North Oakland Hill Area Specific Plan (NOHASP)

&

Environmental Impact Report

CITY OF OAKLAND
CITY PLANNING DEPARTMENT
November 10, 1986

TABLE OF CONTENTS
North Oakland Hill Area Specific Plan

	Page
I. INTRODUCTION	1-5
A. Background	1
B. Purpose of Plan	2
C. Plan Area Location	2
D. General Characteristics of the Plan Area	2
E. Compliance with California Environmental Quality Act	4
F. Financing The Plan	4
II. EXISTING CONDITIONS AND MAJOR ISSUES	6-49
A. Density	6-21
1. Existing Conditions	6-15
a. Zoning	6
b. Ownership Patterns	6
c. Development Patterns	15
2. Impacts Of Potential Growth	15-21
B. Vegetation and Views	21-23
1. Existing Conditions	21-22
a. Vegetation Patterns	21
b. Existing Development	21-22
c. Views From the Scenic Routes	22
d. Views From Various Points Within Oakland	22
2. Potential View Conflicts With Existing Regulations	22-23
C. Erosion And Siltation	23-33
1. Existing Conditions	23-32
a. Natural Erosion	23
b. Major Project Impacts In The Past	32
c. New Regulations	32
2. Impact From New Development	32-33
D. Fire Hazards	33-40
1. Existing Conditions	33
a. Residential Fires	33
b. Wildfires	33
2. Potential Fire Hazards	33-41
a. Residential Fires	33
(1) Public Revenues	38
(2) Public Costs	38

b. Wildfires 40

E. Parking And Property Access Hazards 40-41

1. Existing Conditions 40-41
a. Narrow, Curvilinear Streets 40
b. On-Street Parking 41
c. Impacts Of Existing Development 41

2. Potential Access Conflicts With Future Development 41

F. Infrastructure Deficiencies 41-48

1. Existing Conditions 41-47
a. Sewers Within The Plan Area 41
b. Sewers Outside The Plan Area 42
c. Street Improvements Within The Plan Area 42
d. Street Improvements Outside The Plan Area 47

2. Potential Problems 47-48
a. Sewer Routing Within The Plan Area 47
b. Sewer Capacity Outside The Plan Area 47
c. Traffic Safety And Congestion Within The Plan Area 47
d. Traffic Safety And Congestion Outside The Plan Area 48

G. Summary of Potential Development Impacts 49

III. MITIGATION MEASURES 50-75

A. Introduction 50

B. Comprehensive Mitigation Measures 50-61

1. Vegetation Management Prescriptions 50-51

2. Site Development Map 51-60

3. S-11 Site Development Review Combining Zone 60-61

C. Specific Mitigation Measures 61-75

1. Density 61-65

2. Views And Vegetation 65-70

3. Erosion and Siltation 70

4. Fire Hazards 70-72

5. Parking And Property Access Hazards 72-73

6. Infrastructure Deficiencies 73-75

a. Streets 73
b. Sewers 75

IV. SUMMARY OF PLAN POLICIES AND ACTIONS 76-83

A. Density 76-78

1. Policies 76

2. Implementation 77

B. Views And Vegetation 78-79

1. Policies 78

2. Implementation 78

C. Erosion And Siltation 79-80

1. Policies 79

2. Implementation 79

D. Fire Hazards 80-81

1. Policies 80

2. Implementation 80

E. Parking And Property Access Hazards 81-82

1. Policies 81

2. Implementation 82

F. Infrastructure Deficiencies 82-83

1. Policies 82

2. Implementation 83

V. APPENDICES 84-146

A. Vegetation Management Prescriptions 85-91

B. Text Of New Or Amended Regulations 92-103

1. Oakland Zoning Regulations 92-101

a. S-11 Site Development Review Combining Zone 92-95
b. S-11 Related 95-101

2. Oakland Municipal Code 101-102

a. View Preservation Ordinance, Sections 7-8.02 and7-8.035 101

b. Building Numbers, Section 7-2.01 101

3. Oakland Fire Code 102

a. Residential Sprinkler System, Section 10.309(h) 102

4. Oakland Building Code 102-103

a. Location On Property, Section 504 102
b. Projections, Section 1710 102
c. Automatic Fire Extinguishing Systems, Section 3802 102

C. Draft Environmental Impact Report (DEIR) 104-129

D. Final EIR Supplement 130-146

VI. MAPS AND ILLUSTRATIONS

A. North Oakland Hill Area Specific Plan--Location 3

Key Sheet For Maps B,C,D,F,G,H,I,J, AND K 5

B. Zoning 7-10

C. Land Ownership Patterns 11-14

D. Existing Development Patterns 16-19

E. Public Facilities 20

F. Slope 24-27

G. Drainage Basins/Areas of Instability/Subwatersheds 28-31

H. Four Minute Engine Response Time 34-37

I. Sewer Extension Guide--Includes Existing Sewers/Septic Tanks 43-46

J. Vegetation Management Prescriptions Index 52-56

K. Site Development Map 57-58

L. Recommended EBRPD Site Acquisitions 66

M. Illustrative Schematics 68-69

1. Site Plan--One Unit 68
2. Site Plan--Two Unit Group 69

I. INTRODUCTION

A. Background

In response to the severe winter freeze in 1972 and the consequent threat of major fire, the East Bay Municipal Utility District (EBMUD) installed new water distribution and storage facilities along Skyline and Grizzly Peak Boulevards. Two new tanks of approximately 400,000 gallons each were constructed, and the capacity of the former Hilltop Reservoir was expanded from 38,000 gallons to 250,000 gallons. Over two miles of water mains and ten fire hydrants were installed. These facilities were built as temporary "emergency" facilities; thus an Environmental Impact Report (EIR) was not required, and new service to adjacent property owners was prohibited.

In 1976, EBMUD proposed changing the classification of the facilities from "emergency" to "standard", which would permit regular service from the emergency facilities. An EIR was prepared but received extensive comments and opposition. On October 11, 1977, the EBMUD Board tabled any further discussion on the reclassification proposal and referred consideration of land use matters to the City of Oakland and Contra Costa County.

Since that time, the Oakland City Planning Department prepared The North Hill Area Study which examined the potential impacts of the proposed reclassification action. It recommended some general remedies such as reducing the residential density in the area by rezoning 17 sites (approximately 1,250 acres) from R-30 to R-20 or R-10, and increasing design flexibility by allowing the clustering of single-family homes in the R-10 and R-20 zones through Planned Unit Developments. Both recommendations were subsequently implemented by the City. A more comprehensive study of all of the complex relationships between lot size, ownership patterns, topography, infrastructure and natural resources was not undertaken at that time.

In November, 1983, a revised "draft" EIR was circulated by EBMUD for review, and a hearing was held on January 24, 1984 on the "final" report. As a result of the comments on the EIR, the EBMUD Board referred the report back to its staff for modifications.

Given the desire of EBMUD to recoup its costs for the emergency facilities and the pressure from property-owners/developers in the area, it appeared likely that EBMUD would approve the EIR and the proposed reclassification action. In anticipation of such actions, the Oakland City Council directed staff to draft a specific plan to address the pertinent issues and impacts of potential development that might follow reclassification.

After the plan study began, the EBMUD Board acted on a modified reclassification proposal. As a mitigation measure, or perhaps as an accommodation to the City of Oakland, EBMUD reclassified only the pipes, pumps, valves, and hydrants. The two new tanks and the capacity in excess of the former Hilltop tank were reserved exclusively for fire

protection. Water is to be supplied only from the Skyline reservoir. To obtain the water, developers must pay for the extension of the water mains past their terminus or reimburse EBMUD for the use of the former "emergency" water lines.

B. Purpose of Plan

The purpose of this specific plan is to supplement and complement the provisions of the Oakland Comprehensive Plan in addressing potential problems in the North Oakland hill area. The authority and scope of the plan is set forth in Division 1, Chapter 3, Article 8 of the State of California Planning, Zoning and Development Laws which, in summary, specify that the Specific Plan should address:

1. The distribution, location, and extent of land uses including open space;

2. The distribution, location, and extent and intensity of infrastructure facilities;

3. The standards and criteria by which development will proceed, and the standards for conservation, development, and utilization of natural resources;

4. A program of implementation measures.

The focus of the plan is to mitigate potential problems in the area through a new combining zone in the City's Zoning Regulations, a variety of code changes, and other special measures.

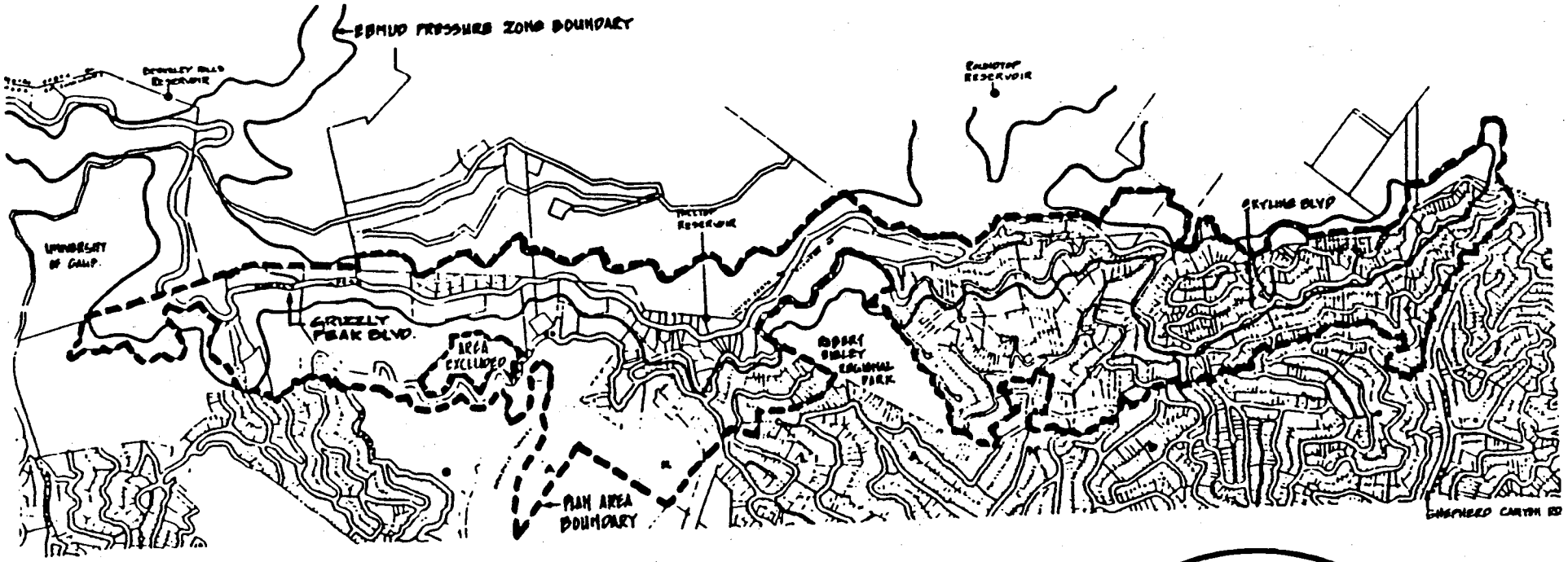
C. Plan Area Location

The plan area generally encompasses those sections of the North Oakland hills serviced by EBMUD's 1250'-1450' water pressure zone and the immediately contiguous areas which show one or more of the following common characteristics: inadequate lot design, water service, sewer service, or street widths; highly erosive soil; extremely steep slopes; or the potential for significant view and/or vegetation loss (see Map A).

D. General Characteristics of the Plan Area

The North Oakland hill area is chiefly characterized by "pockets" of single family detached dwellings and large expanses of wooded open space. Many of the problems in the area were created by the original subdivision process, with lots often platted on extremely steep slopes and streets inadequately designed.

While most of the existing residential development is concentrated within the southerly portions of the plan area, a few large scale subdivision projects (most notably Pinewoods and Cork Harbor) are interspersed throughout the hill area. These residential neighborhoods generally contain expensive single-family homes and are isolated from each other by parks and large vacant parcels. Because most of the land in the plan area has slopes in excess of 30 percent (many areas have slopes

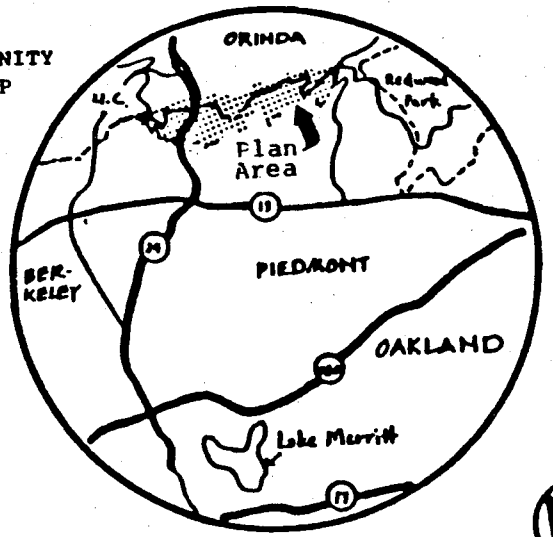


NORTH OAKLAND HILL AREA
SPECIFIC PLAN LOCATION

MAP A

November 1985

VICINITY MAP



Plan Area Boundary

OAKLAND
CITY PLANNING
DEPARTMENT

measuring 50-70 percent or greater--refer to Map F), many of the houses appear to hang from the side of hills, resting either on stilts or on massive foundation walls.

