis to illustrate the Probable and Worst case scenarios, respectively since these represent the most conservative estimates.

The difference between municipal water use in the two cases reflects an assumption of 12 percent per year population growth in the Worst Case and 8 percent growth in the Probable Case. Agricultural development is assumed to remain steady from 1980 through 2000 in the Worst Case and to decline by 50 percent in the Probable Case. Most analyses assume that agricultural development will decrease in the Borrego Valley over the next 15 years because of the increasing cost of pumping ground water as electrical rates rise and ground water levels decline. DWR's scenario of declining agriculture showed agricultural water use decreasing to zero by the year 2000. Since this was considered an extreme case and unlikely to actually happen, this analysis has shown a decline of 50 percent as more representative of what is likely to take place. In both cases golf course water use assumes the development of the proposed Borrego Country Club. A specific plan for this development has been approved by the County; currently, no development has actually occurred, however. The DWR report assumed that the Borrego Country Club would include three golf courses with 175 acres of lawn area.

Table 21

Forecast of Consumptive Water Use in the
Borrego Valley including Rams Hill in 2000
(Acre-Feet)

	With Proposed 616 Acres "Future Planning Area"		Without Proposed 616 Acres "Future Planning Area"	
	2000 Worst Case	2000 Probable Case	2000 Worst Case	2000 Probable Case
Municipal	2,420	1,160	2,420	1,160
Agricultural	7,480	3,740	7,480	3,740
Golf Course	2,443	2,443	2,443	2,443
Riparian Water Use	1,220	1,220	1,220	1,220
Rams Hill Development	2,762	2,220	1,205	637
TOTAL	16,325	10,783	14,768	9,200

As stated in Section 1, the USGS assumed an annual recharge to the Borrego Valley water basin of 8,300 acre-feet per year. Based on this assumption Table 22 shows the estimated annual overdraft and approximate aquifer life for the Worst and Probable Case scenarios with and without the proposed new development at Rams Hill.

Table 22

Estimated Annual Overdraft and Aquifer Life
In the Borrego Valley Basin by the Year 2000

	With Proposed 616 Acres "Future Planning Area"		Without Proposed 616 Acres "Future Planning Area"	
	2000 Worst Case	2000 Probable Case	2000 Worst Case	2000 Probable Case
Overdraft (ac.ft./yr.)	8,025	2,483	6,468	900
Aquifer Life (yrs.)	425	1,370	525	3,780

Since agriculture is the greatest consumer of water, trends in agricultural growth have the most impact upon future water availability in the Borrego Valley. However, even under the worst case assumptions with full Rams Hill development the usable amount of groundwater in storage is large enough to sustain the projected demand for over 400 years. Both the Worst and Probable Case scenarios for Borrego Valley development are conservative in that agricultural use is assumed to fall no more than 50 percent, and full development of Borrego Country Club is assumed. In addition, the residential growth rates used (8 and 12 percent) are in excess of the observed growth rate of 3 percent between 1980 and 1985.

3. Analysis of Significance/Mitigation

Although the Borrego Valley is not likely to have any critical water problems for some time, water is still a finite resource and any new development must address water management considerations. The Rams Hill developer has included certain water conservation measures as part of the planning for the project which are described below.

a. On-Site Measures

Four measures are being implemented or proposed to conserve water at Rams Hill: (1) treatment of wastewater for reuse; (2) increased use of drought resistant plants for landscaping; (3) design of the proposed golf course and redesign of existing course to improve water conservation; and (4) changes in golf course maintenance techniques aimed at water conservation.

As outlined in Section 1.c., steps have been taken to increase the amount of reclaimed water available by the diversion of Town Center sewer to the Rams Hill wastewater treatment plant. If development continues as projected in Table 19, the estimated 1,080 acre-feet of reclaimed water produced would provide sufficient flow in the winter months, during peak occupation rates at Rams Hill, to meet nearly 100% of water demand from two 18-hole golf courses. Or stated differently, the combined sewage flows reaching the Rams Hill treat ment plant from the project and the Town Center in the winter months

will fully irrigate at least two golf courses or other methods of disposal must be identified. In the summer, when irrigation demand is higher and reclaimed water availability is down due to lower occupancy rates, it is estimated that about 30 percent of golf course water demand could be met with reclaimed water.

As discussed in the EIR for Phase I of the Rams Hill development, to conserve water further, drought resistant plants will be used to the maximum extent feasible for landscaping in common areas. Under this amendment to the Specific Plan, the 1,600 acres of the site which are designated as permanent open space will be retained. An additional 233 acres will be added to the open space area.

In addition, plans have been developed for the redesign of the existing course which would substantially decrease the amount of acreage in turf. This would be accomplished by narrowing the fairways and decreasing the size of tee and green areas and increasing the area of the course using desert landscaping. The proposed golf course will be planned based on the same design concept of reduced turf area and increased desert landscape.

A proposal has also been made that would reduce the rate of water application for drought tolerant areas from the current level of about 2.54 acre-feet per acre per year to 1.47 acre-feet per acre per year. This decrease in usage would be achieved largely through the reduction of the rate of application on desert-scape transition areas around the golf course. It is considered a realistic reduction level since it also allows for slightly heavier application at entrances and other "show" areas considered essential to maintain the scenic appeal of the development. (See Appendix B for additional information.)

To further reduce water use, state of the art irrigation technology would be used for the new golf course. Sprinkler heads will be controlled individually, allowing course operators to deliver water where it is needed and avoid overwatering areas which do not dry out as rapidly. In addition, systems are available whereby such meteorological

parameters as temperature, wind and evapotranspiration rate can be keyed into the computer system to deliver water quantities which do not exceed the amount the plants can use.

In addition, some additional recharge may occur since the new golf course design includes settling ponds to desilt runoff. This measure implements in part a recommendation in the DWR water management report for construction of small recharge ponds.

b. Borrego Water District

In 1961, property owners in the Borrego Valley formed the Borrego Water District covering an area of roughly 43 square miles. The District has its own Board of Directors, consisting of Borrego Valley elected officials. One of the mitigation measures proposed in the 1979 EIR was the annexation of Rams Hill to this water district. Since then the Rams Hill site has become part of the Borrego Water District. This will serve to facilitate valley-wide water management. As pointed out in the 1979 EIR, any potential problems with differential lowering of the water table can be prevented through a basin-wide supply agency. Regulation of water usage and equalization of rights to water can be ensured.

In conclusion this amendment to the Specific Plan phase of the Rams Hill project and future high growth in the Borrego Valley would not imperil the water supply in the Borrego groundwater basin. Conservative assumptions concerning future residential and agricultural growth in the valley result in an estimated consumptive water use of between 10,700 and 16,300 acre-feet annually by the year 2000, assuming a growth rate of 8% and 12%, respectively, and that agricultural use declines to 50% of 1980 levels. This is in comparison to DWR's scenarios for 2000 which range from 12,470 to 14,420 acre-feet per year, for the same growth rates (assuming that agricultural use remains at 1980 levels). That report concludes that "the Borrego Valley does not have imminent and critical water problems" and sufficient water is in storage to allow the valley to implement water management plans as growth takes place. The DWR report recommendations for

water management include the establishment of the Borrego Water District as a valley-wide water management agency; capture and recharge of natural runoff into the groundwater basin through construction of numerous small and inexpensive recharge ponds; and maximum water conservation and reclamation. Several of these points are addressed by current or proposed actions at Rams Hill including its incorporation into the Borrego Valley Water District, golf course design aimed at water conservation, and the use of reclaimed water for irrigation.

The Borrego Water District initiated action in the state legislature to establish a valley-wide water management agency in February 1986. At the present time studies are underway to work out the best form for the powers and area to be covered.

K. PUBLIC SERVICES

The provision of public services to the Rams Hill project is one of the major issues associated with the proposed development of the total project build-out. Appropriate service agencies were contacted to update the information that was gathered for the 1979 EIR and to confirm in writing their ability to provide service to the development proposed at Rams Hill. This correspondence is included in Appendix E.

1. Liquid Waste Disposal

a. Existing Setting

The liquid wastes generated by most of the development at Rams Hill are discharged via a sewer system. The estate lots are an exception to this as they handle sewage treatment by individual septic tanks and leaching facilities on each lot. Much of the development throughout the Borrego Valley is likewise on privately-owned septic systems. The Borrego Water District provides sewer service at Rams Hill. The existing on-site wastewater treatment facility has been annexed to the Borrego Water District. That agency is responsible for the operation and maintenance of the facility. For a detailed description of the wastewater treatment facility refer to the liquid waste section of the 1979 Rams Hill EIR and the technical appendix (I) on wastewater reclamation at Rams Hill by Lowry and Associates.

A trunk sewer line, "Town Center Sewer", is currently under construction from the community of Borrego Springs to the wastewater reclamation facility at Rams Hill. The facility currently provides sewage treatment, the treated sewage is percolated or evaporated on-site until flows reach 25,000 gallons per day (g.p.d.). The addition of sewage from Borrego Springs will increase the amount of reclaimed water that can be recycled to a level where it can be used to irrigate the Rams Hill golf course. The present volume of effluent generated at Rams Hill is not sufficient for irrigation purposes. The average effluent flow is less than 4,000 gallons per day (Personal communication with Linden Burzell, June 13, 1986). Refer to the groundwater section of this report for additional information on water reclamation.

b. Potential Impacts

The ultimate build-out of the Rams Hill project will significantly increase the volume of sewage produced on the site. The wastewater treatment and reclamation facility was designed to process an average daily flow of 250,000 gallons per day and could handle up to 750,000 or 1 million gallons per day, with expansion. Since the actual sewage flow is presently so far below that level, the existing plant is underutilized. Increased volumes of sewage as a result of the additional dwelling units proposed will occur at a gradual rate over the next several years. The rate of population growth at Rams Hill is expected to continue on a gradual basis. Therefore, there will be no immediate impacts to the wastewater reclamation facility. At full build-out, however, the volume of liquid waste generated from the project, coupled with flows from the Town Center Sewer, could exceed the current design capacity of the reclamation facility. The facility will soon be processing much of the liquid wastes generated by the community of Borrego Springs. It is projected that the peak season sewage production from this will be 250 g.p.d. per single family dwelling unit. This is the generally accepted level for residential sewage production in San Diego County. As the population grows both in Borrego Springs and at Rams Hill it is likely that the wastewater treatment plant and percolation beds will have to be expanded. The existing facility was designed and sited to permit expansion within the existing fenceline which surrounds the facility. In addition, fees are being assessed for all new construction to provide for future expansion as required by Rams Hill. When this expansion becomes necessary an additional oxidation ditch will be installed within the existing boundaries. Therefore, no impacts are anticipated when expansion occurs. Existing main trunk sewers and headworks were designed to accommodate increased flows (personal communication with Linden Burzell, June 13, 1986).

The sewage disposal/wastewater reclamation facility complies with State Health Department Title 22 and the Regional Water Quality Control Board standards and regulations. Groundwater quality is protected from pollution and other adverse impacts. Irrigation of the golf course using reclaimed effluent would not impact groundwater quality or potable water supply (Threet, 1972). Over two-thirds of the effluent sprayed onto the golf course

is lost through evapo-transpiration and the remaining one-third is not expected to adversely affect either soils or groundwater (Threet, 1972). Seasonal storage ponds insure safe disposal of effluent in the event of either low flows of effluent or problem periods at the reclamation plant. The wet sludge generated by the facility will be dried to a maximum water content of 25 percent in solar drying beds. The dry sludge will be disposed of at either Borrego landfill site or it could be used for agricultural enterprises in the valley. To date, the disposal of dry sludge has not been necessary. Refer to the section on solid wastes for a discussion of potential project impacts to the Borrego landfill site. Dry sludge disposal is supervised by the Regional Water Quality Control Board.

When expansion of the wastewater facility is necessary there would potentially be a slight increase in ambient noise level in the immediate vicinity of the plant. It is unlikely, however, that any of the Rams Hill residents or residents of surrounding properties would be able to perceive any increase in noise levels as a result of expansion. The facility is located approximately 300 feet north of Borrego Springs Road in the panhandle area of the property. This area is designated as a "future planning area".

c. Analysis of Significance/Mitigation

The developer and the users within the Town Center Sewer service area will be responsible for paying for all necessary improvements to the existing wastewater reclamation facility. The Rams Hill project currently has the right to use the plant up to 250,000 gallons per day. If increased flows exceed this volume such improvements and/or expansion could be required. At the present time, however, no significant adverse impacts are anticipated and therefore no mitigation measures are presented. The plant has been designed so that virtually all the wastewater can be recycled for irrigation of the golf courses.

2. Sheriff's Protection

a. Existing Setting

The Rams Hill property falls within the Sheriff's Master Beat 71, which is covered out of the Sheriff's Borrego Springs substation located at 610 Palm Canyon Drive. Response time to the property is approximately twenty-four (24) minutes for priority calls and thirty-three (33) minutes for non-priority calls.

Normal patrol coverage in Master Beat 71 consists of one patrol unit on duty from 7:30 a.m. to 5:00 p.m. The resident deputy remains on call after 5 p.m.

There are currently no projected or budgeted increases in the staff or equipment for the Sheriff's Borrego Office.

b. Potential Impacts

By itself, the proposed project would incrementally impact the Sheriff's level of service in the area as the development is implemented. Currently there is one patrol deputy per 12,000-13,000 residents within the Sheriff's jurisdiction in this area. With construction of the additional 790 dwelling units within the Rams Hill Country Club, the population increase will ultimately affect the Sheriff's level of service in the area.

c. Analysis of Significance/Mitigation

The planned expansion of the Rams Hill Country Club is identified in the General Plan and original specific plan. Project implementation will be completed over the next several years and the population increase is expected to be gradual. An additional deputy may be necessary in the future in order to maintain an acceptable level of service. DiGiorgio Development Corporation will cooperate fully with the Sheriff's Department to provide an increased level of service when the number of residents at the Rams Hill Country Club necessitate additional staff and/or facilities.

The Rams Hill development is designed to incorporate a high level of internal security which would minimize the impact on Sheriff services. Entry into and egress from the property is regulated. Use of the second homes would be seasonal in nature and the need for Sheriff services would probably be substantially reduced during the summer. The proposed project would result in a gradual population increase, thus staggering the impacts upon existing levels of Sheriff's protection.

3. Schools

This discussion is based upon information elicited in a telephone conversation with David West, Superintendent of the Borrego Springs Unified School District and it will be confirmed in writing.

a. Existing Setting

The Rams Hill property lies within the Borrego Springs Unified School District. The District operates one elementary school serving grades K-6 and one high school serving grades 7-12. Vocational education is provided through the County Department of Education Regional Occupational Lab (ROL) program. One lab is offered each semester.

Table 23 provides current enrollment figures for the schools in the Borrego Springs Unified School District.

Table 23

Existing Trends: School Enrollment

School	Grades Served	1986 Enrollment
Borrego Springs Elementary 1315 Palm Canyon Drive	Preschool/K-6	195
Borrego Springs High School 2281 Digueno Road	7-12	150

b. Potential Impacts

It is recognized that second homes generate considerably fewer students than primary residences. For example, there are currently no students attending schools in the Borrego School District from the existing development at Rams Hill or the previous DiGiorgio Development, the De Anza Desert Country Club. Therefore, in consultation with the school district, it was agreed that projected generation factors do not appear to be useful for planning purposes. Due to the fact that the Rams Hill project is a second-home retirement resort it is not likely that the additional 790 dwelling units will directly affect the Borrego School District. A small number of students could be expected however, as a result of induced growth in the Borrego Springs Community promoted by Rams Hill (i.e. service people working at Rams Hill). This increase in enrollment is considered a residual effect of the project on the school system. Again, generation factors for these potential permanent households, resulting from induced growth, are considered by the school district to be inaccurate and therefore are not useful for planning purposes.

In conclusion, generation factors for the ultimate build-out at Rams Hill are not available. Potential impacts of the project itself are expected to be minimal. A slight increase in enrollment from induced growth in the valley is anticipated. The Borrego school system has not experienced an influx of students from Rams Hill or other growth in the valley. The project is located six to eight miles from the Borrego Springs elementary and high schools. Busing of students residing at Rams Hill to these schools would be necessary.

c. Analysis of Significance/Mitigation

The Rams Hill project would not immediately create any significant adverse impacts on the Borrego Springs School District. During the construction phase it is anticipated that additional students would enter the school district from construction workers' families. The school district does not currently have the capacity to handle a large influx in students but because of the large lead time involved in processing this specific plan amendment, the school district would have sufficient opportunity to assess more precisely the impacts likely to be generated by this development and to plan appropriately.

The Borrego Unified School District does not assess developer's fees for land development projects within their district. The current state-wide policy is that district funding is based entirely on the number of students attending school in their district.

4. Fire Protection

The following discussion is based upon correspondence with Batallion Chief Steve Sawyer of the Borrego Springs Fire Protection District.

a. Existing Setting

The Rams Hill property lies within the jurisdiction of the Borrego Springs Fire Protection District. The closest fire station to the site, and the station which currently serves structures in the project vicinity, is located at 2324 Stirrup Road, approximately six and one-half miles away. Response time to the site is estimated to be 10-15 minutes. Given the exposure hazard at the site these response times may not be adequate.

Eight full-time, paid firefighters and approximately six volunteer firefighters man the Stirrup Road station in shifts of five men each. All personnel are certified as Emergency Medical Technicians, with skills rates between that of advanced first aid and paramedic level one. The staff is divided into three engine companies which man two primary 1,000 gallon per minute pumpers and one reserve 1,000 gallon per minute pumper. To facilitate rescue and emergency medical relief services, the District maintains two basic life support ambulances, a four wheel drive basic life support ambulance and a rescue equipment squad truck.

b. Potential Impacts

Implementation of the proposed project would significantly increase the demand for fire protection services within the District. The proposed project may require the construction of the new fire station to be located on the northwest corner of the Rams Hill property. A class ten insurance rating would be given to all new structures on the property until a new fire station

on the development site is constructed. Implementation of a new station at Rams Hill would require additional personnel for the District's staff. Additional service vehicles for the engine companies and the rescue and ambulance teams may also be necessary. Normally, one fireman is required per 1,000 population.

c. Analysis of Significance/Mitigation

When the General Plan was amended by the adoption of a Specific Planning Area for the DiGiorgio property, a 2.5-acre parcel on the site was designated for the provision of a future fire station. The District, however, has no immediate plans or funds for the construction of a new station or other expansion.

Should the District be forced to assume the financial burden to construct the needed fire station on site this project would have a significant adverse impact on the District. The developer has dedicated the land for a fire station and paid for a fire truck. The developer has also agreed to contribute financially to the construction and maintenance of the fire station to District standards. The DiGiorgio Corporation will pay for staffing of the new station for one year. The existing Scripps Satellite Clinic at Rams Hill would significantly mitigate the impact of the project on emergency medical services. The clinic would provide primary and emergency health care for residents throughout the valley and at the Anza Borrego Desert State Park.

The Rams Hill project would significantly expand the tax base in the valley. The additional tax revenues would somewhat off-set the cost of expanded services. The provisions that have been made by the developer should serve to adequately mitigate impacts to the Fire District.

5. Solid Waste

a. Existing Setting

Solid waste in the Borrego Valley is collected through agreement with a private sector company permitted by the County. Service is provided on a contractual basis with individual owners. At the present time, collections are

made at weekly intervals. Solid waste is currently deposited at the sanitary landfill located at the eastern end of Palm Canyon Drive, approximately six miles north of the project site. The landfill has a remaining life expectancy beyond the year 2000.

b. Potential Impacts

San Diego County Department of Sanitation and Flood Control has recommended the following generation factors for planning purposes to estimate the volume of solid waste to be produced by the additional 790 d.u.'s proposed for Rams Hill.

790 d.u.'s x 2.1 persons/d.u. = 1,659 persons
Multiply 1.228 x 5 lbs/person/day = 6.1 lbs/person/day
6.1 lbs/person/day x 1,659 persons = 10,120 lbs/day

The volume of solid waste generated by the residents of the project would vary with the season of year as occupancy rates go up and down. During the peak season, when it can be assumed for planning purposes that 100 percent of the proposed 790 dwelling units would be occupied, 10,120 pounds of solid waste per day would be generated. During the off season, when occupancy is projected to fall below 35 percent, the volume of solid waste generated would fall to 3,542 pounds per day.

The County uses an annual, per capita generation factor of 1.4 tons of solid waste, per person. At ultimate build-out Rams Hill is expected to add 4,616 tons per year to the Borrego Landfill site.

c. Analysis of Significance/Mitigation

The projected life expectancy of the Borrego Landfill is beyond the year 2000 at the current projected rate of landfill development. The landfill site is now being loaded with 7,580 tons of solid waste each year.

The project's gradual increase in population would stagger the cumulative impacts over the next several years. Since solid waste disposal is provided by private carrier, the project would not adversely impact service costs for solid

waste disposal. This amended Specific Plan of the Rams Hill project would ultimately have an adverse effect upon the life expectancy of the Borrego Landfill. In addition, it would contribute incrementally to the regional need for new disposal methods and sites on a gradual basis. The expanded tax base resulting from project implementation would somewhat offset costs for the provision of new landfill facilities. The DiGiorgio Development Corporation is willing to cooperate with the County in order to comply with the County's policies on solid waste disposal.

6. Power

a. Existing Setting

The primary source of energy for domestic and commercial use in Borrego Valley is electricity. San Diego Gas and Electric (SDG&E) would provide electricity to the Rams Hill project. Natural gas service is not available in the Borrego Valley area. The following information was provided in a written correspondence by Don Rose, senior land planner of SDG&E.

Electrical service is available from the transmission line corridor which runs adjacent to Borrego Springs Road from Borrego Substation. The Borrego Substation is currently operating at capacity. SDG&E utilizes an intertied transmission system whereby electricity to Borrego Springs can come from numerous generating stations located in the coastal areas utilizng a multitude of fuels. SDG&E was unable to ascertain the number of kilowatt hours used each month in Borrego Springs.

The peak electrical demand at Rams Hill is in the summer season. This can probably be attributed to the use of electricity for air conditioning and for pumping water. The winter peak demand is 75 percent of summer peak and the spring and fall peak demands are approximately 65 percent of the summer peak. Solar energy is used for pools, water and space heating. For additional information regarding energy consumption refer to the 1979 Rams Hill EIR and the technical appendix F prepared by Dr. Dennis Kasper.

b. Potential Impacts

The proposed amendment to SP-A83-05 would potentially increase the level of energy consumption in the Borrego Valley. This projected increase is difficult to quantify because the rate at which the project will grow to the total build-out is expected to be gradual. SDG&E noted that the proposed development will require either rebuilding the existing substation or installing a new substation. The cumulative effect of ongoing development in the Borrego vicinity will warrant future transmission development for capacity and reliability purposes. SDG&E foresees a new transmission line coming into the planning horizon (i.e. within the next ten years).

Electricity would be used for domestic purposes such as to supply water for the sewage system and for water supply. Because the occupancy rate at Rams Hill fluctuates seasonally, the impacts of the additional 790 d.u.'s, the second 18-hole golf course and the 30-acre commercial area on the existing electrical transmission line system will vary. The summer peak demand season runs from the end of May to the end of September due to the electrical requirements of air conditioning used for space cooling. Additional energy will be required to operate the wastewater treatment plant. Electrical demand would be proportional to the volume of sewage processed by the plant. The recyling of reclaimed water that is proposed for irrigation of the golf course will also consume electricity for the operation of the water pumps. Additionally, the energy required to pump well water from the three wells located on the site and the one well located one mile away will increase over time.

c. Analysis of Significance/Mitigation

The total domestic energy consumption at Rams Hill would be minimized to the extent feasible by the application of solar technology and passive design techniques. Implementation of solar energy would reduce the domestic energy demands. Proper orientation and shading of buildings would facilitate in the solar heating of buildings in the winter and in reducing cooling load in the summer.

Measures designed to decrease water use at the Rams Hill golf course would also serve to significantly reduce the amount of electricity needed to pump groundwater. These measures are described in Section J.

The full build-out of Rams Hill project as proposed by this amendment to SP-A83-05 would significantly increase the amount of energy consumed in the Borrego Valley. SDG&E has stated that as the project grows in size, an increase in the capacity of the Borrego Springs substation will be necessary. Their current recommendation is to install a new substation in the vicinity of Yaqui Pass Road and Borrego Springs Road. The existing transmission line is adequate to serve the proposed development and either a rebuilt substation or the proposed new substation.

3. Analysis of Significance/Mitigation

The proposed development is designed to minimize potential visual impacts of the additional developed acreage to the extent feasible. This will be accomplished by incorporating native vegetation into the landscape design around the single family residences and two-acre estates. The large rough borders of the golf course will be left in native vegetation in order to create a "transition zone" from the desert environment to the developed resort complex. The new golf course will have narrower fairways than the first course, thus minimizing the visual impact at distant viewpoints.

L. VISUAL QUALITY

1. Existing Setting

The existing development at Rams Hill consists of planned residential units, single-family homes, estates, recreation areas, a medical clinic, an 18-hole golf course, a golf pavillion, paved streets and parking lots, drought resistant landscaping, and a waste water treatment facility. This development is visible from most vantage points in the Borrego Valley. It is particularly visible from Montezuma Valley and Yaqui Pass Roads which are the major access routes into the Valley. The eastern half of the property has not been altered in any way as it is dedicated open space. Native vegetation has been preserved along the borders of the golf course to try to maintain the natural, desert environment as much as possible. This has made close-in views compatible with the surrounding desert. Although this was one of the goals at Rams Hill it should be noted that the vista of the Borrego Valley from more distant points has been substantially altered, primarily due to the large expanse of green associated with the golf course.

2. Potential Impacts

The proposed completion of development at Rams Hill will increase the size of the developed acreage on the property but will generally confine it within the existing flood control channels and golf course area. Within this area an additional 177 acres is planned for the new golf course. This will increase the irrigated green area which is the most visible aspect of the resort complex. The additional planned residential units, single-family homes, associated recreational facilities, and commercial area will change the existing gently sloping desert terrain. The project landscaping will be designed to blend with native desert plants in the area. The new development will be fully compatible with existing Rams Hill development. Although the completion of Rams Hill will create additional visual impacts, these impacts will be reduced by project design.

3. Analysis of Significance/Mitigation

The proposed development is designed to minimize potential visual impacts of the additional developed acreage to the extent feasible. This will be accomplished by incorporating native vegetation into the landscape design around the single family residences and two-acre estates. The large rough borders of the golf course will be left in native vegetation in order to create a "transition zone" from the desert environment to the developed resort complex. The new golf course will have narrower fairways than the first course, thus minimizing the visual impact at distant viewpoints.

VI. ALTERNATIVES

This section of the report presents two conceptual alternatives to the proposed project. While there are a number of potential alternatives that can be considered the following two are provided as being the most feasible: (a) development of a residential project with a commercial area but without the proposed additional 18-hole golf course; and (b) no project.

1. Development of a Residential Project with a Commercial Area but without the Proposed Additional 18-hole Golf Course

The first potential alternative to the proposed amendment to SP-A83-05 is the development of the residential units at the same density, with the associated commercial area but without the proposed golf course. This alternative is being presented in response to a request of the County of San Diego. This alternative would include the same number of dwelling units as the proposal in the same location and the 30-acre commercial area. It would eliminate the proposed addition of a second 18-hole golf course. The Borrego Valley is primarily a second home/retirement desert resort community. Rams Hill, being consistent with other developments in Borrego Valley is also oriented toward vacation/retirement resort uses. As explained in more detail in the 1979 Rams Hill EIR section on growth inducement, a primary factor in the marketability of homes in this area is the development of resort facilities.

The environmental impacts of building just the residential units and commercial area would probably be as follows: The alternative would irreversibly commit 544 acres to residential/resort uses. This would be consistent with other speculative land development activities in Borrego Valley but it would not be consistent with the needs of the community. This alternative would increase the acreage that could be left in natural desert vegetation and thereby decrease the total acreage to be graded and subsequently irrigated. Without the second golf course area, however, it is likely that the proposed planned residential units, single family homes and estates would not attract potential buyers and a hotel at Rams Hill would not be viable. This

alternative would not substantially impact the value of the development elsewhere in the valley.

