

Ed Smith

SAN PEDRO VALLEY COUNTY PARK MASTER PLAN

For: San Mateo County Parks and Recreation Department
By: EDAW Inc.

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February 15, 1975

Mr. Jack Brook, Director
Department of Parks & Recreation
San Mateo County
County Government Center
Redwood City, California 94063

Dear Mr. Brook:

It is with great pleasure that we transmit this Master Plan Report for San Pedro Valley County Park to you. We very much appreciate the assistance and constructive input provided by the County staff, particularly Mr. Harry Dean, Jr., throughout its preparation and the preparation of its companion reports, the San Pedro Valley County Park EIR and Management Plan.

We hope that your department and the citizens of the County will join us in our enthusiasm for this plan which we feel will protect the scenic resources of a highly interesting area as well as allow a modest use for its general appreciation.

Yours truly,

EDAW, INC.



Herbert R. Schaal
Principal

HRS:mm
Enclosure



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Master Plan

SAN PEDRO VALLEY COUNTY PARK

San Mateo County Parks & Recreation Department

Date: February 1975

Prepared by:

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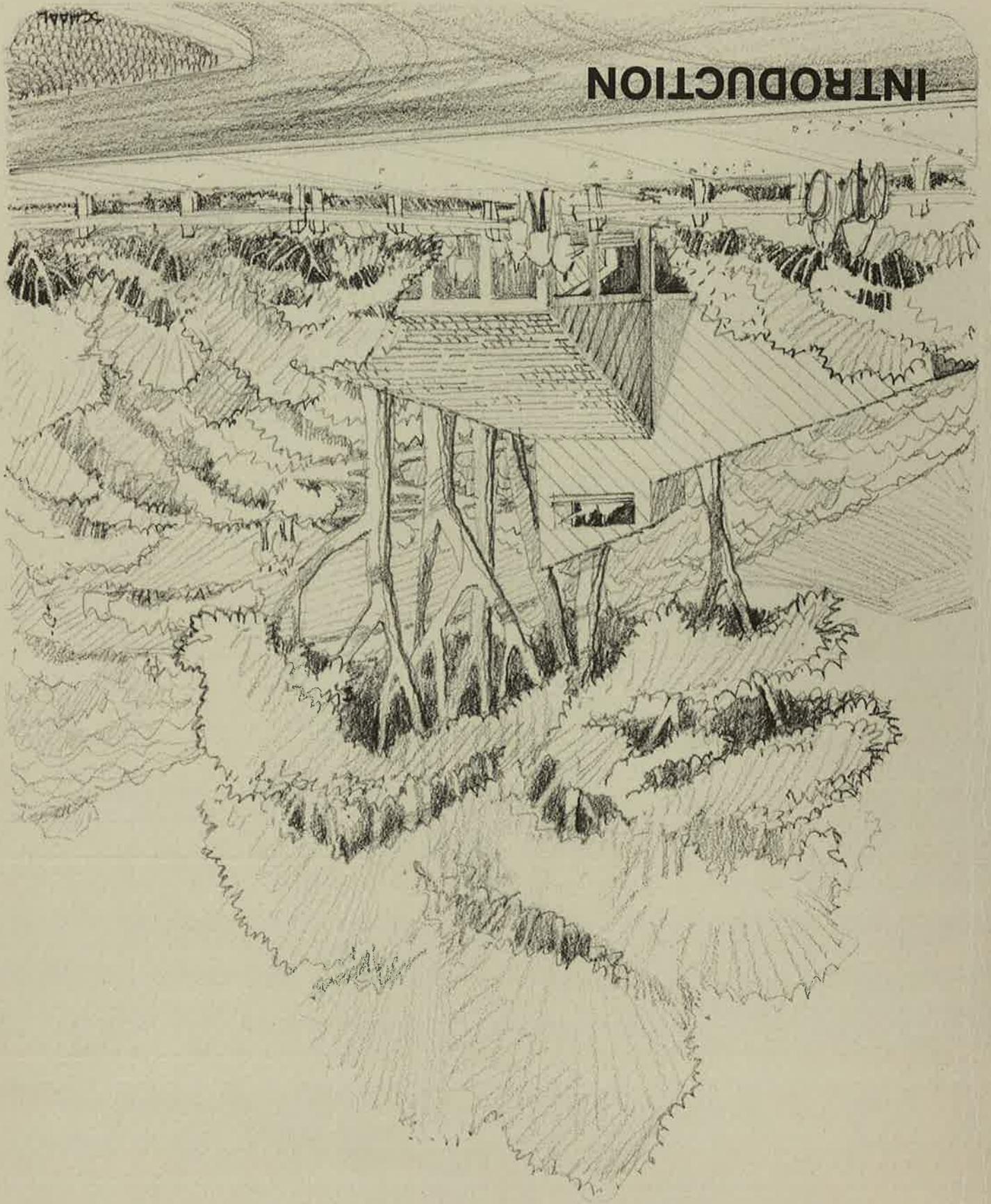
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INTRODUCTION



INTRODUCTION

San Pedro Valley County Park is a 1000+ acre tract of land located in the coastal foothills of Pacifica. The park plan stresses informal activities and includes parking, fields, picnic sites, headquarters and interpretation center, services, and trails.

"San Mateo County's policy, since establishing its first park in 1924, has been to provide recreation facilities to serve the entire county population. The present county park system includes six regional parks, four historic sites and the marina-beach-picnic facilities at Coyote Point. The county government does not attempt to supply neighborhood or community facilities, considering these the responsibility of individual cities."¹

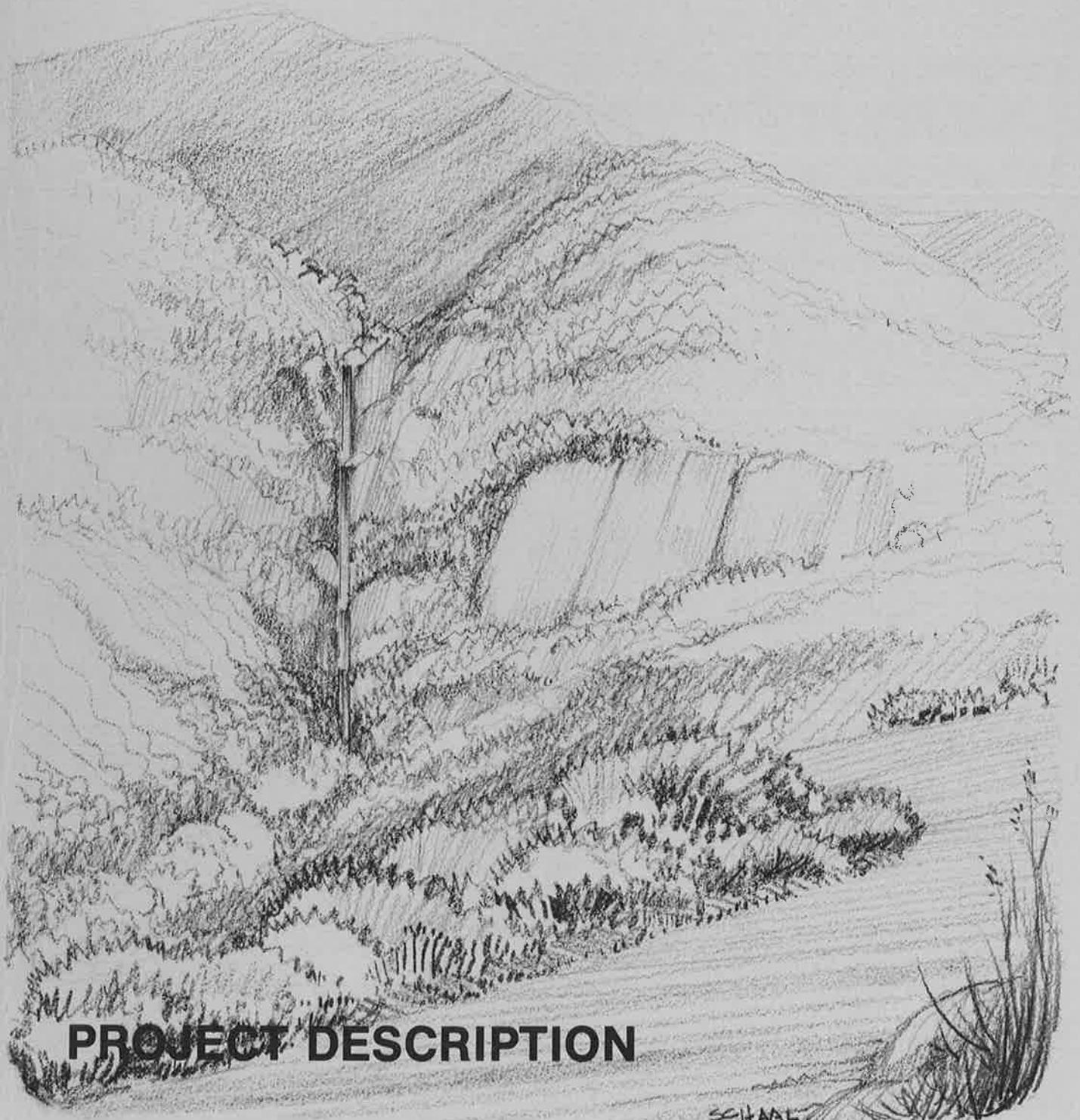
The Master Plan for San Pedro Valley County Park satisfies these objectives and places special emphasis on the conservation of the natural environment and a nature interpretive program related to the local ecology and the existing steelhead fishery.

The Master Plan is based upon an assumed carrying capacity of 400 people at any one time. A gatehouse is provided for the control of the number of visitors.

Park development is planned in two phases, over five years, beginning as early as 1975. The total cost of the park, including the additional acquisition, is estimated to be \$1,420,000.²

¹ Parks and Open Space--a Program for San Mateo County, June 1968, by the Parks and Open Space Committee of San Mateo County.

² 1975 prices - for Phase 1, add 15% per year thereafter, depending upon actual time of construction.



PROJECT DESCRIPTION

SCITRAL

PROJECT DESCRIPTION

I. MASTER PLAN

A. PLANNING PROCESS

The master planning process began with a concept plan prepared in 1973 by Artunian/Kinney Associates of Palo Alto. This concept plan, which called for the park to be primarily natural was approved by the Parks and Recreation Commission and is the concept for this Master Plan. In the preparation of the plan, a special site study was made by an interdisciplinary team composed of specialists in Soils, Geology, Native Plants, Archaeology, Limnology, Wildlife, Acoustics, Social Economics, Planning, Architecture, and Landscape Architecture.

This study simultaneously formed the basis for the Environmental Impact Report, the Master Plan, and the Management Plan for the park.

The two main working documents that were developed as a result of the site study were the Existing Features Map and the Landscape Sensitivity Map. The Master Plan is devised to capitalize on the existing features such as views and interesting places, and to minimize conflicts with sensitive areas such as the steelhead fishery and erosive soils.

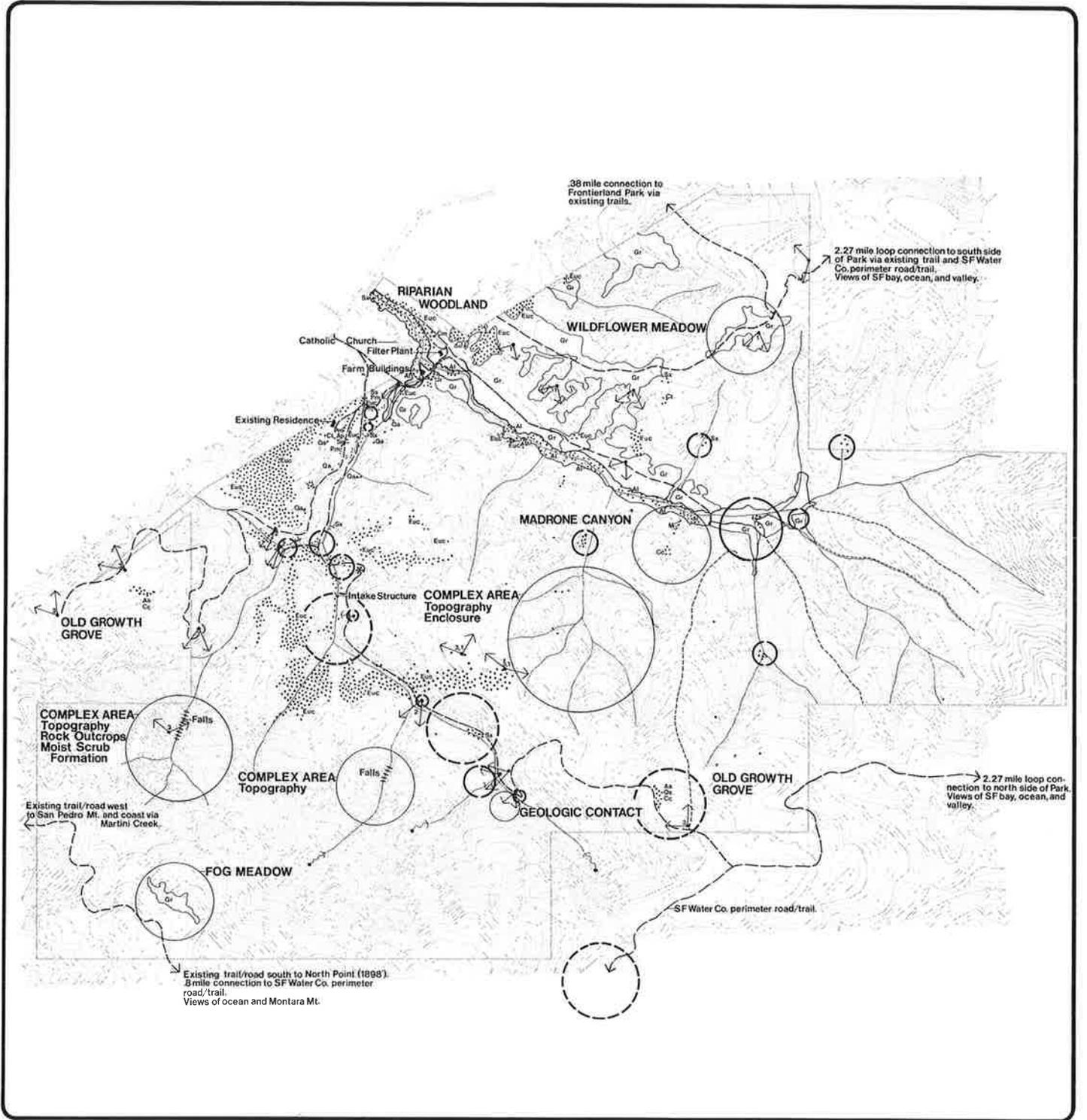
Although the Master Plan is perhaps the most important step in the development of a successful park, continual monitoring and adjustment by way of the Management Plan are an essential ingredient.