The zoning for housing density ranges from one unit per 5,000 square feet in the R-30 Zone to one unit per 25,000 square feet in the R-10 zone. However, due to the difficult topography actual lot size is usually much larger than required due to distance between adjacent streets. This, together with the large amounts of land dedicated to park and open space, gives the area the appearance of being sparsely populated--even undeveloped.

The street patterns in the hill area, by necessity, follow the natural contours of the land. Traffic volumes on most streets are low due to the sparse development pattern. The few direct accessible streets became the natural arterials and collectors. Most of the streets are well below the City's minimum standard paving width of 30 feet; twelve foot wide paving widths are not uncommon. Most drivers when they can, use arterial or collector streets. Very few streets are improved with curbs, gutters, sidewalks, sewers, or storm drains, and in many cases, they are not even graded.

With the exception of the sewers provided in the areas south of the East Bay Regional Park District (EBRPD) and in newly subdivided areas, virtually no sewer service is provided. Developed lots outside of the sewered area are serviced by private sewage disposal systems (septic tanks).

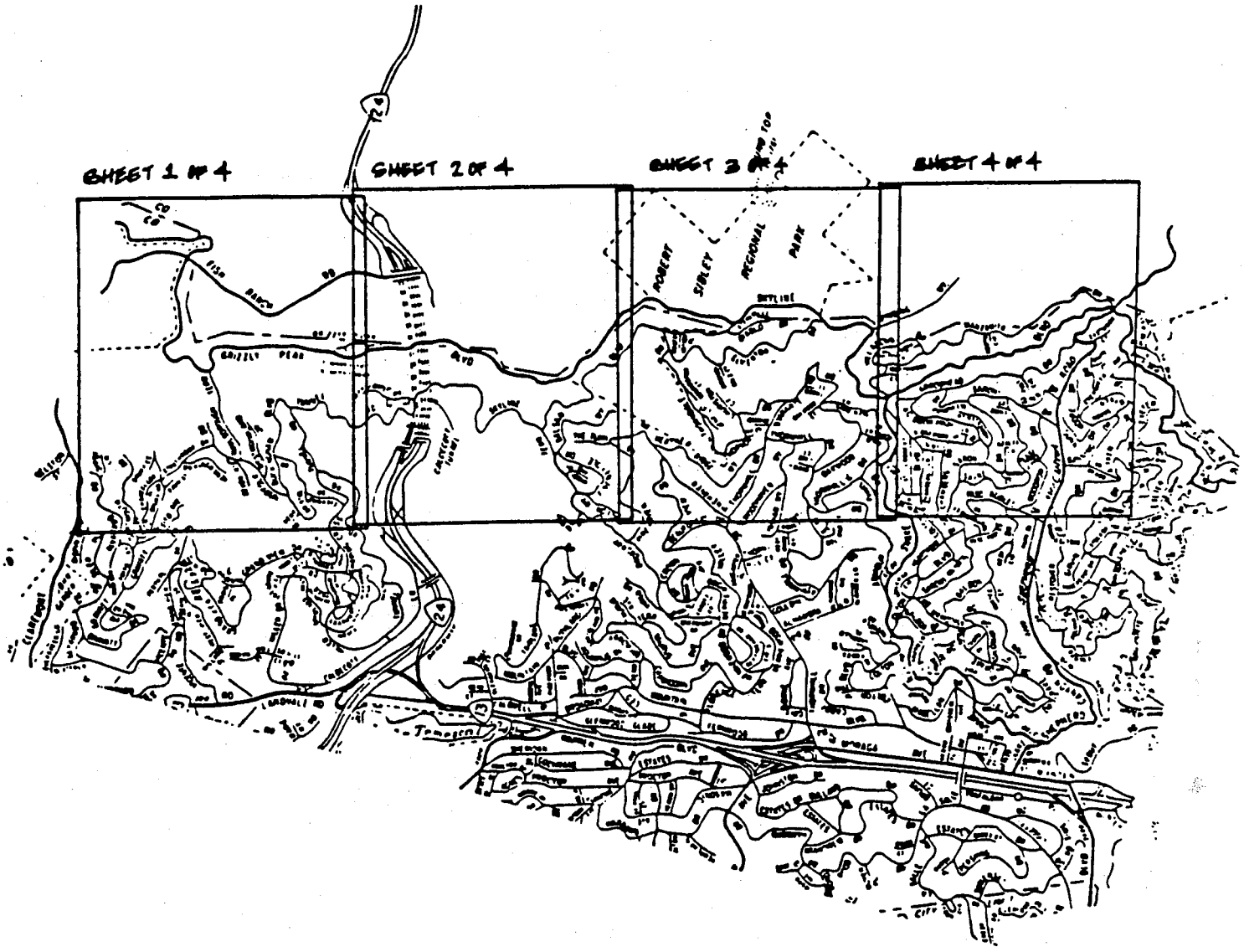
E. Compliance with California Environmental Quality Act

Because the specific plan will evaluate potential environmental impacts of hillside development, it will allow for easier permit processing and environmental review of projects developed in accordance with the plan. Since the plan is meant to act as its own Master Environmental Impact Report, no further EIR documents, with some exceptions, will be required for projects that conform to the plan.

F. Financing the Plan

It is intended that the cost of preparing this plan will ultimately be borne by developers of land within the specific plan area. Fees will be charged for each development project based upon that project's share of the total potential development as prescribed in the plan.

KEY SHEET FOR MAPS: B, C, D, F, G, H, I, J, and L



II. EXISTING CONDITIONS AND MAJOR ISSUES

A. Density

1. Existing Conditions

a. Zoning

Much of the developed area is zoned R-30 One-Family Residential. The R-30 Zone is the most dense zone mapped in the plan area. Other zones mapped in the hill area include the R-20 Low Density Residential Zone and the R-10 Estate Residential Zone. These lower densities resulted from the North Hill Area Study of 1979 which called for a number of areas to be rezoned (see Map B).

b. Ownership Patterns

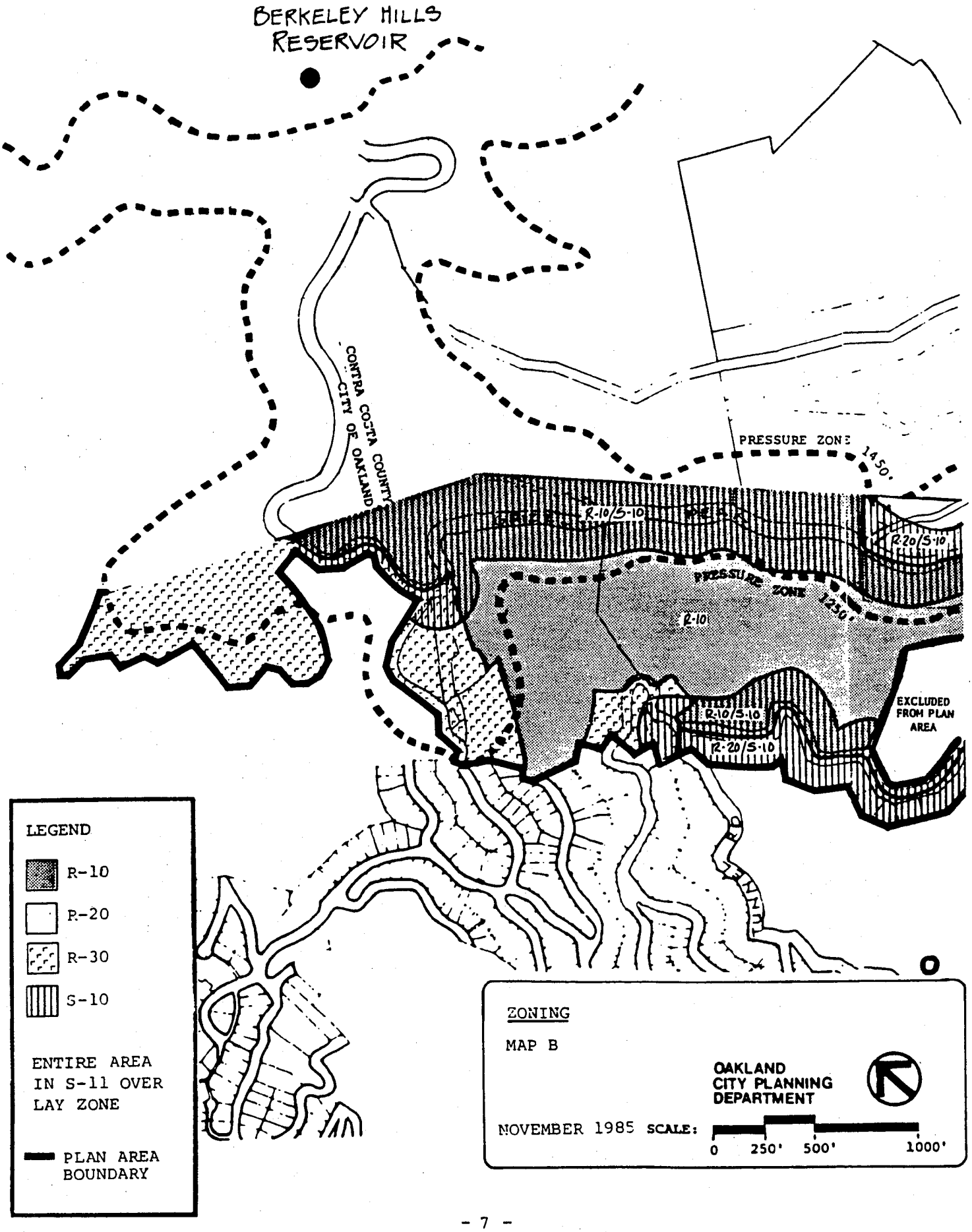
Private land ownership patterns throughout the plan area have been grouped into three general categories. Category One consists of scattered subdivided sites where individual property owners have no more than four adjacent sites. Category Two consists of large subdivided sites where a single property owner has assembled five or more adjacent sites. Category Three consists of large unsubdivided sites (see Map C).

A number of public agencies and utilities including the City, EBRPD, Pacific Gas and Electric (P.G. & E.) and EBMUD, own a great deal of hillside property. Most of such land is being withheld from future development. A summary of major ownership patterns is shown on Table 1 below:

TABLE 1*

Landowner	Percent of Land
Private Ownership (including P.G.& E.)	75.6
City of Oakland	3.6
EBMUD	14.1
EBRPD	6.7
	100.0

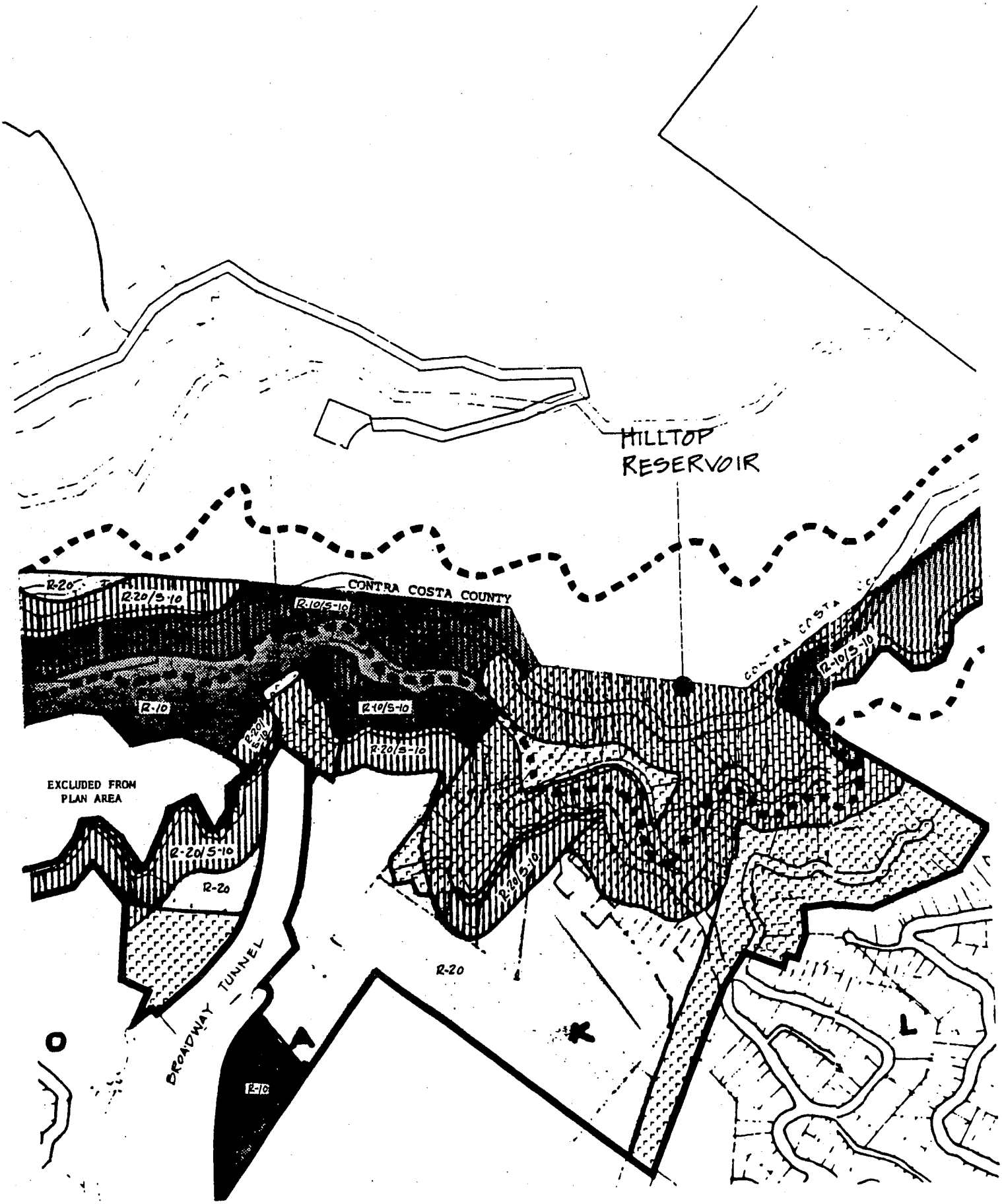
*Figures are from EBMUD Draft EIR (1983) which surveyed an area that closely approximates the specific plan area.


BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
PRESSURE ZONE 1450'
R-10/S-10
R-20/S-10
PRESSURE ZONE 1250'
R-10
R-10/S-10
R-20/S-10
EXCLUDED FROM PLAN AREA
TUNNEL
LEGEND
R-10
R-20
R-30
S-10
ENTIRE AREA IN S-11 OVER LAY ZONE
PLAN AREA BOUNDARY
ZONING
MAP B
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985 SCALE:
0 250' 500' 1000'

ZONING

MAP B

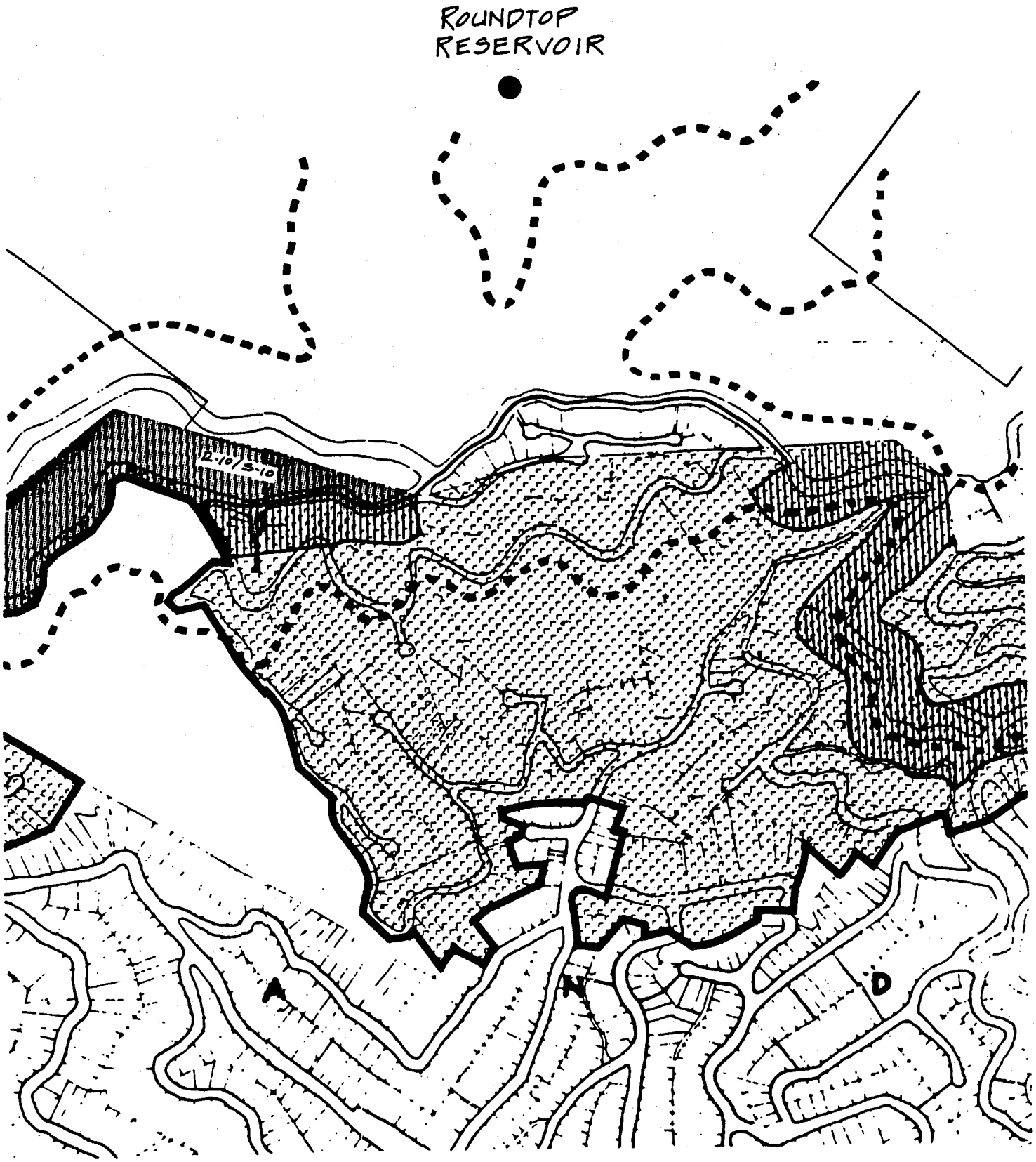
SHEET 2 OF 4



ZONING

MAP B

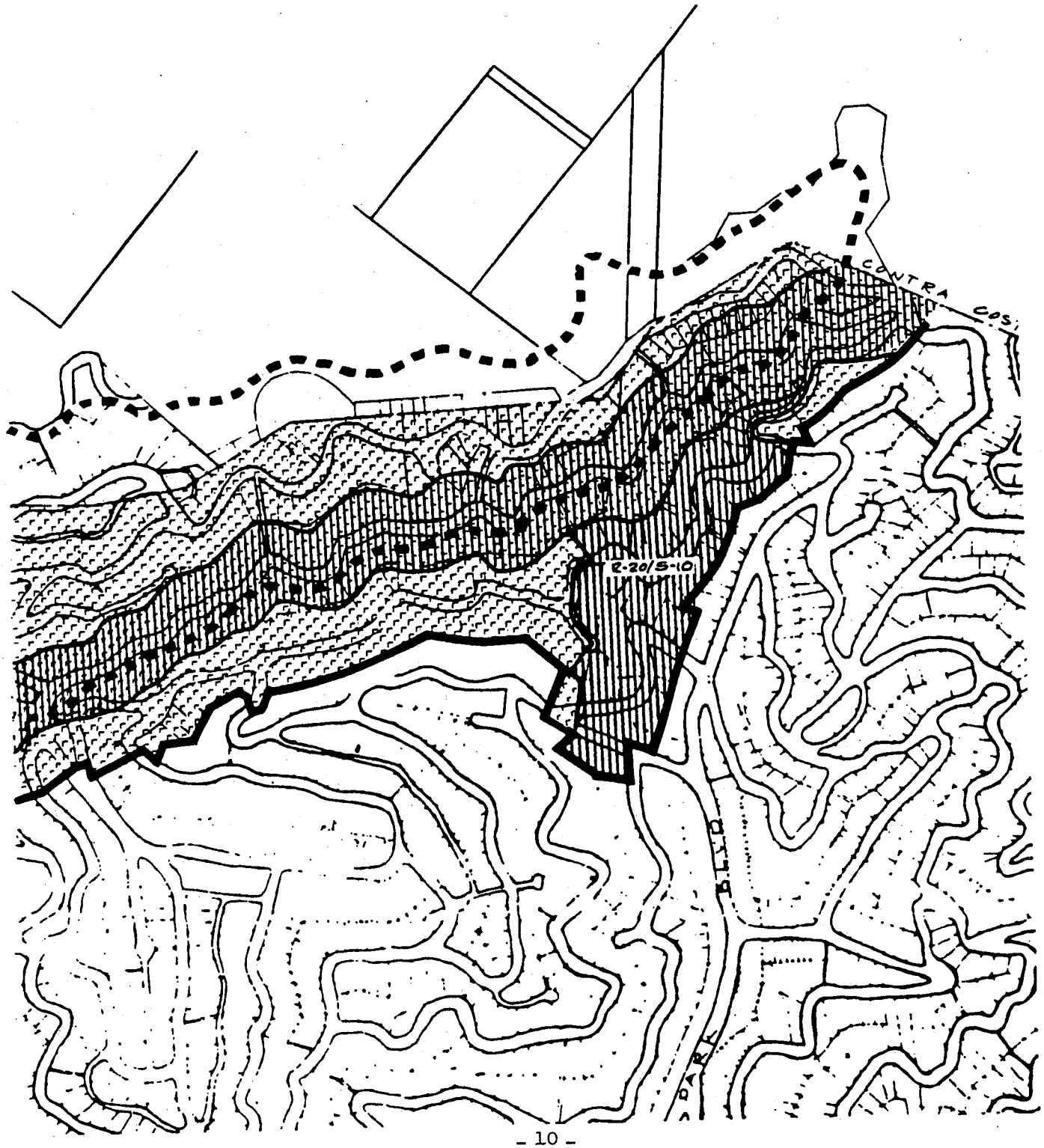
SHEET 3 OF 4

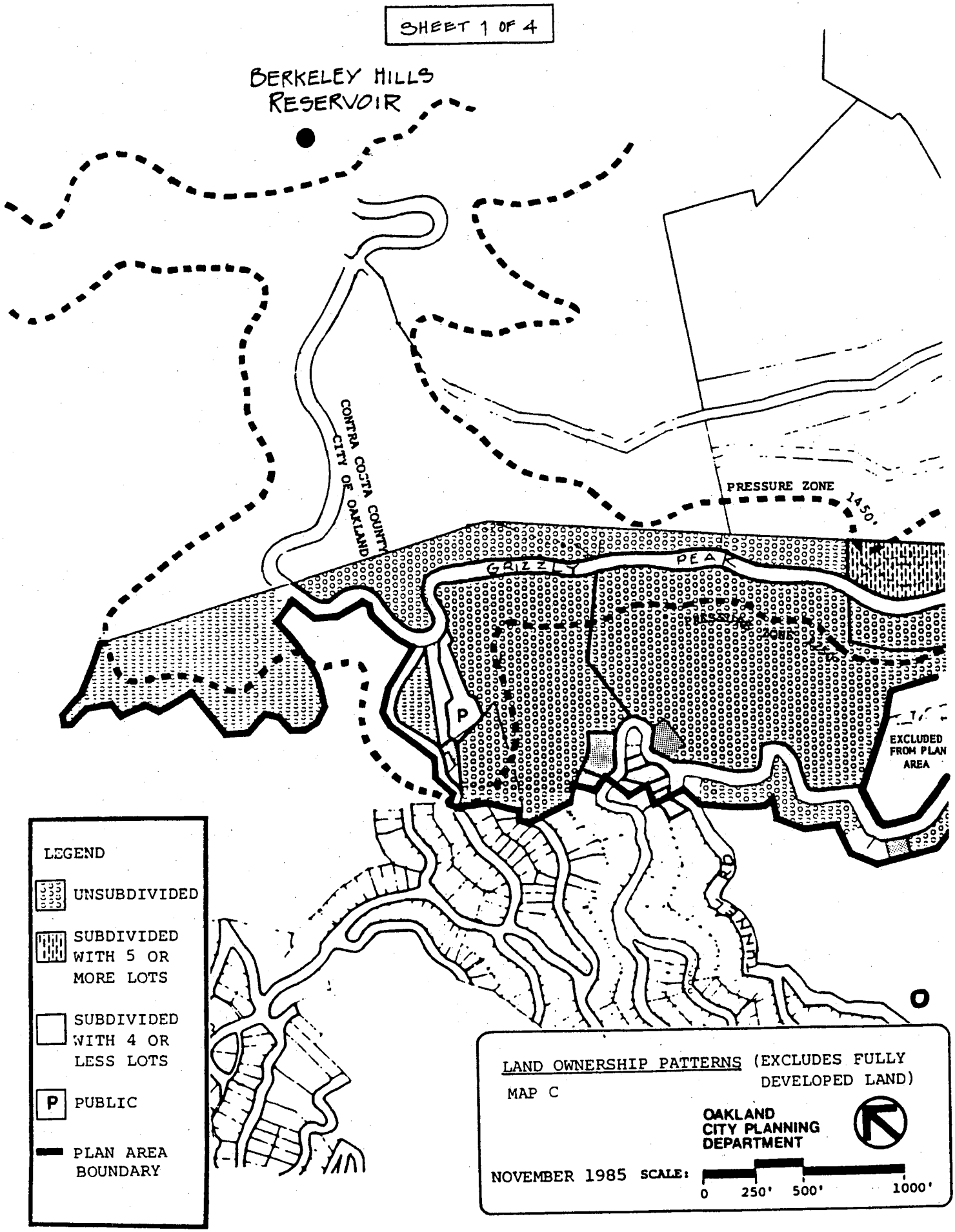


ZONING

MAP B

SHEET 4 OF 4

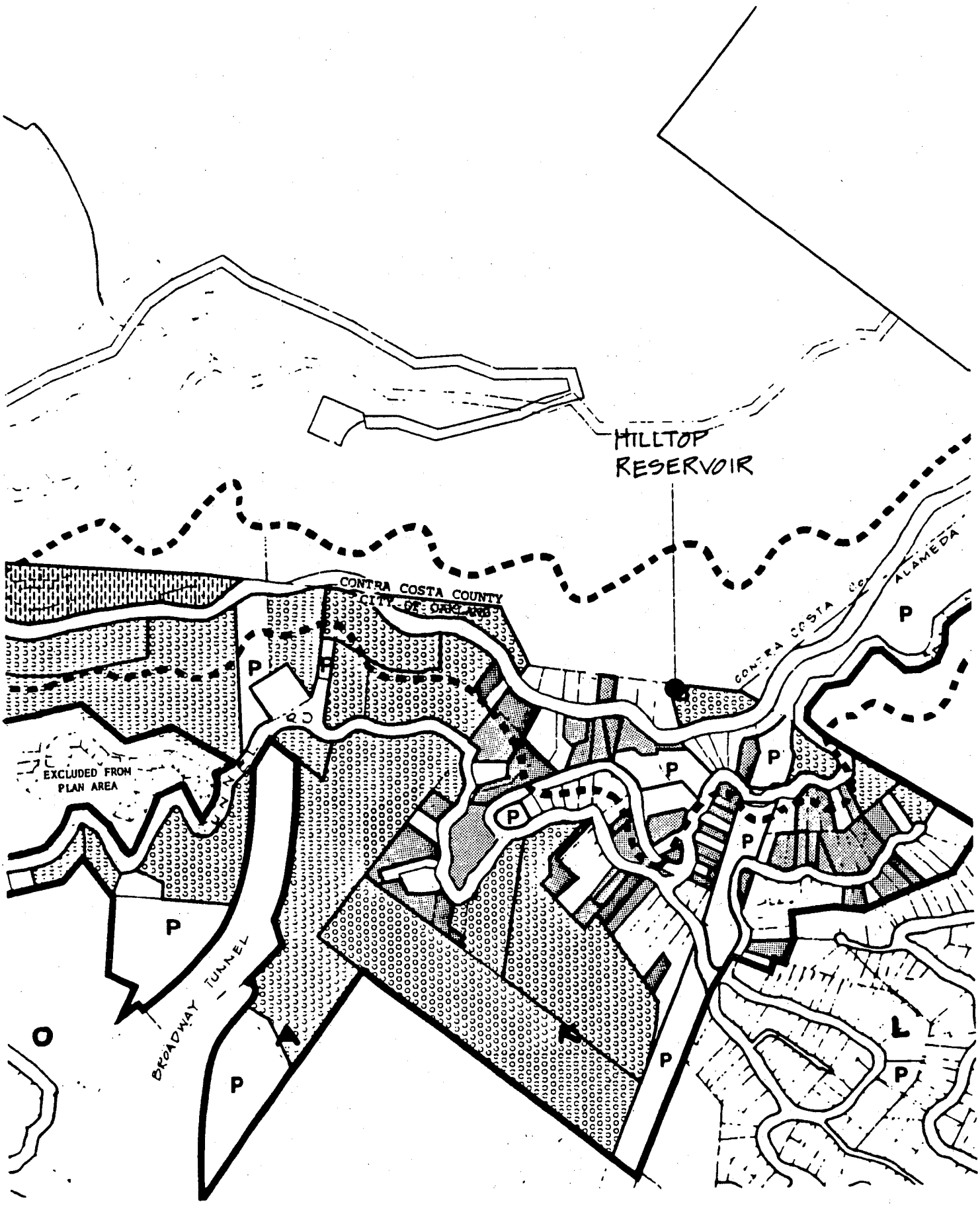



SHEET 1 OF 4
BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
PRESSURE ZONE 1450'
GRIZZLY PEAK
PRESSURE ZONE 1200'
P
EXCLUDED FROM PLAN AREA
LEGEND
UNSUBDIVIDED
SUBDIVIDED WITH 5 OR MORE LOTS
SUBDIVIDED WITH 4 OR LESS LOTS
P PUBLIC
PLAN AREA BOUNDARY
LAND OWNERSHIP PATTERNS (EXCLUDES FULLY DEVELOPED LAND)
MAP C
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985 SCALE:
0 250' 500' 1000'

SHEET 2 OF 4

LAND OWNERSHIP PATTERNS

MAP C



LAND OWNERSHIP PATTERNS

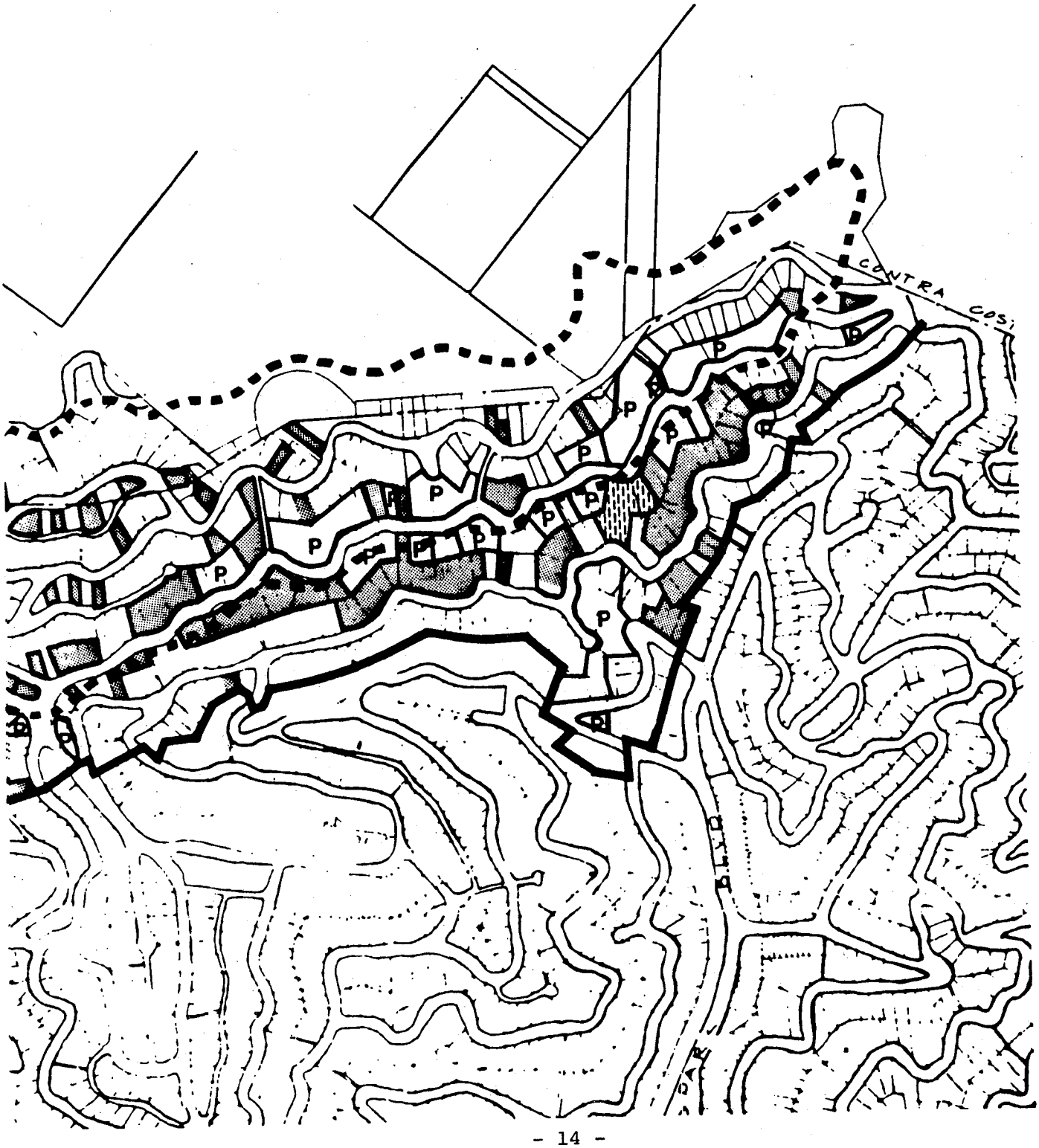
MAP C

SHEET 3 OF 4

LAND OWNERSHIP PATTERNS

SHEET 4 OF 4

MAP C