The residential alternative would lessen some of the potential environmental impacts, although not to a significant extent. The reduction of the acreage that would be irreversibly altered would lessen impacts to the biological habitat; however, impacts from increased human presence and potential ORV activity would remain the same. Potential hydrological impacts would be lessened because less acreage would be irrigated. Since recycled water would be used for irrigation, the water saved could be used for remaining landscaping. With the addition of flows from the Town Center Sewer to the Rams Hill water reclamation facility, however, reclaimed water would be far in excess of that needed to irrigate desert-oriented landscaping, even with the existing course. Therefore the second course is important to the waste treatment system in the valley, since without it some other effluent disposal alternative would be necessary. No other golf course exists within a reasonable distance which could receive the effluent. Potential erosional impacts due to extensive grading would decrease with elimination of the golf course. Such impacts have, however, been mitigated via project design and construction techniques. Impacts on public services would be approximately the same with or without the additional golf course. A large number of construction workers would still be needed to build the residential units; therefore short term impacts during the construction phase would be essentially the same even if the golf course is eliminated.

This alternative would substantially reduce the social and economic benefits of the project without significantly lessening potential environmental impacts. A second 18-hole golf course is now proposed as the first four years of operation of the Rams Hill resort have made it clear that a single 18-hole golf course cannot serve all of the proposed ultimate build-out. The additional golf course will serve not only all of the Rams Hill residents but also the adjacent Casa del Zorro resort users and the valley residents in general. The proposed residential units without the additional golf course would probably not be marketable. In addition, other effluent disposal areas would have to be found to accommodate future flows from the water reclamation facility.

2. No Project

The second alternative to the proposed amendment to SP-A83-05 is the "no project" alternative. The Borrego Valley has experienced minimal development to date. Two key issues in the "no project" alternative are: (1) the effect of increased development in the valley on the Anza Borrego Desert State Park and (2) the relative benefits of preserving the scenic valley versus the social and economic benefits of development.

The Borrego Valley is a privately-owned enclave in the 472,000 acre Anza Borrego Desert State Park. The population in the valley is so low that it does not appear to have negative impacts to the park habitat. The community of Borrego Springs provides commercial support for visitors to the park. The park headquarters and visitors center is located on Palm Canyon Drive two miles west of Christmas Circle.

Two of the operational goals of the Anza Borrego State Park are the preservation of the desert environment and the provision of diversified recreational opportunities to the public. The balance between serving the public's need for recreation and protection of the park's habitat is difficult to maintain. Increased public recreation in the park can potentially lead to destruction of the delicate desert environment. An extended environmental study was conducted to assess the environmental impacts of one million visitor days (projected for 1985) at the park's visitors center. This study concluded that significant impacts would not occur as a result of the increased visitor days. The implementation of the proposed amendment to SP-A83-05 and the incremental increase in the number of visitor days would probably not impact the quality of the park environment. The Rams Hill project would support the park's other goal of providing diversified recreational opportunities to the public.

The relative benefits of preserving the scenic desert valley versus the social and economic benefits of development is the other issue that should be addressed. The visual quality of the Rams Hill project area has already been altered by the existing development on the site. The additional development that is proposed will not substantially alter the present visual quality of the

south slope of the valley. Although the proposed golf course will add to the irrigated green area it will also provide for additional recreational opportunities in the valley. The golf course will be irrigated with recycled water from the wastewater reclamation facility and therefore will not cause significant mining of groundwater. Six of the seven identified archaeological resources on the site will be preserved in the open space area in the eastern portion of the site. The developer has agreed to preserve the area of a significant archaeological resource and a sensitive biological habitat in the southwest portion of the site, by creating 150 acres of additional open space; 72 additional acres of open space in the north panhandle were designated to preserve sensitive biological resources.

The "no project" alternative would result in the avoidance of some of the potential environmental impacts described in this report such as impacts on biological resources due to increased human presence and possible ORV activities. Impacts to public services would be avoided. Grading of the areas proposed for development would be eliminated. Potential impacts to traffic and air quality would also be lessened. The "no project" alternative however, also would result in the continuation of a marginally viable economic community in Borrego Springs and less recreational opportunities in San Diego County.

VII. ENVIRONMENTAL SUMMARIES

A. GROWTH INDUCING EFFECTS

The growth inducing effects associated with development of the Rams Hill property have been previously examined in the 1979 Rams Hill EIR for the adopted Specific Plan (SP-A83-05). The total 1,570 dwelling units allocated to the Rams Hill project were approved in concept by the original Specific Plan (SP-80-01). Since this level of development was anticipated at the time that the original study was done, no growth inducing effects beyond those previously identified would be associated with implementation of this amendment to SP-83-05.

The previous study of growth inducing effects of the Rams Hill project looked at various factors that contribute to the patterns of development in Borrego Valley. Many people go to Borrego for health reasons, for retirement or for seasonal activities. Being a desert resort area, the population swells in the winter but falls back down again in the summer. There are more people who maintain second homes in Borrego than full-time permanent residents. Zoning is another factor in the development patterns in Borrego. The County maintains control over the location of large scale project development throughout the valley by requiring special use permits and zoning changes. The valley has had a history of speculative land division and lot sales but little development. People who buy second homes or lots in areas such as Borrego Valley are inclined to want to buy at a planned community where there is access to resort facilities, a community identity and security servics. Refer to the 1979 Rams Hill EIR for a detailed analysis of potential direct impacts of Rams Hill on existing growth trends in Borrego.

In addition to the residents who would live at Rams Hill a number of new residents would be induced to move to Borrego as a result of an expanding service sector. This is considered an indirect impact of the project. The Rams Hill project would likely have a beneficial economic impact on the valley. Existing public and private services are inadequate largely due to the seasonal fluctuations in demand for services. Many services are not available at all and those that are available tend to be extremely expensive. Implementation of the Rams Hill project and increased growth should promote stabilization of the local economy. Some of the public

services would also benefit from the project. Incremental growth at Rams Hill will eventually necessitate the expansion of public services such as fire protection and sheriff's protection that will ultimately benefit the entire community.

B. CUMULATIVE ENVIRONMENTAL EFFECTS

Since the development of 1,570 dwelling units was approved in concept with the first Specific Plan (SP-80-01) and no changes in intensity are being proposed by this amendment to the adopted SP-A83-05, the proposed specific plan amendments would have cumulative effects identical to those previously identified. Refer to the 1979 Rams Hill EIR for an analysis of those cumulative effects. These include a cumulative increase in traffic in the regional traffic circulaton system, an incremental increase in air pollutants, an incremental increase in runoff into the Borrego Sink and a cumulative increase in the demand for public service.

The County of San Diego Planning Department was contacted to identify any other developments in the Borrego area that are either planned and/or filed with the County. The Roadrunner mobile home park is proposing an expansion in the number of trailer homes that it can accommodate as well as an additional 9-hole golf course. This expansion, if built, will increase the number of units in the mobile home park by approximately one-third. This should not change the analysis of cumulative environmental impacts because the original assumptions used in the analysis were very conservative and presented a "worst case" scenario. For example, completion of the Borrego Country Club was assumed yet very little development has taken place on that project. The full build-out of the Rams Hill project with 1,570 dwelling units and the Borrego Country Club with 782 units was projected for the year 1995. Based on the present growth rate, full build-out is not likely by 1995 and the addition of the trailer homes would not substantially alter the previous conclusions on cumulative impacts. Each of the impacts noted above would be mitigated to a level of insignificance in accordance with the mitigation measures outlined in each of these sections in this document. No significant cumulative effects would be associated with the proposed SP-A83-05 amendments which have not already been considered in previous environmental review.

C. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The proposed amendments to SP-A83-05 would result in significant irreversible changes identical to those associated with implementation of the current Specific Plan. The 1979 Rams Hill EIR discusses the effect of full build-out at Rams Hill. Since this proposed amendment to SP-A83-05 will not increase the area where development will occur above the acreage that was previously approved, the original analysis is still valid. The physical planning of the remaining dwelling units as well as the addition of a second golf course and a 30 acre commercial area are now being proposed. All of the proposed development will be located in the western portion of the property within the existing flood control channels. This is consistent with previous conceptual plans for placement of additional development on the property.

The project will irreversibly commit the Borrego Valley to expanded development and additional resort uses. The project would increase the population, expand business facilities, increase housing needs, energy consumption, water consumption, traffic levels and need for public services. Habitat would be destroyed in developed areas. Adjoining habitat would be altered due to increased human presence and activity. Grading impacts to desert pavement would be irreversible as would impacts to visual quality and to the santiary landfill.

D. RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHACEMENT OF LONG-TERM PRODUCTIVITY

The long-term use of the Rams Hill property for resort and residential development has already been determined to be appropriate by the original Specific Plan review and approval process. The types of land uses proposed by this amendment to SP-A83-05 are consistent with those approved for the property in the current SP-A83-05. The cumulative impacts would be to irreversibly commit the Borrego Valley to long-term resort uses. Implementation of the amended Specific Plan would have long-term cumulative effects on traffic circulaton air quality, runoff water, and urban services identical to those identified in the EIR for the original Specific Plan (SP-80-01). For a complete discussion of cumulative impacts refer to the 1979 Rams Hll EIR. This project should serve to assist in solving the social and economic problems of the Borrego Valley as well as providing additional recreational/resort facilities for the only desert resort in San Diego County.

VIII. SOURCES

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APPENDIX A

AIR QUALITY

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AIR QUALITY IMPACT ANALYSIS

RAMS HILL DEVELOPMENT

BORREGO VALLEY, CALIFORNIA

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Meteorology

General Climate:

Although there are no known on-site aerometric measurements at the Ram's Hill site, general climatic conditions of the Borrego Valley have been documented in a number of studies that well describe the arid, warm climate and its driving mechanisms. Prominent weather features include the semi-permanent high pressure center over the Pacific Ocean, the thermal low pressure trough over the Imperial Valley, and the blocking action of the coastal mountains that further exacerbate the semi-arid conditions found in Southern California coastal plains. Climatic conditions are characterized by very hot summers, mild winters, negligible rainfall, minimal cloudiness, moderate winds, and strong vertical mixing from "thermals" and wind-induced mechanical turbulence. Except at night in winter when cold air pools near the ground and winds become light, dispersion meteorology is very good. Violations of clean air standards may occur when the remnants of urban emissions from coastal regions reach the project area, and possibly from large quantities of dust generated from natural and man-made soil disturbance activities, but otherwise, air quality in the Borrego Valley is probably much, much better than most areas of Southern California.

Long-term climatic measurements at Borrego Springs (data most representative of the project site) confirm the general expectation of a very desert-dominated climatic distribution. Temperatures near the project site average 70° annually, and range from the upper 30's on cool winter mornings to around 105° on summer afternoons. Extremes of temperature may range from 20 to 120°. With very dry air and little cloudiness, sharp daily temperature oscillations may occur. Outdoor comfort may require a sweater early in the morning while bathing attire may be the order of the day by early afternoon. Freezing or slightly sub-freezing temperatures occur on about 20 days per year, while one-half of all days of the year reach or exceed 90° F.

Annual rainfall amounts are extremely low because of the rainshadow effects of the Peninsular Coastal Range further reducing the limited moisture supply from the fringes of mid-latitude storms. Rainfall in Borrego Springs averages 3.5"

annually. Small amounts of rain fall in winter as storms dissipate over the desert area, and isolated summer thunderstorms may create locally heavy rainfall and flooding. The light winter rains are widespread while the summer "gullywashers" are very localized with a random pattern of occurrence. Only 8 days per year experience light rain (0.1") while just one day per year has moderate to heavy rainfall (0.5" or more). As with other desert resort areas, Ram's Hill therefore has a predomiantly outdoor-oriented climate where extreme summer afternoon heat and occasionally cold, windy winter weather are the only two noticeable climatological constraints to outdoor comfort.

Air Pollution Meteorology

Winds, which control horizontal transport, and temperature structure, which governs the vertical depth through which pollutants can be mixed, are the most important parameters in characterizing local dispersion meteorology. In the absence of on-site measurements of these parameters, they can only be described in terms of regional patterns.

Local wind patterns are mainly controlled by meso-scale climatic features such as the Pacific High and the Sonoran Low pressure centers. These features produce winds from the west and northwest in the cooler months, especially at night, and winds from the southeast in summer, especially by day. Locally, these regional winds are steered by the east-west topography of the Borrego Valley, and thus produce a predominantly east-west airflow through the valley. Daytime winds are moderately strong and turbulent from the intense thermal heating that creates convective overturning (up- and down-drafts). Nocturnal winds are usually lighter, especially in winter. Thus, while daytime winds are generally strong enough to adequately ventilate the local area, long, clear and calm winter nights in desert environments can leads to localized pollution stagnation if there are any significant sources of emissions located in the immediate area. The Borrego Valley thus has the potential for nocturnal pollution stagnation, but there are no significant sources of emissions that currently lead to any air quality concerns.

The sometimes light nocturnal cool season winds lead to cold air pooling in

lower elevations while the air aloft remains warm. These radiation inversions that form at night further inhibit microscale dispersion processes. They may contribute to early morning haze and concentrations of dust, odor and other contaminants in developed desert areas until these inversions burn off after sunrise. Such inversions are also probably prevalent in the Borrego Valley, but the limited development creates few emissions that would create any observable air quality problems.

Regional dispersion parameters thus suggest that there may be occasional periods of limited dispersive potential, but emissions levels near the project site should be so exceedingly low that air quality should be pristine except during the intrusion of pollutants from non-local sources. The impacts of such sources on project area baseline air quality are discussed in more detail in the following section.

TABLE 1

AMBIENT AIR QUALITY STANDARDS

(CARB FACT SHEET 38, 1/84)

Pollutant	Averaging Time	California Standards		National Standards		
		Concentration	Method	Primary	Secondary	Method
Oxidant	1 hour	0.10 ppm (200 ug/m³)	Ultraviolet Photometry	—	—	—
Ozone	1 hour	—	—	0.12 ppm (235 ug/m³)	Same as Primary Standard	Ethylene Chemiluminescence
Carbon Monoxide	8 hour	9.0 ppm (10 mg/m³)	Non-Dispersive Infrared Spectroscopy (NDIR)	10 mg/m³ (9 ppm)	Same as Primary Standards	Non-Dispersive Infrared Spectroscopy (NDIR)
	1 hour	20 ppm (23 mg/m³)		40 mg/m³ (35 ppm)		
Nitrogen Dioxide	Annual Average	—	Gas Phase Chemiluminescence	100 ug/m³ (0.05 ppm)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 hour	0.25 ppm (470 ug/m³)		—		
Sulfur Dioxide	Annual Average	—	Ultraviolet Fluorescence	80 ug/m³ (0.03 ppm)	—	Pararosaniline
	24 hour	0.05 ppm (131 ug/m³)		365 ug/m³ (0.14 ppm)	—	
	3 hour	—		—	1300 ug/m³ (0.5 ppm)	
	1 hour	0.5 ppm (1310 ug/m³)		—	—	
Suspended Particulate Matter (PM_{10})	Annual Geometric Mean	30 ug/m³	PM_{10}	—	—	—
	24 hour	50 ug/m³		—	—	
Suspended Particulate Matter	Annual Geometric Mean	—	—	75 ug/m³	60 ug/m³	High Volume Sampling
	24 hour	—		260 ug/m³	150 ug/m³	
Sulfates	24 hour	25 ug/m³	Turbidimetric Barium Sulfate	—	—	—
Lead	30 day Average	1.5 ug/m³	Atomic Absorption	—	—	—
	Calendar Quarter	—	—	1.5 ug/m³	Same as Primary Standard	Atomic Absorption
Hydrogen Sulfide	1 hour	0.03 ppm (42 ug/m³)	Cadmium Hydroxide STRactan	—	—	—
Vinyl Chloride (Chloroethene)	24 hour	0.010 ppm (26 ug/m³)	Tedlar Bag Collection, Gas Chromatography	—	—	—
Visibility Reducing Particles	1 observation	In sufficient amount to reduce the prevailing visibility to less than 10 miles when the relative humidity is less than 70%		—	—	—

Air Quality Setting

Ambient Air Quality Standards (AAQS): In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 has since been extended to 1987 for national AAQS, and may require further extension in air quality problem areas like Southern California. Because California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1.

Baseline Air Quality: The Borrego Valley is located within the San Diego Air Basin such that the San Diego Air Pollution Control District (SDAPCD) is responsible for air quality monitoring, planning, rule enforcement, and other requirements. The Borrego Valley was initially included in the Southeast Desert Air Basin (SEDAB) because its climate and air quality conditions are far more akin to those from other undeveloped desert areas, but administrative problems caused all San Diego County to be incorporated into one air basin despite the obvious diversity of the county's coastal, mountain crest and desert airsheds. Air quality monitoring and other activities generally occur if there is a perceived air quality problem and if there is a significant

population exposed to such problems. Neither condition is met at the Ram's Hill project site. There are, therefore, no known on-site data by which to characterize baseline air quality.

In the absence of definitive data, existing air quality and future projections must be estimated from known distributions in similar environments. With negligible emissions sources and good dispersion meteorology, air quality should be excellent except when pollutants from other source areas are transported into the Borrego Valley. Measurements by the California Air Resources Board along the western side of the Salton Sea had shown that aged smog from the South Coast (Los Angeles) air basin may cause violations of the hourly ozone standard, though certainly not as severe as within the Los Angeles Basin. If such smog levels exist near the Salton Sea and are carried into the Borrego Valley during summer winds from the east, then nominal violations of the ozone standard could occur of concern to retirees who might move to the project site to enjoy the normally pristine air quality. The existence of such levels slightly above the standard is obviously conjectural, but observed violations throughout the Coachella Valley and at Westmorland in Imperial County indicates that the isolated Borrego Valley may not be completely immune from the pervasive intrusion of urban source emissions.

The second potential air quality problem that may exist would be due to dust generated from Imperial Valley agricultural activities and from ORV travel in the Ocotillo Wells ORV area. With summer winds from the east, fine dust particles that remain suspended for long periods of time may reach the Borrego Valley from these sources. While the ORV activities are closest to the project site, the heaviest concentration of such activities occurs during the cooler season when winds are often from the project site toward the ORV area instead of the other way around. Monitoring by the Imperial County APCD in the late 1970's at Burro Bend indicated that average dust levels are usually quite low (only about 30 percent of the levels typically found at El Centro or Calexico), but there is nevertheless a small chance that either the California state standard for total suspended particulates or the standard for respirable (10-micron diameter or less) particulates might be threatened from man-made activities or from occasional winter wind storms that kick up loose dust even in undisturbed desert areas.

Except for isolated cases of polluted air transport into the Borrego Valley from the SEDAB or the South Coast basins, air quality at Ram's Hill is normally excellent. Despite the valley's inclusion in the SDAB, few of San Diego County's emissions affect the project area because they are markedly diluted in crossing the Coast Range, and then they do not easily descend into lee-side valleys because of aerodynamic constraints. Although any local emissions are included in the SDAB's inventory and are considered in the project's air quality impact analysis, such inclusion is purely to maintain administrative consistency and does not reflect the reality of air pollution dynamics in the County's desert airshed.

Air Quality Management Planning: The continued violations of national AAQS in the SDAB, particularly those for ozone in inland foothill areas, requires that a plan be developed outlining the stationary and mobile source pollution controls that will be undertaken to improve air quality. In San Diego County, this attainment planning process is embodied in a regional air quality management plan developed jointly by the APCD and SANDAG with input from other planning agencies. This plan, originally called RAQS (Regional Air Quality Stategies), is now called the 1982 State Implementation Plan Revisions (1982 SIP Revisions). The underlying premise of this plan is that the county can have continued economic and population growth and still achieve basinwide clean air. The plan outlines the analysis methodology and charts the necessary steps to reduce the current excess emissions burden plus offset the air pollutants associated with continued growth.

Ram's Hill relates to the 1982 SIP Revisions through the growth projections and associated transportation-related air pollution emissions generated by such growth. To the extent that the level of growth represented by the proposed Specific Plan Amendment has been anticipated within the growth projections used to generate the 1982 SIP Revisions, that growth will not generate a significant air quality impact. In that regard, however, it should be noted that most Borrego Valley transportation activity emissions will not affect areas of unhealthful County air quality because there is negligible intermingling of local and coastal area emissions. Vehicles driving to and from Ram's Hill may contribute incrementally to the coastal area emissions

burden, but those vehicles driving within Borrego Valley will have little or no effect on any areas of the County where concentrated coastal area emissions are causing any violations of ozone standards. Any air quality impacts of the proposed level of development may therefore be far less than what they would be if the same level of development were to occur along the coastal strip, regardless of whether such development is consistent with the 1982 SIP Revisions or not.

Air Quality Impact

Expansion of the Rams Hill project, including additional residential units, commercial space an another 18-hole golf course, will increase vehicular traffic and its concomitant air pollution emissions. Secondary emissions sources associated with project growth include increased power demand from regional power plants, on-site combustion of natural gas for heating, hot water, and cooking, and a variety of small, miscellaneous sources such as additional landscaping equipment, gas-powered carts, cleaning and maintenance fluids and solvents, and temporary emissions during construction from fugitive dust and construction equipment. These sources are either temporary or much less significant than the mobile source contribution, and are thus acknowledged only as an indication that growth generates small amounts of air pollution from a variety of miscellaneous sources.

The project-related mobile source emissions from the additional growth can be readily calculated by combining trip-making characteristics from the project traffic analysis with the emissions characteristics from identified trip types to generate a project-related emissions inventory. Project-related trips fall generally into two categories. One is for permanent residents who drive throughout the area for goods and services, and the other is for temporary visitors who arrive after a much longer than average trip across the county, but then may drive very little after arrival. For air emissions, the number of separate trips generated which begin in a very pollution inefficient "cold start" mode are as important as longer trips in the "hot-stabilized" driving mode. More than 70 percent of an average trip's emissions occurs within the first 2-3 miles of travel as a car warms up to maximum operating efficiency. Long trips to and from Rams Hill therefore do not add as much air pollution as if the same vehicle miles traveled (VMT) were accumulated in a series of short trips starting in the "cold-start" mode.

In the absence of specific data on operating characteristics of any project-related traffic, local short haul trips with both trip ends in the Borrego Valley were assumed comprised of typical California arterial roadway mixes. Long haul trips with one trip end in San Diego or other non-valley location were assumed operating in a typical California freeway mode (predominantly

"hot-stabilized"). Emission factors for these two traffic mixes were then combined with the VMT predictions from the project traffic consultant to generate a cumulative project vehicular emissions burden. Table 2 summarizes the daily project contribution to the total emissions burden for the Borrego Valley and the non-valley airsheds. The in-valley VMT is about 2.5 times as large as those vehicles with long drives, but the greater efficiency of the long-distance driving mode creates a much greater emissions difference within the two airsheds for CO and ROG, two of the three primary vehicular exhaust pollutants. Table 2 also shows the relative difference between what emissions would be if the project were already built versus the resulting burden if build-out is spread out over many years. The better operating efficiency of newer cars will substantially reduce the project-related emissions contribution than for the current vehicle fleet.

It is difficult to translate emissions into ambient air quality without complicated computer models far beyond the scope of a single project EIR. One can, however, gain some insight into a project's potential significance through a comparison of "new" vehicular exhaust with existing levels. Table 3 presents such a comparison. Within the Borrego Valley, the addition of almost 100,000 VMT is seen to be a major emission increase. Given the low existing emission level upon which any project addition will be superimposed, the project will not create any unhealthful air quality impacts because the project emissions increase is well within the dispersive capacity of the local airshed. On a regional scale, the added 38,000 daily VMT of destination traveler traffic generates only a small, but not completely insignificant emissions increase. On a regional scale, any resulting air quality degradation is correspondingly minimal.

As previously noted, it is not the magnitude of the ambient air quality impact of any development that determines its environmental significance, but rather whether such growth has been anticipated within the regional air quality planning framework. The 1982 SIP Revisions are based on the current general plan designation and any specific plans in effect for the project site. The proposed development plan of 1570 dwelling units on 3140 acres retains the 0.5 DU/acre general plan density, and the proposed project is therefore consistent with the SIP Revisions. The finding of consistency with the SIP indicates

that the regional air quality impact of the proposed Specific Plan is negligible. The minimal project impact is further mitigated by several additional considerations. The highest project-related emission levels will occur during the cooler weather period when county smog levels are lower. Maximum traffic will also occur on weekends when normal commuting emissions are lower. Another consideration is that if Rams Hill is not developed as proposed, there are or will be other destination resorts that will attract the same traffic. Development in Borrego Valley will not really accelerate development in coastal areas of San Diego County where emissions increases are a much greater concern than increased traffic in the valley itself. The Rams Hill development as proposed will therefore not create significant traffic-related air quality impacts that would not occur without project development.

Table 2 - Project-Related Mobile Source Emissions (tons/day)

Pollutant:	1986 Borrego Valley	1986 Regional Access	1986 Total TPD	2000 Borrego Valley	2000 Regional Access	2000 Total TPD
Carbon Monoxide	1.62	0.30	1.92	1.05	0.19	1.24
Reactive Organics	0.11	0.02	0.13	0.08	0.01	0.09
Nitrogen Oxides	0.24	0.12	0.36	0.15	0.08	0.23
Sulfur Dioxide	0.02	0.01	0.03	0.02	0.01	0.03
Suspended Particulates	0.03	0.01	0.04	0.03	0.01	0.04

Source: EMFAC6D & EMFAC7 Computer Emissions Model
93,206 Borrego Valley VMT, 38,038 Regional VMT

Table 3 - Analysis of Mobile Source Emissions Significance

Borrego Valley:

	Non-Project	Rams Hill	Proj. Share
Reactive Organics	1.76	0.114	6.5%
Carbon Monoxide	8.29	1.625	19.6%
Nitrogen Oxides	1.24	0.236	19.0%

San Diego Air Basin:

Reactive Organics	89.3	0.018	0.02%
Carbon Monoxide	766.6	0.296	0.04%
Nitrogen Oxides	117.6	0.125	0.11%

Impact Mitigation:

While the proposed development does not create any unacceptable air quality impacts requring special impact mitigation, any possibilities for reducing project-related air emissions should nevertheless be aggressively pursued. Measures that might nominally reduce both transportation as well as point source emissions include:

1. Planning major grading in concert with prevailing wind patterns as so minimize construction dust exposure for existing residents.

2. Encouraging the development of local commercial facilities at Rams Hill that can be accessed by walking, bicycles, or electric golf carts rather than driving elsewhere for goods and services.

3. Promoting aircraft or multiple-occupant vehicle access to Rams Hill from coastal urban areas through tours and other promotional visitor programs.

4. Utilizing solar-assisted residential utility systems to reduce electrical and gas consumption and to off-set high utility rates in Borrego Valley.

5. Developing a natural gas powered jitney system between the golf clubhouse, commercial facilities and residences, or between Rams Hill and Borrego Springs to eliminate the need for short, but highly polluting automobile trips.

Development may currently be insufficiently intensive to support some of these concepts, but as growth continues and more people (especially retirees) make Rams Hill their permanent homes, the above measures may become viable and should be given full consideration.

APPENDIX B

WATER

Planning · Urban Design
Landscape Architecture
A California Corporation

3585 Fifth Avenue
San Diego, California 92103
619/299-6260

HALSEY DESIGN GROUP

RECEIVED
JUN 3 1986
PRC Engineering

June 2, 1986

Ms. Debra Marsh
PRC Engineering
401 West A Street, Suite 2500
San Diego, CA 92101

Job No. 8709

PROJECT: RAMS HILL GOLF COURSE WATER STUDY

SUBJECT: REDUCED WATER CONSUMPTION THROUGH INCREASED DESERT LANDSCAPE

Dear Debra:

Here are figures for reduced water consumption for the Rams Hill Golf Course. An explanation of approach is probably in order.