B. USE

The site study indicates that the broad valley area of the park is the only satisfactory area for intensive use. In order to provide for as many users as possible and still keep within the concept of a relatively passive use, parking and picnic sites with adjacent turf fields are distributed in small groups throughout most of the valley area.

In an area which is as sensitive to use as the site study indicates, it is of paramount importance to have ample facilities, open fields, and trails for a limited number of users in order to protect the intrinsic resources of the park.

It is felt the Master Plan can accommodate up to 400 people at any one time. If this number proves to be too high, and the plan reaches saturation, then gross violations of park policy can be expected to occur. Individuals will explore off the trail because it is too crowded. They will scramble



Project Setting		Existing Features				North	
Legend:						0 100 500 1000 1500	
	Trail Trace - impassible		Drainage		Viewpoints		Existing Enclosures
	Existing Trails - passible		Riparian		Valley Views		Special Areas
	Mature Trees		Grassland		Falls Views		Endangered Plants (Montara Manzanita)
	Woodrat Lodge		Spring		Ocean Views		



Project Setting - Landscape Sensitivity

- Legend:
- | | | |
|-------------------|-------------------|-----------------|
| C Critical | M Moderate | Area of Erosion |
| H High | L Low | Gully Erosion |

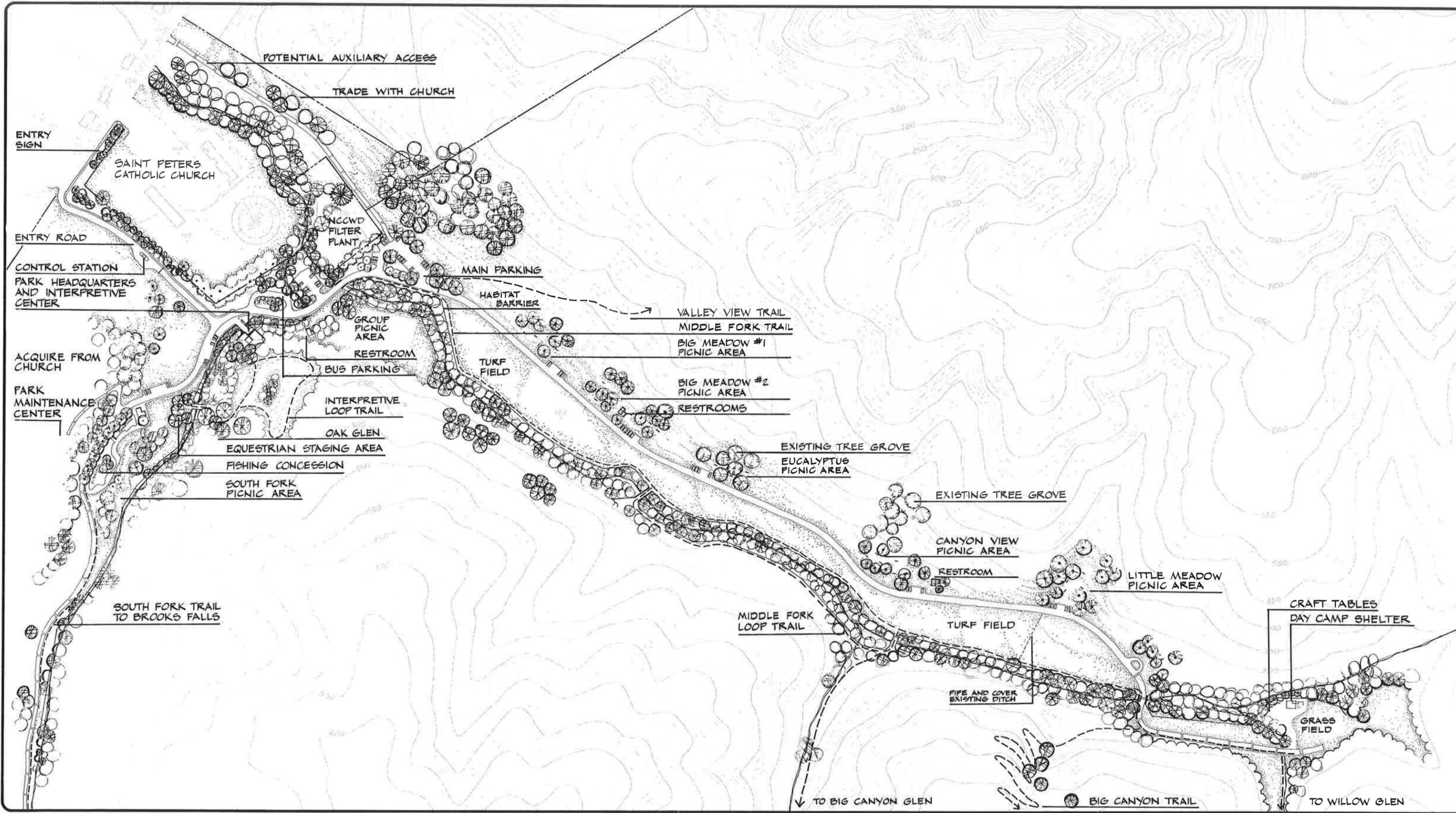
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North

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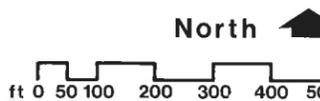
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Local Setting - GENERAL DEVELOPMENT PLAN

- Legend:**
- PAVED ROAD
 - TRAIL
 - CREEK
 - EARTH ROAD
 - EXISTING TREES
 - NEW TREES
 - GRASS
 - GROUND COVER



SAN PEDRO VALLEY COUNTY PARK
 San Mateo County Park and Recreation Department

down the banks of the creek to find seclusion, and they will trample naturalized grass fields because there is not enough room on the turf. An effective monitoring system, as proposed in the Management Plan, will detect these problems before they become serious and provide for changes in facilities, surveillance, and education, or in the numbers of users allowed.

C. FACILITIES

1. Structures

All new structures within the park are designed to complement each other and present a unified design scheme.

Park Headquarters/Interpretive Center - Highly visible and easily accessible from the entrance road and parking areas, the headquarters building is proposed as the central design feature within the park. Functioning as the park supervisory and administrative unit, the facility includes the natural and historic interpretive display and group meeting room; entry-reception area; park rangers' office, general purpose storage-first-aid room with toilet and shower, several restrooms, deck areas, and a park-wide fire alarm siren.

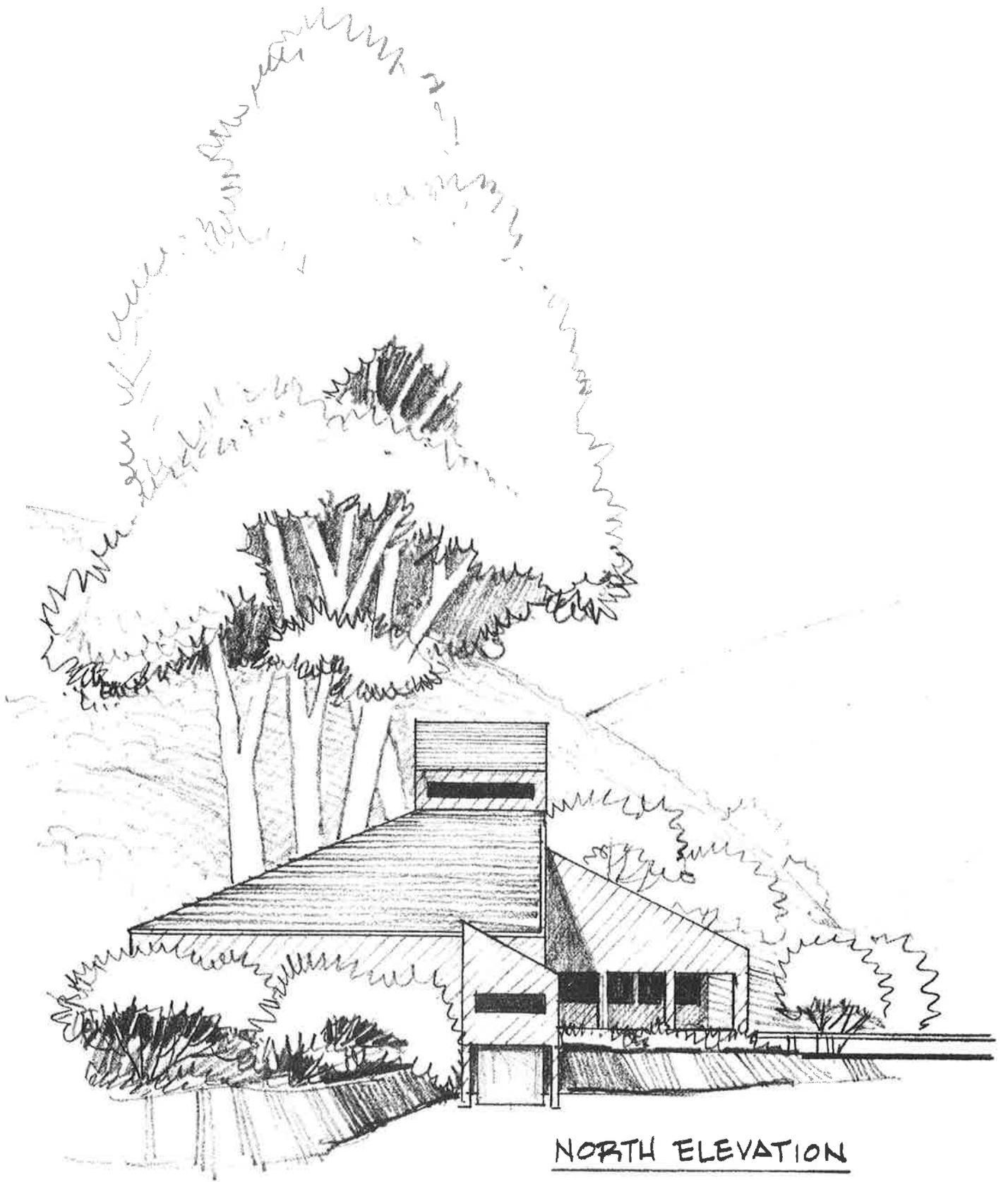
The park rangers' office is situated and designed to allow visual control over activities occurring within the headquarters building and the surrounding exterior areas. The observation room at the top of the structure controls the view to Brooks Falls. The small detached structure north of the main building is for study of the creek ecology through a submerged glass window.