Most of the land owned by the City was initially acquired for street improvements at particularly hazardous sections of Skyline Boulevard. This effort was abandoned, and some of those lots were retained for park use. With the exception of watershed lands, EBMUD and P.G. & E. generally use their property to accommodate equipment or facilities; these utility-owned lots are expected to remain under their current ownership and usage into the foreseeable future.

c. Development Patterns

The predominant development pattern in the hills is one of scattered concentrations of housing in the southern portions of the plan area and vast expanses of both dedicated open space and undeveloped property in the northern portion (see Map D).

Housing development generally mirrors the existing pattern of infrastructure in the North Oakland hills area. Approximately 80 percent of the approximately 400 existing units are located within the Forestland Subdivision. A large number of the lots in the Thorndale and Pinehaven Subdivisions are still vacant, however, indicative of the difficulty of construction on steep slopes, poorly-platted lots, and the lack of supporting infrastructure.

Except for Grizzly Peak Estates, land along the northern and eastern portions of the plan area is still unsubdivided and relatively undeveloped.

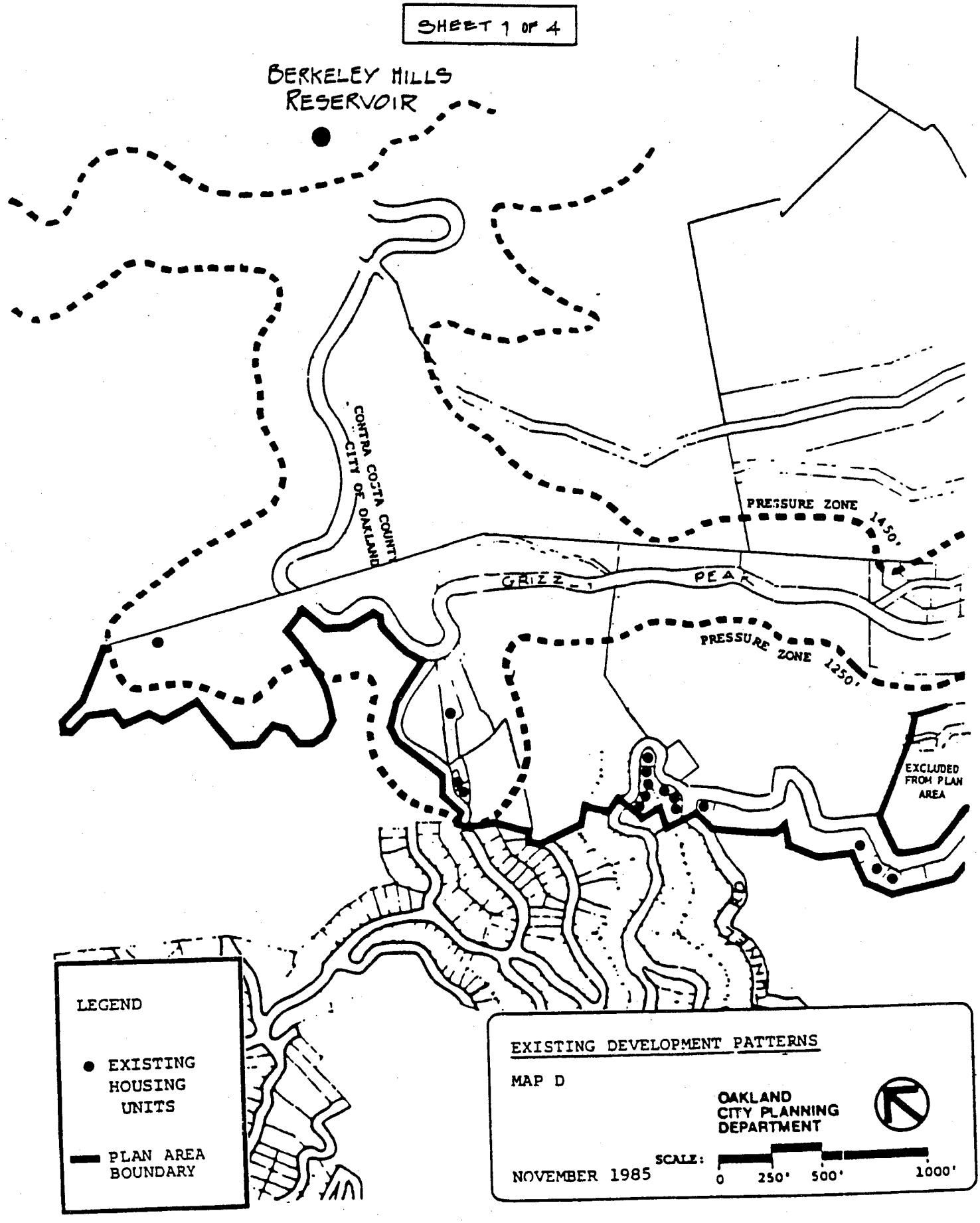
Public facilities serving residents in the plan area are limited. They consist of, for the most part, a firehouse at the intersection of Skyline and Colton Boulevards and Snake Road, and seven public schools in the general vicinity.