We scaled off the area of the golf course within the lot line boundaries, less roadways intersecting the course, for a total of 170.77 acres for the existing course, and 357.56 acres for the expanded course. For existing rates of water consumption we selected a year (October 84 to September 85) from the table of Water Use Data, dated 30 April 1986, intentionally selecting a cycle of highest use and attempting to minimize potential error by avoiding months at either end of the table. Water use for the 18-hole course for that year of record was 1146.56 acre-feet.

By factoring the areas of the course in turf (87%) versus the transition areas (13% - mostly the slopes between the course and residential lots), we can determine existing rates of relative consumption per acre per year: 7.35 acre-feet for turf; 2.45 acre-feet for drought tolerant materials, or one-third of that used for turf.

The rate of application for drought tolerant areas could easily be reduced to an average of twenty percent of that used for turf, still allowing latitude for slightly heavier application at entrances or other "show" areas, balanced against lighter applications at less critical areas. Coupling this reduced rate of application with the apportionment of a greater percentage of the course to desert-scape (34%) will reduce the water consumption of the existing course by twenty percent.

TABLE ONE: Existing 18-hole course

Turf:	122.49 acre (72%)
Drought tolerant planting	48.28 acre (28%)
Total Golf Course	170.77 acre (100%)

(122.49 acre)(7.35 acre-feet/acre/year)+(48.28 acre)(1.47 acre-feet/acre/year
= 971.27 acre-feet/year

$$\frac{971.27 \text{ acre-feet/year}}{1146.56 \text{ acre-feet/year}} = 85\% \text{ water consumption}$$

Similarly, using the same application rates, and same design concept for the expanded golf course (see attached plan) the total yearly water consumption for the 36-hole course would be 2078.34 acre-feet.

TABLE TWO: Expanded 36-hole course

Turf:	264.07 acre (74%)
Drought tolerant planting	93.49 acre (26%)
Total Golf Course	357.56 acre (100%)

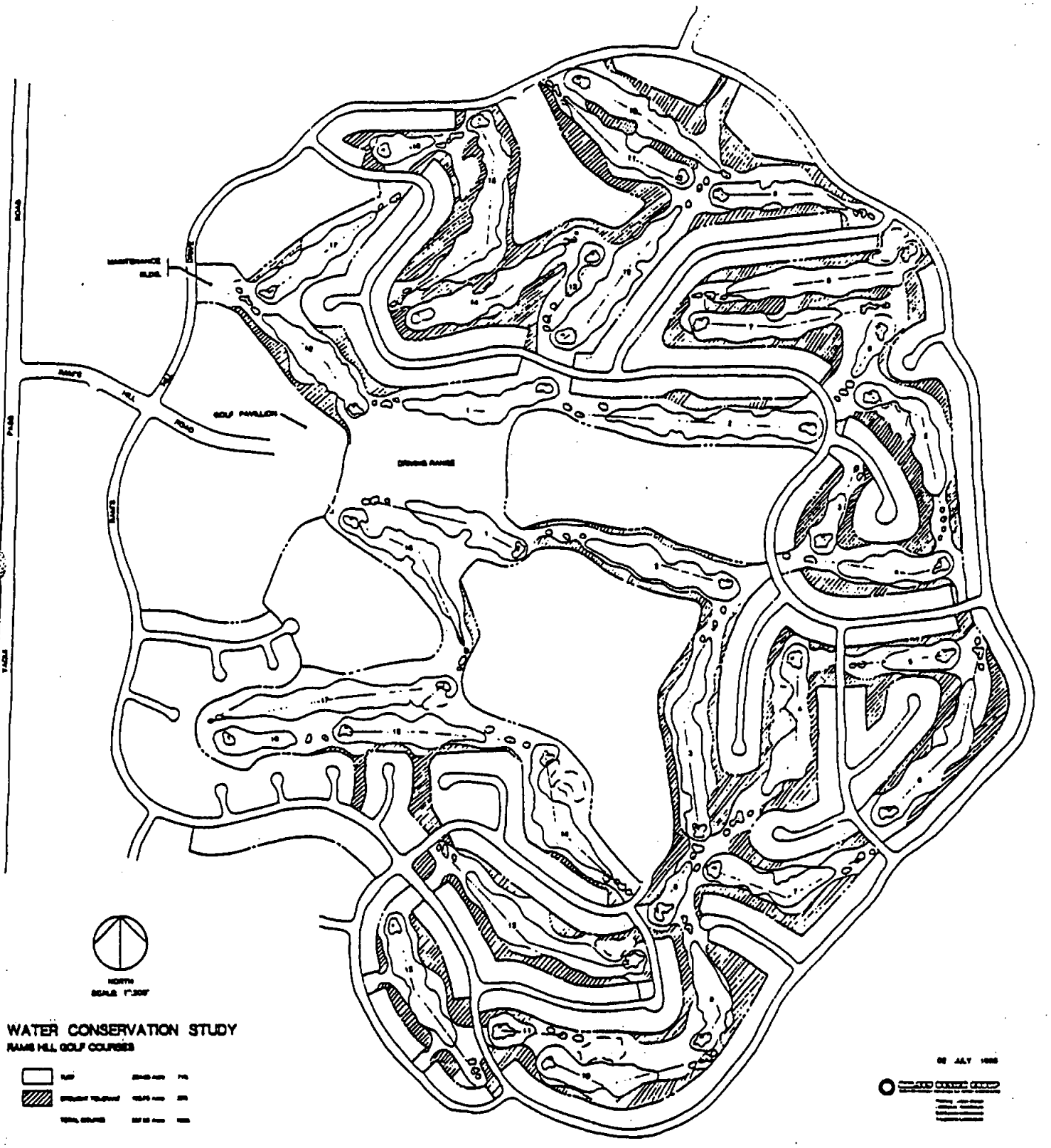
(264.07 acre)(7.35 acre-feet/acre/year)+(93.49acre)(1.47 acre-feet/acre/year)
= 2078.34 acre-feet/year

Water consumption could conceivably also be reduced in turf areas, below current rates, through a concise and controlled maintenance program. However, inasmuch as such a determination must be based on an extensive analysis of current practice, and recommendations must consider the complex interrelationships of fertilization, mowing, and irrigation practices as part of a total turf management program, such a determination is currently beyond the scope of this report.

Sincerely,

Christopher A. Brothers
HALSEY DESIGN GROUP, INC.

CAB/jj
enclosure: Water Conservation Study Plan
cc: Elaine Carlson: 305 Crocus Court, Leucadia CA 92024
8709watr.rpt



WATER CONSERVATION STUDY

RAMS HILL GOLF COURSES

APPENDIX C

TRAFFIC

TRAFFIC ANALYSIS FOR PROPOSED AMENDMENT TO RAMS HILL SPECIFIC PLAN

TECHNICAL APPENDIX

JUNE 1986

LIST OF FIGURES AND TABLES

TABLE OF CONTENTS

I. INTRODUCTION AND PROJECT DESCRIPTION

This traffic analysis has been prepared for the completion of the Rams Hill Country Club. Rams Hill Country Club consists of 3,140 acres located 65 miles northeast of metropolitan San Diego, 40 miles south of Palm Springs and 25 miles west of the Salton Sea in the Borrego Valley area of San Diego County. The project is situated in an unincorporated area which is surrounded by the Anza Borrego Desert State Park. Figure 1 shows the project location.

In January 1979, PRC Engineering prepared an environmental impact report (EIR) for the Specific Plan for Rams Hill. This original specific plan outlined the Rams Hill project which included 780 dwelling units, a 350 room hotel, a tennis and retail shop complex, an 18-hole championship golf course, a medical clinic, a fire station and a waste water treatment plant and flood control facility. As a technical appendix to the EIR, PRC prepared a Traffic Analysis on the proposed Rams Hill project. The study analyzed the traffic impact of the project as described above.

A Specific Plan Amendment (SP-A83-05) was approved in March 1984. The amendment outlined minor revisions to the original specific plan. Because it did not contain any substantial changes to the project, no amendment to the supporting traffic analysis was required.

This traffic analysis has been prepared for a new amendment to the Amended Specific Plan (SP-A83-05). This new amendment will add 790 dwelling units to the project along with a second 18-hole golf course and a 30 acre commercial area. The projected build-out year for these additions is 2000. An environmental impact report has been prepared for this new amendment to the Rams Hill Country Club Amended Specific Plan. This report serves as the technical appendix documenting the traffic analysis conducted for the additional land uses included in the new amendment.

This report documents the impact of project-generated traffic on the surrounding road system. The methodology used herein assesses existing traffic conditions, estimates the additional traffic generated by the project for the horizon year of 2000, analyzes the resulting traffic situation and recommends appropriate mitigative measures needed to accommodate future travel demand.

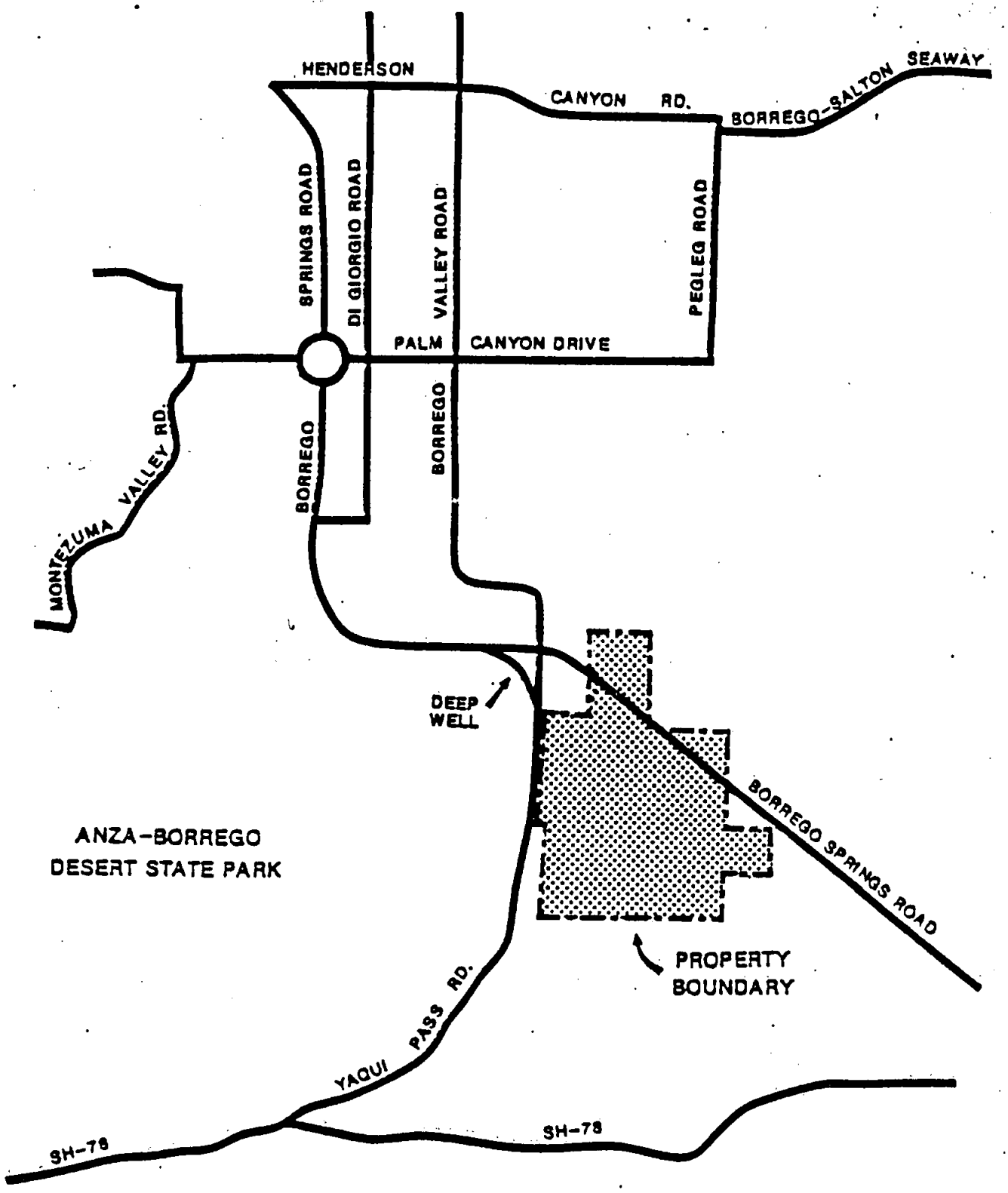


FIGURE 1
PROJECT AREA

RAMS HILL

II. EXISTING CONDITIONS

The two roads adjacent to the project site are Yaqui Pass Road and Borrego Springs Road. Both are currently two lane facilities but are classified by the San Diego County Circulation Element as major roads. Although the paved width of these roads varies from 24 to 40 feet, both roads have 102 feet of right-of-way and 82 feet of roadbed. Yaqui Pass Road (S3) enters the Borrego Valley from points to the south, such as Julian, Agua Caliente, and some of the more densely populated areas of San Diego County. Borrego Springs Road connects the project area with points to the southeast, such as Ocotillo Wells, and El Centro and with the commercial areas of Borrego Springs to the northwest. These two facilities serve as the main access points to the Rams Hill project. Entry and exit from the west side of the project is accomplished via Yaqui Pass Road, while access from the east side is accomplished using Borrego Springs Road.

Due to the project's close proximity to the Anza-Borrego Desert and the Salton Sea recreational areas, there is a distinct peak season during which visitors to the area significantly increase the number of trips made in the Borrego Valley. During this time, January through April, visitor traffic from the south along Yaqui Pass Road occasionally may experience congestion from reduced speeds due to the steep grade and winding nature of this narrow, two-lane rural road. These conditions are not related to the project, but rather are the result of the topographical characteristics of the area. Within the Borrego Springs area, however, peak traffic conditions have not created significant congestion to date.

Nevertheless, it is appropriate to use peak-season traffic data for this analysis. Therefore, traffic counts for the Borrego Springs area were obtained from the Traffic Engineering Division of the County of San Diego. These traffic volumes are shown in Figure 2 and represent counts conducted during the peak month of April 1986. Appendix A contains the 24-hour count sheets obtained from the County. Analysis of these existing conditions indicates that, for the most part, all streets in the immediate vicinity of Rams Hill presently operate at a level of service far below the available capacity of each roadway.

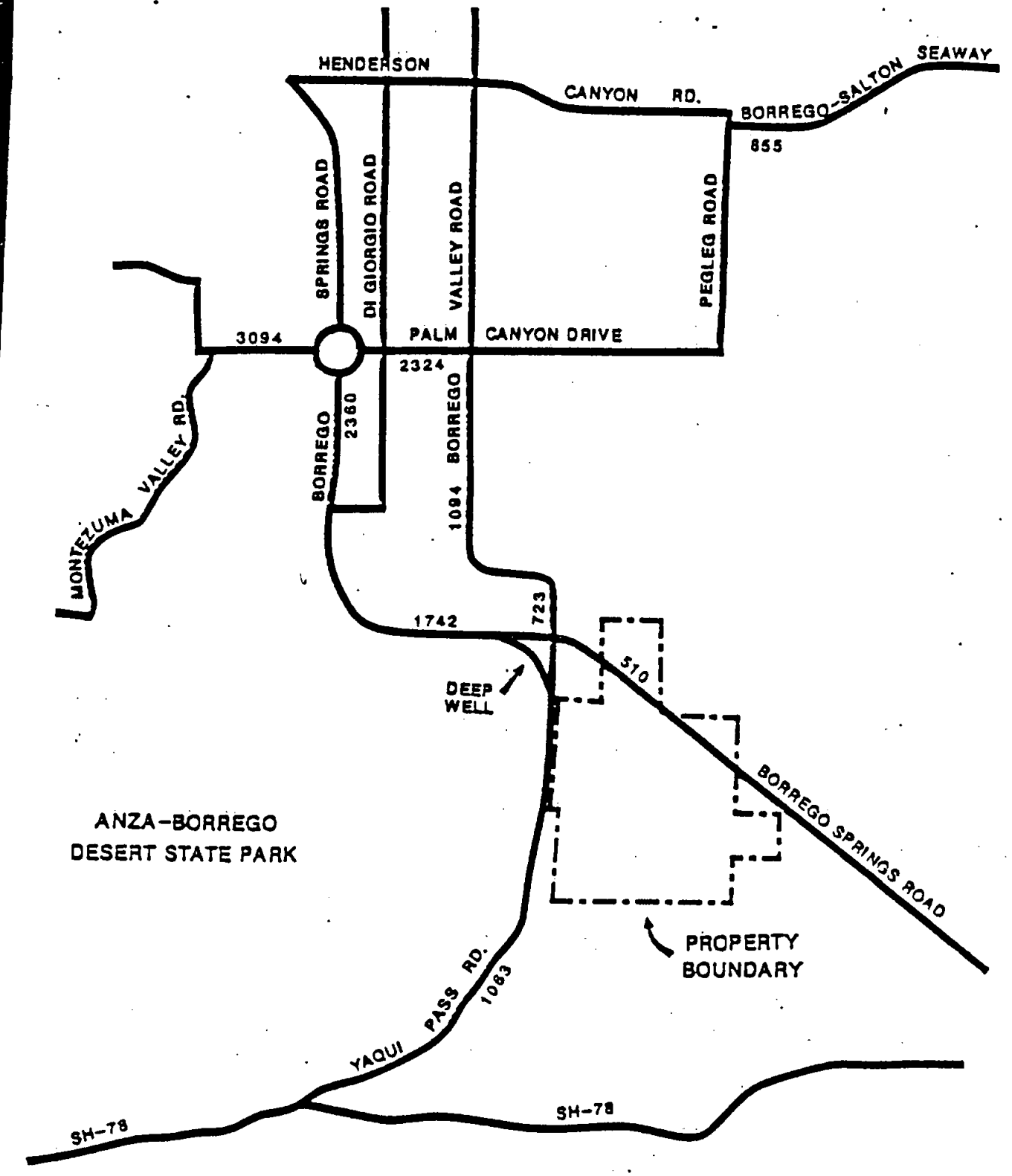


FIGURE 2
EXISTING 1986
AVERAGE DAILY
TRAFFIC VOLUMES

San Diego Regional
POPULATON AND HOUSING ESTIMATES
January 1, 1986

Borrego Springs Area

	1980 Census	Jan. 1 1985	Jan. 1 1986	1980-Current Numeric Change	1980-Current % Change	1985-Current Numeric Change	1985-Current % Change
ɔtal Housing Units	2,204	2,200	2,353	154	7.0	158	7.2
ccupied Housing Units	969	1,125	1,146	177	18.3	21	1.9
otal Population	2,191	2,562	2,712	521	23.8	150	5.9

Source: San Diego Association of Governments

H population for the Borrego Springs area has grown on average by 3 to 4 percent ach year. Similarly, occupied housing has grown during the same period by p ximately 3 percent per year. For the purposes of this analysis, traffic was rojected to grow by a factor of 6 percent each year between 1986 and 2000. This wth assumption is consistent with the 4 percent per year population growth xperienced in the Borrego Springs area since 1980. The traffic growth rate was reased by an additional 2 percent beyond the population growth rate to account or growth in the regional attractiveness of the Borrego Springs area. The ercent assumption is consistent with the overall 3 percent population growth ojected by the San Diego Association of Governments for the San Diego region as a whole, although officials at the Anza Borrego State Park, the main regional a traction, do not project any growth in attendance over the next few years.

e projected traffic volumes based on these assumptions are depicted in Figure 3. These volumes were used in analyzing the combined impact of future background affic and the traffic generated by the Rams Hill development.

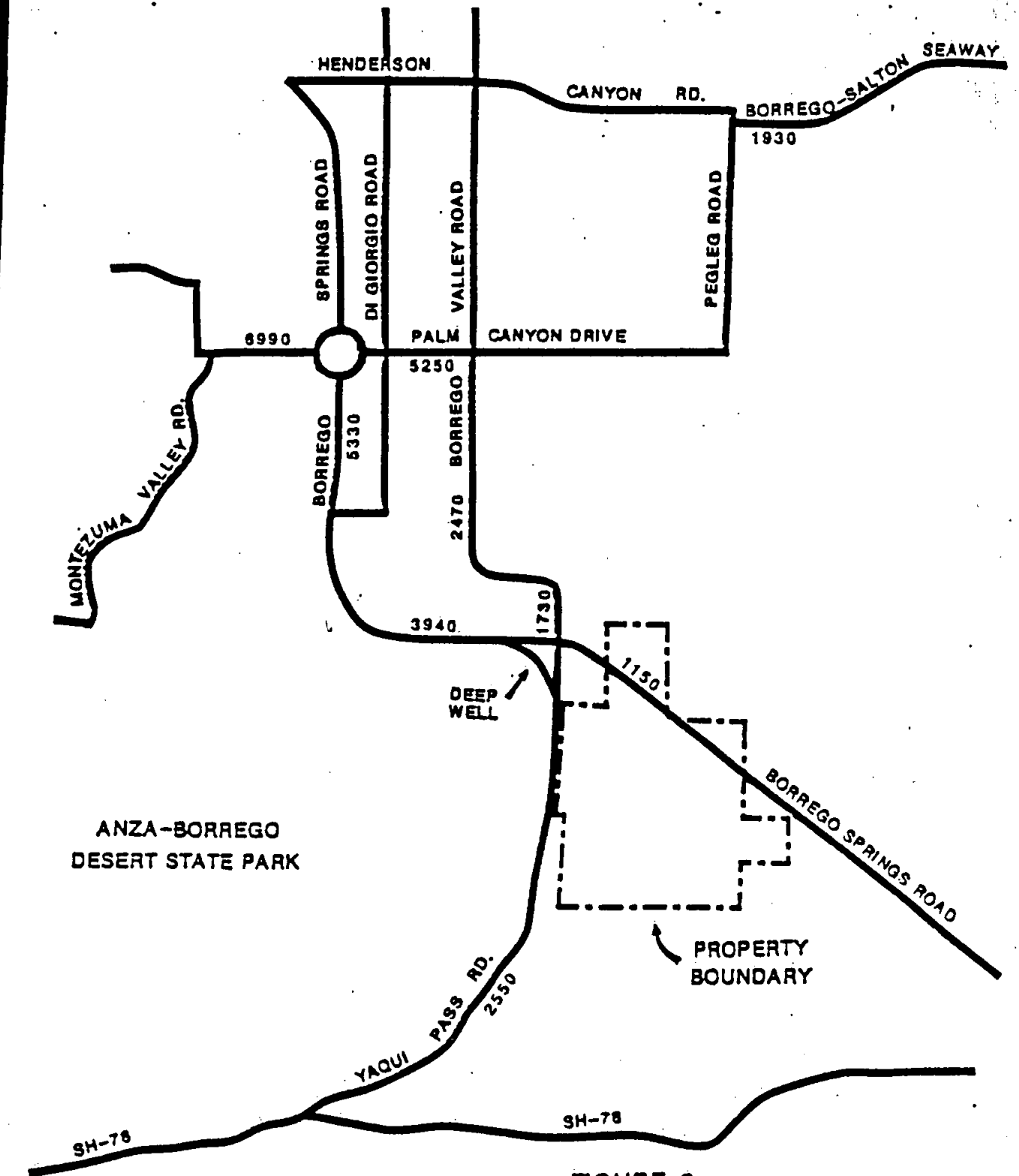


FIGURE 3

2000 FORECAST AVERAGE DAILY TRAFFIC VOLUMES (WITHOUT PROPOSED RAMS HILL SPECIFIC PLAN AMENDMENT)

RAMS HILL

IV. RAMS HILL TRAFFIC IMPACT

number of vehicle trips generated by a development project depends upon the of land uses which are included in the project. For each type of land use, a generation rate can be applied to estimate the number of daily vehicle trips. ch of the Rams Hill land uses and the corresponding trip generation rates used in analysis are shown in Table 1. Because no current recommended county rates ere available the trip generation rates were derived from the City of San Diego ommended Weekday Trip Generation Rates Summary (1984). Slight adjustments to the rates were made to reflect the retirement/recreational nature of the ject.

can be seen in Table 1, trip rates for the three different land uses are assigned and then multiplied by the size of the land use to give the amount of trips nerated by each land use. A total of 31,120 trips will be generated by the oject. However, because of the self-contained nature of the Rams Hill development several assumptions were made to allow for the recognition of trips ch will be made wholly within the Rams Hill project site. These internal trip reduction assumptions are reflected in Table 1 and result in the number of external rips which are then assigned to the surrounding road network. It is estimated that the amendment proposed for the Rams Hill development will add 19,052 daily trips o local external roadway network.

The estimated external traffic generated by the Rams Hill plan amendment was theoretically distributed onto the adjacent road network based upon an assumed distribution of project-related traffic. The geographical distribution of project traffic as follows:

North on Yaqui Pass	32%
South of Yaqui Pass	15%
West on Borrego Springs	49%
East on Borrego Springs	4%

Detailed distribution assumptions are depicted in Figure 4.

TABLE 1. TRIPS GENERATED BY RAMS HILL PROJECT

Trip Generator	Rate	Units	Trips Generated	External Trips	VMT Borrego	VMT Regional
Residential	8 Trips/DU	790 DU's	6,320	5,372	38,678	34,918
Commercial	800 Trips/AC	30 AC	24,000	13,200	52,800	N/A
Golf Course	4 Trips/AC	200 AC	800	480	1,728	3,120
Totals			31,120	19,052	93,206	38,038

ASSUMPTIONS:

RESIDENTIAL -
15% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMT Borrego trips multiplied by 8 mile average trips length
VMT Borrego trips multiplied by 65 mile average trip length

COMMERCIAL -
45% of trips are internal
100% of external trips for VMT Borrego
There is no commercial VMT regional
VMT Borrego trips multiplied by 4 mile average trip length

GOLF COURSE -
40% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMP Borrego trips multiplied by 4 mile average trip length
VMT regional trips multiplied by 65 mile average trip length

The projected increases in daily traffic volumes attributable to the Rams Hill plan amendment and future local growth are summarized in Table 2 and depicted in Figure 5. Table 2 shows the existing ADT volumes, the increase of local background traffic for the year 2000, and the total increase of traffic for the year 2000 which includes the proposed Rams Hill plan amendment. As indicated in Table 2, it is clear that the Rams Hill plan amendment (primarily the commercial area) is a significant contributor to future traffic in the project area. The most significant traffic increases occur on Borrego Springs Road and Yaqui Pass Road where projected volumes range between 8,000 and 14,500 ADT.