Area Requirements:

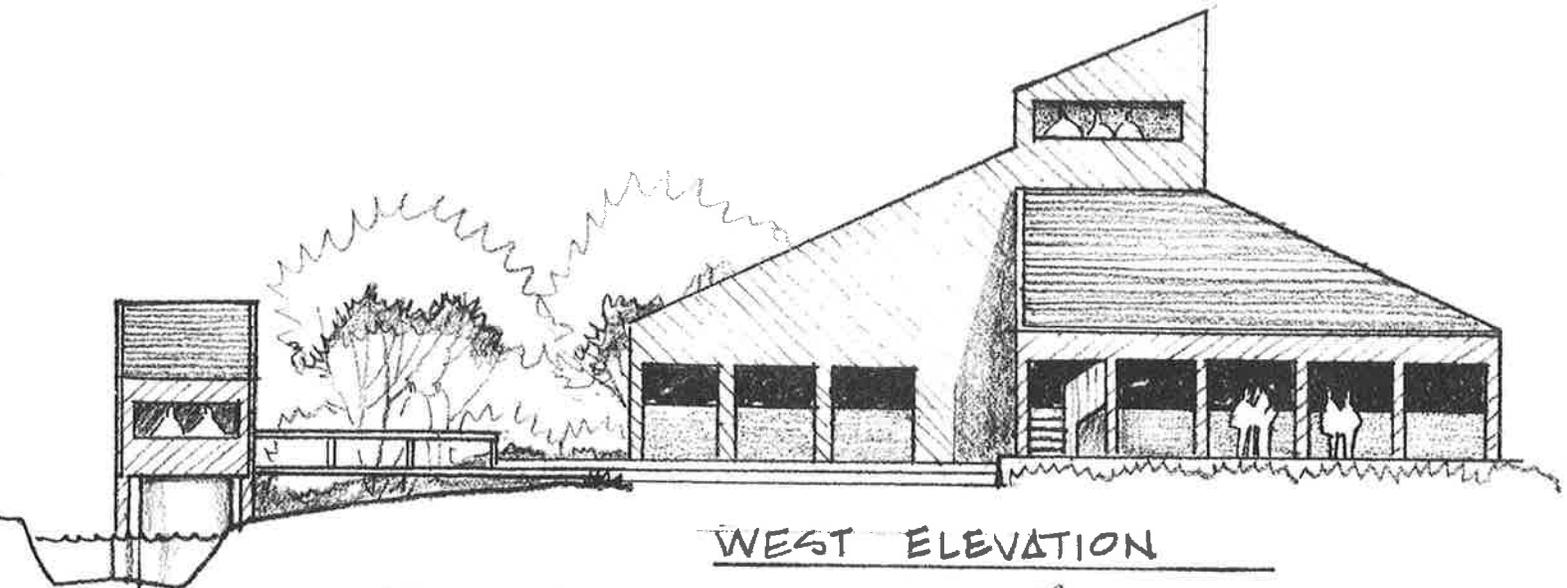
- | | |
|---|--------------|
| o Office | 200 sq. ft. |
| o General Purpose | 200 sq. ft. |
| o Interpretive Display and Meeting Room | 1500 sq. ft. |
| o Restrooms | 300 sq. ft. |
| o Outdoor Patio Area | |

Control Station - The control station controls vehicular and pedestrian access to the park. Located within the traffic island at the park entry, the station consists of a traffic control kiosk accommodating one attendant and movable barriers on each side to control vehicular movement.

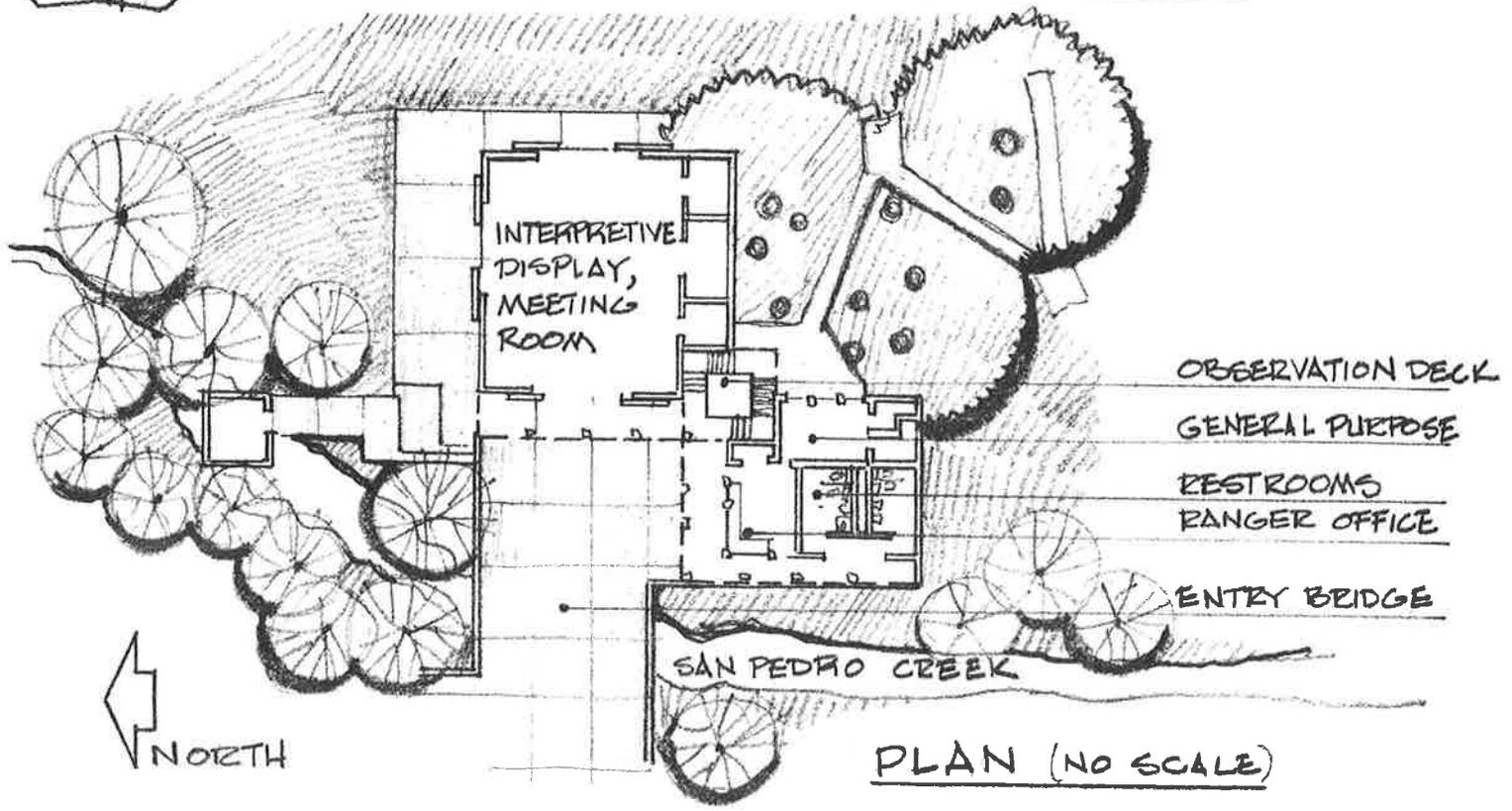
Openable windows in the kiosk are located on sides adjacent to traffic flow enabling the attendant to give directional information. Signing adjacent to the control station provides directional information when the kiosk is unmanned.



INTERPRETIVE CENTER

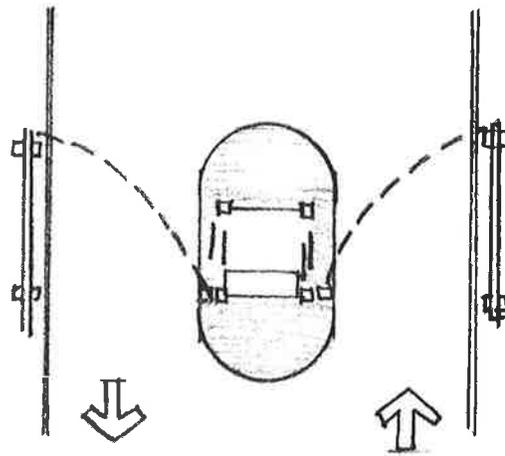
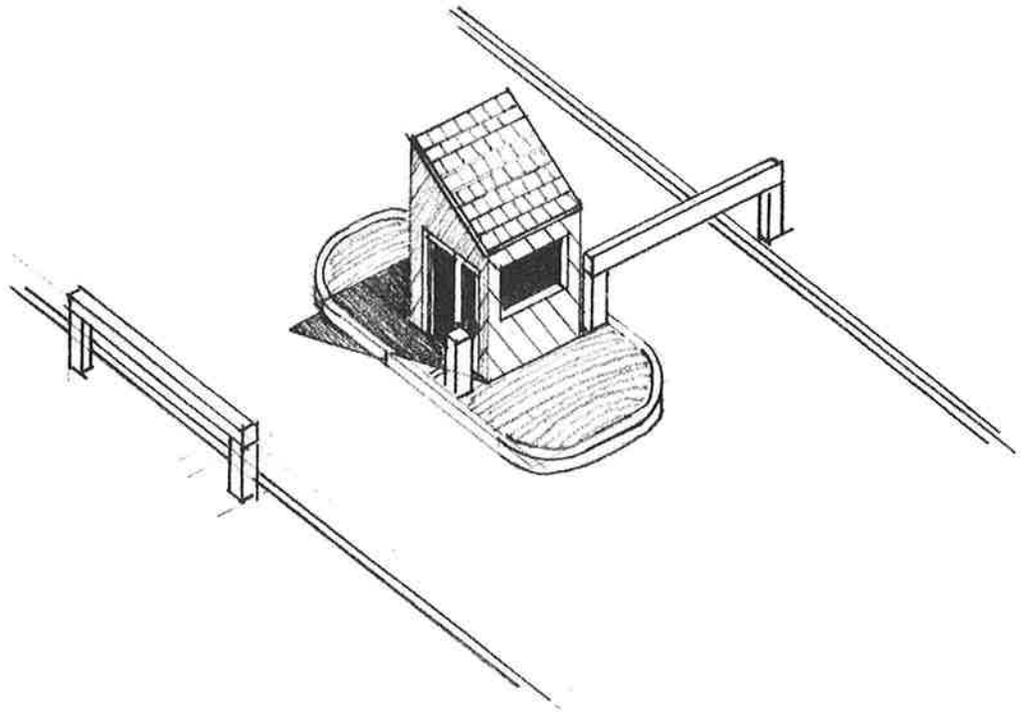


WEST ELEVATION



PLAN (NO SCALE)

INTERPRETIVE CENTER



PLAN (NO SCALE)

CONTROL STATION

Area Requirements:

- o Kiosk 50 sq. ft.
- o Control Station (total area) 600 sq. ft.

Day Camp Shelter - The day camp center provides an indoor-outdoor assembly area, restrooms and storage room. Small groups can be accommodated either inside the shelter and/or in the adjacent patio area. A fireplace that can be used both indoors and from the patio is the center design feature. Ten craft tables and 5 trash containers are also provided in the immediate vicinity.

Area Requirements:

- o Assembly Area (inside) 600 sq. ft.
- o Restrooms 300 sq. ft.
- o Storage 100 sq. ft.
- o Patio Area

Fishing Concessionaire - The fishing concessionaire facility is proposed as a combination trout pond fishing unit and refreshment center. For a minimal fee, the park visitor would be provided fishing gear and bait with access to the stocked trout pond. Fish cleaning areas are provided along with several restroom facilities. A refreshment counter serving soft drinks and snacks would be located adjacent to the fishing gear checkout counter to allow joint operation by the concessionaire.

An arbor covered patio area is provided with tables and benches next to the refreshment counter allowing spectators to watch activity around the trout pond. A 4' high berm protects the area in the event of flooding. Disaster screens are provided to prevent escape of fish into San Pedro Creek.

Area Requirements:

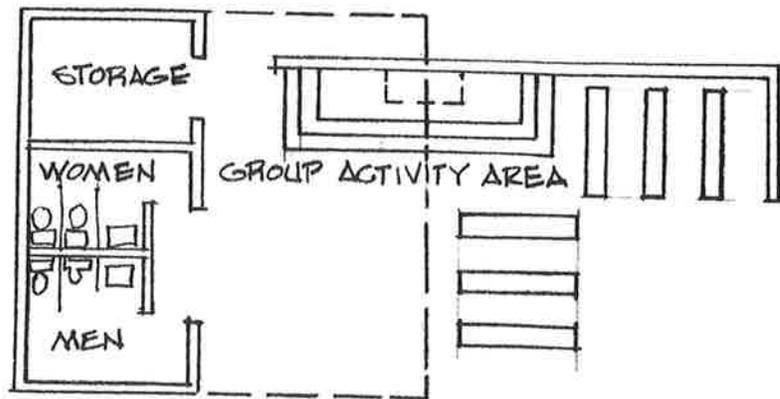
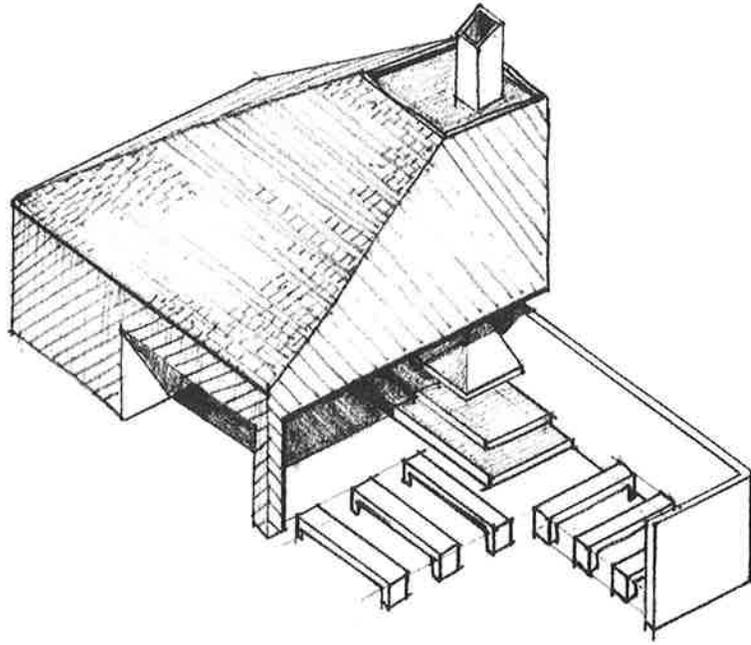
- o Pond Area
- o Concessionaire Stand 250 sq. ft.
- o Restrooms and Fishing Cleaning Area 350 sq. ft.