Public Parks abutting the specific plan area are the Huckleberry Botanic Preserve and the Sibley Regional Park. These areas are noted for undisturbed stands of native vegetation, the presence of rare and endangered plant or animal species of educational and scientific interest, and an incomparable viewshed of the surrounding area (see Map E).

2. Impacts of Potential Growth

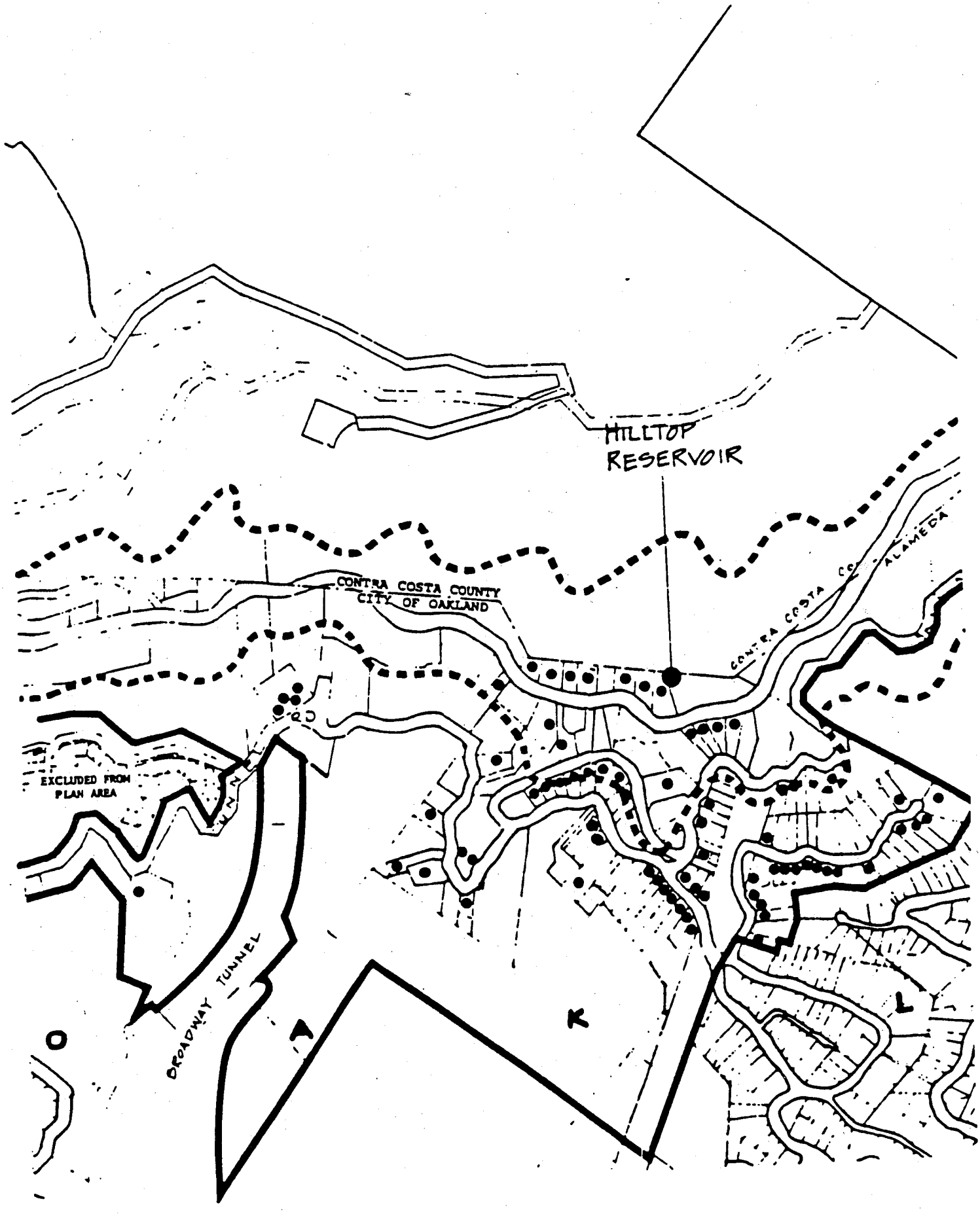
It is estimated that a theoretical maximum of 718 new housing units might be added within the plan area if all of the vacant land could be developed*. Realistically, it is likely that substantially fewer than 718 units will be constructed due to the topographic and geotechnical constraints that affect many properties.

* The 718 unit estimate was derived by adding the number of subdivided lots to the number calculated for unsubdivided parcels. This estimate assumes no street extensions or private access easements that create new building sites.


SHEET 1 OF 4
BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
GRIZZ
PEAK
PRESSURE ZONE 1450'
PRESSURE ZONE 1250'
EXCLUDED FROM PLAN AREA
LEGEND
EXISTING HOUSING UNITS
PLAN AREA BOUNDARY
EXISTING DEVELOPMENT PATTERNS
MAP D
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985
SCALE:
0 250' 500' 1000'

EXISTING DEVELOPMENT PATTERNS | SHEET 2 OF 4

MAP D

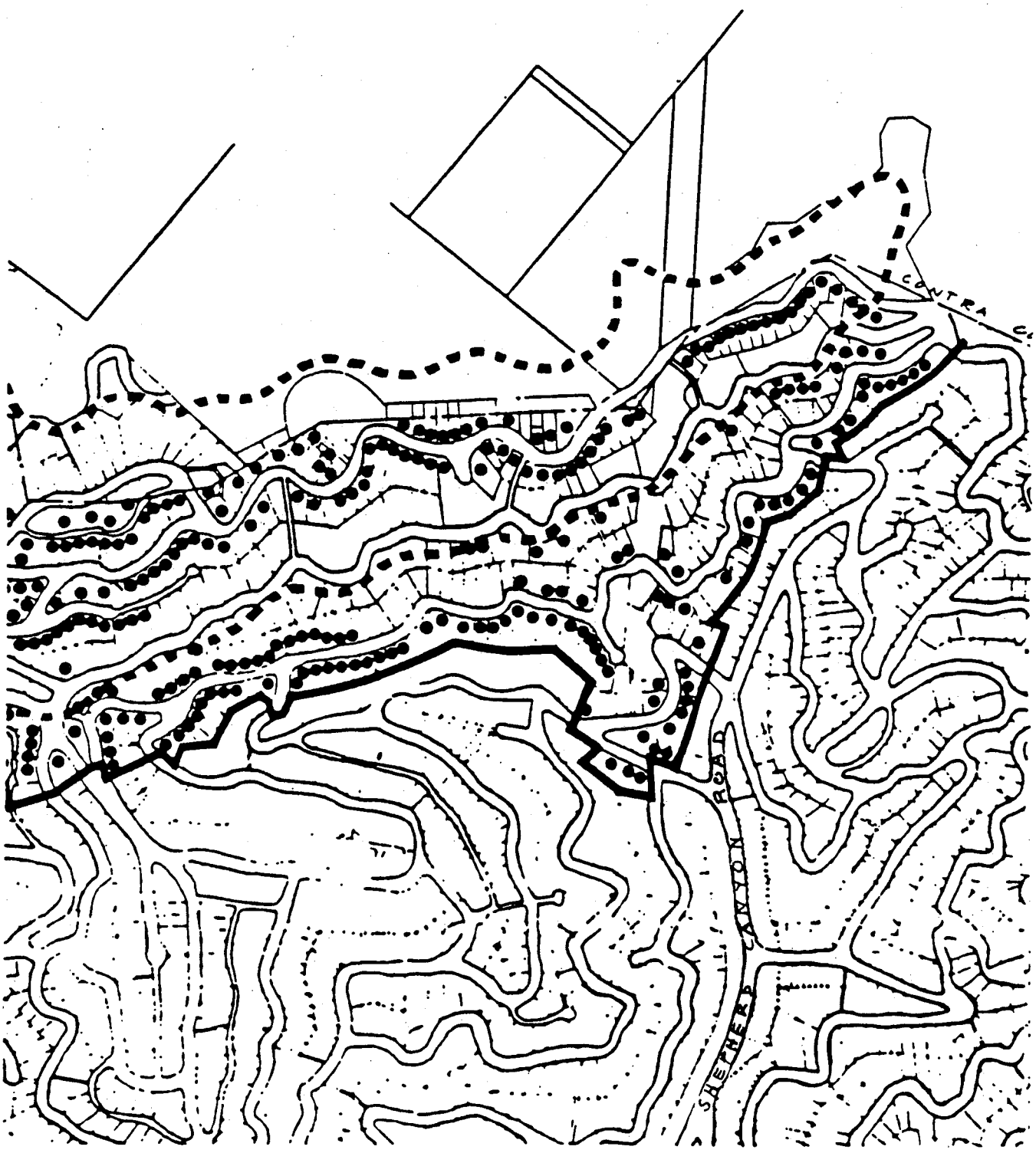


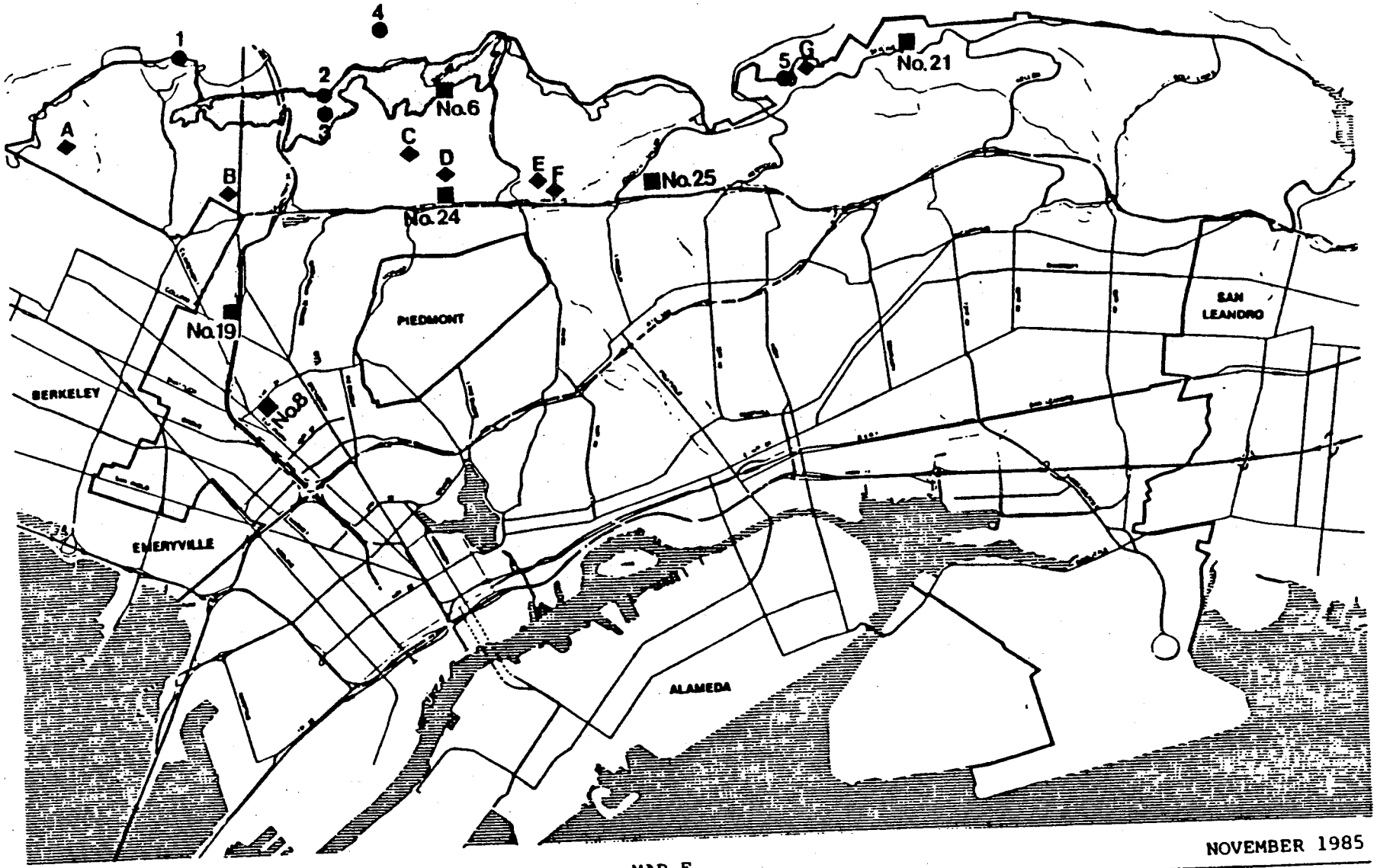
EXISTING DEVELOPMENT PATTERNS | SHEET 3 OF 4

MAP D

EXISTING DEVELOPMENT PATTERNS | SHEET 4 OF 4

MAP D





NOVEMBER 1985

MAP E

LEGEND: PUBLIC FACILITIES

● Reservoirs:

1. Berkeley Hills
2. Hilltop
3. Pinehaven
4. Roundtop
5. Skyline

▭ Specific Plan Area

■ Fire Stations:

No. 6 - Colton Blvd./Snake Rd.
No. 8 - 463-51st St.
No. 19 - 5776 Miles Ave.
No. 21 - 13150 Skyline Blvd.
No. 24 - 6226 Moraga
No. 25 - 2795 Butters Dr.