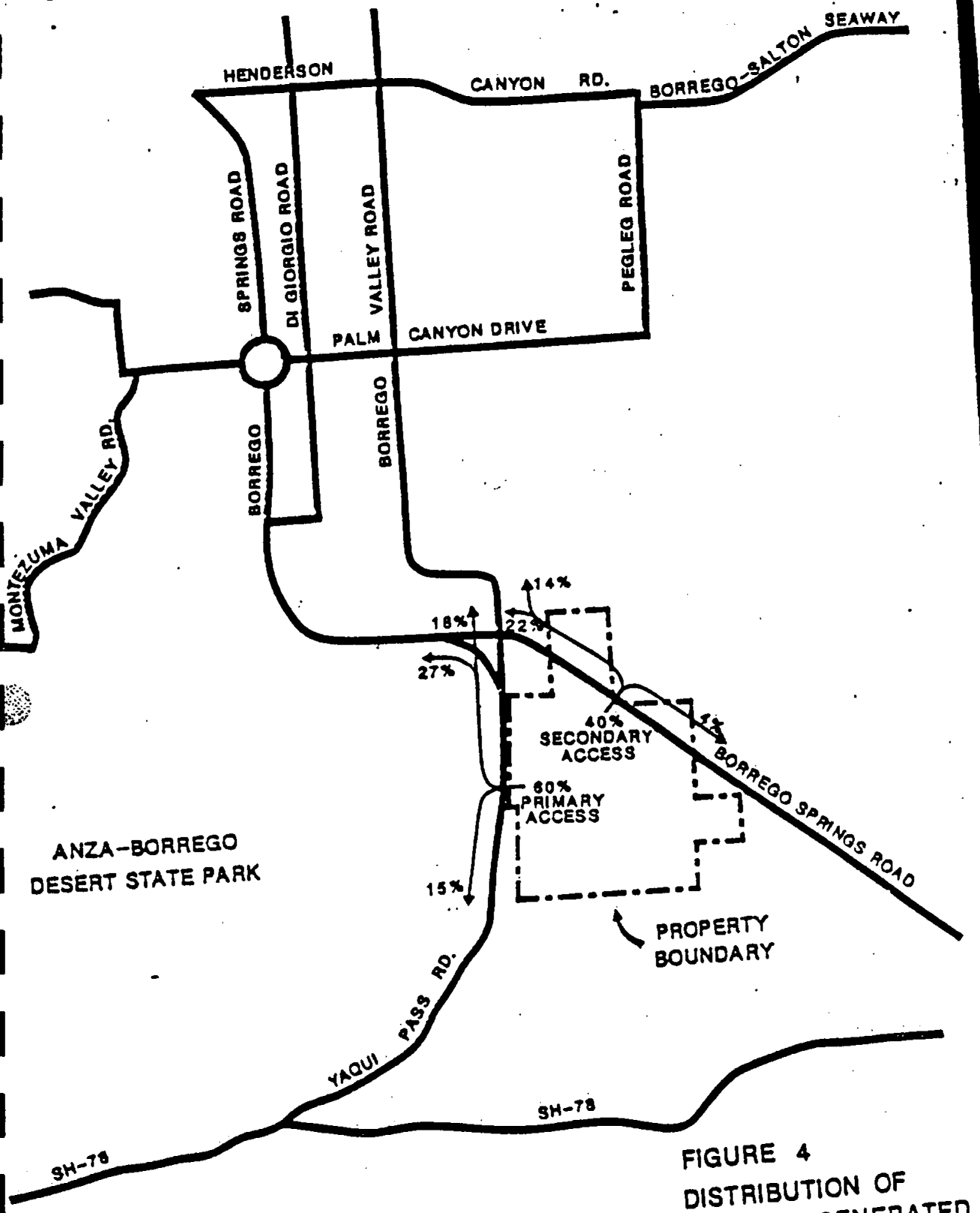


FIGURE 4
DISTRIBUTION OF
PROJECT GENERATED
TRAFFIC

RAMS HILL

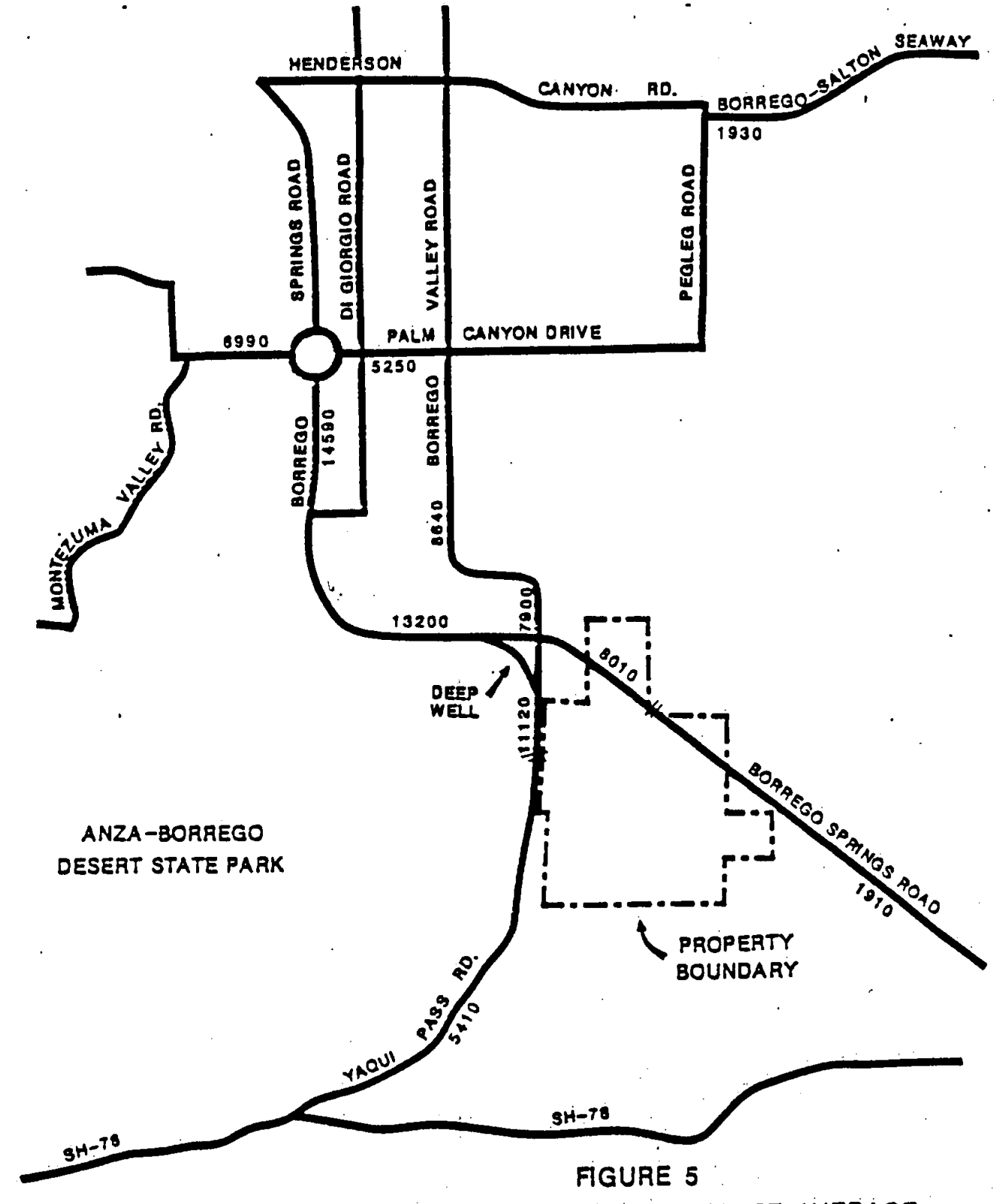


FIGURE 5

2000 FORECAST AVERAGE DAILY TRAFFIC VOLUMES (WITH PROPOSED RAMS HILL SPECIFIC PLAN AMENDMENT)

2. RAMS HILL ADT COMPARISON

Location	1986 Existing	2000 Background (1)	2000 with Proposed Rams Hill Plan Amendment
go Spring Road S. of qui Pass Road	510	1,150	8,010
go Springs Road S. of ject Site	510	1,150	1,910
go Springs Road N. of e Path	1,742	3,940	13,200
go Springs Road S. of tmas Circle	2,360	5,330	14,590
go-Salton Seaway E. of erson Canyon	855	1,930	1,930
rrego Valley Road S. of Canyon Drive	1,094	2,470	8,640
lm Canyon Drive W. of o Valley Road	2,324	5,250	5,250
lm Canyon Dr. E. of Diamonds Rd.	3,094	6990	6,990
aqui Pass Rd. N. of rrego Springs Rd.	723	1,730	7,900
aqui Pass Road N. of H-78	1,063	2,550	5,410
ui Pass Road S. of orrego Springs Road	1,063	2,550	11,120

1) Is assumed to include trips from first phase Rams Hill development.

The analysis of the impact of the proposed Rams Hill Specific Plan amendment on the Borrego Springs Road network focussed on the project's impact on Yaqui Pass Road, Borrego Springs Road and the intersection of these two roads. Although Yaqui Pass Road is currently paved to only 24 feet and Borrego Springs Road is currently paved to 40 feet, they are both classified as major roads in the Circulation Element of the County General Plan. Built to this standard, these roads would have four travel lanes and 102 feet of right-of-way containing 82 feet of paving with an 18 feet median strip.

While the level of contribution is significant, Rams Hill traffic would be more than adequately accommodated if Yaqui Pass Road and Borrego Springs Road were built to major road standards as provided in the County Circulation Element. However, the existing roadways are more aptly described as Light Collectors by County road standards with a corresponding capacity of 7,100 ADT (see Table 3). This being the case, Rams Hill-generated traffic would seriously tax Yaqui Pass and Borrego Springs Roads as they exist today.

It should be noted that standard trip generation figures have proven to be high for the first Rams Hill Specific Plan. Development level and occupancy rates have not been as high as anticipated. Nevertheless, for this proposed project, standard trip generation rates have been used with only slight modifications. Based on these rates, the future traffic volumes clearly exceed the capacity of the existing roadways. Based on the capacities exhibited in Table 3 the County of San Diego recommends road improvements to Yaqui Pass Road and Borrego Springs Road to be completed in two phases. The first-phase road improvements will mitigate the impacts resulting from increased residential-generated traffic and must be completed prior to occupancy of any residential units within the proposal. The second phase of road improvements will mitigate the impacts resulting from commercial generated traffic and must be completed prior to occupancy of any buildings within the commercial area of the proposal.

Because significant traffic growth is projected for both Yaqui Pass and Borrego Springs Roads the impact of this increase in traffic at the intersection of the two roads was examined. Using the traffic signal warrant standards contained in the California Department of Transportation's Traffic Manual (1977/revised 1985), it was first determined that the projected traffic volumes for the intersection exceeded the threshhold values included in the Traffic Manual for signalization.

Street Approach	ADT Requirement	ADT Volume	ADT Exceedance
Major Street/Borrego Springs	9,600	10,600	1,000
Minor Street/Yaqui Pass	2,400	9,500	7,100

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Street Approach	ADT Requirement	ADT Volume	ADT Exceedance
Major Street/Borrego Springs	9,600	10,600	1,000
Minor Street/Yaqui Pass	2,400	9,500	7,100

Based on this initial analysis, future traffic increases were deemed to warrant the signalization of the intersection of Yaqui Pass and Borrego Springs Roads. This is primarily due to a heavy left turn demand from northbound Yaqui Pass to Borrego Springs. Rams Hill will also contribute significant northbound travel demand along Yaqui Pass through the Borrego Springs Road intersection as well as increased east-west travel along Borrego Springs Road. The latter is due to the secondary access/egress road at Borrego Springs Road.

The projected level of service for a signalized intersection of Yaqui Pass Road and Borrego Springs Road was calculated using the Intersection Capacity Utilization (ICU) methodology. This methodology is a planning level evaluation of the capacity of an intersection which does not take into consideration the details of signalization. It provides a basic assessment of whether or not capacity is likely to be exceeded for a given set of traffic demand volumes and lane geometrics.

TABLE 3. AVERAGE DAILY VEHICLE TRIPS STANDARDS

Road Class	X-Section	Level of Service A	B	C	D	E
Prime Arterial	106/126	#22,200	37,000	44,600	50,000	57,000
Major Road	82/102	#14,800	24,700	29,600	33,400	37,000
Collector	64/84	#13,700	22,800	27,400	30,800	34,200
Light Collector	40/60	# 1,900	4,100	7,100	10,900	16,200

Source: San Diego County Public Road Standards, June 11, 1986, page 9 (Draft).

The ICU methodology requires data concerning:

1. Geometrics - number and use of lanes on each approach
2. Volumes - total vehicles per hour (vph) for each movement

The data concerning the geometrics was obtained from a site review and the San Diego County General Plan, Circulation Element. Data concerning the total vph was available from 24-hour traffic counts taken in April 1986 (Appendix A). Turning movements were estimated by comparing the approach volumes for each leg of the Yaqui Pass/Borrego Springs intersection and extrapolating likely turn volumes. This was done for two alternatives: 1) no improvement to the existing intersection except signalization, and 2) improvement to major road standards with signalization. Appendix B contains the intersection work sheets used in the analysis.

Intersection of
Yaqui Pass/Borrego Springs

	No Improvement Except Signalization	Improvement to Major Road Standards and Signalization
V/C	1.98	.78
LOS	F	C

The results of the analysis indicate that the improvement of the Yaqui Pass and Borrego Springs intersection to major road standards along with signalization would yield a level of service of C for the intersection. This is within an acceptable range of operation.

V. SUMMARY OF PROPOSED MITIGATION MEASURES

Based on the traffic impacts of the proposed Rams Hill plan amendment on the local road network, the following mitigation measures are recommended by the County of San Diego to be phased in the following manner:

Phase I

- Yaqui Pass Road is to be constructed to collector road standards from the southwesterly property line of the proposal to Borrego Springs Road intersection prior to occupancy of any residential units.

aqui Pass Road is to have a left turn pocket constructed in addition to the Collector Road at the entrance of Rams Hill Road. The left turn pocket is to be 200 feet long and 12 feet wide. Transitions of 250 feet are to be required north and south of the left turn pocket. The left turn pocket is also to be fully constructed prior to occupancy of any residential units.

Borrego Springs Road is to be constructed with a left turn pocket 12 feet in width 200 feet long with 250 transitions northerly and southerly of its intersection with the Rams Hill connection. This construction is to be completed prior to occupancy of any residential units within the proposal.

ase II

Yaqui Pass Road is to be completed to Major Road standards from the southwesterly corner of the proposal to Borrego Springs Road prior to occupancy of any buildings within the commercial area of the proposal.

The complete intersection and traffic signal improvements at the intersection of Yaqui Pass Road and Borrego Springs Road are to be constructed prior to occupancy of any buildings within the commercial area of the proposal.

The construction of Borrego Springs Road from the northeasterly corner of the proposal to the intersection of Yaqui Pass Road is to be constructed to Collector Roadway standards prior to occupancy of any buildings in the commercial area of the proposal.

though the proposed Rams Hill plan amendment is expected to generate 9,052 external daily trips by the year 2000, the improvement measures sum-arized above will fully mitigate the traffic impact these additional trips will have n local roads. These improvements in conjunction with continuing improvement by abutting land developers and by the County to Borrego Springs Road between aqui Pass Road and Palm Canyon Road will provide a high level of service on these facilities toward the year 2000 horizon.

APPENDIX A

APRIL 1986 TRAFFIC COUNT SHEETS

TSS-M.F.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

RUN DATE
4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
CORREGO SLTN SWY E OF HENDERSON CYN RD SO CO LINE	00621-00834	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	0.	20.	0.	0.	0.		
1	0.	0.	10.	0.	0.	0.		
2	10.	0.	0.	20	0.	10.		
3	10.	0.	20.	10.	0.	10.		
4	0.	0.	10.	10.	10.	0.		
5	10.	10.	10.	0.	0.	10.		
6	10.	10.	10.	20.	10.	10.		
7	10.	10.	20.	20.	20.	10.		
8	30.	30.	40.	50.	20.	30.		
9	30.	50.	60.	90.	30.	30.		
10	30.	60.	100.	110.	40.	30.		
11	40.	70.	110.	150.	50.	40.		
12	60.	60.	120.	130.	50.	60.		
13	50.	70.	120.	120.	50.	30.		
14	70.	70.	140.	110.	60.	0.		
15	60.	60.	150.	90.	60.			
16	70.	80.	130.	80.	30.			
17	40.	60.	130.	60.	40.			
18	40.	60.	90.	30.	30.			
19	10.	50.	70.	10.	20.			
20	10.	30.	60.	10.	10.			
21	10.	40.	20.	10.	0.			
22	0.	50.	20.	0.	10.			
23	10.	10.	10.	0.	0.			
TOTALS	610.	880.	1470.	1130.	540.			
PEAK HOUR=								
AM- VOL.	50.	80.	120.	150.	50.			
-TIME	11.25	10.50	10.75	11.00	10.25			
PHF-	0.625	1.000	0.750	0.937	0.625			
PM- VOL.	70.	80.	150.	130.	70.			
-TIME	13.25	15.50	13.75	12.00	14.50			
PHF-	0.875	0.667	0.937	0.812	0.875			

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 10.25 COUNT = 1010.

AVG 24 HR VOL = 855.

AVERAGE WEEKEND VOL = 1300. AVERAGE WEEKDAY VOL = 677.

TOTAL COUNTER COUNT = 4680.

COUNTY OF SAN DIEGO 4-11-86

TRAFFIC ENGINEERING DIVISION

OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
RD S OF CHRISTMAS CIR DR DIAMOND BAR RD	30934-30929	X	4- 3-86	CLR	2

THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0.	10.	10.	30.	0.	0.		
0.	10.	10.	10.	0.	0.		
10.	0.	20.	10.	0.	10.		
10.	10.	20.	10.	10.	10.		
10.	10.	20.	10.	10.	10.		
30.	20.	20.	20.	20.	30.		
60.	30.	40.	30.	60.	60.		
120.	90.	70.	60.	110.	120.		
100.	110.	130.	130.	110.	100.		
90.	110.	200.	160.	100.	90.		
120.	120.	200.	230.	130.	120.		
170.	150.	240.	220.	140.	170.		
150.	170.	260.	270.	140.	150.		
130.	170.	280.	290.	180.	70.		
160.	170.	300.	200.	150.	0.		
190.	210.	270.	250.	200.			
180.	200.	230.	200.	170.			
180.	210.	250.	160.	130.			
120.	160.	160.	140.	110.			
100.	140.	120.	70.	70.			
80.	120.	90.	50.	50.			
50.	120.	80.	50.	30.			
20.	60.	40.	20.	10.			
10.	50.	30.	10.	10.			
2090.	2450.	3090.	2630.	1940.			

JUR= 170.	190.	260.	270.	160.
10.75	11.75	10.50	11.75	11.50
0.850	0.950	0.929	0.844	0.800
190.	220.	300.	290.	200.
ME 14.50	17.25	14.00	12.50	15.00
0.792	0.917	0.833	0.906	0.833

EIGHT HOUR PEAK DAY OF WEEK =SAT BEGIN TIME = 10.25 COUNT = 2050.

AVG 24 HR VOL = 2360.

AVERAGE WEEKEND VOL = 2860. AVERAGE WEEKDAY VOL = 2160.

TOTAL COUNTER COUNT = 12200.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

RUN DATE
4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	STA WTHR	TYPE
BORREGO SPR RD S OF YAQUI PASS RD SH 78	00054-00303	X	4- 3-86	CLDY	8

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR.
0	0.	0.	0.	0.	0.	0.		
1	0.	0.	0.	0.	0.	0.		
2	0.	0.	0.	10.	0.	0.		
3	0.	0.	0.	0.	0.	0.		
4	0.	0.	10.	10.	0.	0.		
5	10.	10.	0.	0.	10.	10.		
6	10.	10.	20.	10.	10.	10.		
7	30.	20.	20.	20.	30.	30.		
8	30.	40.	30.	20.	30.	30.		
9	30.	40.	60.	50.	30.	30.		
10	20.	40.	50.	60.	30.	20.		
11	50.	30.	60.	70.	20.	30.		
12	30.	40.	50.	70.	40.	0.		
13	30.	50.	70.	40.	30.			
14	40.	40.	70.	70.	40.			
15	40.	30.	50.	50.	40.			
16	50.	40.	50.	30.	30.			
17	20.	30.	50.	30.	10.			
18	20.	10.	30.	10.	10.			
19	10.	20.	20.	20.	10.			
20	10.	20.	10.	10.	0.			
21	0.	30.	30.	0.	10.			
22	10.	10.	10.	10.	0.			
23	10.	10.	10.	0.	0.			
TOTALS	470.	520.	700.	590.	380.			

PEAK HOUR=

AM- VOL.	50.	50.	80.	80.	40.
-TIME	11.00	9.50	10.50	10.75	7.25
PHF-	0.625	0.625	1.000	1.000	1.000
PM- VOL.	60.	50.	80.	70.	50.
-TIME	13.25	12.50	13.50	12.00	13.75
PHF-	0.750	0.625	0.667	0.583	0.625

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 9.00 COUNT = 460.

AVG 24 HR VOL = 510.

AVERAGE WEEKEND VOL = 645. AVERAGE WEEKDAY VOL = 457.

TOTAL COUNTER COUNT = 2670.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

463 2

COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
BORR. SPNGS. RD. W/O YNEZ PATH	30915-30922	X	4-3-86	CLR	2

ME	MON	TUE	WED	THUR	FRI	SAT	SUN	MON
					7	6	16	
1	1	4			0	6	9	
2	1	0			2	3	5	
3	1	3			3	8	9	
4	0	3			1	15	5	
5	3	1			18	15	14	
6	20	24			42	37	27	
7	34	41			71	58	46	
8	94	72			78	92	87	
9	69	64			95	127	162	
10	72	63			119	152	182	
11	86	77			128	212	190	
12	93	↑110		1435	128	195	232	
13	120			1[illegible]	136	255	218	
14	125			13[illegible]	159	261	169	
15	151			152	160	240	197	
16	175			117	142	169	176	
	106			104	116	179	91	
18	77			64	90	75	46	
19	56			51	66	67	32	
20	30			31	60	42	27	
21	18			36	63	46	28	
22	12			22	46	28	8	
23	7			13	33	20	7	
24	7							
	1325	462		1008	1763	2803	1947	

ALS

4 HR VOL = 1742 5 day aver.

K HOUR 11:00 AM 212 WEEK DAY SAT
EAK HOUR 2:00 PM 261 WEEK DAY SAT

AL COUNTER COUNT =

Weekend aver. 2,127

Weekday aver. 1,519

TRAFFIC ENGINEERING DIVISION

RUN DATE 4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	ST TY
BORREGO VLY RD S OF PALM CANYON DR TILTING T DR 1	00056-03067	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	10.	0.	10.	0.	0.		
1	10.	0.	0.	10.	0.	10.		
2	0.	0.	10.	0.	10.	0.		
3	10.	0.	20.	20.	10.	10.		
4	0.	0.	10.	10.	0.	0.		
5	20.	20.	10.	10.	10.	20.		
6	20	30.	20.	30.	30.	20.		
7	50.	50.	40.	60.	60.	50.		
8	60.	80.	80.	90.	50.	60.		
9	70.	70.	60.	130.	40.	70.		
10	60.	80.	80.	140.	40.	60.		
11	60.	70.	100.	120.	60.	60.		
12	110.	100.	110.	140.	80.	60.		
13	80.	100.	100.	140.	60.	0.		
14	100.	70.	100.	120.	60.			
15	100.	90.	110.	80.	70.			
16	70.	70.	130.	60.	60.			
17	30.	80.	120.	60.	50.			
18	50.	60.	80.	40.	30.			
19	30.	70.	50.	20.	30.			
20	20.	50.	60.	10.	20.			
21	20.	30.	30.	10.	10.			
22	20.	30.	20.	10.	10.			
23	0.	20.	20.	10.	0.			
TOTALS	1010.	1180.	1360.	1330.	790.			

PEAK HOUR=

AM- VOL.	90.	100.	110.	140.	70.
-TIME	11.50	11.75	10.75	9.25	7.50
PHF-	0.750	0.833	0.917	0.875	0.875
PM- VOL.	110.	100.	140.	140.	80.
-TIME	12.00	12.00	16.75	12.00	12.00
PHF-	0.917	0.833	0.875	0.700	1.000

EIGHT HOUR PEAK

DAY OF WEEK =SUN BEGIN TIME = 8.00 COUNT = 960.

AVG 24 HR VOL = 1094.

AVERAGE WEEKEND VOL = 1345. AVERAGE WEEKDAY VOL = 993.

TOTAL COUNTER COUNT = 5700.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

RUN DATE
4-11-86

LOCATION OF COUNTER		LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
DR	N OF BIG HORN RD WRANGLERS DR	31080-27413	X	4- 3-86	CLR	2

BEGINING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0	10.	0.	0.	0.	0.		
1	0.	0.	0.	0.	0.	0.		
2	0.	0.	0.	0.	0.	0.		
3	0.	0.	0.	0.	0.	0.		
4	0.	0.	0.	0.	0.	0.		
5	0.	0.	0.	10.	0.	0.		
6	20.	10.	20.	10.	10.	20.		
7	20.	20.	20.	10.	20.	20.		
8	20.	40.	20.	30.	40.	20.		
9	60.	60.	50.	40.	40.	60.		
10	40.	60.	30.	60.	40.	40.		
11	40.	80.	80.	40.	70.	40.		
12	50.	60.	70.	30.	70.	50.		
13	60.	50.	70.	20.	50.	60.		
14	30.	70.	50.	50.	90.	30.		
15	70.	60.	70.	40.	90.	0.		
16	70.	60.	60.	50.	60.			
17	50.	70.	70.	40.	40.			
18	30.	30.	40.	30.	30.			
19	30.	20.	20.	10.	20.			
20	10.	10.	0.	10.	10.			
21	20.	10.	10.	10.	10.			
22	10.	10.	10.	10.	0.			
23	0.	0.	10.	0.	0.			
TOTALS	600.	730.	700.	500.	690.			

PEAK HOUR=

VOL.	60.	80.	90.	60.	80.
P-TIME	8.75	10.75	11.25	9.75	11.23
P-HR	0.750	0.667	0.750	0.750	1.000
VOL.	80.	80.	80.	60.	90.
P-TIME	15.25	15.50	16.50	14.50	14.00
P-HR	1.000	1.000	0.667	0.750	0.750

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 10.50 COUNT = 520.

AVG 24 HR VOL = 660.

AVERAGE WEEKEND VOL = 600. AVERAGE WEEKDAY VOL = 680.

TOTAL COUNTER COUNT = 3280.

TRAFFIC ENGINEERING DIVISION

LOCATION OF COUNTER		LOCATION CODE	DIRECT FLOW	DATE OF COUNT	WTHR	STA TYPE
COTILLO CR	N OF PALM CANYON DR VERBENA DR	00447-00700	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	0.	0.	10.	0.	10.		
1	0.	0.	10.	0.	0.	0.		
2	0.	0.	0.	0.	0.	0.		
3	10.	0.	0.	10.	10.	10.		
4	30.	30.	30.	20.	30.	40.		
5	70.	60.	40.	40.	70.	70.		
6	70.	120.	50.	70.	70.	90.		
7	70.	100.	90.	90.	70.	60.		
8	80	110.	90.	100.	80.	70.		
9	100.	120.	160.	80.	100.	90.		
10	140.	140.	110.	90.	140.	130.		
11	100.	120.	110.	60.	100.	100.		
12	150.	120.	120.	100.	150.	20.		
13	130.	150.	120.	80.	130.	0.		
14	130.	150.	110.	70.	120.			
15	200.	150.	110.	90.	130.			
16	140.	80.	70.	60.	70.			
17	120.	60.	40.	30.	70.			
18	80.	60.	30.	40.	40.			
19	70.	40.	30.	30.	10.			
20	40.	40.	20.	10.	10.			
21	20.	10.	20.	0.	0.			
22	10.	10.	0.	0.	0.			
23	0.	0.	0.	0.	0.			
TOTALS	1760	1670.	1360.	1080.	1400.			
PEAK HOUR=								
AM- VOL.	140.	150.	160.	110.	140.			
-TIME	9.50	10.25	9.00	7.75	9.50			
PHF-	0.700	0.937	0.800	0.917	0.700			
PM- VOL.	200.	150.	130.	100.	150.			
-TIME	15.00	13.00	14.25	12.00	12.00			
PHF-	0.714	0.750	0.812	0.833	0.750			

EIGHT HOUR PEAK
DAY OF WEEK =THU BEGIN TIME = 9.50 COUNT = 1110.

AVG 24 HR VOL = 1499.

AVERAGE WEEKEND VOL = 1220. AVERAGE WEEKDAY VOL = 1610.

TOTAL COUNTER COUNT = 7010.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

(HPS)

OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
PALM CAN. DR. w/o BORA. VLY RD.	00056-00472	X	4-3-86	CLR	2

TIME	MON	TUE	WED	THUR	FRI	SAT	SUN	MON
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12		↑						
13				↓				
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
TOTALS	1486	798		1085	2373	3206	2676	

HR VOL = 2324 (5 day average)

K HOUR 10:00 AM 304 WEEK DAY SUN.
K HOUR 2:00 PM 304 WEEK DAY SUN.