Restrooms - Three detached restrooms are provided for the picnic areas. Each facility contains a mens' and womens' room with one toilet and sink each. Also included is a small storage room and a covered waiting area.

Area Requirements:

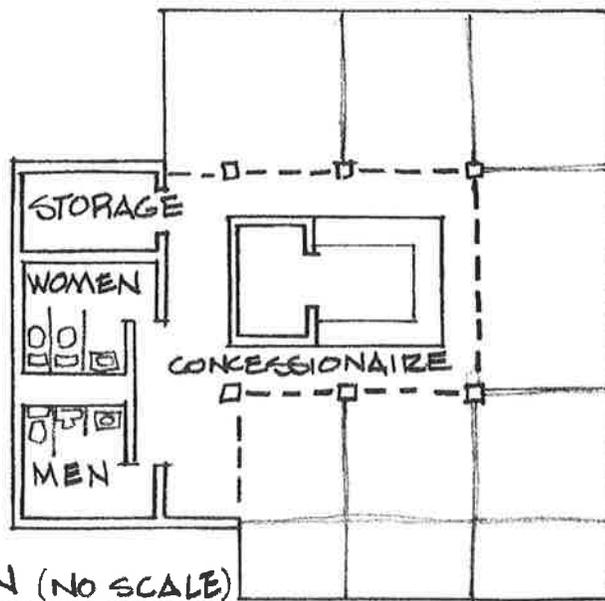
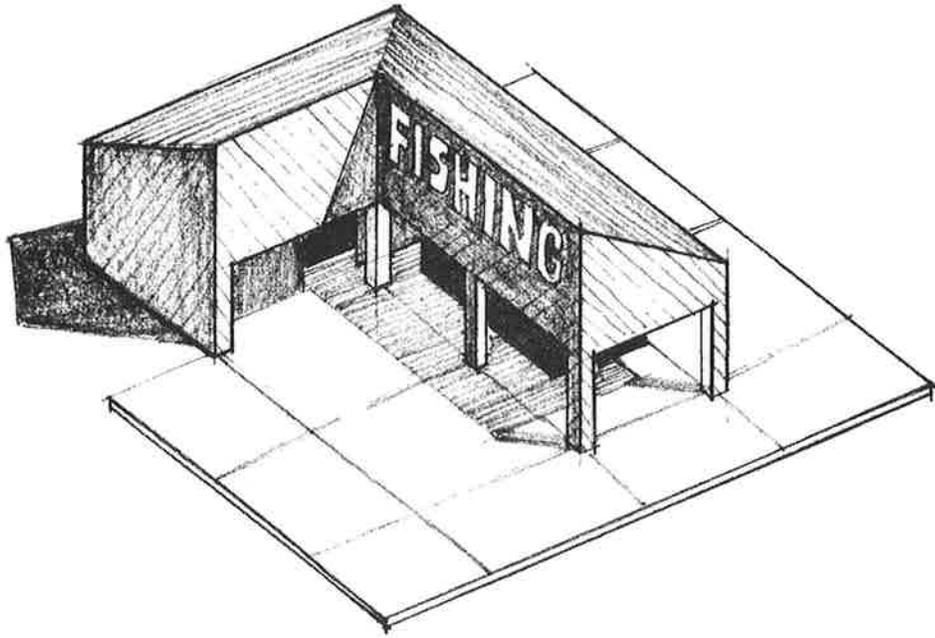
- o Total Area 250 sq. ft.

Habitat Barrier - This barrier is actually a one rail, low fence made of rough cut timbers to discourage wandering from

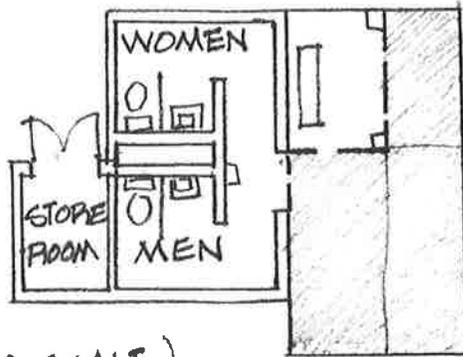
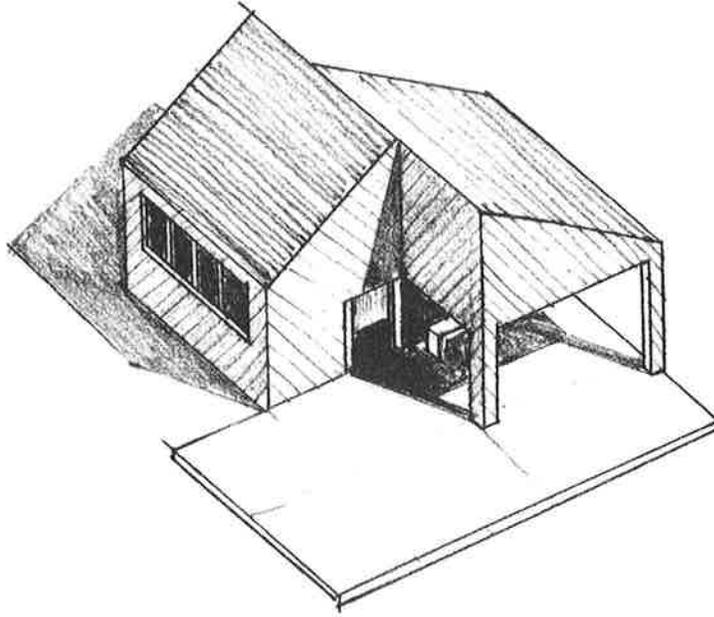


PLAN (NO SCALE)

DAY CAMP CENTER

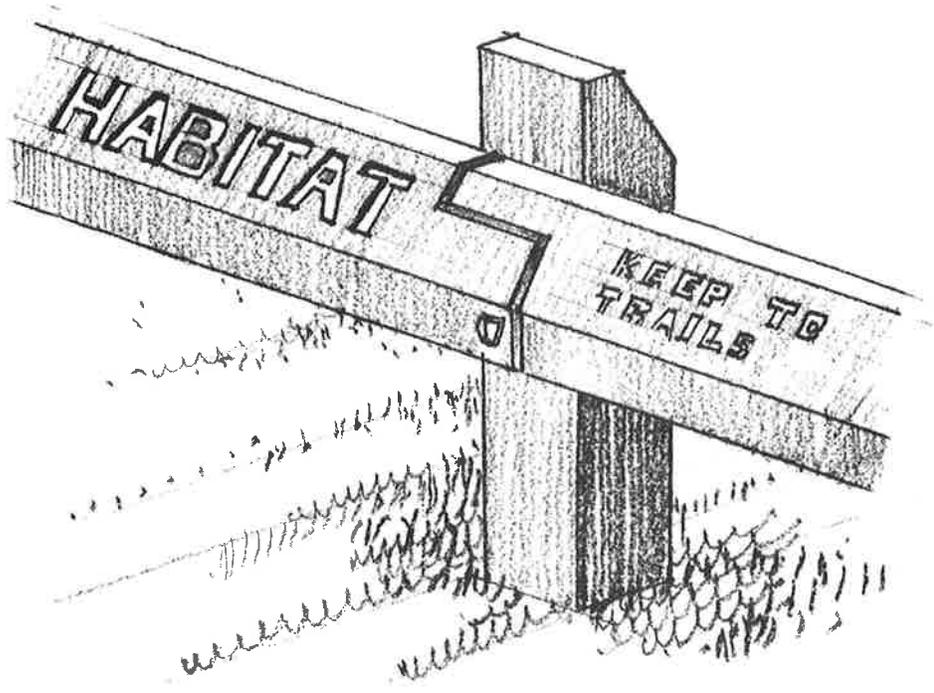
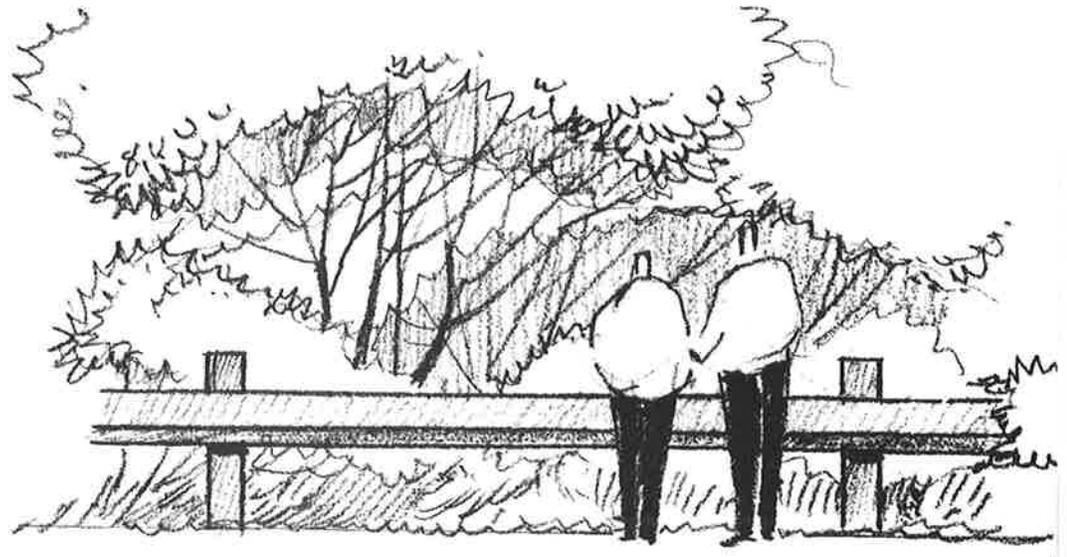


FISHING CONCESSIONAIRE



PLAN (NO SCALE)

RESTROOMS



HABITAT BARRIER

the trail to the creek area. Integral with the barrier detail will be a sign, advising park visitors to stay on the trails. The barrier is located along the entire Middle Fork trail and loop trail, the creek adjacent to the Day Camp area, and portions of the South Fork near the Park Headquarters.

2. Roads and Parking

Except for the dirt road to the Day Camp area, all roads are to be 2-lane, 22' wide asphalt pavement. They connect all picnic areas and attendant parking. An Auxiliary Access, to the north of the church, should be arranged for emergency use.

A drainage swale on the uphill side of the roads is necessary to divert surface water from saturating the fields.

Parking for 100 cars is dispersed throughout the valley area to limit the size of a single lot and to provide convenience.

Bus parking and a turn-around are located near the Interpretive Center and Group Picnic area.

3. Picnic Areas

Six individual picnic areas are distributed throughout the valley area. Each site contains: 5 tables, 1 bike rack for 5 bicycles, 5 fireplaces, 1 drinking fountain, 2 trash containers, and a new planting of about 20 trees.

The Big Meadow #1 and #2 picnic areas can be combined to form one group area as needed. Otherwise, the Group Picnic Area near the Interpretive Center will serve all group functions. This area is conveniently located to parking, separated visually and physically from the rest of the park, and is convenient to the Interpretive Center. Facilities include: 10 picnic tables, 2 barbecue pits, 2 drinking fountains, and 5 trash containers.

All sites are irrigated and maintained to reduce fire hazard and surface erosion. All sites are adjacent to open fields for spontaneous play and are within 400' of restrooms.

4. Fields

Turf fields are irrigated and mowed grass areas for spontaneous play. These fields are naturally quite narrow and no formal sports facilities are included.

Grass fields are used less intensively and are also irrigated and mowed, but the grass is allowed to grow higher in order to give more of the appearance of a natural meadow.

5. Trails

There are 7.7 miles of trail proposed within the park boundaries. Three and two-tenths of these would be a wide trail which would permit equestrian use and access to fire fighting vehicles.

The other trails are typically 4' wide and under 10% grade. The trails form a series of interconnecting loops so as to accommodate many different route and mileage alternatives. Should access to the San Francisco Water Company Perimeter Trail be realized, these loops could expand to day-long outings. Frequent park users can put together many different experiences out of the same trail components by careful selection.