◆ Schools

A. University of California
B. Henry Kaiser Jr. Elementary
C. Thornhill Elementary
D. Montclair Elementary
E. Montera Junior H.S.
F. Joaquin Miller School
G. Skyline High School

OAKLAND CITY PLANNING DEPARTMENT

Without the new regulations recommended in this plan, the additional units would likely create tremendous impacts upon the sensitive hill area environment. For example, increased development would significantly alter views from within and outside of the area. Existing panoramic views along the roads could become filtered views, and the wooded image of the hill area could be dramatically transformed into a more urbanized one. New development could affect the rural characteristics of the plan area, if additional units stand out from the natural foreground.

Other potential impacts of new growth include an increase in soil erosion problems, fire hazards, parking and access problems, all of which are discussed in detail later in this Chapter.

While there is a significant potential for additional housing units in the plan area, a zoning change that requires larger lot sizes would be ineffective in controlling housing density. Most subdivided lots would be unaffected due to their status as existing non-conforming lots. The real concern, however, is with very large, unsubdivided parcels whose extreme depth would currently permit the creation of numerous narrow lots of substantial area; in these instances, regulations that emphasize lot area are generally ineffective in reducing density. To address density concerns, a new policy that relates density to street frontage and parcel width must be developed.

Finally, there is the potential for increased population growth from more than one family occupying a single family home. Recently, particularly large units have been built and rented to multiple family households--a form of communal living. These households tend to further aggravate the existing problems, especially with respect to on-street parking but also with respect to infrastructure overload and traffic safety. While zoning density formulas may regulate the number of possible housing units within the plan area, there is presently no effective method for controlling the number of individuals who may reside within each dwelling unit.

B. Vegetation and Views

1. Existing Conditions

a. Vegetation Patterns

The plan area is aligned generally along a north-south axis with maximum exposure on its steep west-facing slopes. The trees, shrubs, and grasses which dominate the area are adapted to low moisture, wind, shallow soils, and afternoon sun. These include Monterey Pines, blue gum eucalyptus, and coyote brush. In more protected locations, coast live oaks, California bay, and madrone appear.

b. Existing Development

Due to the extensive stands of pine and eucalyptus much of the existing development is screened from view. Further, many of the

existing houses are isolated from one another by parks and large vacant parcels. While development is essentially shielded from outside the plan area, views from within the plan area have, in some cases, been obstructed by homes which were insensitively sited.

c. Views from the Scenic Routes

The original City of Oakland Scenic Route encompasses three thoroughfares within the plan area: Skyline Boulevard, Grizzly Peak Boulevard, and Tunnel Road. From each of these routes, one can enjoy filtered and direct views of the San Francisco Bay and both the Bay and Golden Gate bridges. To preserve the spectacular vistas from these official Scenic Routes, the S-10 Scenic Route Combining Zone was imposed in 1975. This zone restricts the height of structures on downhill lots, and many potentially jeopardized views have been retained, even though the open space has been lost.

One tool for enhancing visual quality within developed areas has been to require undergrounding of utility lines in all new subdivisions. This requirement has only been in effect since the 1960s; therefore, only relatively recent subdivision projects are in conformance. There are no requirements for retroactive undergrounding of utilities on older subdivisions.

d. Views From Various Points Within Oakland

The plan area is highly visible from vantage points throughout the City. For example, locations such as Hiller Highlands, North Oakland Sports Center, Lake Temescal Regional Park, Rockridge BART Station, and Stark Knoll Place each provide dramatic views of the north hills. These locations are in close enough proximity to the plan area for changes to be readily perceived.

Observers at other more distant vantage points would perceive change in much less detail. The North Oakland hill area is part of the larger backdrop of hills seen from Grand Avenue, the upper floors at the Kaiser Center and City Center, and the Bay Bridge Toll Plaza.

2. Potential View Conflicts With Existing Regulations

Existing zoning regulations have been fairly successful in preserving many views because they have been applied to small lots with a diverse ownership pattern. They are not as appropriate once development begins to occur on larger unsubdivided acreage with sparser vegetation. With greater latitude for siting units, more effective controls should be considered.

The S-10 regulations were geared to the development of small, scattered lots. There was little opportunity to group units to open up natural vistas, and, at the same time, there was ample vegetation to mask the units. Further, the S-10 height restrictions apply primarily to downhill parcels along Tunnel Road and Skyline and Grizzly

Peak Boulevards; houses along other corridors need not be sited in a manner that would open up view corridors.

Of the additional housing units which may be constructed throughout the plan area, those located along Grizzly Peak Boulevard will have the most significant view impact. Grizzly Peak Boulevard is a generally undeveloped scenic route with low vegetation and spectacular vistas; thus any development along this corridor, even that consistent with the S-10 regulations, will produce major impacts on views, both from within and outside of the plan area. Unlike other sections of the plan area, where additional units can be more readily integrated with existing vegetation and development, new housing units in the more open and undeveloped Grizzly Peak section cannot be easily assimilated or masked.

C. Erosion and Siltation

1. Existing Conditions

a. Natural Erosion

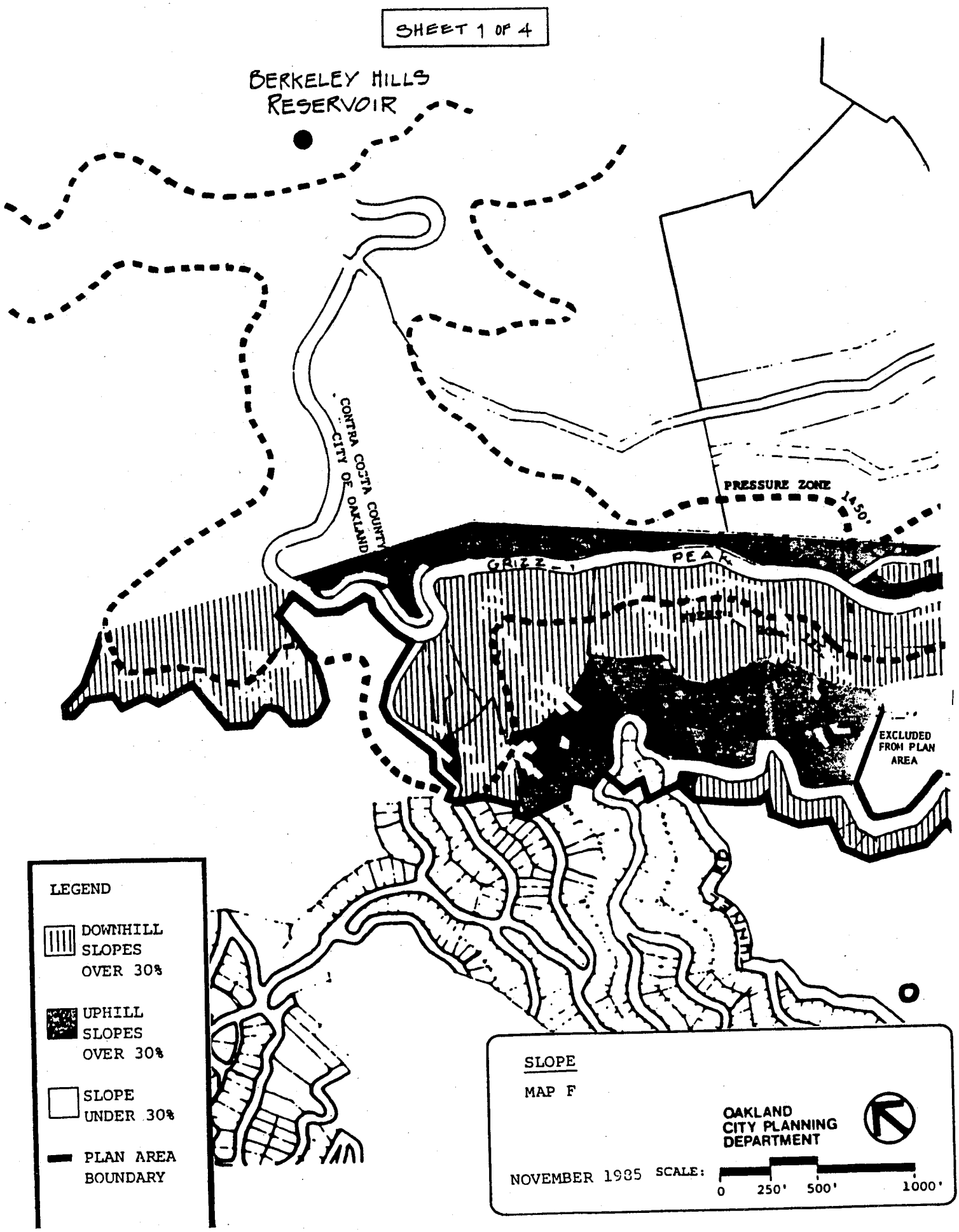
The drainage patterns of this area follow geological land-forms (see Maps F and G). From the top of the ridgeline, the flow is diverted down the slopes into Oakland on the west and into Contra Costa County on the east. The main flow, however, is divided by a series of cross-ridges which result in patterns of converging channels descending in the major canyons.

The soil formation underlying the plan area is composed of sedimentary and volcanic rocks which date back to the Pliocene (1.8 million years ago) and Miocene (22.5 million years ago) ages. Weathering, folding, and uplifting of these rock masses has created the three geologic formations commonly found in the area: Claremont shale and chert, Sobrante Formation, and Orinda Formation. They are basically mixed conglomerates of thin, bedded chert, shale, soft sandstone, claystone, and siltstone.

The characteristics of Claremont shale/chert and Sobrante Formation are very similar. Both are deeply weathered, and slope stability is generally good, but they have a tendency to slough off and slump on cut slopes. Both types are moderately resistant to erosion although the soil layer of the Claremont shale/chert is only 3-4 inches thick while the Sobrante Formation can be several feet thick.

The Orinda Formation has much more variable characteristics. Its softer rocks form gentle slopes and valleys while its harder rock forms steep ridges. Weathered units are weak and given to poor stability. Bedrock and soil-flow type slides can also occur in the Orinda Formation on cut and natural slopes. This condition, together with expansive and clayey soils, can cause heaving of structures with the passage of time.

As a result, a great deal of natural erosion occurs annually without the soil disturbances caused by construction activities.


SHEET 1 OF 4
BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
PRESSURE ZONE 1450'
GRIZZLY PEAK
EXCLUDED FROM PLAN AREA
LEGEND
DOWNHILL SLOPES OVER 30%
UPHILL SLOPES OVER 30%
SLOPE UNDER 30%
PLAN AREA BOUNDARY
SLOPE
MAP F
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985 SCALE:
0 250' 500' 1000'