COUNTER COUNT = 11,624

1914 Weekday Vol. (ave.)
2941 Weekend " "

PLANNING REPORT

COUNTY OF SAN DIEGO

DATE ISSUED: November 17, 1986

TO: Board of Supervisors

FROM: Planning Commission

SUBJECT: Hearing on:
Ram's Hill Specific Plan (SP-A86-006), Reclassification (R86-046) DiGiorgio Corporation, Tentative Map (TM4613), Major Use Permit (P86-062) and Major Use Permit Modification (P79-103W[1]). Borrego Springs area.

SUPV. DIST: 5

DESCRIPTION:
This project consists of five separate but related applications to change land uses within the adopted Ram's Hill Specific Plan. The specific plan amendment (SP-A86-06) proposes to allocate the remaining 790 dwelling units permitted by the General Plan, and proposes to redesign the central area of the specific plan by adding an 18-hole golf course and changing the configuration of proposed residential development. The tentative map (TM4613) proposes to create 201 parcels which would include 7 open space lots and 194 residential lots. The rezone (R86-046) proposes to amend the existing zoning to accommodate the changes proposed by the specific plan amendment. The new major use permit (P86-062) proposes a public 18-hole golf course and clubhouse. The major use permit modification (P79-130W[1]) modifies the existing permit for a private 18-hole golf course and clubhouse by proposing the relocation and redesign of a number of existing fairways.

PREVIOUS ACTIONS:
SP80-01 Adopted May 7, 1980
SP-A83-05 Adopted May 2, 1984

PLANNING COMMISSION RECOMMENDATION:

That the Board of Supervisors take the following action:

1. **Certify that an Environmental Impact Report dated October 23, 1986 has been completed in compliance with the California Environmental Quality Act, review and consider information contained therein, and made the required finding in the Resolution of Approval/Form of Decision.**

2. Adopt the Resolution adopting an amendment (SP-A86-006) to the Ram's Hill Specific Plan which makes the appropriate findings and includes those requirements and conditions necessary to ensure that the project is implemented in a manner consistent with State Law.

3. Adopt an ordinance approving a change from the S80 Use Regulations to the RV6, RS3 Use Regulations, from the S88 Use Regulations to the RV6, RRO.5, RS3, S80, C36 Use Regulations, from the RRO.5 Use Regulations to the RS3 Use Regulations, from the RS3 Use Regulations to the RV6 Use Regulations with other designators as shown in the ordinance.

4. Adopt the Resolution approving TM4613 which makes the appropriate findings and includes those requirements and conditions necessary to ensure that the project is implemented in a manner consistent with the Subdivision Ordinance and State Law.

5. Grant major use permit P86-062 which makes the appropriate findings and includes those requirements and conditions necessary to ensure that the project is implemented in a manner consistent with the Zoning Ordinance and State Law.

6. Grant major use permit P79-130W[1] which makes the appropriate findings and includes those requirements and conditions necessary to ensure that the project is implemented in a manner consistent with the Zoning Ordinance and State Law.

The Department of Planning and Land Use concurs with this recommendation.

MAJOR ISSUES:

- No major issues have been identified.

BACKGROUND/REASONS FOR HEARING:

The Ram's Hill Specific Plan (SP80-01) was originally adopted by the Board of Supervisors on May 7, 1980. That specific plan only covered a portion of the 3140 acres within the DiGiorgio ownership which is designated (21) Specific Plan on the Desert Subregional Plan. SP80-01 contained 611 acres and included 780 dwelling units, a resort hotel, golf course and clinic among its approved uses. An amendment to the Ram's Hill specific plan (SP-A83-05) was approved on May 2, 1984. That amendment relocated some open space easements, internal circulation roads, and lot lines and shifted densities from one area of the project to another.

This Specific Plan Amendment is intended to largely complete the planning process for the Ram's Hill Development. The balance of the residential units permitted by the (21) Specific Plan (.5 du/acre) are allocated to a number of areas proposed by this amendment for residential development. This will include redesigns of areas already approved for residential development and areas formerly identified as Future Planning Areas. These Future Planning Areas are being reduced from 928 acres to 384 acres. Another major change proposed by this amendment is the redesign of the existing 18-hole public golf course, and the addition of a new, private 18-hole golf course, complete with its own clubhouse. One other major change proposed by this amendment would change the Future Commercial Area, in the northwest corner of the Specific Plan, to a Commercial Area. The commercial uses would be limited to those typically found in the C36 (General Commercial) Use Regulation.

The reclassification request makes the zoning changes necessary to implement the Specific Plan Amendment. Of the 35 zoning subareas within the Specific Plan 20 are proposed for change. Two levels of change are proposed. Subareas changing from Future Planning Area to Residential Development are typically changing from S88 [Specific Plan Use Regulation] with a 20-acre minimum lot size to the RV6 (Residential Use Regulation) with a 6000 square foot minimum lot size. Other subareas having relatively minor changes to the Development Regulations are proposed, such as the addition of the P or D Special Area Regulations which will require either a Planned Residential Permit or Site Plan.

The tentative map resubdivides an area in the central area of the Ram's Hill Specific Plan. This map (TM4613) proposes 201 lots; 194 residential lots and seven lots designated for open space. The subdivision proposes a standard, 12,000 square foot lot residential subdivision for 191 of the residential lots. The three remaining residential lots (lots 1, 200, and 201) are proposed by the Specific Plan Amendment and rezone as locations for planned developments.

The major use permit (P86-062) and major use permit modification (P79-103W[1]) each propose an 18-hole golf course. The new use permit would allow an 18-hole public golf course utilizing the existing golf club facilities and nine existing, and nine new, holes. The applicants also propose, via the permit modification, a private 18-hole golf course located to the south of the public course. Initially the private club will use the existing club facilities covered by P86-062. The modification plot plan does include a site for the club facilities and parking necessary to serve the private, 18-hole, course.

OTHER RELATED INFORMATION

-- This case was heardby the Planning Commission on November 7, 1986. Staff made a short presentation and made some corrections to the Resolution of Approval. The Commission had some questions about offsite public improvements and groundwater use for the golf course. With the resolution of these points the Commission voted 6-0 (1 absent) to recommend approval of the project.

-- An Environmental Impact Report has been prepared for this amendment by the applicants. Nine items including: Biology, Archaeology, Groundwater Flooding-Hydrology, Landforms-Soils, Noise, Traffic, Public Services, and Dark Skies were found to be significant but mitigable. The mitigation measures have been included where appropriate in the resolutions of approval.

PLANNING GROUP/PUBLIC STATEMENTS

The Borrego Springs Community Planning Group in a letter (attached) dated October 24, 1986, indicated that they support the proposed project.

COMMISSION REASONS FOR RECOMMENDATION

1. The project as proposed is consistent with the General Plan and the Desert Subregional Plan because the Board of Supervisors have approved and adopted the Ram's Hill Specific Plan and this project is consistent with that approval.

2. The project as proposed is consistent with zoning because a reclassification conforming to the changes proposed by the Specific Plan Amendment has been filed for.

3. The project as proposed does comply with all required findings of Section 66474 of the Subdivision Map Act and County Subdivision Ordinance as described and incorporated in the attached Resolution.

4. The project as proposed does comply with all required findings of a major use permit pursuant to Section 7358 of the Zoning Ordinance as described and incorporated in the attached Form of Decision.

5. The project as proposed does comply with Board of Supervisors' Policy I-59 because a large scale project has been adopted and approved by the Board of Supervisors.

6. The project as proposed does comply with the California Environmental Quality Act and State and County Guidelines because an Environmental Impact Report has been prepared which has identified appropriate levels of mitigation which have been included as conditions of approval.

BOARD POLICY APPLICABLE: I-59 Large Scale Project Review	CONCURRENCES: N/A
COUNTY COUNSEL APPROVED:	CAO or AUTHORIZED REPRESENTATIVE

DEPARTMENT AUTHORIZED REPRESENTATIVE
Walter C. Ladwig, Director

Walter C. Ladwig

CONTACT PERSON

LEE VANCE

565-5963 (0650)

ATTACHMENTS

Attachment A - Planning Documentation
Attachment B - Environmental Documentation
Attachment C - P/C - PERB and Public Documentation

cc:

PLANNING REPORT

COUNTY OF SAN DIEGO

5-1

MEETING DATE: August 1, 1991 DATE ISSUED: July 25, 1991

TO: Planning and Environmental Review Board

FROM: Department of Planning and Land Use

SUBJECT: Hearing on:
Borrego Springs Development Corporation, Major Use Permit Modification, P86-062W[1], Desert (Borrego Springs) Area

SUPV. DIST.: 5

DESCRIPTION:

Application for a Major Use Permit Modification to eliminate the area of the country club facilities from the area of the public golf course. Property is located at the east terminus of Rams Hill Road in Borrego Springs and is zoned C42 (Visitor Serving Commercial).

REFERRAL/
PREVIOUS ACTIONS:

Planning and Environmental Review Board (PERB) I: May 23, 1991.

On May 7, 1991, the Borrego Springs Sponsor Group voted 8-0-1 to recommend approval.

DEPARTMENT RECOMMENDATION:

1. Find that there are no changes in the project or in the circumstances under which it is undertaken which involve significant new environmental impacts which were not considered in the previously certified Environmental Impact Report (EIR), dated October 23, 1986, and that no new information of substantial importance has become available since said EIR was prepared; and review and reconsider the information contained therein.

2. Grant Major Use Permit Modification P86-062W[1] which makes the appropriate findings and includes those requirements and conditions necessary to ensure that the project is implemented in a manner consistent with The Zoning Ordinance and State law.

MAJOR ISSUES:

- No major issues identified.

BACKGROUND/REASONS FOR HEARING:

The Board of Supervisors adopted the Rams Hill Specific Plan SP 80-001 on May 7, 1980. Subsequently, several Specific Plan Amendments have been approved. The present version of the Specific Plan was approved by the Board of Supervisors on December 10, 1986. Included at that time was reference to Major Use Permits P79-130W[1] and P86-062. The current Major Use Permit Modifications, P79-130W[2] and P86-062W[1], were filed on April 26, 1991, to change the Major Use Permit boundaries.

DISCUSSION OF MAJOR ISSUES AND RESPONSES:

- **NO MAJOR ISSUES IDENTIFIED.**

PLANNING GROUP/PUBLIC STATEMENTS:

On May 7, 1991, the Borrego Springs Sponsor Group voted 8-0-1 to recommend approval.

DEPARTMENT REASONS FOR RECOMMENDATION:

1. The project as proposed is consistent with the General Plan (Desert Subregional Plan) because the request is still in conformance with the Rams Hill Specific Plan SP 80-001 since the site will still be used for golf course purposes.

2. The project as proposed is consistent with existing zoning because the C42 Use Regulations allow Resort and Recreational uses.

3. The project as proposed does comply with all required findings of a Major Use Permit pursuant to Section 7358 of The Zoning Ordinance as described and incorporated in the attached revised Form of Decision.

4. The project as proposed does comply with the California Environmental Quality Act and State and County Guidelines because the previous Environmental Impact Report dated October 23, 1986 adequately address the same use and site.

BOARD POLICY APPLICABLE: I-18: RIGHT-OF-WAY DEDICATION AND PUBLIC REQUIREMENTS IN CONNECTION WITH MAJOR AND MINOR USE PERMITS.	CONCURRENCES: N/A
APPROVED BY COUNTY COUNSEL AS TO LEGALITY: N/A	CAO OR AUTHORIZED REPRESENTATIVE: N/A

DEPARTMENT AUTHORIZED REPRESENTATIVE
RICHARD MIURA, CHIEF

CONTACT PERSON

BENJAMIN GRAME

(0650) 694-3714

ATTACHMENTS

Attachment A - Planning Documentation
Attachment B - Environmental Documentation
Attachment C - Public Documentation

cc: Borrego Springs Development Corp., P.O. Box 9, Borrego Springs, CA 92004
Roger Casio, c/o McIntire Co., 5055 Avenida Encinas, Suite 210, Carlsbad, CA 92008

PERB\08-01\P86062.LTR-aeb,jc

TRAFFIC ANALYSIS FOR PROPOSED AMENDMENT TO RAMS HILL SPECIFIC PLAN

TECHNICAL APPENDIX

JUNE 1986

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

I. INTRODUCTION AND PROJECT DESCRIPTION

This traffic analysis has been prepared for the completion of the Rams Hill Country Club. Rams Hill Country Club consists of 3,140 acres located 65 miles northeast of metropolitan San Diego, 40 miles south of Palm Springs and 25 miles west of the Salton Sea in the Borrego Valley area of San Diego County. The project is situated in an unincorporated area which is surrounded by the Anza Borrego Desert State Park. Figure 1 shows the project location.

In January 1979, PRC Engineering prepared an environmental impact report (EIR) for the Specific Plan for Rams Hill. This original specific plan outlined the Rams Hill project which included 780 dwelling units, a 350 room hotel, a tennis and retail shop complex, an 18-hole championship golf course, a medical clinic, a fire station and a waste water treatment plant and flood control facility. As a technical appendix to the EIR, PRC prepared a Traffic Analysis on the proposed Rams Hill project. The study analyzed the traffic impact of the project as described above.

A Specific Plan Amendment (SP-A83-05) was approved in March 1984. The amendment outlined minor revisions to the original specific plan. Because it did not contain any substantial changes to the project, no amendment to the supporting traffic analysis was required.

This traffic analysis has been prepared for a new amendment to the Amended Specific Plan (SP-A83-05). This new amendment will add 790 dwelling units to the project along with a second 18-hole golf course and a 30 acre commercial area. The projected build-out year for these additions is 2000. An environmental impact report has been prepared for this new amendment to the Rams Hill Country Club Amended Specific Plan. This report serves as the technical appendix documenting the traffic analysis conducted for the additional land uses included in the new amendment.

This report documents the impact of project-generated traffic on the surrounding road system. The methodology used herein assesses existing traffic conditions, estimates the additional traffic generated by the project for the horizon year of 2000, analyzes the resulting traffic situation and recommends appropriate mitigative measures needed to accommodate future travel demand.

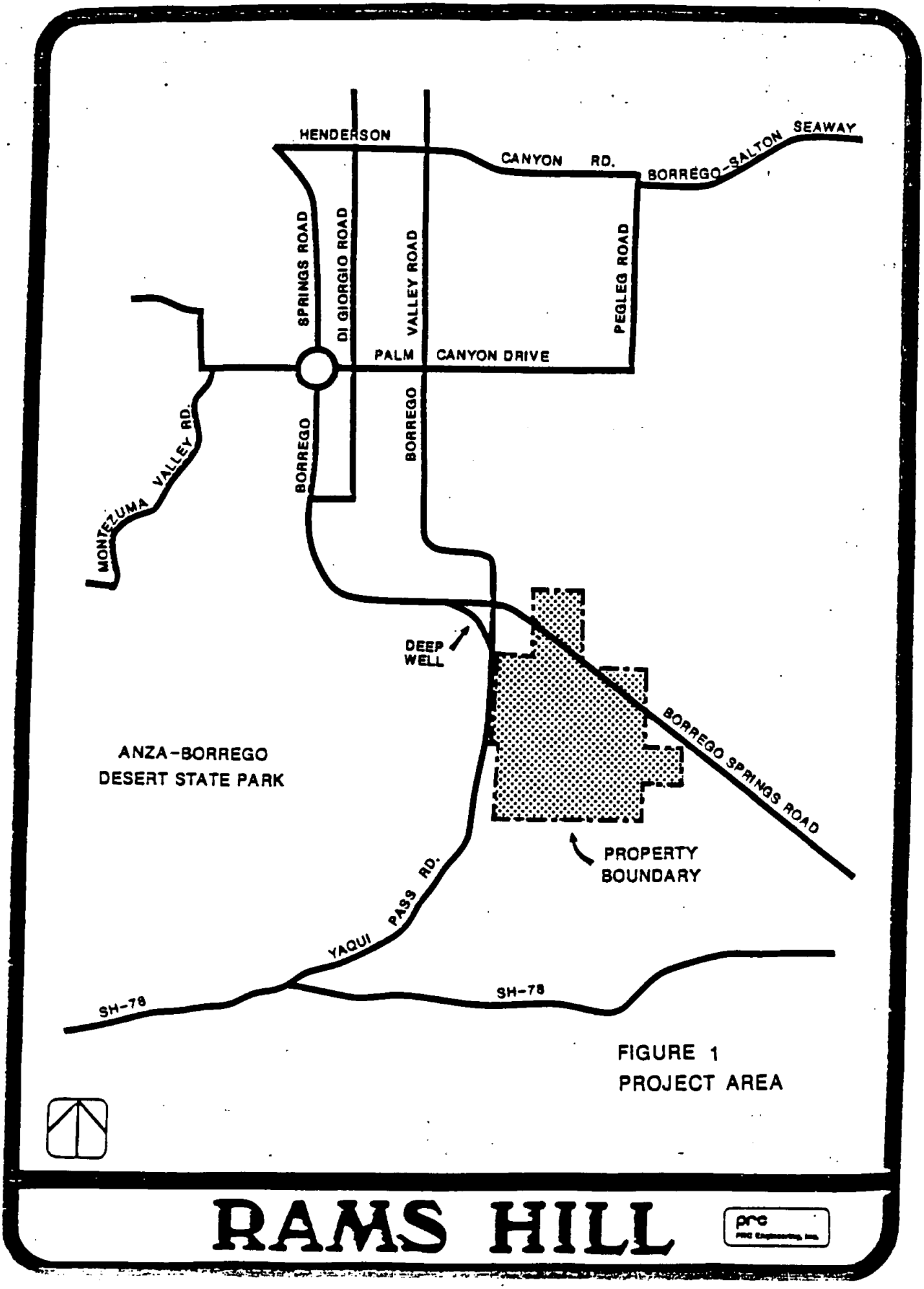


FIGURE 1
PROJECT AREA

RAMS HILL

II. EXISTING CONDITIONS

The two roads adjacent to the project site are Yaqui Pass Road and Borrego Springs Road. Both are currently two lane facilities but are classified by the San Diego County Circulation Element as major roads. Although the paved width of these roads varies from 24 to 40 feet, both roads have 102 feet of right-of-way and 82 feet of roadbed. Yaqui Pass Road (S3) enters the Borrego Valley from points to the south, such as Julian, Agua Caliente, and some of the more densely populated areas of San Diego County. Borrego Springs Road connects the project area with points to the southeast, such as Ocotillo Wells, and El Centro and with the commercial areas of Borrego Springs to the northwest. These two facilities serve as the main access points to the Rams Hill project. Entry and exit from the west side of the project is accomplished via Yaqui Pass Road, while access from the east side is accomplished using Borrego Springs Road.

Due to the project's close proximity to the Anza-Borrego Desert and the Salton Sea recreational areas, there is a distinct peak season during which visitors to the area significantly increase the number of trips made in the Borrego Valley. During this time, January through April, visitor traffic from the south along Yaqui Pass Road occasionally may experience congestion from reduced speeds due to the steep grade and winding nature of this narrow, two-lane rural road. These conditions are not related to the project, but rather are the result of the topographical characteristics of the area. Within the Borrego Springs area, however, peak traffic conditions have not created significant congestion to date.

Nevertheless, it is appropriate to use peak-season traffic data for this analysis. Therefore, traffic counts for the Borrego Springs area were obtained from the Traffic Engineering Division of the County of San Diego. These traffic volumes are shown in Figure 2 and represent counts conducted during the peak month of April 1986. Appendix A contains the 24-hour count sheets obtained from the County. Analysis of these existing conditions indicates that, for the most part, all streets in the immediate vicinity of Rams Hill presently operate at a level of service far below the available capacity of each roadway.

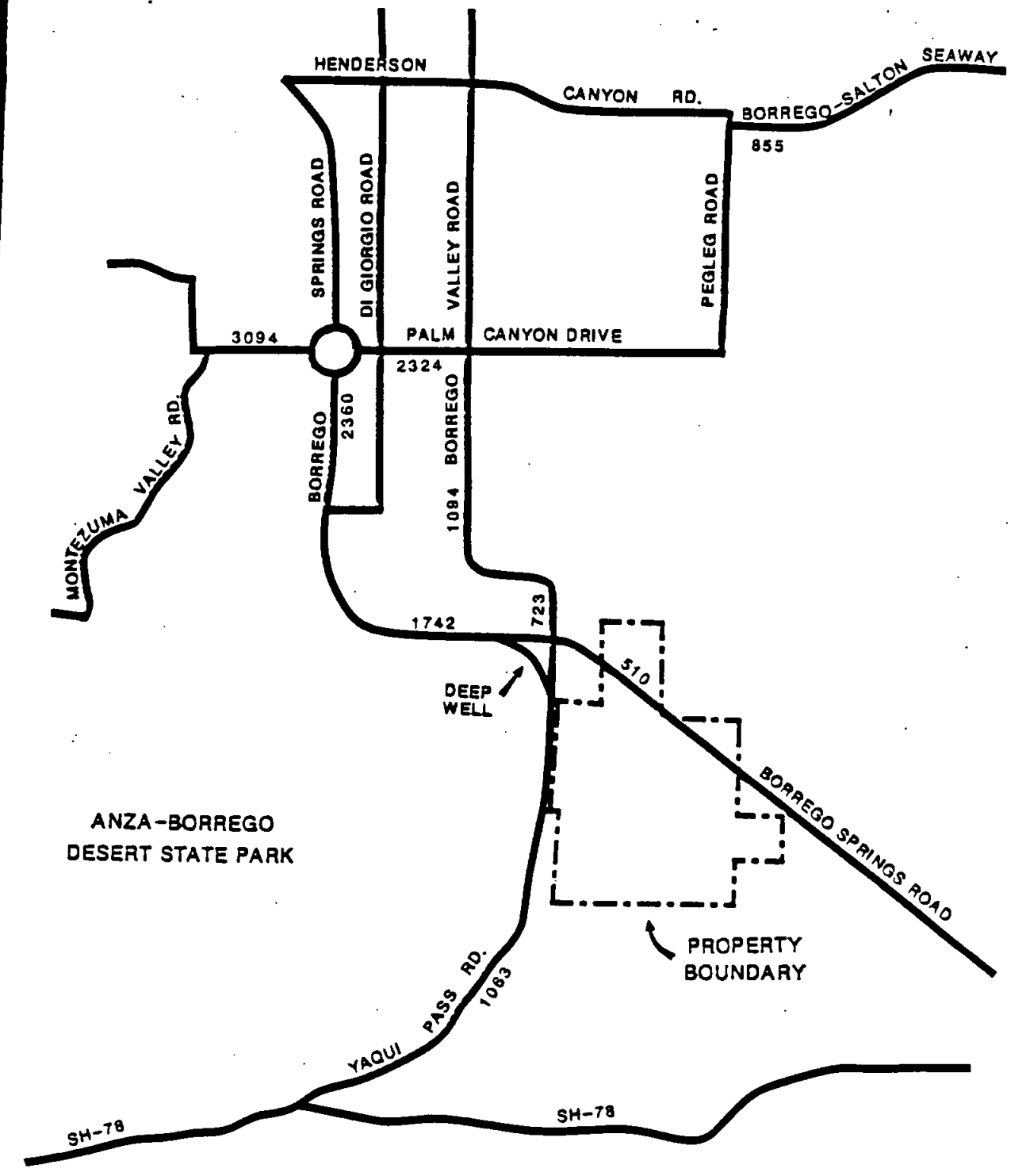


FIGURE 2
EXISTING 1986
AVERAGE DAILY
TRAFFIC VOLUMES

RAMS HILL

The existing daily traffic count on Yaqui Pass Road north of Borrego Springs Road is 723. South of Borrego Springs Road, the count is 1,063. About 20 percent of these 24-hour volume occurs during the peak hours, between 11:00 a.m. and 1:00 p.m. The existing daily traffic counts on Borrego Springs, east and west of Yaqui Pass are 1,742 and 510, respectively. Again, about 20 percent of these 24-hour volumes occur around the noon hour. However, because of the relatively small number of permanent residents in the Borrego Valley and because of the dispersed location of the major trip attractors in the area, there is no significant congestion problem on any of the local Borrego Springs roads today. This holds true even during the peak periods of park visitation.

The original EIR and specific plan required several road improvements which were also conditions of Final Map 10460. The following improvements have been bonded for, contracts have been let, and they will be complete within three months. They include:

Borrego Springs Road within the project boundary to the intersection of Borrego Springs Road: graded to 60' width within 40' paved;

Yaqui Pass Road adjacent to project: graded to 61' width with 53' of pavement;

Yaqui Pass Road from northern project boundary to Borrego Springs Road: graded to 48' width with 40' of pavement.

III. PROJECTED TRAFFIC GROWTH

In order to determine the background traffic for the projected build-out year of 2000, local population and housing growth estimates were examined for the Borrego Springs area. The table below summarizes the estimated growth for the Desert Subregion of San Diego County. This subregion is predominantly comprised of the Borrego Springs area.

San Diego Regional
POPULATON AND HOUSING ESTIMATES
January 1, 1986

Borrego Springs Area

	1980 Census	Jan. 1 1985	Jan. 1 1986	1980-Current Numeric Change	1980-Current % Change	1985-Current Numeric Change	1985-Current % Change
Total Housing Units	2,204	2,200	2,353	154	7.0	158	7.2
Occupied Housing Units	969	1,125	1,146	177	18.3	21	1.9
Total Population	2,191	2,562	2,712	521	23.8	150	5.9

*Source: San Diego Association of Governments

The population for the Borrego Springs area has grown on average by 3 to 4 percent each year. Similarly, occupied housing has grown during the same period by approximately 3 percent per year. For the purposes of this analysis, traffic was projected to grow by a factor of 6 percent each year between 1986 and 2000. This growth assumption is consistent with the 4 percent per year population growth experienced in the Borrego Springs area since 1980. The traffic growth rate was increased by an additional 2 percent beyond the population growth rate to account for growth in the regional attractiveness of the Borrego Springs area. The 2 percent assumption is consistent with the overall 3 percent population growth projected by the San Diego Association of Governments for the San Diego region as a whole, although officials at the Anza Borrego State Park, the main regional attraction, do not project any growth in attendance over the next few years.

The projected traffic volumes based on these assumptions are depicted in Figure 3. These volumes were used in analyzing the combined impact of future background traffic and the traffic generated by the Rams Hill development.