Overlook Trail (1.4 miles) - In the northwestern portion of the park, this trail begins at Walnut Glen on Brooks Mountain Trail. The Overlook Trail follows an abandoned trail for the most part and provides a sequential series of spectacular views toward Brooks Falls. Of added interest further along this trail is the Manzanita Glen, an area where Manzanita and Chinquapin are the size of small trees. Just past this spot, the ocean is both audible and visible as it meets the land at San Pedro Beach. From here, the trail loops back over a precipitous area to the connection with Montara Mountain Trail and the top of Brooks Falls and the Brooks Falls Trail.

Montara Mountain Trail (.8 mile) - This trail provides for linkage and an ascent to the top of Montara Mountain. However, it can only be realized if permitted access to the San Francisco Water Company Perimeter Trail can be accomplished. One outstanding aspect of this trail is the Fog Meadow area where Bleeding Heart wildflowers abound.

Brooks Falls Trail (1.0 miles) - This trail completes the loop begun on the Overlook Trail and provides safe access up and down the falls which cascade well over 100' vertically. At the bottom of the falls, the trail follows the creek and brings the hiker into close proximity with the moist shrub and riparian plant community. This is the only area within the park where a trail is close to the actual water course.

South Fork Trail (1.8 miles) - This trail is spine of the trail system in the southern portion of the park. It follows the South Fork of San Pedro Creek but is generally located well away from the creek. It begins at the Park Headquarters and terminates at the Big Canyon Overlook, where it connects with both the Big Canyon Trail and the Chaparral Trail. If access to the San Francisco Water Company Perimeter Trail is accomplished, the South Fork Trail would continue to make the connection. The trail tread is 10' wide and follows an old road. The width is

to be maintained to allow for horses and to provide emergency access in case of fire. Points of interest along the way include the Eucalyptus Glen, Granite Overlook and views to seasonal waterfalls. Eucalyptus Glen provides a very strong spatial enclosure created by mature trees and surrounding land forms. At Granite Overlook, one can clearly see the contact between the two very different igneous and sedimentary rock types.

Chaparral Trail (1.2 miles) - This trail looks back onto the South Fork Trail. The trail winds its way among mature Eucalyptus trees and through a variety of scrub types.

Big Canyon Trail (1.6 miles) - From the Big Canyon Overlook, the trail descends the slopes which form the large canyon in the center of the park. The trail continually exposes a differing view of this interesting topographic unit. The trail terminates in the valley where it connects with the Middle Fork Trail and the picnic areas. Just before reaching the valley, dramatic, elevated views up and down the valley are exposed and the final section of trail passes through the finest and oldest Madrone trees in the park.

Middle Fork Trail (.9 miles) - This trail will probably be the most traveled since it is in close proximity to the intensive use areas. It will be paved to allow for a bike loop with the park road in the valley area. The paving will serve not only as a good tread for bicycles, but will prevent wear by the anticipated heavy foot traffic, and provide a good maintenance edge between turf and the natural area along the creek. The trail is typically set back 15-20' from the creek bank and separated from the creek by a habitat barrier to discourage unauthorized access to the sensitive creek zone. The only vantages of the creek occur at right angle crossings where the Middle Fork Loop Trail connects and where the park road crosses the creek at either end of the valley.

Middle Fork Loop Trail (.4 miles) - This trail affords access to the south side of the creek and leads to Big Canyon Glen, where mature willows provide an intimate enclosure.

Willow Glen Trail (.3 miles) - This dead-end trail is furnished mostly for the use of the day camp facility, from which it originates. The trail follows the canyon to Willow Glen, which provides small, secluded space for small gatherings.

Valley View Trail (.9 miles) - This trail provides access to the grasslands on the northern ridges of the park and also potentially connects with Frontierland Park and the San Francisco Water Company Perimeter Trail. In the spring, the grasslands through which this trail passes are full of

wildflowers and the views to the valley are superb. Like the South Fork Trail, this will be wide enough for fire vehicles and will be designated equestrian if linkage to the out of park trail is resolved.

Interpretive Loop Trail (.2 miles) - This trail is part of the interpretive facility at the Park Headquarters. It allows for a capsulized view of the park's natural features and passes through portions of grassland, woodland, shrub, and riparian zones.

6. Glens and Overlooks

The glens and overlooks are areas of exceptional quality relative to the park environment. Glens are clearings within groves of trees, and overlooks are places which provide interesting views. Both are to be cleared enough to allow greater appreciation of their intrinsic values, safety, and gathering of from 5 to 10 people.

II. PHASING

Park development has been separated into two phases in order to reduce initial costs.

Phase 1 consists of all of the items which are essential to opening the park to the public, and includes the construction of all roads and parking, entrance facilities, 3 individual picnic areas, group picnic area, turf areas, park headquarters/interpretive center, Big Canyon and related trails, habitat barrier, 2 restrooms, rehabilitation of park maintenance facility, erosion control, demolition, and the construction of a water storage facility.

Phase 2 consists of those items which are not essential to the initial park operations and includes the construction of fishing concession, balance of trails, day camp center, native plantings, bike paths, foot bridges, sidewalks, balance of picnic areas.

III. COST ESTIMATES

The following itemized costs for Phase 1 have been estimated using 1975 prices. Fifteen percent should be added to these per year every year thereafter, depending upon the actual time of construction.

PHASE 1

<u>Description</u>	<u>Cost</u>
2 Box Culverts with Headwalls	\$ 13,430
3 Picnic Sites	24,810
Group Picnic Site	7,610
Restrooms	25,160
Control Station	2,720
Headquarters/Interpretive Center	107,430
Maintenance Center (Recondition)	8,700
Site Grading, Mass Excavation, Earth Roads - Trails, Culvert, Headwalls (28 acres)	119,700
Paving - Roads & Parking Area, Headers, Striping, Parking Bumpers	112,080
Habitat Barrier	40,230
Entrance Control Chain Link Fence	8,480
Turf Fields (12 acres)	76,170
Grass Fields (9.5 acres)	7,870
Demolition (4 buildings)	8,165
Entry - Sign (6' x 16' Redwood), Trees, Shrubs, Berm	13,220
Sewer Line	52,230
Water Line	32,640
Irrigation System, Meter	253,870
Buffer Planting	3,480
Resource Management - Erosion Control, Diversion Ditch, Seeding, Plantings	4,320
Poison Oak Control - 2 setups @ 1 week each	3,260
Water Storage Facility	100,000
Phase 1 Total	\$1,025,575

PHASE 2

<u>Description</u>	<u>Cost</u>
Sidewalks	\$ 16,760
Bike Paths	13,294
Bridges	6,446
Excavation & Grading - Trails (2 miles) Equestrian/Fire (3.2 miles), Glens and Overlooks (8 ea.), Grade, Picnic Area, Day Camp Center, Fishing Concession	71,624
Picnic Area - 3 sites	32,661
Day Camp Center - Building, Craft Tables, Benches, Trash Containers, Water Foun- tains, Restroom Structure	47,766
Fishing Concessionaire	<u>35,874</u>
Phase 2 Total	\$ 224,425
ADDITIONAL ACQUISITION	<u>170,000</u>
GRAND TOTAL	<u><u>\$1,420,000</u></u>

IV. ENVIRONMENTAL SETTING

The San Pedro Valley County Park Environmental Impact Report, September 1974, describes the regional and local environmental setting of the park in detail and should be used as a supplement to this report. The following relevant site data which appeared in the EIR have also been included here for easy reference.

A. GEOLOGY

The park area is underlain by three different rock units:

1. The Franciscan Assemblage - KJF
2. The Montara Mountain Quartz Diorite - Kgr
3. The Martinez Formation - Tss

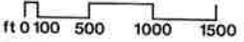
The old rocks of the Franciscan Assemblage underlie the third of the park northeast of the middle fork of San Pedro Creek (see Geologic Map). They consist mainly of sandstone and shale, but bodies of limestone and greenstone (altered lava) are also present. The rocks are hard, but extensively fractured and broken. They are generally resistant to erosion and are stable on moderately steep slopes. Deep gullies have developed in the soils overlying these rocks in some areas, and near-surface slippages have also occurred in the soils.

The very steep southwest portion of the park is underlain by an intrusive igneous rock type known as the Montara Mountain Quartz Diorite. It is a medium to coarse-grained rock that is very hard where fresh, but is weathered to "D.G." (decomposed granite) in most areas to depths of a few to several tens of feet below the ground surface. It is a very strong rock type forming bold outcrops where fresh, and is generally stable on the steep slopes present. The weathered "D.G." rock is moderately to highly susceptible to erosion.

The middle third of the park is underlain by bedded sedimentary rocks of the Martinez Formation of Tertiary age. The rocks consist predominantly of thin bedded shale and sandstone with some conglomerate. The shale is dark gray in color, while the sandstone is tan or buff. The thin natural soil cover overlying this rock and, to a lesser extent, the rock itself is relatively susceptible to gullying. Many areas of accelerated erosion are present within the portion of the park underlain by this rock type, and new areas of erosion could develop wherever the natural vegetation and soil cover is stripped away.

The Pilarcitos fault runs down the valley of the Middle Fork of San Pedro Creek, separating the Franciscan rocks from the Martinez Formation. The Montara fault is in the upper reaches



Project Setting		Geology		North  
Legend: Source: <small>USGS, Miscellaneous Field Studies Map MF-228, 1960; Alvarado, Preliminary Geologic Map, San Mateo</small>	 Geologic Formation (see text for explanation)  Geologic Contact  Approximate Geologic Contact	 Concealed Geologic Contact Fault  Approximate Fault  Concealed or Inferred Fault	 Downthrown Side/Upthrown Side  Area of Erosion  Gully Erosion  Strike and Dip of Strata	

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 San Mateo County Park and Recreation Department

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of the southern part of the park at the headwaters of the South Fork of San Pedro Creek. There has been no historic movement on these faults, and they are considered inactive. They should not be considered a constraint on the planning of the location of park features.

Soils present in the park are predominantly thin residual deposits a few inches to 3 or 4 feet in thickness overlying the rocks described above. Thicker soil deposits exist only as stream terrace deposits along the major drainage courses, and where alluvial fans have spilled out from the mouths of side canyons (see Geologic Map).

B. SURFACE AND SUBSURFACE WATER CONDITIONS

The park area is drained by the Middle and South Forks of San Pedro Creek, which converge near the park entrance at the northern boundary of the area. Both of these streams are perennial, and they flow in well developed steep-walled channels cut into the alluvial deposits that underlie the relatively flat valley floor areas. The two main streams are fed by numerous minor intermittent drainages that develop substantial flows only during and shortly following periods of extended rainfall. A significant flooding hazard reportedly exists in the valley bottom areas, and both forks of the Creek have overflowed their banks several times in the last few decades.

The surface water hydrology of the area is discussed in considerably greater detail in the "EIR for San Pedro Creek Diversion of the North Coast County Water District," 1974.

Since alluvial deposits are minor and confined to the valley bottom areas, ground water beneath the park is mainly present within the relatively impermeable bedrock units. All of the rocks underlying the area have a low primary permeability, and the water flows principally through secondary features such as fractures and joints. Consequently, while the mass permeability of the rocks is low, there are certain zones which transmit considerable flows of water which presently come to the surface as springs.

C. SOILS

There are four soil associations within the boundary of the San Pedro Valley Park. These associations include the Tunitas - Lockwood association, Lobitos - Gazos - Santa Lucia association, Miramar - Sheridan association, and Miramar severely eroded - Rock land association.

Tunitas - Lockwood Association - The soils of this association occur on small alluvial fans and low terraces along the major stream channels. The slopes will average about 5%.

Tunitas soils are moderately well drained and have very dark gray medium acid, loam or clay loam surface layers and very dark dray, mildly alkaline clay subsoils. Underlying materials are mildly alkaline, mottled, fine textured, alluvium. The soils have moderately slowly permeable surface layers and slowly permeable subsoils.*

Lockwood soils are well drained and have grayish-brown medium acid, loam or shaly loam surface layers and grayish-brown, slightly acid, shaly heavy clay loam subsoil. Underlying materials are slightly acid, shaly clay loam alluvium derived from siliceous shale rocks. The soils have moderately permeable surface layers and moderately slowly permeable subsoils.*

Lobito - - Gazos - Santa Lucia Association - The soils of this association developed on sedimentary rocks. They occur on very steep uplands under a cover of shrubs and grasses. Depth to bedrock is 2 to 3'. The erosion hazard is high. This association occurs on slopes of 30-70%. Phases of Lobitos soils make up 35% of the association. Phases of Gazos soils make up 25% and phases of Santa Lucia soils make up 25% of the association. The other 15% consists of included unnamed soils.*

The Lobitos soils have very dark gray, medium acid, sandy loam, loam or silt loam surface layers and light olive-brown, strongly acid, silty clay subsoils. Underlying materials are consolidated sedimentary rocks which occur at depths of 25 to 30". Permeability is moderate in the surface soil and moderately slow in the subsoil.*

The Gazos soils consist of grayish-brown, neutral, silt loam surface layers and neutral silty clay loam subsoils over sandstone at depths of 25 to 30". Permeability is moderate.*

Santa Lucia soils have gray, slightly acid, shaly loam surface layers and grayish-brown, strongly acid, very shaly loam subsoils. Depth to shattered siliceous shale average 25 to 30". The soil is moderately permeable.*

One included soil has gray, slightly acid, loam or clay loam surface layers and grayish-brown, slightly acid, clay subsoils. Soft shale rock occurs at depths of 2 to 3'.*

Another included soil has very dark gray, slightly acid, heavy clay loam or clay surface layers and dark gray, slightly acid, clay subsoils. Underlying materials are moderately consolidated sedimentary rocks which occur at an average depth of 36".*

The Lobitos soils generally underlay the grasslands in the park. These are particularly susceptible to deep gully erosion and slumping. The Gazos and Santa Lucia soils underlie the coastal sage unit.