SLOPE

MAP F

SHEET 2 OF 4

SLOPE

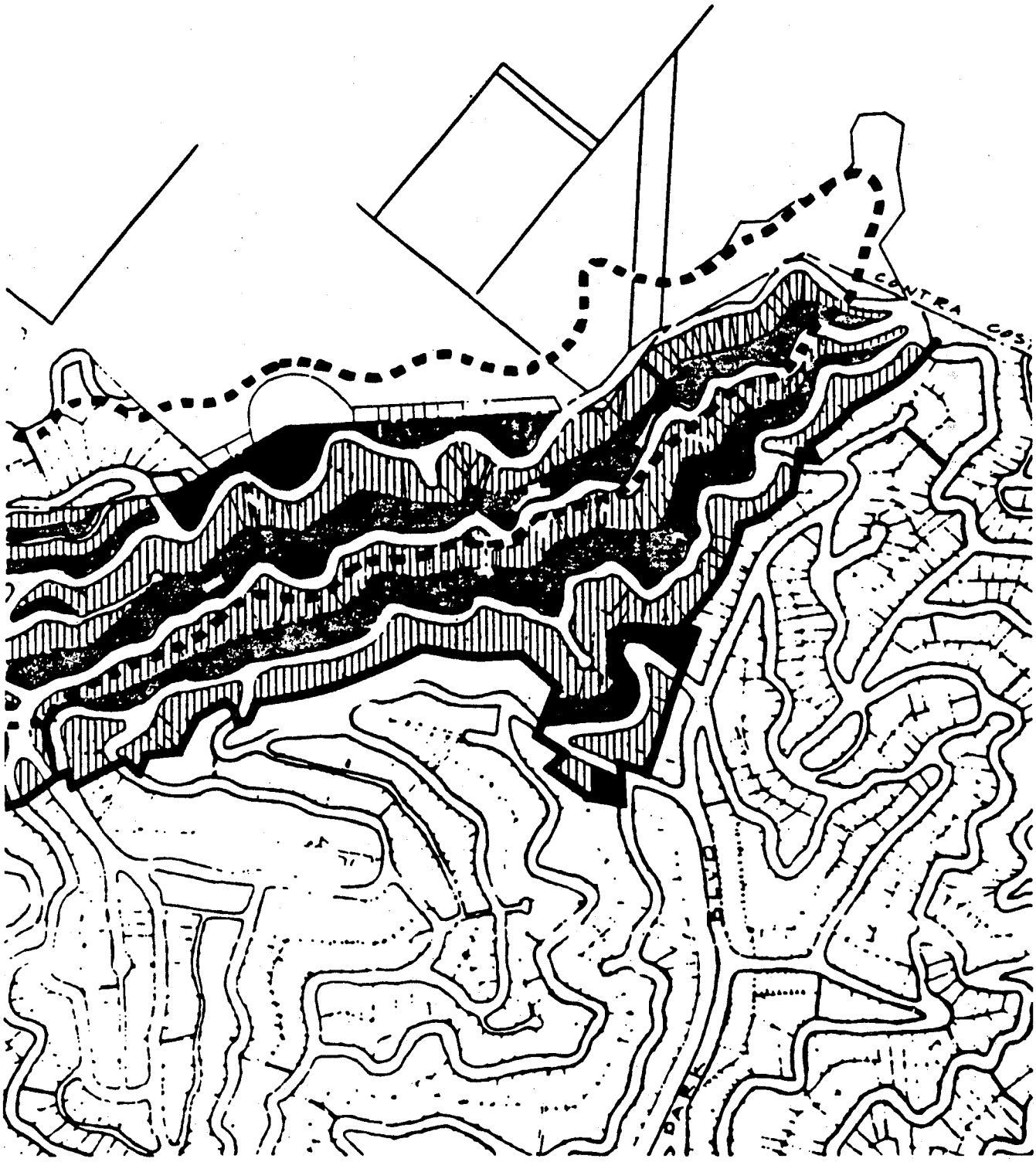
MAP F

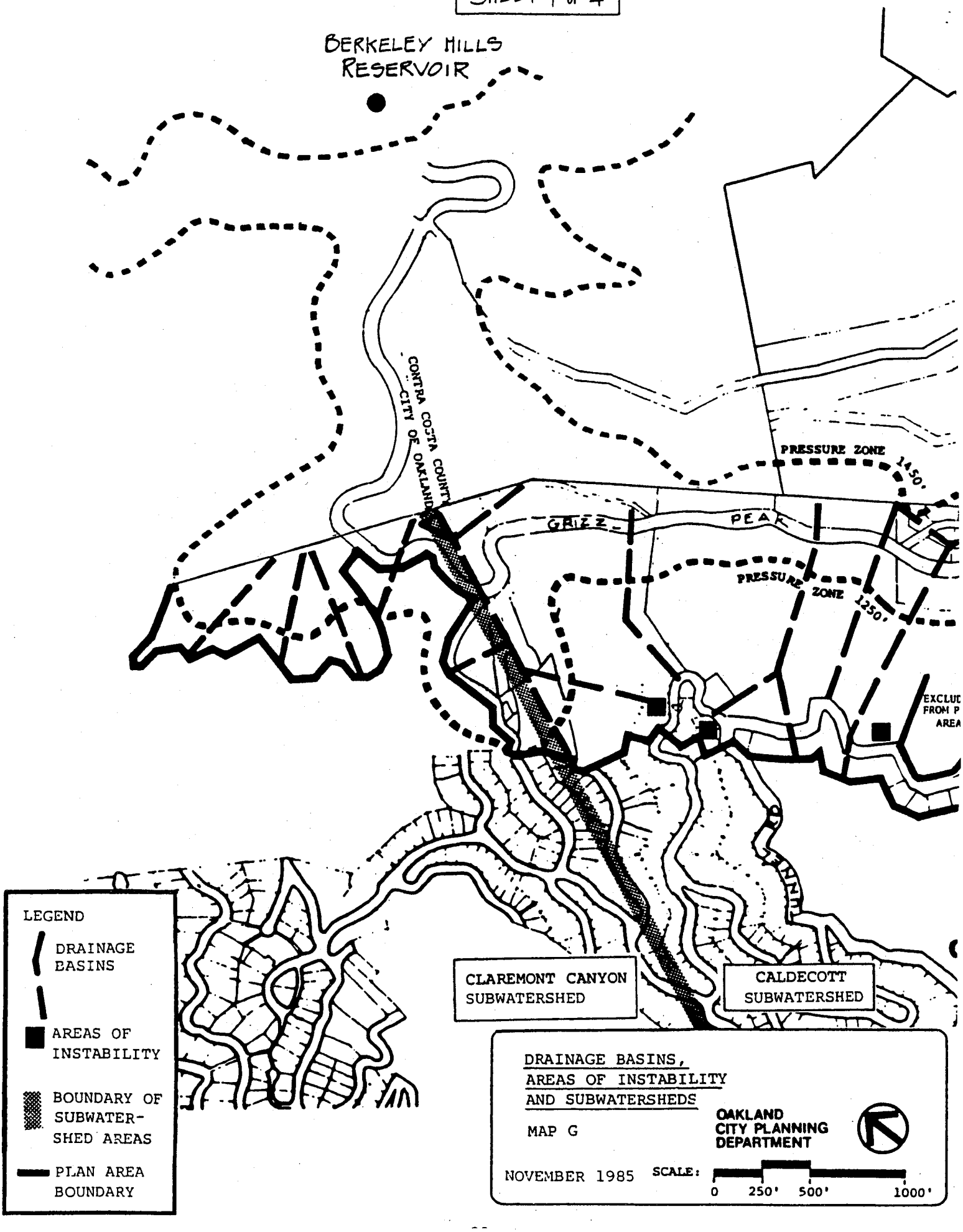
SHEET 3 OF 4

SLOPE

MAP F

SHEET 4 OF 4

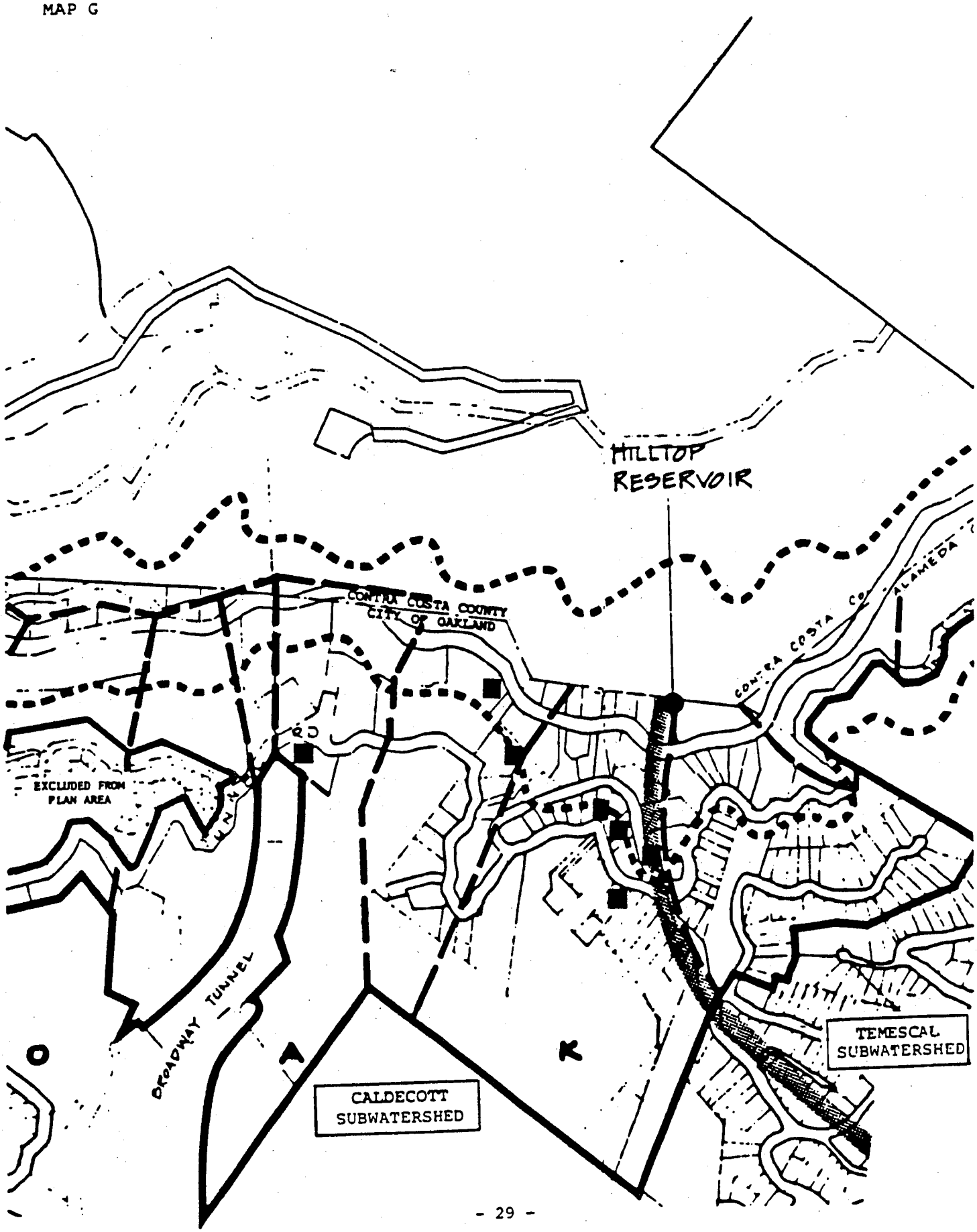



BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
PRESSURE ZONE 1450'
GRIZZ
PEAR
PRESSURE ZONE 1250'
EXCLUD
FROM P
AREA
CLAREMONT CANYON SUBWATERSHED
CALDECOTT SUBWATERSHED
LEGEND
DRAINAGE BASINS
AREAS OF INSTABILITY
BOUNDARY OF SUBWATER-SHED AREAS
PLAN AREA BOUNDARY
DRAINAGE BASINS, AREAS OF INSTABILITY AND SUBWATERSHEDS
MAP G
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985
SCALE:
0 250' 500' 1000'