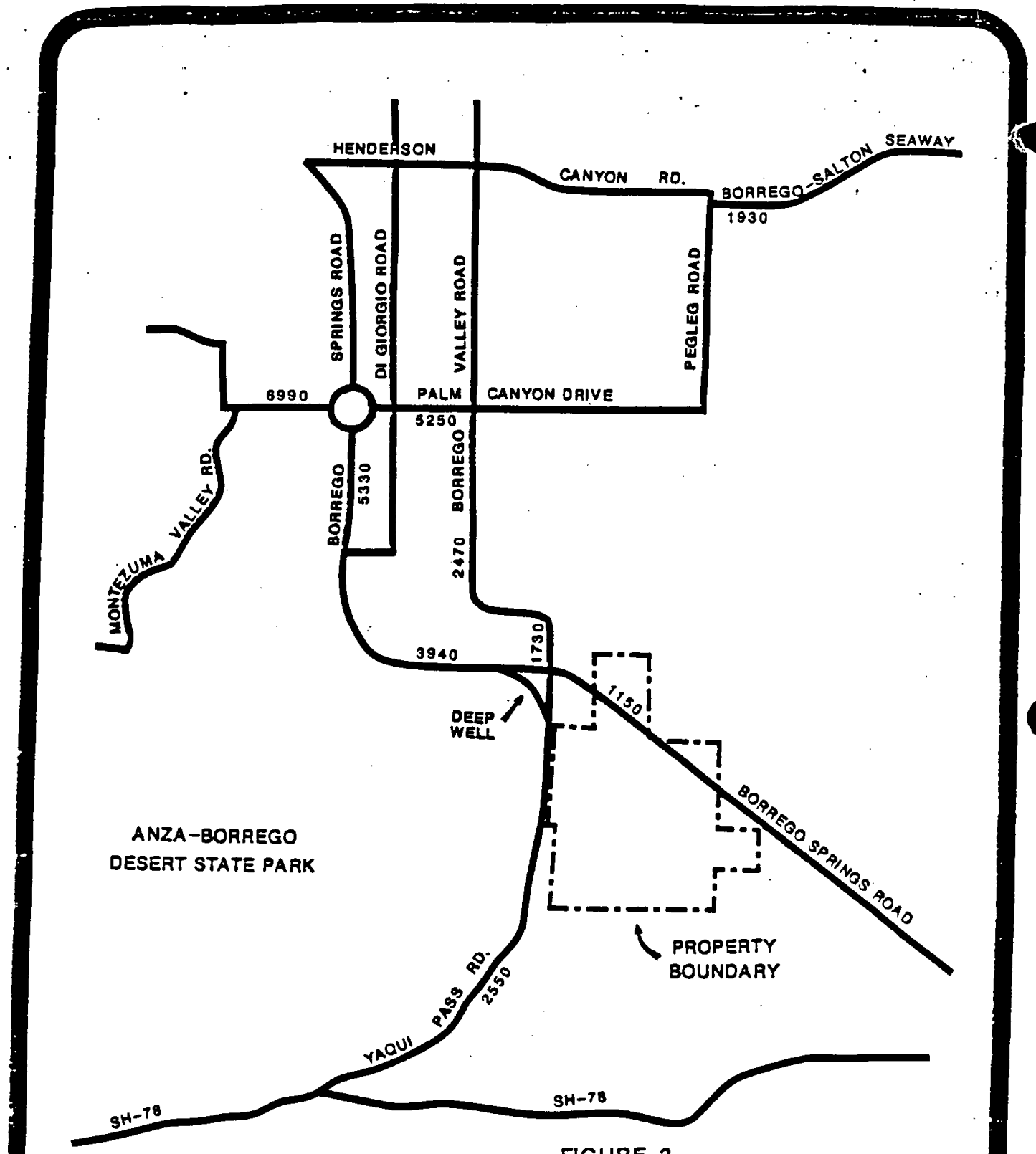


FIGURE 3

2000 FORECAST AVERAGE DAILY TRAFFIC VOLUMES (WITHOUT PROPOSED RAMS HILL SPECIFIC PLAN AMENDMENT)

RAMS HILL

IV. RAMS HILL TRAFFIC IMPACT

The number of vehicle trips generated by a development project depends upon the types of land uses which are included in the project. For each type of land use, a trip generation rate can be applied to estimate the number of daily vehicle trips. Each of the Rams Hill land uses and the corresponding trip generation rates used in this analysis are shown in Table 1. Because no current recommended county rates were available the trip generation rates were derived from the City of San Diego Recommended Weekday Trip Generation Rates Summary (1984). Slight adjustments to the rates were made to reflect the retirement/recreational nature of the project.

As can be seen in Table 1, trip rates for the three different land uses are assigned and then multiplied by the size of the land use to give the amount of trips generated by each land use. A total of 31,120 trips will be generated by the project. However, because of the self-contained nature of the Rams Hill development several assumptions were made to allow for the recognition of trips which will be made wholly within the Rams Hill project site. These internal trip reduction assumptions are reflected in Table 1 and result in the number of external trips which are then assigned to the surrounding road network. It is estimated that the amendment proposed for the Rams Hill development will add 19,052 daily trips to local external roadway network.

The estimated external traffic generated by the Rams Hill plan amendment was theoretically distributed onto the adjacent road network based upon an assumed distribution of project-related traffic. The geographical distribution of project traffic as follows:

North on Yaqui Pass	32%
South of Yaqui Pass	15%
West on Borrego Springs	49%
East on Borrego Springs	4%

Detailed distribution assumptions are depicted in Figure 4.

TABLE 1. TRIPS GENERATED BY RAMS HILL PROJECT

Trip Generator	Rate	Units	Trips Generated	External Trips	VMT Borrego	VMT Regional
Residential	8 Trips/DU	790 DU's	6,320	5,372	38,678	34,918
Commercial	800 Trips/AC	30 AC	24,000	13,200	52,800	N/A
Golf Course	4 Trips/AC	200 AC	800	480	1,728	3,120
Totals			31,120	19,052	93,206	38,038

ASSUMPTIONS:

RESIDENTIAL -
15% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMT Borrego trips multiplied by 8 mile average trips length
VMT Borrego trips multiplied by 65 mile average trip length

COMMERCIAL -
45% of trips are internal
100% of external trips for VMT Borrego
There is no commercial VMT regional
VMT Borrego trips multiplied by 4 mile average trip length

GOLF COURSE -
40% of trips are internal
90% of external trips for VMT Borrego
10% of external trips for VMT regional
VMP Borrego trips multiplied by 4 mile average trip length
VMT regional trips multiplied by 65 mile average trip length

The projected increases in daily traffic volumes attributable to the Rams Hill plan amendment and future local growth are summarized in Table 2 and depicted in Figure 5. Table 2 shows the existing ADT volumes, the increase of local background traffic for the year 2000, and the total increase of traffic for the year 2000 which includes the proposed Rams Hill plan amendment. As indicated in Table 2, it is clear that the Rams Hill plan amendment (primarily the commercial area) is a significant contributor to future traffic in the project area. The most significant traffic increases occur on Borrego Springs Road and Yaqui Pass Road where projected volumes range between 8,000 and 14,500 ADT.

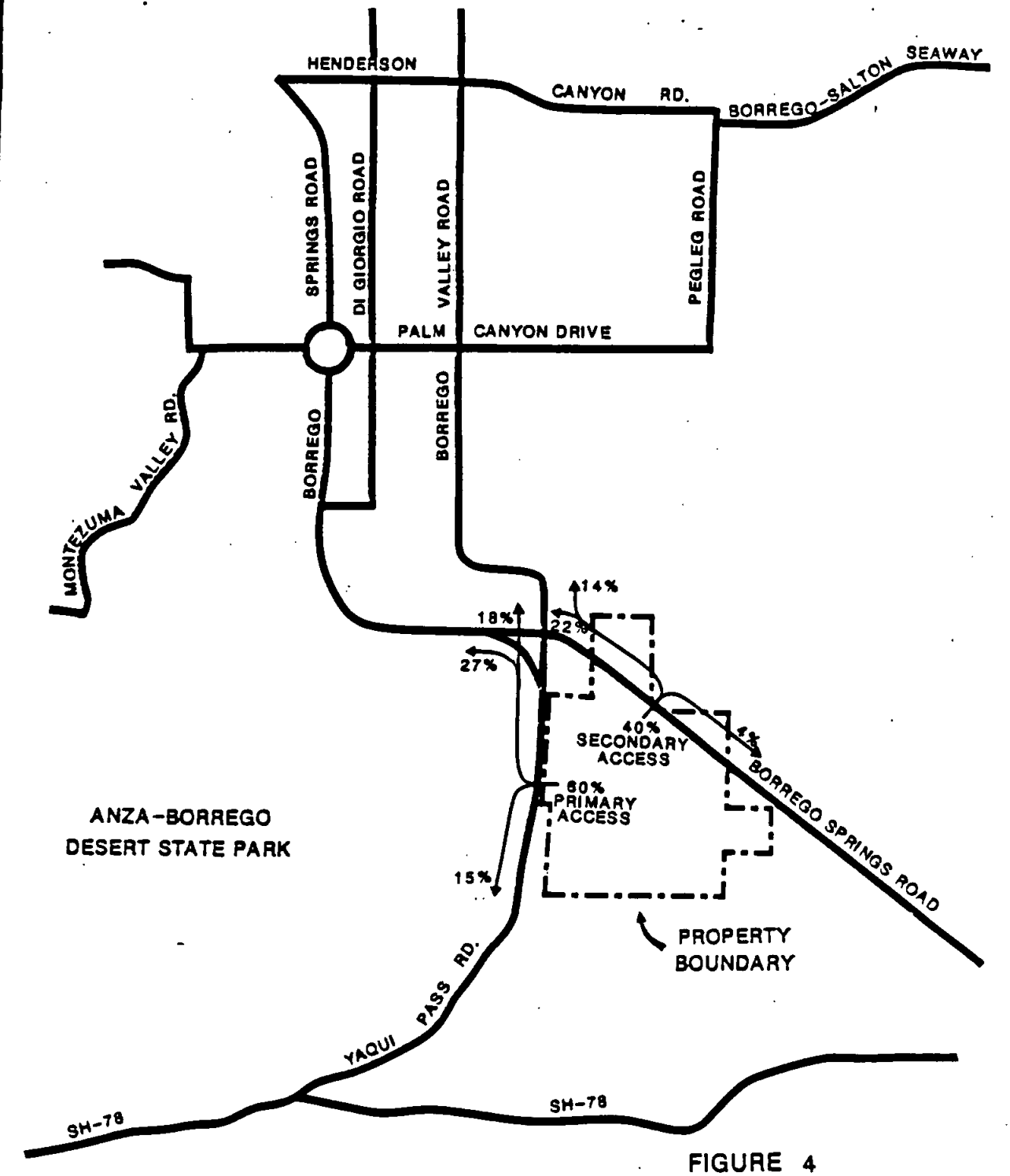


FIGURE 4
DISTRIBUTION OF
PROJECT GENERATED
TRAFFIC

RAMS HILL

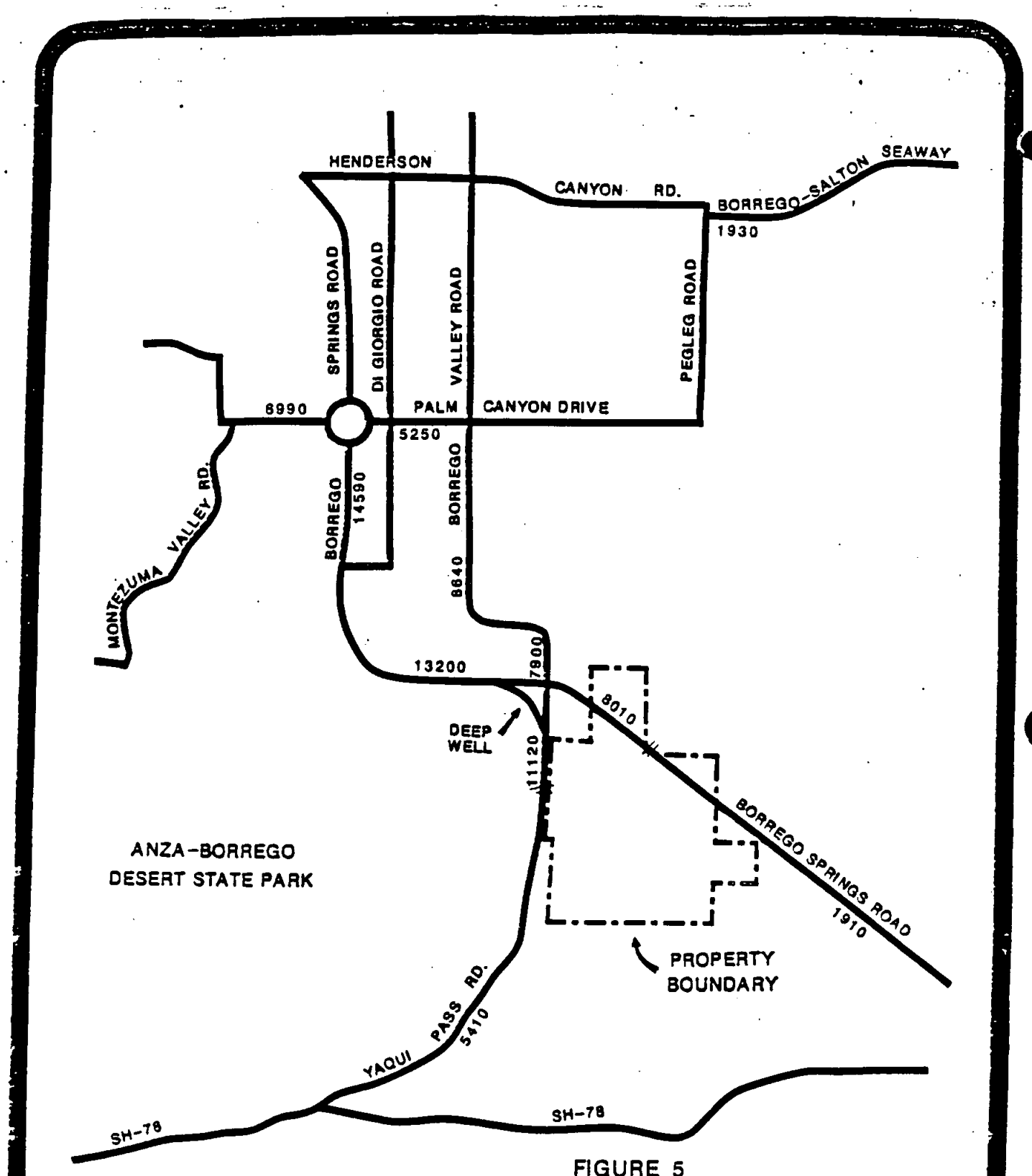


FIGURE 5

2000 FORECAST AVERAGE DAILY TRAFFIC VOLUMES (WITH PROPOSED RAMS HILL SPECIFIC PLAN AMENDMENT)

RAMS HILL

TABLE 2. RAMS HILL ADT COMPARISON

Count Location	1986 Existing	2000 Background (1)	2000 with Proposed Rams Hill Plan Amendment
Borrego Spring Road S. of Yaqui Pass Road	510	1,150	8,010
Borrego Springs Road S. of Project Site	510	1,150	1,910
Borrego Springs Road N. of Ynez Path	1,742	3,940	13,200
Borrego Springs Road S. of Christmas Circle	2,360	5,330	14,590
Borrego-Salton Seaway E. of Henderson Canyon	855	1,930	1,930
Borrego Valley Road S. of Palm Canyon Drive	1,094	2,470	8,640
Palm Canyon Drive W. of Borrego Valley Road	2,324	5,250	5,250
Palm Canyon Dr. E. of Five Diamonds Rd.	3,094	6990	6,990
Yaqui Pass Rd. N. of Borrego Springs Rd.	723	1,730	7,900
Yaqui Pass Road N. of SH-78	1,063	2,550	5,410
Yaqui Pass Road S. of Borrego Springs Road	1,063	2,550	11,120

(1) Is assumed to include trips from first phase Rams Hill development.

The analysis of the impact of the proposed Rams Hill Specific Plan amendment on the Borrego Springs Road network focussed on the project's impact on Yaqui Pass Road, Borrego Springs Road and the intersection of these two roads. Although Yaqui Pass Road is currently paved to only 24 feet and Borrego Springs Road is currently paved to 40 feet, they are both classified as major roads in the Circulation Element of the County General Plan. Built to this standard, these roads would have four travel lanes and 102 feet of right-of-way containing 82 feet of paving with an 18 feet median strip.

While the level of contribution is significant, Rams Hill traffic would be more than adequately accommodated if Yaqui Pass Road and Borrego Springs Road were built to major road standards as provided in the County Circulation Element. However, the existing roadways are more aptly described as Light Collectors by County road standards with a corresponding capacity of 7,100 ADT (see Table 3). This being the case, Rams Hill-generated traffic would seriously tax Yaqui Pass and Borrego Springs Roads as they exist today.

It should be noted that standard trip generation figures have proven to be high for the first Rams Hill Specific Plan. Development level and occupancy rates have not been as high as anticipated. Nevertheless, for this proposed project, standard trip generation rates have been used with only slight modifications. Based on these rates, the future traffic volumes clearly exceed the capacity of the existing roadways. Based on the capacities exhibited in Table 3 the County of San Diego recommends road improvements to Yaqui Pass Road and Borrego Springs Road to be completed in two phases. The first-phase road improvements will mitigate the impacts resulting from increased residential-generated traffic and must be completed prior to occupancy of any residential units within the proposal. The second phase of road improvements will mitigate the impacts resulting from commercial generated traffic and must be completed prior to occupancy of any buildings within the commercial area of the proposal.

Because significant traffic growth is projected for both Yaqui Pass and Borrego Springs Roads the impact of this increase in traffic at the intersection of the two roads was examined. Using the traffic signal warrant standards contained in the California Department of Transportation's Traffic Manual (1977/revised 1985), it was first determined that the projected traffic volumes for the intersection exceeded the threshhold values included in the Traffic Manual for signalization.

Street Approach	ADT Requirement	ADT Volume	ADT Exceedance
Major Street/Borrego Springs	9,600	10,600	1,000
Minor Street/Yaqui Pass	2,400	9,500	7,100

Based on this initial analysis, future traffic increases were deemed to warrant the signalization of the intersection of Yaqui Pass and Borrego Springs Roads. This is primarily due to a heavy left turn demand from northbound Yaqui Pass to Borrego Springs. Rams Hill will also contribute significant northbound travel demand along Yaqui Pass through the Borrego Springs Road intersection as well as increased east-west travel along Borrego Springs Road. The latter is due to the secondary access/egress road at Borrego Springs Road.

The projected level of service for a signalized intersection of Yaqui Pass Road and Borrego Springs Road was calculated using the Intersection Capacity Utilization (ICU) methodology. This methodology is a planning level evaluation of the capacity of an intersection which does not take into consideration the details of signalization. It provides a basic assessment of whether or not capacity is likely to be exceeded for a given set of traffic demand volumes and lane geometrics.

TABLE 3. AVERAGE DAILY VEHICLE TRIPS STANDARDS

Road		Level of Service				
Class	X-Section	A	B	C	D	E
Prime Arterial	106/126	#22,200	37,000	44,600	50,000	57,000
Major Road	82/102	#14,800	24,700	29,600	33,400	37,000
Collector	64/84	#13,700	22,800	27,400	30,800	34,200
Light Collector	40/60	# 1,900	4,100	7,100	10,900	16,200

Source: San Diego County Public Road Standards, June 11, 1986, page 9 (Draft).

The ICU methodology requires data concerning:

1. Geometrics - number and use of lanes on each approach
2. Volumes - total vehicles per hour (vph) for each movement

The data concerning the geometrics was obtained from a site review and the San Diego County General Plan, Circulation Element. Data concerning the total vph was available from 24-hour traffic counts taken in April 1986 (Appendix A). Turning movements were estimated by comparing the approach volumes for each leg of the Yaqui Pass/Borrego Springs intersection and extrapolating likely turn volumes. This was done for two alternatives: 1) no improvement to the existing intersection except signalization, and 2) improvement to major road standards with signalization. Appendix B contains the intersection work sheets used in the analysis.

	Intersection of Yaqui Pass/Borrego Springs	
	No Improvement Except Signalization	Improvement to Major Road Standards and Signalization
V/C	1.98	.78
LOS	F	C

The results of the analysis indicate that the improvement of the Yaqui Pass and Borrego Springs intersection to major road standards along with signalization would yield a level of service of C for the intersection. This is within an acceptable range of operation.

V. SUMMARY OF PROPOSED MITIGATION MEASURES

Based on the traffic impacts of the proposed Rams Hill plan amendment on the local road network, the following mitigation measures are recommended by the County of San Diego to be phased in the following manner:

Phase I

- Yaqui Pass Road is to be constructed to collector road standards from the southwesterly property line of the proposal to Borrego Springs Road intersection prior to occupancy of any residential units.

- Yaqui Pass Road is to have a left turn pocket constructed in addition to the Collector Road at the entrance of Rams Hill Road. The left turn pocket is to be 200 feet long and 12 feet wide. Transitions of 250 feet are to be required north and south of the left turn pocket. The left turn pocket is also to be fully constructed prior to occupancy of any residential units.

- Borrego Springs Road is to be constructed with a left turn pocket 12 feet in width 200 feet long with 250 transitions northerly and southerly of its intersection with the Rams Hill connection. This construction is to be completed prior to occupancy of any residential units within the proposal.

Phase II

- Yaqui Pass Road is to be completed to Major Road standards from the southwesterly corner of the proposal to Borrego Springs Road prior to occupancy of any buildings within the commercial area of the proposal.

- The complete intersection and traffic signal improvements at the intersection of Yaqui Pass Road and Borrego Springs Road are to be constructed prior to occupancy of any buildings within the commercial area of the proposal.

- The construction of Borrego Springs Road from the northeasterly corner of the proposal to the intersection of Yaqui Pass Road is to be constructed to Collector Roadway standards prior to occupancy of any buildings in the commercial area of the proposal.

Although the proposed Rams Hill plan amendment is expected to generate 19,052 external daily trips by the year 2000, the improvement measures summarized above will fully mitigate the traffic impact these additional trips will have on local roads. These improvements in conjunction with continuing improvement by abutting land developers and by the County to Borrego Springs Road between Yaqui Pass Road and Palm Canyon Road will provide a high level of service on these facilities toward the year 2000 horizon.

APPENDIX A

APRIL 1986 TRAFFIC COUNT SHEETS

TSS-M.F. COUNTY OF SAN DIEGO RUN DATE
TRAFFIC ENGINEERING DIVISION 4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
DORREGO SLTN SWY E OF HENDERSON CYN R2 SO CO LINE	00621-00834	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	0.	20.	0.	0.	0.		
1	0.	0.	10.	0.	0.	0.		
2	10.	0.	0.	20	0.	10.		
3	10.	0.	20.	10.	0.	10.		
4	0.	0.	10.	10.	10.	0.		
5	10.	10.	10.	0.	0.	10.		
6	10.	10.	10.	20.	10.	10.		
7	10.	10.	20.	20.	20.	10.		
8	30.	30.	40.	50.	20.	30.		
9	30.	50.	60.	90.	30.	30.		
10	30.	60.	100.	110.	40.	30.		
11	40.	70.	110.	150.	50.	40.		
12	60.	60.	120.	130.	50.	60.		
13	50.	70.	120.	120.	50.	30.		
14	70.	70.	140.	110.	60.	0.		
15	60.	60.	150.	90.	60.			
16	70.	80.	130.	80.	30.			
17	40.	60.	130.	60.	40.			
18	40.	60.	90.	30.	30.			
19	10.	50.	70.	10.	20.			
20	10.	30.	60.	10.	10.			
21	10.	40.	20.	10.	0.			
22	0.	50.	20.	0.	10.			
23	10.	10.	10.	0.	0.			
TOTALS	610.	880.	1470.	1130.	540.			

PEAK HOUR=					
AM- VOL.	50.	80.	120.	150.	50.
-TIME	11.25	10.50	10.75	11.00	10.25
PHF-	0.625	1.000	0.750	0.937	0.625
PM- VOL.	70.	80.	150.	130.	70.
-TIME	13.25	15.50	13.75	12.00	14.50
PHF-	0.875	0.667	0.937	0.812	0.875

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 10.25 COUNT = 1010.

AVG 24 HR VOL = 855.

AVERAGE WEEKEND VOL = 1300. AVERAGE WEEKDAY VOL = 677.

TOTAL COUNTER COUNT = 4680.

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
BORREGO SPR RD S OF CHRISTMAS CIR DR DIAMOND BAR RD	30734-30929	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	10.	10.	30.	0.	0.		
1	0.	10.	10.	10.	0.	0.		
2	10.	0.	20.	10.	0.	10.		
3	10.	10.	20.	10.	10.	10.		
4	10.	10.	20.	10.	10.	10.		
5	30.	20.	20.	20.	20.	30.		
6	60.	30.	40.	30.	60.	60.		
7	120.	90.	70.	60.	110.	120.		
8	100.	110.	130.	130.	110.	100.		
9	90.	110.	200.	160.	100.	90.		
10	120.	120.	200.	230.	130.	120.		
11	170.	150.	240.	220.	140.	170.		
12	150.	170.	260.	270.	140.	150.		
13	130.	170.	280.	290.	180.	70.		
14	160.	170.	300.	200.	150.	0.		
15	190.	210.	270.	250.	200.			
16	180.	200.	230.	200.	170.			
17	180.	210.	250.	160.	130.			
18	120.	160.	160.	140.	110.			
19	100.	140.	120.	70.	70.			
20	80.	120.	90.	50.	50.			
21	50.	120.	80.	50.	30.			
22	20.	60.	40.	20.	10.			
23	10.	50.	30.	10.	10.			
TOTALS	2090.	2450.	3090.	2630.	1940.			

PEAK HOUR=					
AM- VOL.	170.	190.	260.	270.	160.
-TIME	10.75	11.75	10.50	11.75	11.50
PHF-	0.850	0.950	0.929	0.844	0.800
PM- VOL.	190.	220.	300.	290.	200.
-TIME	14.50	17.25	14.00	12.50	15.00
PHF-	0.792	0.917	0.833	0.906	0.833

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 10.25 COUNT = 2050.

AVG 24 HR VOL = 2360.

AVERAGE WEEKEND VOL = 2860. AVERAGE WEEKDAY VOL = 2160.

TOTAL COUNTER COUNT = 12200.

1?3-M.F.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

RUN DATE
4-11-86

LOCATION OF COUNTER		LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
BORREGO SPR RD	S OF YAQUI PASS RD SH 78	00054-00303	X	4- 3-86	CLDY	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	0.	0.	0.	0.	0.		
1	0.	0.	0.	0.	0.	0.		
2	0.	0.	0.	10.	0.	0.		
3	0.	0.	0.	0.	0.	0.		
4	0.	0.	10.	10.	0.	0.		
5	10.	10.	0.	0.	10.	10.		
6	10.	10.	20.	10.	10.	10.		
7	30.	20.	20.	20.	30.	30.		
8	30.	40.	30.	20.	30.	30.		
9	30.	40.	60.	50.	30.	30.		
10	20.	40.	50.	60.	30.	20.		
11	50.	30.	60.	70.	20.	30.		
12	30.	40.	50.	70.	40.	0.		
13	30.	50.	70.	40.	30.			
14	40.	40.	70.	70.	40.			
15	40.	30.	50.	50.	40.			
16	50.	40.	50.	30.	30.			
17	20.	30.	50.	30.	10.			
18	20.	10.	30.	10.	10.			
19	10.	20.	20.	20.	10.			
20	10.	20.	10.	10.	0.			
21	0.	30.	30.	0.	10.			
22	10.	10.	10.	10.	0.			
23	10.	10.	10.	0.	0.			
TOTALS	470.	520.	700.	590.	330.			
PEAK HOUR=								
AM- VOL.	50.	50.	80.	80.	40.			
-TIME	11.00	9.50	10.50	10.75	7.25			
PHF-	0.625	0.625	1.000	1.000	1.000			
PM- VOL.	60.	50.	80.	70.	50.			
-TIME	13.25	12.50	13.50	12.00	13.75			
PHF-	0.750	0.625	0.667	0.583	0.625			

EIGHT HOUR PEAK

DAY OF WEEK =SAT BEGIN TIME = 9.00 COUNT = 460.

AVG 24 HR VOL = 510.

AVERAGE WEEKEND VOL = 645. AVERAGE WEEKDAY VOL = 457.