Miramar - Sheridan Association - The soils of this association developed from acid igneous rocks. They occur on steep to very steep mountainous areas.

The soils are mainly sandy loam, and depth to bedrock is 3 to 5'. Erosion is a problem and many places show substantial losses of topsoil. This association occurs on slopes of 30-70%. Phases of Miramar soils make up 60% of this association and they occupy the windward, western slopes under a shrub vegetation. Phases of Sheridan soils make up the other 40% of this association and the soils occupy leeward, very steep, east-facing slopes. The land underlain by these soils is used mainly for watershed and wildlife, but a few small areas are used for the production of timber.*

Miramar soils have grayish-brown, slightly acid, coarse sandy loam surface layer and light brown, slightly acid, sandy clay loam subsoils. Depth to weathered quartz diorite is 2.5 to 3'. Subsoil permeability is moderately slow.*

Sheridan soils have very dark grayish-brown neutral, coarse sandy loam surface layers and brown, slightly acid coarse sandy loam subsoils. Depth to weathered quartz diorite is 3.5 to 5'. The soil is rapidly permeable.*

These soils underlie the mixed shrub types of vegetation where the Miramar soil has been eroded severely. Chinquapin is a frequent shrub species.

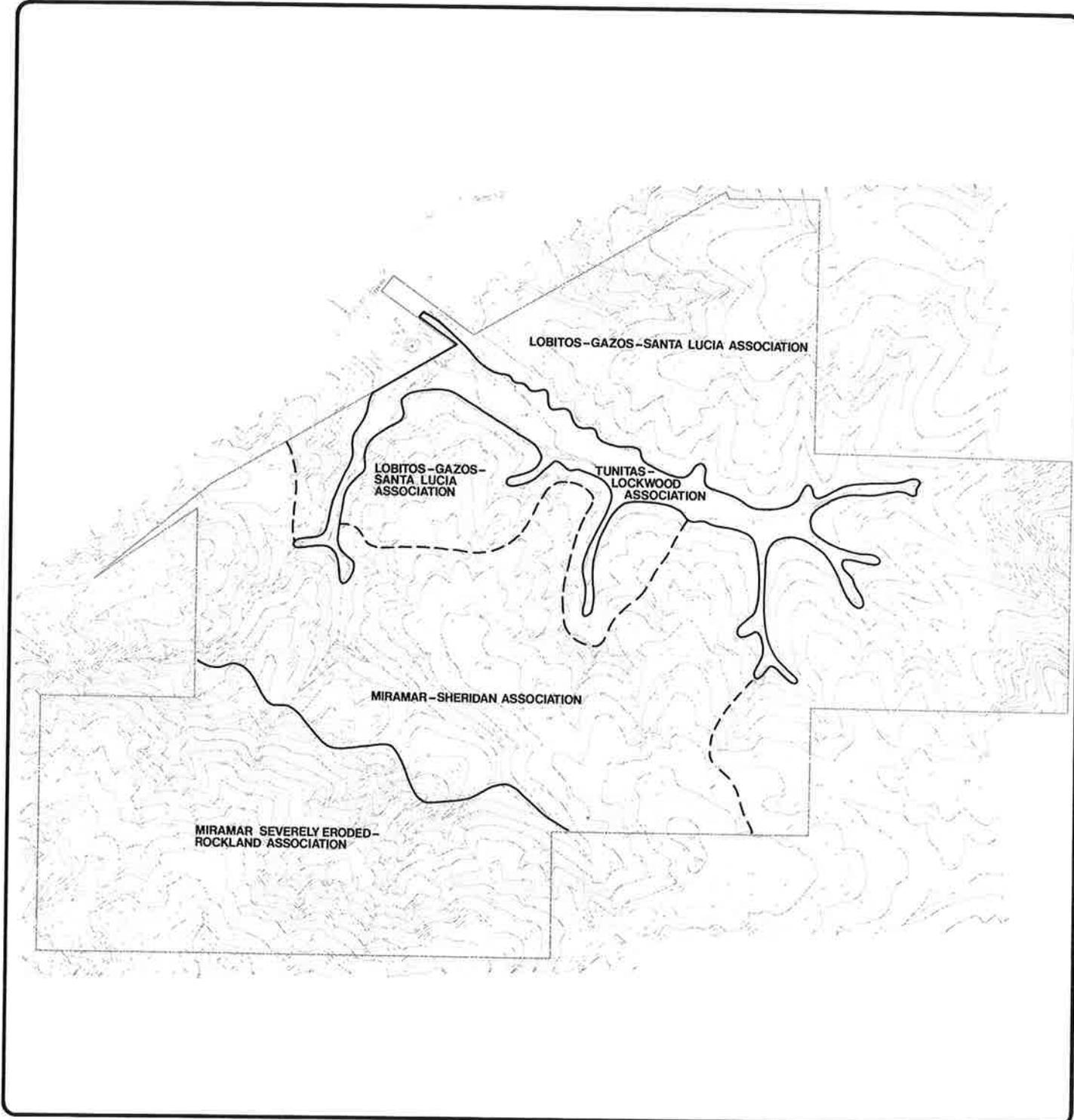
Miramar Severely Eroded - Rock Land Association - The soils of this association developed from acid igneous rock. They occur on steep to very steep mountainous areas. The soils are shallow to moderately deep and rocky. Erosion is high and most of the soils are severely eroded. This association occurs on slopes of 30-70%. Phases of Miramar soils make up 60% of the association and Rock land makes up the other 40% of the association. Land underlain by the soils of the association are used mainly for recreation, watershed and wildlife.*

The Miramar soils have grayish-brown, slightly acid, coarse sandy loam surface layers and brown, slightly acid, sandy clay loam subsoils underlain by weathered quartz diorite at a depth of 20 to 30". Subsoil permeability is moderately slow.*

Rock land consists of areas that have enough acid igneous rock outcrops and very shallow soils to dominate other soil characteristics. Rock outcrops usually cover 35 to 90% of the surface area.*

These soils support the shrub cover of the upper slopes of Montara Peak. Where severely eroded, prostate mats of *Arctostaphylos andersonii* cover some of the soil, with surface runoff and erosion occurring between the plants. Off-road vehicle use has a severe impact upon these soils creating much gully erosion.

* SCS - Soil Surveys



Project Setting - Soils

Legend:  Known Contact  Estimate Contact

Source: U.S.D.A. Soil Conservation Service (interpretation, EDAW)

North 

ft 0 100 500 1000 1500

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D. SLOPE AND TOPOGRAPHY

Elevation within the Park varies from about 150' above sea level at the confluence of the South and Middle Forks of San Pedro Creek to about 1850' on the higher reaches of Montara Mountain. Overall, the land is steep and deeply cut into V-shaped canyons by the tributaries to each of the main forks of the creek.

For planning and evaluation purposes, the following Slope Map was prepared. Slopes under 5% are suitable for roads and play fields; slopes from 6-20% are suitable for roads, picnicking and gathering areas. Slopes from 21-75% are suitable for trails, and slopes 76% and greater are considered unsuitable for use except for the achievement of special goals otherwise unobtainable.

The acreage in each slope zone is as follows:

In Valley Area

0-5%	26.6 acres
6-20%	13.9 acres

Beyond Valley Area

0-5%	2 acres
6-20%	77 acres
21-75%	500 + acres
76+%	450 + acres

E. VEGETATION*

The vegetation within the Park has been grouped into 6 basic units: Grasslands, Herbaceous Cover, Coastal Sage, Mixed Shrub, Eucalyptus Forest and Riparian Woodlands. The following is a discussion of each unit.

Grassland - The grasslands are located in the northern part of the study area along the ridge tops and south-facing slopes. Abandoned agricultural lands are also converted to grasslands.

These grasslands are described as a California annual type. Annual vegetation changes from season to season. This change may not represent changes in species composition but in relative amounts of certain species. The recoverability of the grassland after a disturbance depends on the competing species and adjacent vegetation. The principal result of a fire in the grassland type is the reduction of invading plant and woody vegetation.

* It should be noted that wherever areas of Heartleaf Manzanita are discussed or mapped, these may instead consist of, or include, Montara Manzanita.



Project Setting - Slope & Topography

Legend:

Source:
USGS, 7 1/2
Series, 1969

1 0-5%

2 6-20%

3 21-75%

4 76%+

North 

ft 0 100 500 1000 1500

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Burning, as a management tool, can be effective for maintaining a good grassland condition, but in lieu of burning, invading brush can be held in check by herbicides or physical removal.

The grassland is the first step in the successional sequence of the San Pedro Valley area leading to an ultimate climax of Chaparral, if fire is excluded.

Species: Bromus rigidus Ripgut Brome
Avena barbata Wild Oat

Herbaceous Cover - Herbaceous cover tends to occur following fire in the fog meadows on the upper north slopes of Montara Peak. Large clumps of Bleeding heart and Solomonseal form an unusual and beautiful aspect of the high parts of the Park. Baccharis and thimbleberry tend to overlap these herbaceous cover areas.

Species: Pteris ogcilinum Ferns
Polystichium munitom
Smilacina racemosa Solomonseal
Dicentra formosa (Andr.)
 D.C. Bleeding Heart

Coastal Sage - The south-facing slopes of the Park being dryer and creating favorable conditions, are dominated by baccharis, Sage and the associated species.

Baccharis is an erect shrub which attains an average height of six feet and is found either in relatively pure stands or as the dominant species in a mixed vegetation composition.

Baccharis is a member of the Compositae family and bears flowers during October and November.¹

Both baccharis and grassland occur on the Gazos, Lobitos, and Santa Lucia soils within the study area.

Baccharis will seed into areas that are disturbed either by landslides or by man-made disturbances.² Seed dispersal in baccharis begins in November and germination occurs during the winter and early spring. Even though baccharis is dominant, it must be considered a sub-climax species, with larger tree species eventually becoming the climax vegetation type.

¹ Munz, P. A. and Keck, D. C. A California Flora, University of California Press, Berkeley, 1959.

² Horton, J. S. Trees and Shrubs for Erosion Control in Southern California, U. S. Department of Agriculture, 1949.

Species:

(Bp) <u>Baccharis pilularis</u> DC.	Baccharis, Coyote Brush, Chaparral Broom
(Rd) <u>Rhus diversiloba</u> T. & G.	Poison Oak
(Ac) <u>Artemisia californica</u>	California Sagebrush
(Rc) <u>Rhamnus californica</u>	Coffee Berry
(Hd) <u>Holodiscus discolor</u>	Creambush
(Ct) <u>Ceanothus thyrsiflorus</u>	Blue Blossom
(A) <u>Arctostaphylos andersonii</u>	Heart Leaf Manzanita
(Gr) Grass	

Mixed Shrubs - The areas characterized by the Mixed Shrub Vegetation extend over half of the study area. These areas are normally on north-facing slopes, and the vegetation is lush and plentiful. The vegetation is not dominated by one single species, but is usually made up of combinations of the above species. The mixed shrub type normally has a deep leaf litter (1 to 2"),¹ is of impenetrable density, and attains a height of 3 to 12'.¹

The ability, by many of the species, to sprout gives this type an advantage in recovering from disturbance.² Reseeding by adjacent vegetation is abundant and can be seen on many of the trails that run through the mixed shrub type.

On the higher slopes of Montara Peak, this type occurs on eroded soils, is subject to much wind exposure and to fire. There, a pronounced fire succession occurs, with grasses, herbs and ferns immediately following the fire, followed in several years by soft shrub cover of Rubus parviflorus and Rhamnus with occasional Ceanothus thyrsiflorus. Severely eroded sites become dense mats of Arctostaphylos andersonii.

A unique aspect of the herbaceous phase are expanses of Bleeding Heart (Dicentra formosa) in north slope hollows of these upper ridges.

The mixed shrub type can be considered a sub-climax vegetative type. This sub-climax vegetation often forms the understory for Douglas-fir land, which is considered the climax vegetation type. Because of the absence of seed trees, it is unlikely that Douglas-fir will ever naturally succeed into the area.

¹ U. S. Forest Service. Vegetative Types of California, Map and Legend, San Mateo Quadrangle - 82C, 1932.

² Sampson, Arthur W. Plant Succession on Burned Chaparral Lands in Northern California, University of California, Berkeley, pp. 144.