TOTAL COUNTER COUNT = 2670.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

4G3 25

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
BORR. SPNGS. RD. W/O YNEZ PATH	30915-30922	X	4-3-86	CLR	2

TIME	MON	TUE	WED	THUR	FRI	SAT	SUN	MON
0 - 1	1	4			7	6	16	
1 - 2	1	0			0	6	9	
2 - 3	1	3			2	3	3	
3 - 4	0	3			3	8	9	
4 - 5	3	1			1	15	5	
5 - 6	20	24			18	15	14	
6 - 7	34	41			42	37	27	
7 - 8	91	72			71	58	46	
8 - 9	69	64			78	92	87	
9 -10	72	63			95	127	162	
10 -11	86	77			119	152	182	
11 -12	93	↑110			128	212	190	
12 -13	120			↓135	128	195	232	
13 -14	125			148	136	255	218	
14 -15	151			134	159	261	169	
15 -16	175			152	160	240	197	
16 -17	106			117	142	169	176	
17 -18	77			104	116	179	91	
18 -19	58			64	90	75	46	
19 -20	30			51	66	67	32	
20 -21	18			31	60	42	21	
21 -22	12			36	63	46	28	
22 -23	7			22	46	28	8	
23 -24	7			13	33	20	7	
TOTALS	1325	462		1008	1763	2803	1947	

24 HR VOL = 1742 5 day aver.

PEAK HOUR 11:00 AM 212 WEEK DAY SAT
PEAK HOUR 2:00 PM 261 WEEK DAY SAT

TOTAL COUNTER COUNT =

Weekend aver. 2,127

Weekday aver. 1,519

T55-M.F. COUNTY OF SAN DIEGO RUN DATE
TRAFFIC ENGINEERING DIVISION 4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
BORREGO VLY RD S OF PALM CANYON DR TILTING T DR 1	C0056-03067	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	10.	0.	10.	0.	0.		
1	10.	0.	0.	10.	0.	10.		
2	0.	0.	10.	0.	10.	0.		
3	10.	0.	20.	20.	10.	10.		
4	0.	0.	10.	10.	0.	0.		
5	20.	20.	10.	10.	10.	20.		
6	20	30.	20.	30.	30.	20.		
7	50.	50.	40.	60.	60.	50.		
8	60.	80.	80.	90.	50.	60.		
9	70.	70.	60.	130.	40.	70.		
10	60.	80.	80.	140.	40.	60.		
11	60.	70.	100.	120.	60.	60.		
12	110.	100.	110.	140.	80.	60.		
13	80.	100.	100.	140.	60.	0.		
14	100.	70.	100.	120.	60.			
15	100.	90.	110.	80.	70.			
16	70.	70.	130.	60.	60.			
17	50.	80.	120.	60.	50.			
18	50.	60.	80.	40.	30.			
19	30.	70.	50.	20.	30.			
20	20.	50.	60.	10.	20.			
21	20.	30.	30.	10.	10.			
22	20.	30.	20.	10.	10.			
23	0.	20.	20.	10.	0.			
TOTALS	1010.	1180.	1360.	1330.	790.			

PEAK HOUR=					
AM- VOL.	90.	100.	110.	140.	70.
-TIME	11.50	11.75	10.75	9.25	7.50
PHF-	0.750	0.833	0.917	0.875	0.875
PM- VOL.	110.	100.	140.	140.	80.
-TIME	12.00	12.00	16.75	12.00	12.00
PHF-	0.917	0.833	0.875	0.700	1.000

EIGHT HOUR PEAK
DAY OF WEEK =SUN BEGIN TIME = 8.00 COUNT = 960.

AVG 24 HR VOL = 1094.

AVERAGE WEEKEND VOL = 1345. AVERAGE WEEKDAY VOL = 993.

TOTAL COUNTER COUNT = 5700.

TSS-M.F. COUNTY OF SAN DIEGO MON DATE
TRAFFIC ENGINEERING DIVISION 4-11-86

LOCATION OF COUNTER		LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
LAZY S DR	N OF BIG HORN RD WRANGLERS DR	31080-27413	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0	10.	0.	0.	0.	0.		
1	0.	0.	0.	0.	0.	0.		
2	0.	0.	0.	0.	0.	0.		
3	0.	0.	0.	0.	0.	0.		
4	0.	0.	0.	0.	0.	0.		
5	0.	0.	0.	10.	0.	0.		
6	20.	10.	20.	10.	10.	20.		
7	20.	20.	20.	10.	20.	20.		
8	20.	40.	20.	30.	40.	20.		
9	60.	60.	50.	40.	40.	60.		
10	40.	60.	30.	60.	40.	40.		
11	40.	80.	80.	40.	70.	40.		
12	50.	60.	70.	30.	70.	50.		
13	60.	50.	70.	20.	50.	60.		
14	30.	70.	50.	50.	90.	30.		
15	70.	60.	70.	40.	90.	0.		
16	70.	60.	60.	50.	60.			
17	50.	70.	70.	40.	40.			
18	30.	30.	40.	30.	30.			
19	30.	20.	20.	10.	20.			
20	10.	10.	0.	10.	10.			
21	20.	10.	10.	10.	10.			
22	10.	10.	10.	10.	0.			
23	0.	0.	10.	0.	0.			
TOTALS	600.	730.	700.	500.	690.			

PEAK HOUR=

AM- VOL.	60.	80.	90.	60.	80.
-TIME	8.75	10.75	11.25	9.75	11.25
PHF-	0.750	0.667	0.750	0.750	1.000
PM- VOL.	80.	80.	80.	60.	90.
-TIME	15.25	15.50	16.50	14.50	14.00
PHF-	1.000	1.000	0.667	0.750	0.750

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 10.50 COUNT = 520.

AVG 24 HR VOL = 660.

AVERAGE WEEKEND VOL = 600. AVERAGE WEEKDAY VOL = 683.

TOTAL COUNTER COUNT = 3280.

TRAFFIC ENGINEERING DIVISION 4-11-86

LOCATION OF COUNTER		LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
OCOTILLO CR	N OF PALM CANYON DR VERBENA DR	00447-00700	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	0.	0.	0.	10.	0.	10.		
1	0.	0.	10.	0.	0.	0.		
2	0.	0.	0.	0.	0.	0.		
3	10.	0.	0.	10.	10.	10.		
4	30.	30.	30.	20.	30.	40.		
5	70.	60.	40.	40.	70.	70.		
6	70.	120.	50.	70.	70.	90.		
7	70.	100.	90.	90.	70.	60.		
8	80	110.	90.	100.	80.	70.		
9	100.	120.	160.	80.	100.	90.		
10	140.	140.	110.	90.	140.	130.		
11	100.	120.	110.	60.	100.	100.		
12	150.	120.	120.	100.	150.	20.		
13	130.	150.	120.	80.	130.	0.		
14	130.	150.	110.	70.	120.			
15	200.	150.	110.	90.	130.			
16	140.	80.	70.	60.	70.			
17	120.	60.	40.	30.	70.			
18	80.	60.	30.	40.	40.			
19	70.	40.	30.	30.	10.			
20	40.	40.	20.	10.	10.			
21	20.	10.	20.	0.	0.			
22	10.	10.	0.	0.	0.			
23	0.	0.	0.	0.	0.			
TOTALS	1760.	1670.	1360.	1080.	1400.			

PEAK HOUR=					
AM- VOL.	140.	150.	160.	110.	140.
-TIME	9.50	10.25	9.00	7.75	9.50
PHF-	0.700	0.937	0.800	0.917	0.700
PM- VOL.	200.	150.	130.	100.	150.
-TIME	15.00	13.00	14.25	12.00	12.00
PHF-	0.714	0.750	0.812	0.833	0.750

EIGHT HOUR PEAK
DAY OF WEEK =THU BEGIN TIME = 9.50 COUNT = 1110.

AVG 24 HR VOL = 1499.

AVERAGE WEEKEND VOL = 1220. AVERAGE WEEKDAY VOL = 1610.

TOTAL COUNTER COUNT = 7010.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

4F3 (HPS) 25 (ADT)

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	STA TYPE
PALM CAN. DR. w/o BORR. VLY RD.	00056-00472	X	4-3-86	CLR	2

TIME	MON	TUE	WED	THUR	FRI	SAT	SUN	MON
0 - 1								
1 - 2								
2 - 3								
3 - 4								
4 - 5								
5 - 6								
6 - 7								
7 - 8								
8 - 9								
9 -10								
10 -11								
11 -12		↑						
12 -13				↓				
13 -14								
14 -15								
15 -16								
16 -17								
17 -18								
18 -19								
19 -20								
20 -21								
21 -22								
22 -23								
23 -24								
TOTALS	1486	798		1085	2373	3206	2676	

24 HR VOL = 2324 (5day average)

PEAK HOUR 10:00 AM 304 WEEK DAY SUN.
PEAK HOUR 2:00 PM 304 WEEK DAY SUN.

TOTAL COUNTER COUNT = 11,624

1914 Weekday Vol. (ave.)
2941 Weekend " "

TSS-M.F.

COUNTY OF SAN DIEGO
TRAFFIC ENGINEERING DIVISION

RUN DATE
4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	TYPE
PALM CANYON DR 1 E OF FIVE DIAMONDS RD SUN AND SHOWS LN	29272-26877	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	10.	10.	40.	10.	10.	10.		
1	10.	0.	10.	10.	0.	10.		
2	10.	10.	30.	30.	10.	10.		
3	20.	20.	50.	20.	0.	20.		
4	10.	0.	30.	30.	10.	10.		
5	10.	20.	30.	10.	20.	10.		
6	60.	30.	70.	70.	50.	60.		
7	110.	100.	110.	120.	80.	110.		
8	100.	140.	180.	200.	130.	100.		
9	110.	200.	270.	310.	130.	110.		
10	150.	210.	350.	380.	170.	150.		
11	220.	220.	400.	440.	210.	220.		
12	240.	260.	430.	490.	200.	240.		
13	230.	260.	450.	450.	210.	230.		
14	250.	270.	460.	410.	200.	230.		
15	230.	280.	450.	370.	210.	120.		
16	170.	230.	430.	280.	140.	0.		
17	180.	240.	320.	220.	130.			
18	100.	170.	210.	130.	80.			
19	70.	130.	140.	60.	40.			
20	60.	120.	100.	70.	40.			
21	30.	120.	70.	20.	20.			
22	20.	80.	30.	20.	10.			
23	10.	60.	30.	0.	0.			
TOTALS	2410.	3180.	4690.	4150.	2100.			

PEAK HOUR=

AM- VOL.	240.	260.	420.	490.	220.
-TIME	11.75	11.75	10.75	11.50	11.75
PHF-	0.857	0.929	0.875	0.942	0.917
PM- VOL.	250.	290.	470.	490.	210.
-TIME	12.50	14.50	12.50	12.00	13.00
PHF-	0.893	0.906	0.904	0.942	0.875

EIGHT HOUR PEAK
DAY OF WEEK =SAT BEGIN TIME = 9.50 COUNT = 3290.

AVG 24 HR VOL = 3094.

AVERAGE WEEKEND VOL = 4420. AVERAGE WEEKDAY VOL = 2563.

TOTAL COUNTER COUNT = 16810.

TRI-M S. COUNTY OF SAN DIEGO RUN DATE
TRAFFIC ENGINEERING DIVISION 4-11-86

LOCATION OF COUNTER	LOCATION CODE	DIRECT OF FLOW	DATE OF COUNT	WTHR	TYPE
SCISSORS CROSSING (SEE THOS. BROS					
SAN FELIPE RD W OF SH 78 MONTEZUMA VLY RD	01495-27104	X	4- 3-86	CLR	2

HOUR BEGINNING	THUR	FRI	SAT	SUN	MON	TUES	WED	THUR
0	10.	10.	30.	20.	0.	10.		
1	10.	10.	20.	0.	0.	10.		
2	0.	10.	10.	0.	10.	0.		
3	10.	10.	20.	10.	10.	10.		
4	20.	20.	20.	0.	20.	20.		
5	20.	0.	20.	10.	20.	20.		
6	30.	20.	30.	10.	10.	30.		
7	20.	40.	60.	40	20.	20.		
8	30.	50.	70.	70.	30.	30.		
9	50.	60.	100.	60.	30.	50.		
10	50.	70.	90.	120.	40.	40.		
11	40	70.	100.	180.	50.	10.		
12	50.	50.	100.	190.	50.			
13	40.	80.	80.	220.	40.			
14	40.	80.	90.	220.	50.			
15	60.	70.	100.	280.	30.			
16	50.	90.	100.	170.	30.			
17	30.	70.	90.	160.	20.			
18	20.	100.	50.	90.	20.			
19	30.	100.	40.	40.	10.			
20	30.	140.	40.	10.	10.			
21	20.	110.	20.	10.	10.			
22	20.	70.	20.	10.	10.			
23	0.	70.	10.	10.	0.			
TOTALS	680.	1400.	1310.	1930.	520.			

PEAK HOUR=					
AM- VOL.	60.	80.	110.	210.	60.
-TIME	9.50	9.50	9.75	11.50	11.25
PHF-	0.750	0.667	0.687	0.875	0.750
PM- VOL.	70.	150.	120.	280.	50.
-TIME	15.25	20.25	16.25	15.00	12.00
PHF-	0.875	0.750	0.750	0.875	0.625

EIGHT HOUR PEAK
DAY OF WEEK =SUN BEGIN TIME = 10.00 COUNT = 1540.

AVG 24 HR VOL = 1082.

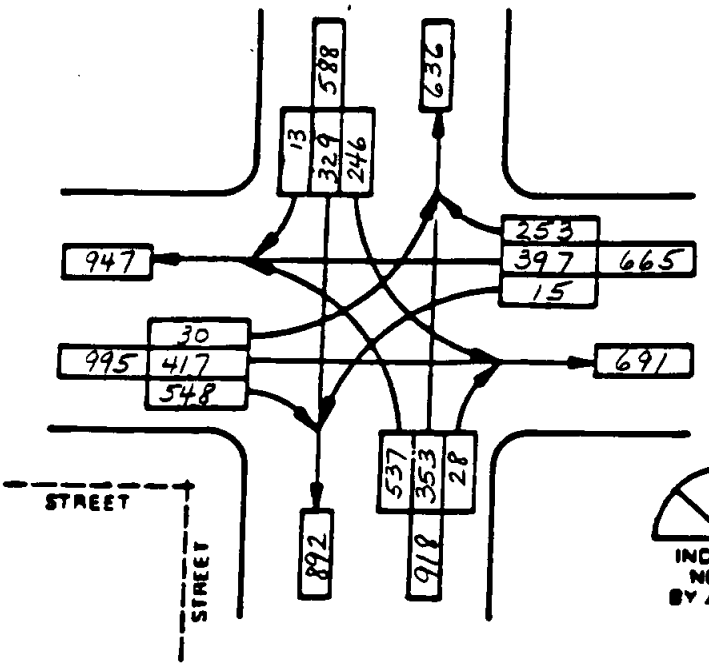
AVERAGE WEEKEND VOL = 1620. AVERAGE WEEKDAY VOL = 967.

TOTAL COUNTER COUNT = 5870.

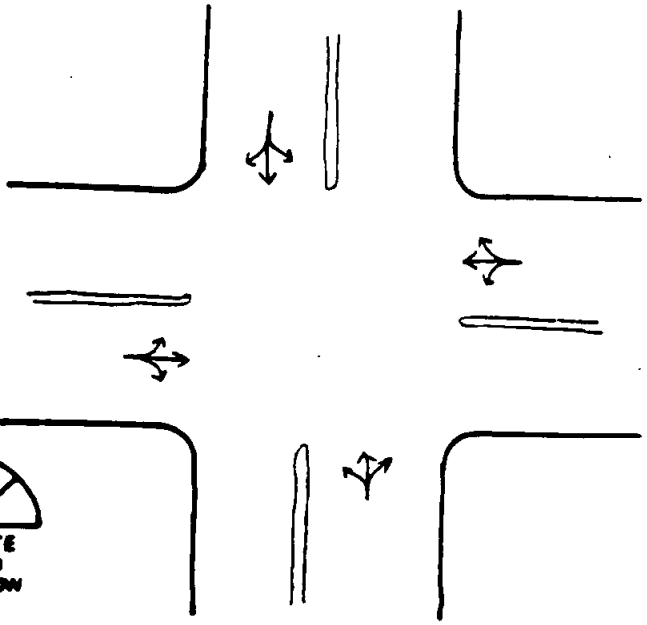
APPENDIX B

ICU WORKSHEETS

TURNING MOVEMENT SUMMARY



LANE CONFIGURATION



CRITICAL LANE VOLUME WORKSHEET

Movement	Volume	Capacity	Vol/Cap	Critical Movement	Critical Vol/Cap
NBT/NBR/NBL	918	1600	.57	*	.57
SBT/SBR/SBL	588	1600	.37	*	.37
EBT/EBR/EBL	995	1600	.62	*	.62
WBT/WBR/WBL	665	1600	.42	*	.42

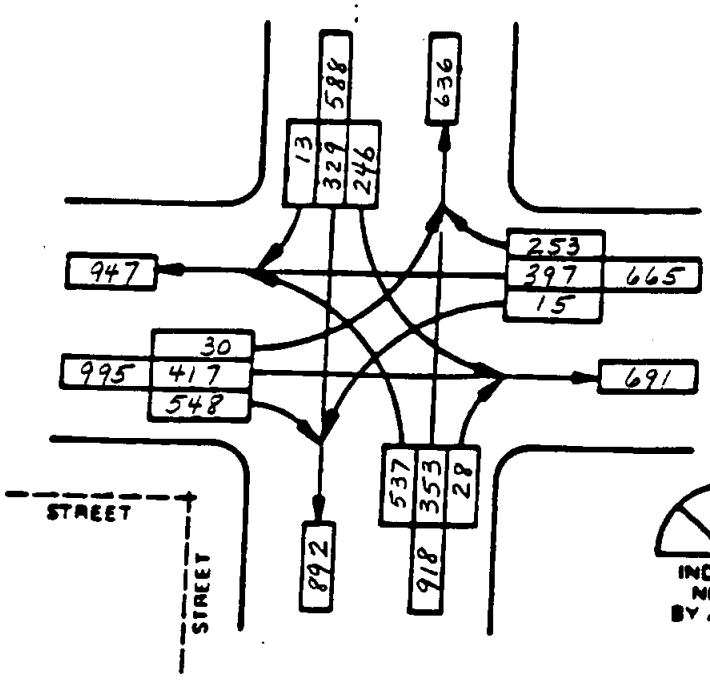
TOTAL	1.98
LEVEL OF SERVICE	F

Movements:

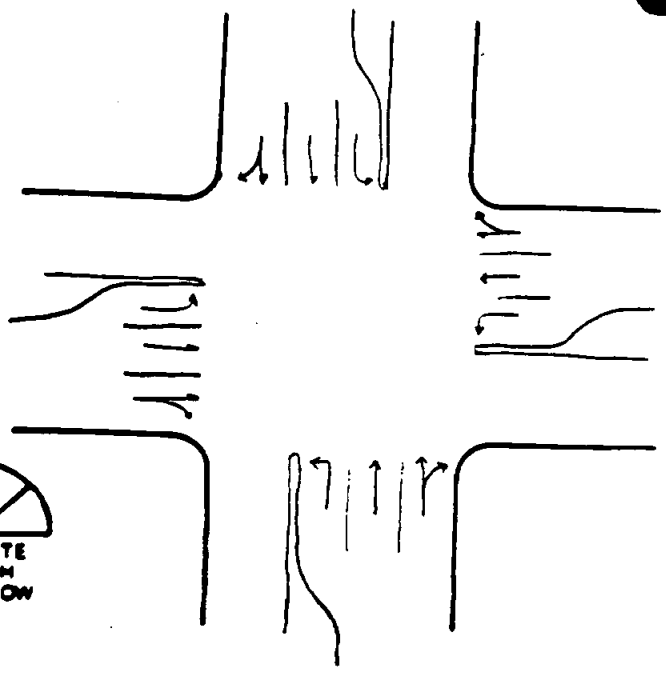
Northbound Thrus = NBT
Northbound Rights = NBR
Northbound Lefts = NBL
Etc.

* Denotes Critical Volume

TURNING MOVEMENT SUMMARY



LANE CONFIGURATION



CRITICAL LANE VOLUME WORKSHEET

Movement	Volume	Capacity	Vol/Cap	Critical Movement	Critical Vol/Cap
NBT/NBR	381	3200	.12		
NBL	537	1500	.36	*	.36
SBT/SBR	342	3200	.11	*	.11
SBL	246	1500	.16		
EBT/EBR	965	3200	.30	*	.30
EBL	30	1500	.02		
WBT/WBR	630	3200	.11		
WBL	15	1500	.01	*	.01
				TOTAL	.78
				LEVEL OF SERVICE	C

Movements:

Northbound Thrus = NBT
Northbound Rights = NBR
Northbound Lefts = NBL
Etc.

* Denotes Critical Volume

APPENDIX D

NOISE

SAN DIEGO ACOUSTICS, Inc.

Report No. 86-095 Rev. 1
July 30, 1986

Environmental Noise Analysis
Rams Hill

Noise

1. Existing Setting

Existing noise levels over the site are quite low. The sources include aircraft operating in and out of the Borrego County Airport, off road vehicles and automotive traffic on Yaqui Pass Road and Borrego Springs Road. As the two former sources are relatively random in nature, only the latter source will be addressed.

The FHWA Traffic Model was used to determine both the current and future noise levels associated with these roads. Current and projected traffic volumes were obtained as a result of PRC traffic studies of the entire area, as reported in detail in another portion of this report.

2. Existing And Future Noise Levels

The current and future traffic expected on the two major roads influencing the project are shown in Table 1, both without (W/O) and with (W) the project.

Table 1
Current and Future Traffic - ADT

Road	1986	2000	
		W/O Proj	W Proj
Yaqui Pass Road			
N. of Rams Hill Rd	1063	2550	11,120
S. of Rams Hill Rd	1063	2550	5,410
Borrego Springs Road			
N. of Kuhrts Rd	510	1153	8,010
S. of Kuhrts Rd	510	1153	1,910

Table 2
Expected Noise Levels Adjacent to Yaqui and Borrego Springs Roads. - CNEL

Road	Noise Contour	Dist. from Road Ctr Line - Ft 1986	2000
Yaqui Pass Rd	50	185	336
	55	86	156
	60	40	72
Borrego Spgs Rd	50	222	380
	55	103	177
	60	48	82

3. Project Impact

The project contains no unusual sources of noise and therefore is not expected to have an acoustical impact on the surrounding area.

4. Mitigation

The County requires that all outdoor recreational areas receiving noise levels which exceed 60 CNEL must be mitigated such that the result which occurs is 60, or less. The projected 60 CNEL noise contours (Table 2), for the two major roads influencing the project, will not occur at a distance of more than 82 feet from the center line of Borrego Springs Road or 72 feet from the centerline of Yaqui Pass Road. It is unlikely that recreational areas will be located this close to either of the roads. Thus, no mitigation of noise is required.

5. Analysis of Significance

No significant noise impacts are anticipated due to implementation of the Rams Hill project.

No mitigation of outdoor recreational areas is required as traffic noise levels will be minimal.

The project will be in compliance with County requirements.

5. Analysis of Significance

No significant noise impacts are anticipated due to implementation of the Rams Hill project.

Mitigation of outdoor recreational areas is not required as no outdoor recreational areas will be located within the CNEL contours which are in excess of 60, Table 2.

The project will be in compliance with County requirements as proposed.

APPENDIX E

SERVICE LETTERS

SDG&E

San Diego Gas & Electric

June 13, 1986

Mary J. Donovan
PRC Engineering, Inc.
401 W. A Street
Suite 2500
San Diego, CA 92101

SUBJECT: Specific Plan Amendment, Rams Hill Country Club, Borrego California

Ms. Donovan:

This letter responds to your request for information regarding the ability for San Diego Gas & Electric's existing system to serve the proposed expansions of the Rams Hill Country Club development. I discussed this subject with the district engineer. SDG&E's future plans for the area were also discussed. The following information should respond to your inquiry:

- The existing substation at Borrego is an isolated substation and is at capacity.
- Proposed development will require either rebuilding the existing substation or installing a new substation. The current recommendation is to install a new substation in the vicinity of Yaqui Pass and Borrego Springs Road.
- The existing transmission line is adequate to serve the proposed development and the rebuilt substation or proposed new substation.
- Ongoing development in the Borrego vicinity will warrant future transmission development for capacity and reliability purposes. We foresee a new transmission line coming into the planning horizon, i.e., within the next 10 years. At this time we have no idea where the line would be located but, it would be wise to begin planning for the location in the near future.

Ms. Donovan, please keep in mind that SDG&E has no gas facilities in the Borrego area. We only serve it with electricity. Bottled gas is available from private companies. If you have any questions regarding this letter or wish to discuss the entire matter further, please give me a call at (619) 696-2409.

Sincerely,

Don L. Rose
Sr. Licensing Analyst

DLR:sl

May 26, 1986

Mr. Don Rose, Land Planning Analyst
San Diego Gas & Electric
P.O. Box 1831
San Diego, CA 92101

Dear Mr. Rose:

The DiGiorgio Development Corporation is proposing a specific plan amendment, rezone, and tentative maps for the completion of Rams Hill Country Club. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the first Rams Hill Country Club Specific Plan (SP-80-01). That specific plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations. In March 1984, a Specific Plan Amendment (SP-A83-05) which outlined minor revisions to the Specific Plan was approved. The following table provides land use information for SP-A83-05.

Amended Specific Plan (SP-A83-05) Land Use Table

Land Use	Acres	Dwelling Units
Residential:		
Estates	134.3	50
R-S-3 (zone)	122.7	199
R-V-6 (zone)	92.9	401
R-V-11 (zone)	19.7	130
Commercial:		
Clinic	12.6	-0-
Hotel, Country Club, golf pavilion and Tennis Center	31.7	-0-
Public facilities/Golf Course	188.1	-0-
Public Roads	3.0	-0-
SPECIFIC PLAN TOTALS	605.0	780 d.u.
Permanent Natural Open Space	1,600.0	
Future Planning Areas	935.5	
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

At the present time, PRC Engineering is preparing a new amendment to the Specific Plan. This amendment will allocate the remaining 790 dwelling

units (d.u.'s) allowed by the General Plan within the 935+ acres which were designated as "future planning areas" in the original specific plan (see above table). Additionally, a second 18-hole country club golf course and a 30-acre commercial are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An EIR is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits (MUP). A modified MUP for the proposed modifications to the existing golf course and a new MUP for the newly proposed 18-hole country club golf course will be filed. The following land use table is provided for your reference.

Proposed Complete Rams Hill Land Use Table

Land Use	Acres	Dwelling Units
Current Planned/Developed Residential	240	522
Future Residential:		
Estates	258.5	55
R-S-3 (zone)	132.8	398
R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	
TOTAL	3,140.5 (acres)	1,570 d.u.'s

These proposed land uses are indicated on the enclosed map.

Your office was contacted by telephone to identify existing conditions and to identify potential impacts of this project to SDG&E. Can you please verify, in writing, that the following information is correct.

1. Existing capacity in Borrego Springs at the Borrego Substation is 8.75 megawatts (MW).

2. There is presently one transmission line corridor serving Borrego Substation. This line runs adjacent to Borrego Springs Road.

3. SDG&E is unable to ascertain the number of kilowatt hours (kwh) used in Borrego Springs monthly, although patterns and peak demands can be identified.

4. There is no specific generating plant serving Borrego Springs. An intertied system is utilized whereby electricity to Borrego Springs can come from numerous generating stations located in the coastal areas using a multitude of fuels.

5. Due to the proposed size of this development it is likely that an increase in substation capacity would be required and that a second transmission line be constructed to Borrego Substation, when occupancy levels warrant these improvements. Circuit work on the distribution system would also likely be required.

Also, does SDG&E have any planned facilities in this district?

Thank you for your assistance with this project. We are in the process of preparing the EIR and would appreciate a written response from you by June 5, 1986. Please feel free to make any changes and/or corrections to the above information right on this letter. Please do not hesitate to call me if you have any questions. A space is provided below for your signature.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan
Environmental Analyst

_____ Dated: _____

Don Rose
San Diego Gas & Electric

cc: Steve Lizanich

MJD:deb

prc

Planning Research Corporation

PRC Engineering

MAY 29 1986

May 27, 1986

Mr. David West
Superintendent
Borrego Springs Unified School District
P.O. Box 235
Borrego Springs, CA 92004

Dear Mr. West:

The DiGiorgio Development Corporation is proposing a specific plan amendment, rezone, and tentative maps for the completion of Rams Hill Country Club. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the first Rams Hill Country Club Specific Plan (SP-80-01). That specific plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations. In March 1984, a Specific Plan Amendment (SP-A83-05) which outlined minor revisions to the Specific Plan was approved. The following table provides land use information for SP-A83-05.