Four distinctive associations occur within the Mixed Shrub Unit. Listed in descending order of apparent hardness, they are as follows:

- . Manzanita, Huckleberry or Chinquapin Association
- . Manzanita, Baccharis or Poison Oak Association
- . Hazelnut Association
- . Baccharis Association

Species:

<u>Rhamnus californica</u>	Coffee Berry
<u>Garrya elliptica</u>	Silk Tassel Bush
<u>Vaccinium ovatum</u>	Huckleberry
<u>Rubus vitifolius</u>	California Blackberry
<u>Castanopsis chrysophylla</u>	Chinquapin
<u>Heteromeles arbutifolia</u>	Toyon
<u>Heracleum maximum</u>	Cow Parsnip
<u>Rhus diversiloba</u>	Poison Oak
<u>Arctostaphylos</u>	Manzanita
<u>Arbutus mensiesii</u>	Madrone
<u>Ceanothus thrysiflorus</u>	Blue Blossom
<u>Baccharis pilularis</u>	Baccharis
<u>Holodiscus discolor</u>	Cream Bush
<u>Artemisia californica</u>	California Sagebrush
<u>Eriodictyon californicum</u>	Yerba Santa

Eucalyptus - (Euc) - The principal species in this unit is Eucalyptus globulus Labill (Blue Gum). Blue Gum is the fast-growing, towering tree that has been a feature of much of the California landscape since 1860. Historically, it has been used for windbreaks in the valleys. It reaches sizes up to 180'+ on good bottomland soils.¹ In the San Pedro study

¹ Metcalf, Woodbridge. Notes on Eucalyptus Species for Central California, University of California, Berkeley, April 1965.

area, the Blue Gum tree can be found on both ridge tops and in valleys. Blue Gum is seldom found by itself but rather, tends to be in groves.

In the struggle for survival after repeated devastation by brushfires, the eucalyptus has developed a special adaptation known as lignotubers which are woody swellings at the base of the stem. These enable seedlings to sprout again after fire damage or mechanical injury to the trunk. Eucalyptus also sprouts from epicormich buds on the branches and main stem. Coppice regeneration from a cut stump also enables the eucalyptus to recover from damages.¹

The planting of eucalyptus by man seems to be the major way eucalyptus is introduced to an area. Eucalyptus does not spread readily by itself, but tends to keep in the general area of planting. It is usually confined to openings in the surrounding areas where disturbance has taken place.

Eucalyptus leaves contain oil glands and are flammable when ignited. Fuel dynamics and fire hazard of the eucalyptus have been investigated by Dr. H. H. Biswell, U. C. Berkeley School of Forestry and Conservation. The accumulation of fuel depends on the balance between accession and deposition rates. When yearly decomposition equals yearly accession, fuel does not accumulate. When decomposition is less than accession, fuel builds up to the level where the percentage of decomposition of the total mass equals the yearly additional.²

Eucalyptus bark is readily shed along with its side branches. The accumulation of these branches and bark, along with the fallen leaves, on the forest floor create a buildup of fuel. The total quantity of fuel/acre of this unit is estimated by the U. S. Forest Service to be 100-200,000 pounds as compared to 15-30,000 pounds in Chaparral.

Species:

<u>Eucalyptus globulus</u> Labill.	Blue Gum
<u>Rhus diversiloba</u>	Poison Oak
<u>Rubus vitifolius</u>	California Blackberry

Riparian Woodlands - Woodlands along streams and very moist areas. Smaller, less conspicuous flora are also present but are dominated by the larger species listed above. Abundant moisture is the governing factor in riparian woodlands and is needed for the survival of the unit. The small streams usually do not have floras conspicuously differing from those of the adjacent slopes.

¹ Metcalf, Woodbridge, Eucalyptus Species of California, University of California, Berkeley, February 1967.

² Biswell, H. H., Agee, J. K. Wakimoto, R. H. and Darley, E. F. "Eucalyptus - Fuel Dynamics, and Fire Hazards in the Oakland Hills," California Agriculture, Vol. 27 (9) 1973, pp. 13-15.



Species Key

Bp	Bur Oak	Cc	<i>Castanopsis chrysophylla</i> (Chinquapin)	Ma	Maritime Madwort (Down Parsnip)	Rb	<i>Rhus diversiloba</i> (Poison Oak)
Cc	California Sage	Ck	<i>Cupressus arborescens</i> (Dixie Cypress)	Mb	Maritime Asteroid (Green Samba)	Rp	<i>Rubus parviflorus</i> (Thimble Berry)
D	Dune	Cw	<i>Cercocarpus californicus</i> (Dove Tree)	Jr	Juglans nigra (Black Walnut)	Rv	<i>Rubus vitifolius</i> (California Blackberry)
Aa	<i>Arctostaphylos uva-ursi</i> (Blackberry)	Ce	<i>Cercyon porteri</i> var. <i>californicus</i> (California Beet)	Jc	Juglans regia (English Walnut)	Rc	<i>Rubus callosus</i> (Coast Red Elderberry)
Al	<i>Alnus incana</i> (Oregon Alder)	Ct	<i>Ceanothus thyrsiflorus</i> (Blue Blossom)	Pm	<i>Podocarpus nunezii</i> (Douglas Fir)	Ry	<i>Rubus glaucus</i> (Blue Elderberry)
Am	<i>Arctostaphylos montana</i> (Mountain Blackberry)	Sa	<i>Sambucus glauca</i> (Black Dog)	Pm	<i>Podocarpus nunezii</i> (Western Dwarf Pine)	Rs	<i>Rubus compressus</i> (Coast Redwood)
At	<i>Arctostaphylos tomentosa</i> (Sp. Currant)	Sv	<i>Schizanthus liliifolius</i> (Coast Bluebell)	Pta	<i>Pinus attenuata</i> (Mexican Pine)	Zc	<i>Zinnia</i> , spp. (Zinnia)
Bp	<i>Baccharis pilularis</i> (Shrubmint)	Sd	<i>Sida acuta</i> (Sida)	Qa	<i>Quercus agrifolia</i> (Oak Leaf Oak)	Vc	<i>Vaccinium vitis-idaea</i> (California Huckleberry)
		Sd	<i>Sida acuta</i> (Sida)	Qc	<i>Quercus californica</i> (California Coffee Berry)	Pf	<i>Pinus radiata</i> (Monterey Pine)

Project Setting - Vegetation Legend:

B Barren	F Forest	G Grass	M1 Mixed Shrubs (wet)	M3 Mixed Shrubs (medium)
C Coastal Sage	R Riparian	Ct Ceanothus	M2 Mixed Shrubs (soft)	M4 Mixed Shrubs (hard)

Source: Aerial Photography June 1970

North

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Environmental Design Associates, Inc. 1415 Market Street, San Francisco, CA 94102 (415) 434-1400

The riparian woodland is located primarily on the soils of the Tunitas-Lockwood Association. The slopes will average less than 5%. The soils are very deep and drainage on the average is good to moderately good.

The sprouting Salix and Cornus are favored by disturbance to the type. Alnus are favored by the age and stability of the woodland.

Species:

<u>Salix</u> spp.	Willow
<u>Alnus oregona</u>	Red or Oregon Alder
<u>Cornus californica</u>	Creek Dogwood
<u>Equisetum telmateia</u> var. <u>braunii</u>	Giant Horsetail
<u>Sambucus callicarpa</u>	Coast Red Elderberry
<u>Lonicera ledebourii</u>	Twinberry - Honeysuckle

F. WILDLIFE

Aside from the stream and its associated riparian and canyon-bottom habitat, the Park provides habitats and niches that are fairly common in coastal California.

Wildlife depends for its existence upon a particular environmental habitat and an ecological niche. An oversimplified but accurate definition of these terms is: Habitat--where an organism lives, its "home"; Niche--where an organism works, its "office". The carrying capacity of a particular habitat or niche depends on a multitude of interacting factors. Intrinsic soil fertility is one base factor. Others are: climate, slope and exposure to insolation, availability of water, prevailing winds and their velocities and temperature and, primary to all, the food base upon which the organisms rest. The ecological and environmental history of an area determines which organisms, and in what population sizes, inhabit that area.

Wildlife Habitats of San Pedro Valley - The San Pedro Valley Park area contains five major environmental habitats, each associated with broad vegetation communities with certain identifiable ecological niches and subhabitats.

Eucalyptus Forest - This is the only major timber stand in the Park. Eucalyptus generally provides poor wildlife habitat; the fauna is usually sparse and is almost entirely restricted to a few birds and insects. The birds of the groves are generally those of the neighboring terrain--grasslands and chaparral--but a few, such

as Steller's Jay, will be more commonly observed here than in the adjacent shrub.

Riparian - This habitat borders the banks of the Middle Fork and South Fork and, to a lesser degree, Brooks Creek. The dominant plant is willow, with laurel subdominant at the higher elevations. Understory is a complex of vines, shrubs and forbs. The riparian habitat is the most productive site for varied wildlife in the Park. Many perching birds find both cover and feeding niches in the dense vegetation. The proximity of water and the protection from wind and dehydration insure abundance of insects and other invertebrates. Consequently, many vertebrate forms--amphibians (frog, salamander), reptiles (garter snake, gopher snake, and occasional pond turtle), mice, shrews and brush rabbits will be found here.

Scrub - The wildlife of the scrub in this area will be predominantly avian, both in variety of species and in population sizes. Birds associated with scrub are generally common and widely distributed throughout California's brushlands. Wrentits are to be heard singing from every canyon slope, Bewick's Wrens and Bush-tits are common. California Thrasher, Scrub Jay and the Valley Quail are common larger birds. Several species of humming birds, warblers and sparrows will be found.

Scrub is a fire-associated vegetative type; the community is at its thriftiest and most productive in the early successional stage following a moderate fire. The customary fire cycle is about forty years: San Pedro Valley will soon be due. As the scrub here after the last fire has matured and closed in, the area has become impenetrable and has lost its attraction for mammalian wildlife.

Food is out of reach, browse is woody and scarce, and the thickets are too dense for access by deer or the medium-sized predators. Even rabbits have declined, although the complete reasons for this are obscure. Only seed and insect-foraging mice and birds will be found in any numbers in this dense cover. An occasional Wood Rat nest is to be found.

During two decades, 1940 to 1960, this scrub was used as a small private deer club. There were many open vistas and passable game trails, and footpaths through the scrub then. The hunting was reportedly good for several years; "several fine bucks" were taken each fall. Within recent years, prior to the park sale, organized hunting lapsed. In 1973 a local landowner took two deer in one of the upper fields of Middle Fork. The deer population of the area is very low. The major contributing factor in the current low mammalian population is the density of the mature chaparral that blankets so much of this area.

The grasslands appear to be too small in extent to support much true grassland fauna. Meadowlarks, Killdeer and Horned Larks were absent. Ground squirrels and jack-rabbits were not found. Raptors were conspicuously absent; only one Redtailed Hawk was observed during the site survey, soaring high over the valley. Contrary to this observation, it should be noted that in April 1973, the Sequoia Audubon Society observed 5 Redtailed Hawks and 9 Turkey Vultures.¹

Comparatively, the grasslands here produce little wildlife. The reasons are obscure, although the grasslands low productivity is probably linked to the low productivity of the surrounding over-mature chaparral, compounded by the apparent high incidence of human use and disturbance of these more open lands. The number of dog scats suggest that feral dogs may also be a part of the problem.

Cultivated and Abandoned Fields - Deer and rabbit damage used to occur in the past, but now no wildlife damage is reported. Mouse trails or mole burrows are not found. However, at several locations along the hillside access road extensive colonies of Pocket Gophers, with fresh burrows, were seen. Scats of a wild mammal predator, probably Bobcat, were collected. These contained only gopher fur and teeth, no rabbit. Rabbit sign, sets and droppings were found only in a couple of scrub-grassland sites. Brush Rabbits were observed only twice. The local rancher reports seeing Bobcats in the abandoned east fields. Grey Fox, raccoon and opossum are not reported, nor were any tracks or sign found. Along with skunk and weasel, these fur mammals are probably present, but in very small numbers. Mountain Lion are periodically reported from the high Coast Range hills to the east. The scant deer population and dense cover will preclude these big cats at present, but they are potentially a wildlife resource of the Park.

Willow and weed growth cover debris and furnish haven for numerous small wildlife forms. Garter snakes, fence lizards, alligator lizards, mouse runs, many insects, spiders, and other land invertebrates are found. However, it was noted that all portable debris such as plywood, chunks of concrete, or sheet iron had been lifted and investigated many times before. The study team found that local youngsters, enthusiastic collectors, had also found this debris prime habitat for garter snakes and fence lizards.

Barren Areas and Rocky Bluffs - Several such areas are to be found but were not inspected because of the difficulty of access and their obviously low biological potential. Most of these are areas of steep, unstable wildlife habitat. Turkey Vultures were observed resting on rock outcrops in these areas.

Wildlife Inventory - The wildlife inventory (Appendix C) lists those animal forms either known or anticipated to occur in the Park. They are cited with notations as to their habitat types, forage niches, and the anticipated impact of Park development upon these species. Impacts are cited as positive, innocuous, or adverse to the species.

A quantitative inventory of the wildlife populations of San Pedro Valley Park area can only be conducted through several complete seasonal cycles in order to quantify migratory, ephemeral, aestivating, or hibernating forms.

Fish

Any valid statement concerning San Pedro Valley Park's fishery must recognize that, no matter how cautious the management within the park may be, the survival of the fishery may lie outside the Park's jurisdiction. Suburban construction has proceeded along the South Fork drainage and adjacent to the mainstream, with more and more acres of concrete, asphalt, roofs, lawns and gardens. Herbicides, insecticides, coal tars, oils, solvents, silt and litter increasingly infect this little stream. Design controls and regulations of use levels to retain steelhead in the Park could become academic if there are no fish to swim the stream.

The San Pedro fishery is too meager to sustain any sport fishing program. Spawning sites are so few and of such modest quality that any diminution of existing habitat will have significant negative impacts on the fishery. Stream side trails, wading, foot traffic, insect collecting within the creek beds of the Middle and South Fork will significantly diminish the habitat. Bridges, crossings or viewpoints related to the creek will be deleterious to the habitat unless a "look - do not touch" principle is developed.

Essential to fish survival in this small stream is the seclusion of dense shade provided by the canopy of overhanging willows and alders of the riparian habitat. If much of the canopy is broken, exposure will bring potentially lethal water temperature rises, greater predation hazard, and will encourage human trespass.

The only fishery enhancement work of value within the Park would involve the clearing of obstructions and litter from the stream bed. Of particular note is the obstruction on Middle Fork above the confluence of Middle Fork and South Fork to assure fish passage.

A renovated diversion screen on South Fork is needed. The present random access breaks through the riparian hedge to the creek are a threat. When (and if) the South Fork and mainstream mess is cleaned up, there will be greater resiliency in the fishery. Until then, the small resource that remains is critical and needs as much protection as possible.

The major obstruction outside the jurisdiction of the Park administration is the seven-foot drop and upstream culvert at the Sanchez School crossing. On-site evidence (collapsed retaining walls and undercutting) clearly shows that this obstruction is critical and, if not properly repaired, could prove fatal to the fishery. The culvert and fall at the Capistrano Street crossing is another serious obstruction requiring immediate corrective action.

G. OWNERSHIP AND LAND USE

The following Ownership Map indicates all land owners which may be directly influenced by the proposed Park. These lands are undeveloped except for the Park Pacifica Subdivision, Saint Peter's Church facilities which are confined to bottom-land, the filtration plant on NCCWD land at the confluence of the South and Middle Forks of San Pedro Creek and the Weiler houses also at the confluence.

The 415 acres of watershed owned by the NCCWD are under lease to San Mateo County for the Park for a period of 99 years.

Water Rights -

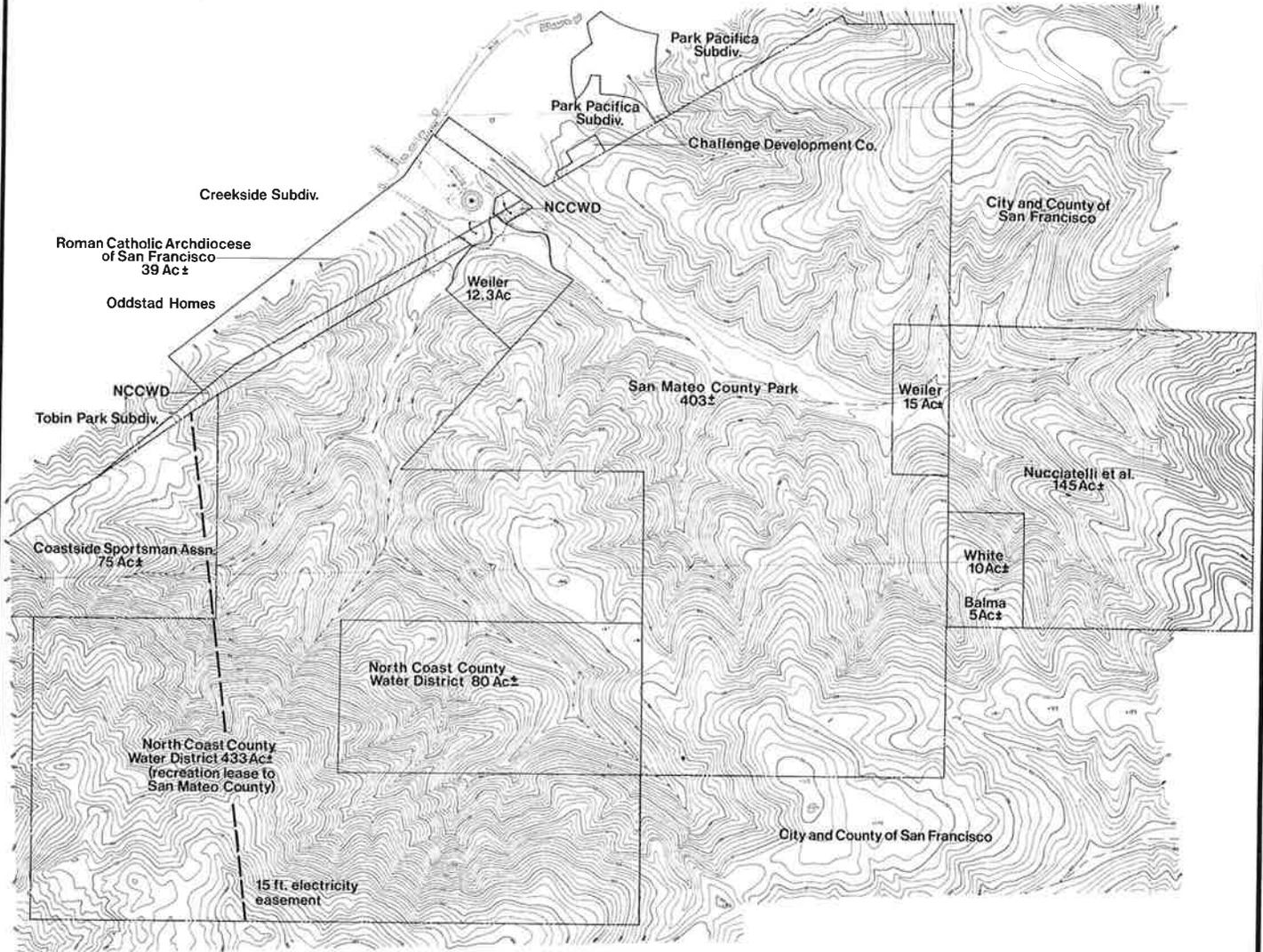
"In 1921 a San Mateo County Superior Court Decree adjudicated the water rights of San Pedro Creek water. Owners of land along the North and Middle Forks were allowed to use the water flowing in these tributaries. However, South Fork water was portioned to property owners downstream and along the South Fork for domestic and irrigation use."¹

This suggests that the County does have riparian rights along the Middle Fork. According to the California Water Rights Board, the only way to establish the exact amount of water to be withdrawn is for a civil action to be filed.

The land within the Park along the South Fork is under lease from the North Coast County Water District. Rights to water are not part of this lease. Also bordering along the South Fork is the Weiler Property, which the County plans to acquire for the Park. According to the Water Resources Board, the water available from the rights of this small parcel (12.3 acres) cannot be used beyond the limits of the parcel.

"The North Coast County Water District holds a State permit (No. 15676) to use 1.5 cfs (674 gpm) of flow in the Middle Fork from December 1 to June 1 and 0.2 cfs (90 gpm) from June 1 to December 1. The District

¹ Final Environmental Impact Report for the San Pedro Creek Diversion of the North Coast County Water District, May 1974.

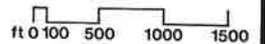


Project Setting – Land Ownership

Legend:

Source:
San Mateo County
Assessor's Office

North 



SAN PEDRO VALLEY COUNTY PARK
San Mateo County Park and Recreation Department

EDAW inc.
Environmental Design Architecture & Planning
San Francisco, Seattle, East Windsor, Montebello
190 W. 4th Street, San Francisco, CA 94103-4014

does have a license (No. 9038) to divert and use for water supply 0.47 cfs of flow from the South Fork from December 1 to June 1.

"Aside from the District, the only other person or entity possessing a permit to divert Pedro Creek water is a prior property owner on the South Fork who was granted a permit to divert 1.2 cfs (539 gpm) of South Fork flow for the non-consumptive use of fish culture on his property. Since issuance of this permit, the District has purchased the property and it appears this permit may no longer be valid."¹

On March 23, 1971, the North Coast County Water District applied for an increase in its right to divert and use water from the South Fork (Application No. 23733).

This application is the subject of a recent Environmental Impact Report (May 1974). The approval or denial of this application has no relationship to the status of water rights of the Park.

The San Francisco Water Department owns riparian rights adjacent to the Park in part of Sections 13, 18, 19 and 24 of Township 4S Range 5 and 6 West MEM.

H. EXISTING FEATURES

Special Features - Special features of Park value are indicated on the Features Map (see page 4). Of special merit is the waterfall on Brooks Creek. This series of falls creates a vertical water display well over 100' in elevation.

Historical & Archaeological Sites - No archaeological remains were encountered during the reconnaissance of the proposed San Pedro Valley Park site. While the chances appear to be very low, there still is the possibility of buried archaeological remains existing within the Park boundaries, either under the ground cover which prohibited an adequate look at a small portion of the valley bottoms, or under the ground covering on the hillsides and ridges where new trails will be built. While none of the remains were found, there is a rumor amongst historians of San Mateo County that an adobe building, possibly part of the Mission outpost, is located somewhere along the Middle or South Fork of San Pedro Creek.²

Rare or Unique Plants - With the exception of Montara Manzanita (*Arctostaphylos montaraensis*), no unique or endangered plants were observed during the site survey. The valley bottom has been so disturbed that little of the natural vegetation remains.

¹ Final Environmental Impact Report for the San Pedro Creek Diversion of the North Coast County Water District, May 1974.
² (Personal communication, Stephen Dietz).

There are, however, several areas of interesting plant communities which contribute highlights to the natural setting of the Park. These areas are indicated on the Features Map as follows:

- . Wildflower Meadow - This area is abundant with wildflowers in May.
- . Riparian Woodland - This area is associated with the creeks and contains the largest native trees in the Park and a highly diverse vegetation association.
- . Moist Shrub Formation near Brooks Falls - This area occurs on the steep wet slopes and includes two plants which are rare to the Park. Red Larkspur (Delphinium muclicavle) and Western Burning Bush (Euonymus occidentalis).¹
- . Madrone Canyon - This area contains several distinct shrub communities together with several mature madrone.
- . Old growth groves of Manzanita, Scrub Oak and Chinquapin on the ridges in the southern portion of the site.
- . Fog Meadow near Montara Mountain - This area contains expanses of the showy herb, Bleeding Heart (Dicentra formosa).

A plant list with habitat developed from the site survey is included in Appendix C.

I. LANDSCAPE SENSITIVITY

The geology, soils, slope, fishery, drainage and vegetation data have been combined to indicate the relative sensitivity of the landscape to human access. The greater the sensitivity rating, the greater will be the impacts on Park values by human access. The Landscape Sensitivity Map (see page 5) indicates zones from critical to low.

The sensitivity for most of the park area is determined by slope since all soils in the Park are rated similarly in terms of erodibility.

The Critical zone is defined by the riparian forest area around the lower reaches of the two forks of San Pedro Creek. Uncontrolled access to this zone could result in the permanent loss of the steelhead fishery.

The High zone is determined by severe slopes (76%+), areas and gullies presently undergoing erosion, and drainage channels.

¹ Site survey observation by Dr. Dennis Breedlove.

In this zone erosion could be accelerated with even occasional foot traffic unless extraordinary precautions are undertaken.

The Moderate zone is determined by slopes ranging between 21 and 75%. This zone is susceptible to erosion but the hazard can be managed with controlled use and ordinary maintenance and design standards.

The Low zone is determined by flat and gentle slopes (0-20%). These areas are basically trafficable and tolerant to un-designated circulation.

Sensitivity to Fire - In dry periods, the danger is uniformly high on the Park's upper slopes. The riparian forest and wet shrub are low and provide natural "breaks". The low valley areas alternate in sensitivity depending upon cultivation and irrigation for crops.

V. PROJECT TEAM

This report was prepared by EDAW, Inc. (formerly Eckbo, Dean Austin and Williams), Landscape Architects, Urban Designers, and Environmental Planners.

The project team was comprised of the following:

Herbert R. Schaal, Principal - Project Manager, Environmental Planning, Design
Alison Massa, Planner
Buonaccorsi and Associates, Architectural Acoustics
Dr. Dennis Breedlove, Botanist, California Academy of Sciences
Dr. Joseph Hendricks, Limnologist
Dr. John Thomas, Botanist, California Academy of Sciences
Dr. Paul Zinke, Forester, Soil Scientist
Eugene Nelson, Engineering Geologist
Howard Altman, Architect
Miley Holman, Archaeologist
Philip Arend, Biologist
Robert Peirce, Draftsman, Analyst
Timothy Biddinger, Forester
Williams-Kuebelbeck and Associates, Inc., Economists