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Commercial:		
Clinic	12.6	-0-
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Public facilities/Golf Course	188.1	-0-
Public Roads	3.0	-0-
SPECIFIC PLAN TOTALS	605.0	780 d.u.
Permanent Natural Open Space	1,600.0	
Future Planning Areas	935.5	
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

JUL 8 1986

At the present time, PRC Engineering is preparing a new amendment to the Specific Plan. This amendment will allocate the remaining 790 dwelling units (d.u.'s) allowed by the General Plan within the 935+ acres which were designated as "future planning areas" in the original specific plan (see above table). Additionally, a second 18-hole country club golf course and a 30-acre commercial are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An EIR is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits (MUP). A modified MUP for the proposed modifications to the existing golf course and a new MUP for the newly proposed 18-hole country club golf course will be filed. The following land use table is provided for your reference.

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Future Residential:		
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R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	———
TOTAL	3,140.5 (acres)	1,570 d.u.'s

These proposed land uses are indicated on the enclosed map.

Your office was contacted on May 27, 1986 regarding information on the public schools serving the Borrego Springs Community. Could you please verify in writing that the following information is correct:

1. The following table provides current enrollment figures for the schools in the Borrego Springs Unified School District.

School	Grades Served	1986 Enrollment
o Borrego Springs Elementary 1315 Palm Canyon Drive	Preschool/K-6	195
o Borrego Springs High School 2281 Digueno Road	7-12	150

2. Vocational education is provided through the County Department of Education Regional Occupational Lab (ROL) program. One lab is offered each semester.

3. The school district has indicated that projections of increased enrollment that would be generated by the Rams Hill project are not available. Previous estimates of generation factors have been extremely inaccurate and consequently have not proven to be useful for planning purposes. There are currently no students attending schools in the Borrego School District from the Rams Hill Country Club. Since the project is designed for vacation/resort use the school district indicated that Rams Hill will produce enrollment from the service people that will be working at the resort. This increase in enrollment is considered a residual affect of the project on the school system. Generation factors for the ultimate development at Rams Hill however, are not available.

4. The school system does not currently have the capacity to handle an influx of students. Figures on the current capacity of the Elementary School and the High School are not available. The Borrego Springs Unified School District does not assess developers fees for land development projects within their district.

5. The project is located 6-8 miles from the Borrego Springs Elementary and High Schools. Students residing at Rams Hill would have to be bussed to these schools.

Please feel free to make any changes and/or corrections to the above information right on this letter. Thank you for your assistance with this project. Should you have any questions do not hesitate to call me. A space is provided below for your signature. We are in the process of preparing the EIR and would appreciate a written response by June 6, 1986.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan

Mary J. Donovan
Environmental Analyst

David H. West

David West, Superintendent
Borrego Springs Unified School District

Dated: 7/7/86

MJD:be

prc

PRC Engineering

Planning Research Corporation

May 23, 1986

RECEIVED

JUN 1 1986

PRC Engineering

Mr. Steve Sawyer
Borrego Springs Fire Protection District
P.O. Box 898
Borrego Springs, CA 92004

Dear Mr. Sawyer:

The DiGiorgio Development Corporation is proposing a specific plan amendment, rezone, and tentative maps for the completion of Rams Hill Country Club. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the first Rams Hill Country Club Specific Plan (SP-80-01). That specific plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations. In March 1984, a Specific Plan Amendment (SP-A83-05) which outlined minor revisions to the Specific Plan was approved. The following table provides land use information for SP-A83-05.

Amended Specific Plan (SP-A83-05) Land Use Table

Land Use	Acres	Dwelling Units
Residential:		
Estates	134.3	50
R-S-3 (zone)	122.7	199
R-V-6 (zone)	92.9	401
R-V-11 (zone)	19.7	130
Commercial:		
Clinic	12.6	-0-
Hotel, Country Club, golf pavilion and Tennis Center	31.7	-0-
Public facilities/Golf Course	188.1	-0-
Public Roads	3.0	-0-
SPECIFIC PLAN TOTALS	605.0	780 d.u.
Permanent Natural Open Space	1,600.0	
Future Planning Areas	935.5	
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

At the present time, PRC Engineering is preparing a new amendment to the Specific Plan. This amendment will allocate the remaining 790 dwelling

units (d.u.'s) allowed by the General Plan within the 935+ acres which were designated as "future planning areas" in the original specific plan (see above table). Additionally, a second 18-hole country club golf course and a 30-acre commercial area are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An EIR is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits (MUP). A modified MUP for the proposed modifications to the existing golf course and a new MUP for the newly proposed 18-hole country club golf course will be filed. The following land use table is provided for your reference.

Proposed Complete Rams Hill Land Use Table

Land Use	Acres	Dwelling Units
Current Planned/Developed Residential	240	522
Future Residential:		
Estates	258.5	55
R-S-3 (zone)	132.8	398
R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	
TOTAL	3,140.5 (acres)	1,570 d.u.'s

These proposed land uses are indicated on the enclosed map.

Your office was contacted on May 21, 1986 regarding the provision of fire protection and emergency medical services for the expansion and completion of the Rams' Hill Country Club. Could you please verify in writing that the following information is correct:

1. The Rams Hill project lies within the jurisdiction of the Borrego Springs Fire Protection District. The fire station in closest proximity to the site is located at 2324 Stirrup Road; this is approximately 6 miles from the project. Response time to the site is estimated to be ~~6-10~~ 10-15 minutes. Given the exposure hazard at the site these response times may not be adequate.

2. There are ~~10~~ 8 full-time paid fire fighters and two chief officers. At the present time there are six volunteer fire fighters. It is anticipated that the number of volunteer firefighters may increase in the near future. The staff is divided into three engine companies which man two primary 1000-gallon per minute (gpm) pumpers and one reserve 1000-gpm pumper. All personnel are certified Emergency Medical Technicians (EMT-1A). The district maintains two basic life support ambulances, one

4-wheel drive basic life support ambulance and a rescue equipment squad truck.

3. A 2.5 acre parcel within the Rams Hill Country Club boundary was designated for the provision of a future fire station. A class 10 insurance rating will be given to all new structures on the property until a new fire station is built on or adjacent to the property. When the new station is built additional staff and service vehicles will be required.

4. The proposed project will significantly increase the demand for both fire protection and emergency medical services; this will be mitigated by staffing the future fire station intended for the Rams Hill site, when occupancy levels warrant its construction. An assessment of the financial impacts of the project on the District are not available at the present time.

Thank you for your assistance with this project. We are in the process of preparing the EIR and would appreciate a written response from you by June 5, 1986. Please do not hesitate to call me if you have any questions. You may make corrections and/or changes to the above information right on the letter. A space is provided below for your signature.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan

Mary J. Donovan
Environmental Analyst

Steve Sawyer, Batallion Chief
Borrego Springs Fire Protection District

Dated: 5-30-86

MJD:deb

PRC Engineering
[illegible]

prc
Planning Research Corporation

May 26, 1986

Mr. Michael Ringer
San Diego County Sheriff's Department
222 West "C" Street
San Diego, CA 92101

Dear Mr. Ringer:

The DiGiorgio Development Corporation is proposing a specific plan amendment, rezone, and tentative maps for the completion of Rams Hill Country Club. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the first Rams Hill Country Club Specific Plan (SP-80-01). That specific plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations. In March 1984, a Specific Plan Amendment (SP-A83-05) which outlined minor revisions to the Specific Plan was approved. The following table provides land use information for SP-A83-05.

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Permanent Natural Open Space	1,600.0	
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RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

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units (d.u.'s) allowed by the General Plan within the 935+ acres which were designated as "future planning areas" in the original specific plan (see above table). Additionally, a second 18-hole country club golf course and a 30-acre commercial are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An EIR is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits (MUP). A modified MUP for the proposed modifications to the existing golf course and a new MUP for the newly proposed 18-hole country club golf course will be filed. The following land use table is provided for your reference.

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R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	____
TOTAL	3,140.5 (acres)	1,570 d.u.'s

These proposed land uses are indicated on the enclosed map.

Your office was contacted on May 21, 1986 to obtain information regarding the provision of law enforcement for the proposed completion of the Rams Hill Country Club. Could you please verify in writing that the following information is correct:

1. The Rams Hill Country Club falls within Sheriff's Master Beat 71, District 1. There is currently one patrol unit on duty from 7:30 a.m. - 5 p.m. The resident deputy remains on call after 5 p.m.

2. The substation in closest proximity to the project site is located at 610 Palm Canyon Drive, Borrego Springs.

3. The following response time information was calculated for the 6-month period ending March 31, 1986:

Type of Call	Average Response Time	Number of Calls
Priority	24.3 minutes	42
Non-priority	33.4 minutes	225

It should be noted that actual response times vary depending on the resident deputy's location at the time of the call.

4. There are currently no projected and/or budgeted increases in staff or equipment for the Borrego station.

5. The projected increase in population at the Rams Hill Country Club will significantly affect the sheriff's level of service in the area. There is currently one patrol deputy per 12,000-13,000 residents within this jurisdiction. As the population increases over the next several years additional patrol deputies and/or units will likely be required.

Please feel free to note any corrections and/or changes to the above information right on this letter. Thank you for your assistance with this project. We are in the process of preparing the EIR and would appreciate a written response from you by June 5, 1986. Please do not hesitate to call me if you have any questions. A space is provided for your signature.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan

Mary J. Donovan
Environmental Analyst

The above information is still valid.

Michael Ringer
Sherriff's Department

Dated: 6-4-86

MJD:deb

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS

Building 2, 5555 Overland Avenue
San Diego, California 92123-1295
Telephone: (619) 565-5177

GRANVILLE M. BOWMAN, Director

August 19, 1986

Ms. Mary J. Donovan
PRC Engineering
401 West A Street
Suite 2500
San Diego, CA 92101

Dear Ms. Donovan:

This letter will confirm my earlier discussion with Tom Weber of the DiGiorgio Development Corporation regarding the proposed Rams Hill amended specific plan (SP-A83-05) and the provision of solid waste disposal. I appreciate that the DiGiorgio Corporation recognizes the fact that solid waste disposal is a regional problem and that the proposed project would affect the life expectancy of the Borrego Landfill. Even though the population at Rams Hill is expected to increase on a gradual basis the project as described in the draft Environmental Impact Report for the increased density will contribute to the need for a new disposal site to serve the Borrego community.

As we discussed, the County has ultimate responsibility to ensure disposal of solid waste generated in the unincorporated area. I appreciate the willingness of the DiGiorgio Corporation, as expressed by Mr. Weber, to cooperate with the County's efforts to meet this responsibility.

Very truly yours,

JOHN S. BURKE, Deputy County Engineer
Construction and Solid Waste Division

JSB:SJR:lk

August 14, 1986 1927-111-00

Mr. John S. Burke
Deputy County Engineer
County of San Diego
Department of Public Works
Construction and Solid Waste Division
Building 2, 5555 Overland Avenue
San Diego, CA 92123

Dear Mr. Burke:

I am writing this letter to confirm the results of your discussion with Tom Weber of the DiGiorgio Development Corporation regarding the proposed Rams Hill amended specific plan (SP-A83-05) and the provision of solid waste disposal. The DiGiorgio Corporation recognizes the fact that solid waste disposal is a regional problem and that the proposed project would affect the life expectancy of the Borrego Landfill. As the population at Rams Hill is expected to increase on a gradual basis and because the project is mainly a second-home/retirement resort community which is occupied only seasonally, the project will incrementally contribute to the need for new disposal methods and sites. While identification of disposal methods and sites is primarily the responsibility of the County, the DiGiorgio Corporation will cooperate with the County in order to comply with the County's policies for solid waste disposal.

Please confirm that the above information is correct.

Thank you for your assistance. A space is provided below for your signature.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan
Environmental Analyst

_____ Dated: _____

John S. Burke
Deputy County Engineer

COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS

Building 2, 5555 Overland Avenue
San Diego, California 92123-1295
Telephone: (619) 565-5177

GRANVILLE M. BOWMAN, Director

June 6, 1986

RECEIVED
JUN 12 1986
PRC Engineering

Mary J. Donovan
Environmental Analyst
PRC Engineering
401 West A Street, Suite 2500
San Diego, CA 92101

Dear Ms. Donovan:

SUBJECT: Rams Hill Country Club Specific Plan

This letter acknowledges your letter of May 27, 1986 to Mr. Eric Swanson regarding the impact of the Rams Hill Country Club project on the Borrego Landfill.

Your information regarding solid waste disposal in the County of San Diego is correct:

1. Collection in unincorporated communities is through agreement with private sector companies permitted by the County of San Diego.

2. The County uses an annual, per capita generation factor of 1.4 tons of solid waste, per person.

3. Rams Hill will affect the life expectancy of the Borrego Landfill in that it will add 4616 tons/year to the current annual 7580 tons received there.

Early in the development of the Rams Hill project, I met with Dennis O'Leary, consultant to the project, to discuss the impact of this development on the Borrego Landfill.

At that time, Mr. O'Leary indicated a willingness on the part of the DiGiorgio Development Corporation to provide a landfill site to the County to assure the continuing availability of disposal in the Borrego area.

Please have appropriate representatives of the Corporation contact me to discuss this matter. I can be reached at (619) 565-5166.

Sincerely,

JOHN S. BURKE, Deputy County Engineer
Construction and Solid waste Division

JSB:SJR:lk

cc: Julia Quinn
Eric Swanson

May 27, 1986

Mr. Eric Swanson
Department of Sanitation and Flood Control
County of San Diego
5555 Overland Avenue
San Diego, CA 92123

Dear Mr. Swanson:

The DiGiorgio Development Corporation is proposing a specific plan amendment, rezone, and tentative maps for the completion of Rams Hill Country Club. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the first Rams Hill Country Club Specific Plan (SP-80-01). That specific plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations. In March 1984, a Specific Plan Amendment (SP-A83-05) which outlined minor revisions to the Specific Plan was approved. The following table provides land use information for SP-A83-05.

Amended Specific Plan (SP-A83-05) Land Use Table

Land Use	Acres	Dwelling Units
Residential:		
Estates	134.3	50
R-S-3 (zone)	122.7	199
R-V-6 (zone)	92.9	401
R-V-11 (zone)	19.7	130
Commercial:		
Clinic	12.6	-0-
Hotel, Country Club, golf pavilion and Tennis Center	31.7	-0-
Public facilities/Golf Course	188.1	-0-
Public Roads	3.0	-0-
SPECIFIC PLAN TOTALS	605.0	780 d.u.
Permanent Natural Open Space	1,600.0	
Future Planning Areas	935.5	
RAMS HILL COUNTRY CLUB TOTAL OWNERSHIP	3,140.5 ac.	

At the present time, PRC Engineering is preparing a new amendment to the Specific Plan (SP-A83-05). This amendment will allocate the remaining

790 dwelling units (d.u.'s) allowed by the General Plan within the 935+ acres which were designated as "future planning areas" in the original specific plan (see above table). Additionally, a second 18-hole country club golf course and a 30-acre commercial are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An EIR is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits (MUP). A modified MUP for the proposed modifications to the existing golf course and a new MUP for the newly proposed 18-hole country club golf course will be filed. The following land use table is provided for your reference.

Proposed Complete Rams Hill Land Use Table

Land Use	Acres	Dwelling Units
Current Planned/Developed Residential	240	522
Future Residential:		
Estates	258.5	55
R-S-3 (zone)	132.8	398
R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	
TOTAL	3,140.5 (acres)	1,570 d.u.'s

These proposed land uses are indicated on the enclosed map.

Your office was contacted on May 21, 1986 regarding information on solid waste disposal in the project vicinity. Could you please verify in writing that the following information is correct:

1. Solid waste from the Rams Hill project would be collected by private carrier and deposited at the sanitary landfill located at the end of Palm Canyon Drive, approximately six miles north of the project site, and east of Borrego Springs. The landfill has a life expectancy beyond the year 2000.

2. For planning purposes, the following generation figures may be used:

   790 d.u.'s x 2.1 persons/d.u. = 1,659 persons
   Multiply 1.228 x 5 lbs./person/day = 6.1 lbs./person/day
   6.1 lbs/person/day x 1,659 persons = 10,120 lbs./day

Therefore, the newly planned Rams Hill units (790 units) will generate approximately five tons of refuse per day. San Diego County residents generate an average (for residential and employment) of 1.4-1.5 tons of trash per person per year.

3. The proposed project would affect the life expectancy of the Borrego landfill. In addition, as the population gradually increases at Rams Hill it will contribute to the need for new disposal methods and sites. Identification of disposal methods and sites is primarily the responsiblity of the County of San Diego.

Please feel free to make any changes and/or corrections to the above information right on this letter. Than you for your assistance with this project. Should you have any questions please do not hesitate to call. A space is provided below for your signature. We are preparing the EIR and would appreciate a written response from you by June 5, 1986.

Sincerely,

PRC ENGINEERING, INC.

Mary J. Donovan

Mary J. Donovan
Environmental Analyst

_____ Dated: _____

Eric Swanson
Department of Sanitation and
Flood Control

MJD:be

APPENDIX F

NOTICE OF PREPARATION (N.O.P.) AND RESPONSES

NOTICE OF PREPARATION (N.O.P.)
OF THE ENVIRONMENT IMPACT REPORT (E.I.R.)
FOR THE RAMS HILL AMENDED SPECIFIC PLAN

Project Description

This project is a specific plan amendment, rezone, and tentative map for completion of the Rams Hill Country Club. Rams Hill Country Club consists of 3,140 acres located 86 miles northeast of metropolitan San Diego and 30 miles west of the Salton Sea in the Borrego Valley area of San Diego County. The project is situated in an unincorporated area which is surrounded by the Anza Borrego Desert State Park. The property is owned by the DiGiorgio Development Corporation.

This project's detailed planning program is consistent with the requirements of the General Plan Amendment 76-02. The Rams Hill Country Club site has been designated as a Specific Planning Area (SPA 0.5) with an overall density of one dwelling unit per two acres. In January, 1979, PRC Engineering prepared an environmental impact report (EIR) for the Specific Plan for Rams Hill. The first Rams Hill Country Club Specific Plan (SP-80-01) was approved in May, 1980. This outlined in detail the proposed development of 2,205 acres (of which 1,600 acres was designated permanent natural open space) over a five year period. It also acknowledged that the remaining 935^{+} acres would be developed to the intensity allowed by the general plan. The original Specific Plan (SP-80-01) included a total of 780 dwelling units, a hotel (350 suites), tennis and retail shop complex, an 18-hole championship golf course, a medical clinic, a fire station, a waste water treatment plant and flood control facility. That Rams Hill Specific Plan was to be developed over a five year planning period and included approximately half of the ultimate build-out allowed by the General Plan designations.

To date, four residential subdivisions have been recorded providing for a total of 522 dwelling units (d.u.'s) in four different market categories out of the 780 approved units. Approximately 20% of these units have been built, with construction on-going. The major infrastructure public facilities have also been constructed. A Specific Plan Amendment (SP-A83-05) was approved in March, 1984. The amendment served to outline minor revisions to the Specific Plan. It did

not contain any substantial changes in the overall project. At the present time, PRC Engineering is preparing a new amendment to the Specific Plan (SP-A83-05). This amendment will allocate the remaining 790 dwelling units allowed by the General Plan in the areas which were previously designated as "future planning areas" within the 935+ acres not planned in detail in the original specific plan. These areas are generally located adjacent to the previously designated "planned development" areas within the 1,080 acres protected by flood control facilities. In addition to the above mentioned development, a second 18-hole golf course and a 30 acre commercial area are proposed. Much of the water needed to irrigate the new golf course will be water reclaimed at the sewage treatment plant on the Rams Hill property. An environmental impact report (EIR) is being prepared for the Rams Hill Country Club amended specific plan, rezone, tentative map and major use permits.

The following discretionary actions are proposed by the applicant and would be covered by the EIR:

- o Specific Plan Amendment allocation of dwelling units (d.u.'s) to "future planning areas." The following land use tables provide proposed d.u. and acreage data for the specific plan area.

Land Use Table

Land Use	Acres	Dwelling Units
Current Planned/Developed Residential	240	522
Future Residential:		
Estates	258.5	55
R-S-3 (zone)	132.8	398
R-V-6 (zone)	439.2	595
Commercial	30.0	-0-
Golf Course, Open Space, Streetscape	440.0	-0-
Permanent Natural Open Space	1,600.0	____
TOTAL	3,140.5 (acres)	1,570 d.u.'s

Note:

1. 522 d.u. out of the originally approved 780 d.u. have been approved and have a tentative map. The remaining 258 d.u. are being replanned as part of this amended specific plan.

- o Tentative Map (non-vesting): the proposed tentative map includes the southeast portion of the property and shows lots, streets, grading and other information for 280± single family custom lots and planned development lots fronting golf course fairways.

- o Rezone Package: the rezone package will be prepared for submittal to the County for the areas contained in the amended specific plan.

- o Major Use Permits: (a) modified major use permit for the proposed modifications to the existing 18-hole championship golf course; (b) new major use permit for the newly proposed 18-hole country club golf course.

Environmental Issues

Major issues to be addressed in the EIR include groundwater supply, traffic circulation, and public services. Other issues include land use, landforms, geology and soils, flooding/hydrology, biology, archaeology, climate/air quality, noise, dark skies, and visual quality. The EIR will also address cumulative impacts, direct and indirect efforts, and both long and short term impacts of development. Alternatives will be formulated in order to decrease any identified impacts associated with the development as proposed.

NOTICE OF PREPARATION (N.O.P.)
OF THE ENVIRONMENT IMPACT REPORT (E.I.R.)
FOR THE RAMS HILL AMENDED SPECIFIC PLAN

Mailing List

1. U.S. Department of the Interior
   Geological Survey
   District Office
   Water Resources Division
   855 Oak Grove Avenue
   Menlo Park, CA 94025

2. State of California
   Regional Water Quality Control Board
   Colorado River Basin Region
   73-271 Highway 111
   Palm Desert, CA 92260

3. Anza Borrego Desert State Park
   P.O. Box 299
   Borrego Springs, CA 92004
   Attn: James G. Hendrix, District Superintendent

4. San Diego County Sheriff's Department
   222 West "C" Street
   San Diego, CA 92101
   Attn: Mike Ringer, Administrative Assistant

5. County of San Diego
   Department of Sanitation and Flood Control
   5555 Overland Avenue
   San Diego, CA 92123
   Attn: Eric Swanson

6. SDG&E
   P. O. Box 1831
   San Diego, CA 92101
   Attn: Don Rose

7. Borrego Springs Unified School District
   P. O. Box 235
   Borrego Springs, CA 92004
   Attn: David West

8. Borrego Springs Fire Protection District
P. O. Box 898
Borrego Springs, CA 92004
Attn: Steve Sawyer, Batallion Chief

9. Borrego Water District
P. O. Box B
Borrego Springs, CA 92004
Attn: John Sasso, President

10. Sierra Club San Diego Chapter
1549 El Prado
San Diego, CA 92101
Attn: Mr. J. Powell

11. Mountain Defense League
P. O. Box 2267
San Diego, CA 92112
Attn: Mr. Byron Lindsley

12. San Diego County Archaeological Society, Inc.
P. O. Box A-81106
San Diego, CA 92138
Attn: Steven Van Wormer, President

13. California Native Plant Society - San Diego Chapter
4996 Mt. Almagosa Drive
San Diego, CA 92111
Attn: Joan Stewart, President

14. Desert Protective Council
c/o Mrs. Harriet Allen, Southern Desert Representative
3750 Canto Drive
Spring Valley, CA 92077

15. Anza Borrego Desert Natural History Association (ABDNHA)
P. O. Box 311
Borrego Springs, CA 92004

THE DESERT PROTECTIVE COUNCIL INC.

A NON-PROFIT ORGANIZATION

To safeguard for wise and reverent use by this and succeeding generations those desert areas of unique scenic, scientific, historical, spiritual and recreational value and to educate by all appropriate means children and adults to a better understanding of the desert.

BOX 4294 • PALM SPRINGS • CALIFORNIA 92263

DATE: July 2, 1986

REPLY TO:
3941 Clark Street
San Diego, CA 92103

Gary R. Fink, EMS,III
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666

NOTICE OF INTENET TO PREPARE DEIR, RAMS HILL

Dear Mr. Fink:

Thank you for the opportunity to comment on the proposed DEIR.

The Council continues to express concern for impacts upon the world-reknowned Anza-Borrego Desert State park and upon the expectations of its visitors for a "desert experience." Potential impacts include adverse effects on plant and animal life, clear air, aesthetics and distant vistas which provide the ambience for a rewarding visit.

MAJOR CONCERNS

1. Groundwater.. The EIR should provide:
   a. USGS data on aquifer contours and geology; correct all previous misrepresentations;
   b. alternative methods for monitoring both the quantity and quality of aquifer,
   c. precise percentage for reclaimed vs fresh water to be used on golf courses,
   d. information on pollution from sewer treatment plant and golf courses (see #6).

2. Traffic. The EIR must:
   a. include transportation figures for employees and families as well as residents (see #4),
   b. provide data on extension of Yaqui Pass Road to Palm Canyon Drive.

3. Public Services. The EIR should address:
   a. recreational facilities, other than golf, within the project

and for employees and families off-site. Anza-Borrego Desert State Park may not be used for such purposes,
b. all public services for employees and families.

4. Housing (not mentioned in NOI) EIR should include analysis of:
a. off-site locations for low-income, high density, minimum amenity units for Rams Hill employees and families in coordination with the Borrego Springs Community Plan which identifies areas across Palm Canyon Drive from the airport,
b. population vs tourist figures because 3-4 Rams Hill managed and operated motels are being used to house current employees and families.

5. Flooding/hydrology. EIR should provide data on:
a. cost to taxpayers for maintenace of Borrego Springs Road in vicinity of flood channel/s,
b. protection of Borrego Sink, a unique biological area, from run-off and effluent.

6. Waste Disposal (not mentioned in NOI). EIR should include discussion & data on:
a. landfill sites or alternatives for solid waste,
b. toxic and radioactive wastes from clinic.

7. Climate and Air Quality. EIR must provide data on:
a. climate/humidity changes and air quality (clarity) due to golf course irrigation and traffic,
b. short term vs long term particulate pollution.

8. Compliance & Coordination with Community Plan (not mentioned in NOI)

The Council concurs that other items listed are significant and recommends full analysis and updating of data.

In summary, the great Anza-Borrego Desert State Park must be protected from water-table drawdown, from use as an urban park/relaxation area, from illegal uses eminating from Rams Hill and from unsightly development as well as from actions which degrade air clarity, impact wildlife, ignore night skies and erode visitor expectations.

Please keep me on the mailing list and copy the Council's Southern Desert representative (see below).

Respectfully submitted,

Mary Swedelius

Mary Swedelius, Executive Director

c: Harriet Allen, Southern Desert Representative
3750 El Canto Drive
Spring Valley, CA 92077

San Diego County Archaeological Society, Inc.

Environmental Impact Report Review Committee
P. O. Box A-81106 San Diego, CA 92138

June 15, 1986

To: Mr. Gary R. Fink
Department of Planning and Land Use
County of San Diego
5201 Ruffin Road
San Diego, California 92123

Subject: Notice of Intent to Prepare a Draft Environmental Impact Report
Rams Hill Amended Specific Plan

Dear Mr. Fink:

Thank you for the subject Notice of Preparation, received by SDCAS last week.

We are pleased to note that cultural resources will be addressed by the DEIR, as is appropriate given the resources known to be present in the area. We look forward to reviewing and commenting upon the new DEIR when it becomes available to the public. It should be sent to this committee at the address given above.

The San Diego County Archaeological Society appreciates being included in the County's environmental review process for this project.

Sincerely,

James W. Royle, Jr.
Chairperson, EIR Review Committee

cc: SDCAS President
file