DRAINAGE BASINS,
AREAS OF INSTABILITY
AND SUBWATERSHEDS

SHEET 2 OF 4

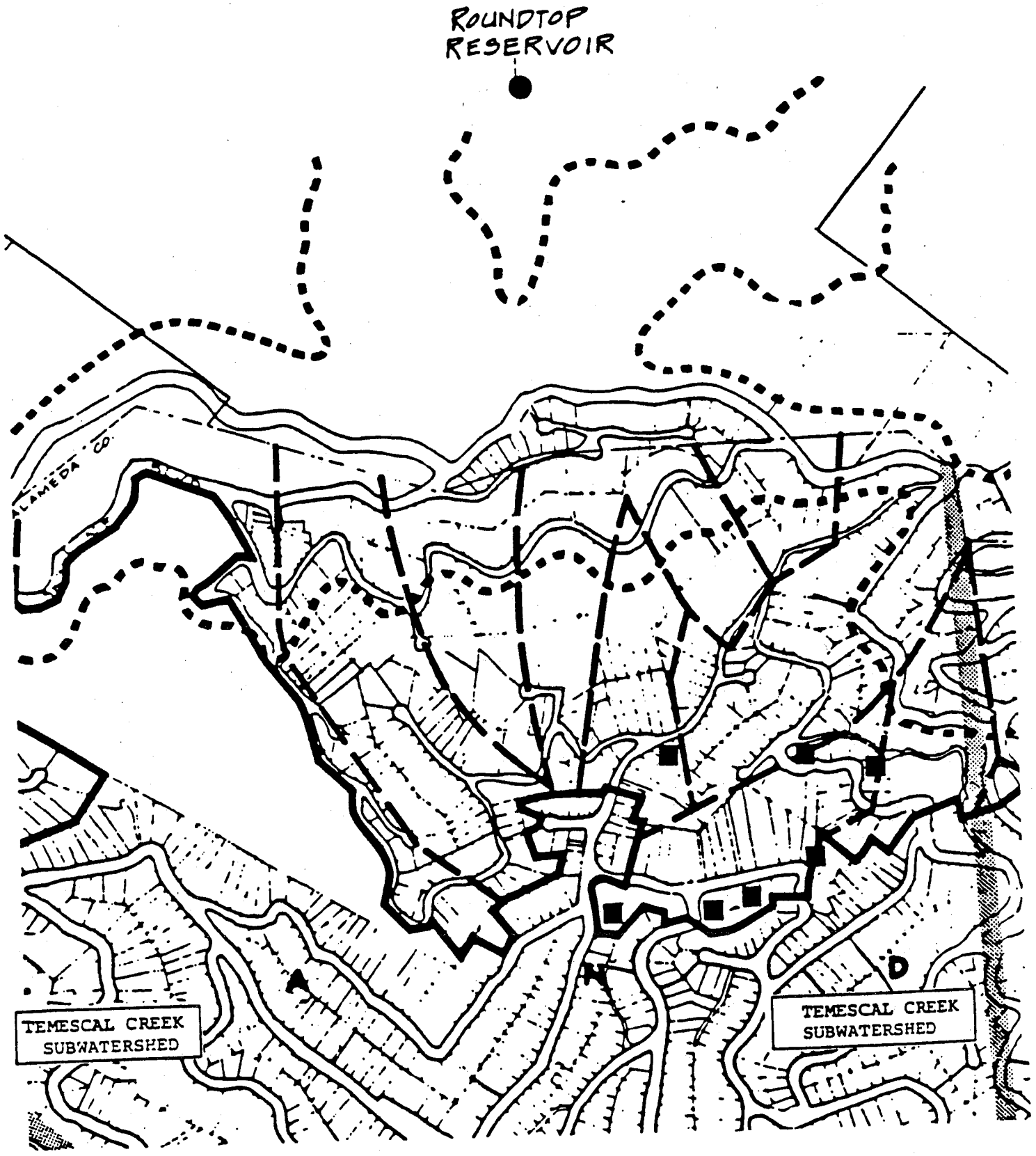
MAP G



DRAINAGE BASINS, SLOPES, AREAS OF INSTABILITY AND SUBWATERSHEDS

SHEET 3 OF 4

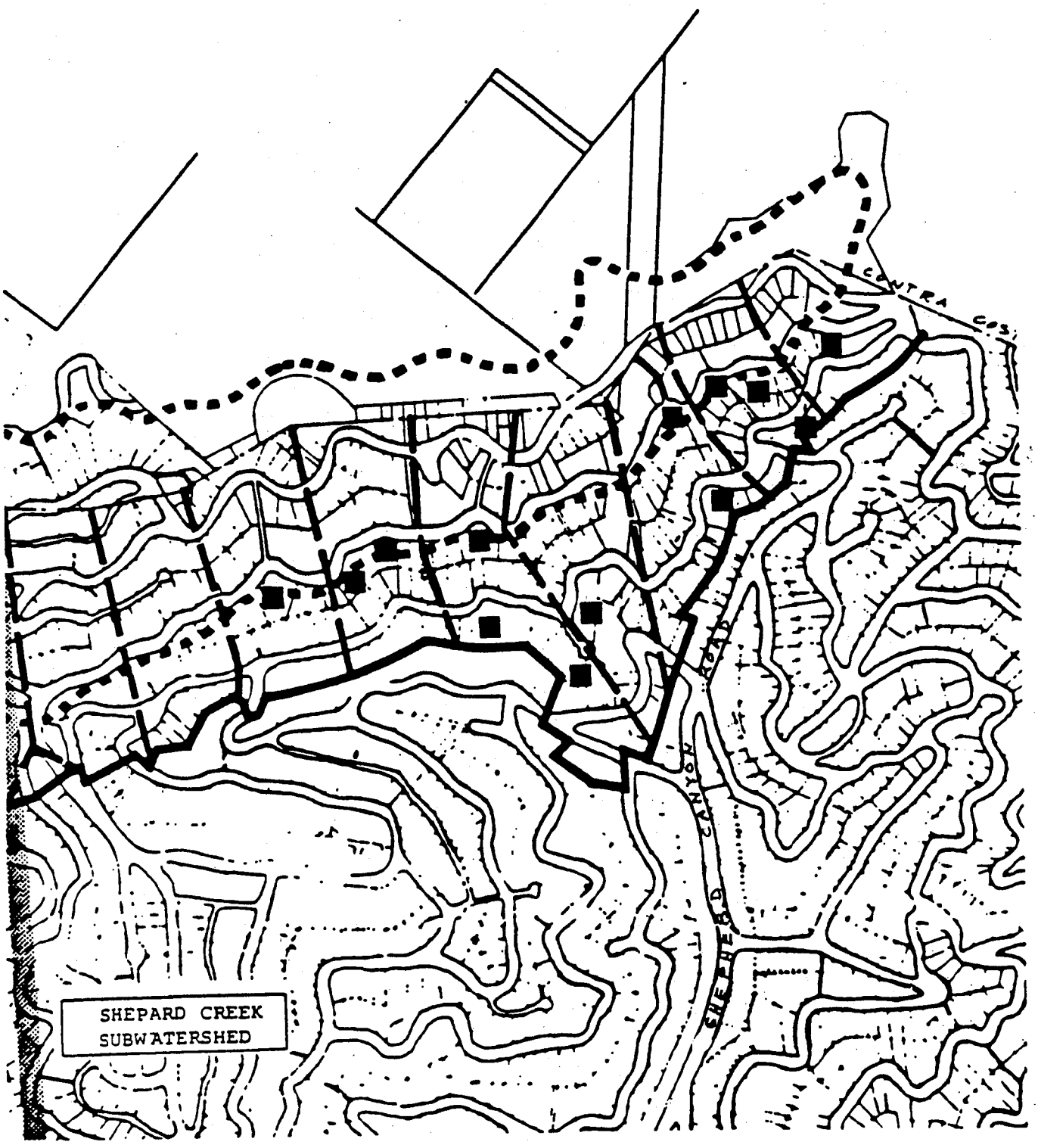
MAP G



DRAINAGE BASINS,
AREAS OF INSTABILITY
AND SUBWATERSHEDS

SHEET 4 OF 4

MAP G



b. Major Project Impacts in the Past

A number of large-scale development projects have produced erosion and siltation problems in the Oakland hills. None of these has been located within the boundaries of the plan area. Major siltation problems have been attributed to the construction of Route 24, the Warren Freeway, and, more recently, the North Oakland Sports Center. The impacts from the highway construction were disastrous on Lake Temescal. The consequent siltation and degradation of water quality required dredging the lake. (The problem with the sports center occurred before the adoption of the City's new erosion and sedimentation regulations.) These projects, however, focused attention on inadequacies in the grading regulations.

c. New Regulations

To address problems highlighted by the siltation of Lake Temescal, the City prepared a new grading ordinance in 1977 (applicable even to minor grading) requiring stringent mitigation. Circumstances not regulated by the new grading ordinance were covered in the erosion and sedimentation control ordinance adopted in 1983. This new ordinance regulates land disturbance irrespective of how little earth is moved.

2. Impact from New Development

Generally, owners of downhill lots in all three ownership categories mentioned earlier have more flexibility in siting structures than owners of upslope lots. Off-street parking facilities and entry for the unit can be easily achieved with a minimum of grading. Development on uphill lots, however, creates many problems. Providing off-street parking is the major problem. Because the slope of many properties rises steeply from the edge of the street paving, extensive excavation is required. The further up hill the house is sited, the more complicated and expensive the project will be (e.g., steep driveways, elaborate retaining walls, extensive stairways). As a result, there exists a substantial potential for erosion and sedimentation. During construction, sedimentation production rates could increase approximately one to two orders of magnitude; for post-construction development, it would increase two to five times over the natural rate if the new measures are not undertaken.

Without implementation and careful monitoring of these new erosion and siltation measures, the estimated increase in annual sediment load could be as high as 170 percent in the Shepard Creek subwatershed, 228 percent in the Temescal Creek subwatershed, 640 percent in the Caldecott Canyon subwatershed, and 228 percent of the natural rate in the Claremont subwatershed (refer to Map G). However, once construction is completed and the landscaping has matured, the annual sedimentation load would be reduced to 2-8 percent of the natural rate in the subwatersheds.

Without careful monitoring of performance, additional sediment could result in the clogging of local culverts, a decrease in the capacity of downstream channel sections, and further deterioration of Lake Temescal. Thus, periodic dredging of the lake would be required if the required measures are not diligently undertaken by those developing homes in the plan area.

D. Fire Hazards

1. Existing Conditions

a. Residential Fires

The chances are much greater for a domestic fire than a wildland fire in the plan area, according to the Fire Marshal. The untreated shake and shingle roofs of many existing homes and the existence of extensive vegetative fuels increase the potential for the spread of wildfire. The major problem, however, is that of long fire crew response times for domestic fire calls, especially in the Berkeley Hills Pressure Zone. In Oakland, a four-minute response time is the standard employed to measure adequacy. Since much of the area lies beyond the four minute response time, additional precautions are warranted to insure the safety of the existing and future residents (see Map H).

b. Wildfire

The plan area is in the City of Oakland's critical fire zone as is most of the hill area. Hazardous characteristics include: (1) densely growing trees and scrub of highly flammable species; (2) steep slopes which accelerate uphill fire spread; and (3) proximity to other wildlands.

The day-to-day hazard of fire spread is from the westerly wind, but this is typically accompanied by cool and humid marine influences which reduce the likelihood of combustibility. The exceptional hazard is the "reverse" or "Foehn-type wind" which blows hot and dry from the north or northeast and can achieve velocities of 40 to 50 m.p.h. Reverse winds occur during the critical fire season of August through October.

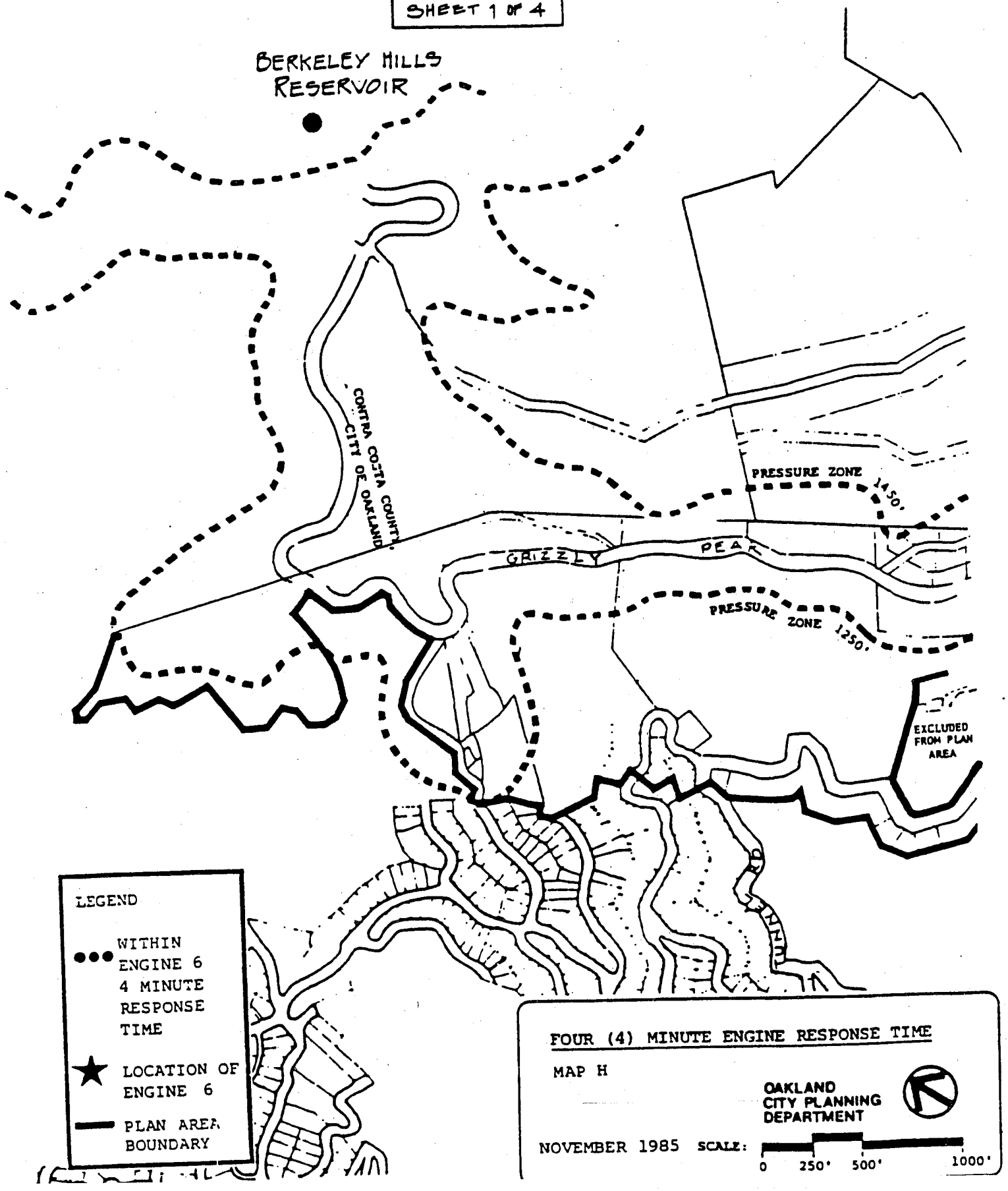
Over the years, a roving fire truck with personnel has been deployed to Marlborough Terrace and Grizzly Peak Boulevard during the critical fire months. Due to the city's financial situation, this deployment has to be approved annually during the budget process.

2. Potential Fire Hazards

a. Residential Fires

The positive impacts that can result from adding more housing within the plan area include (1) the addition of new water mains and fire hydrants; (2) the possibility of improved fire access via scattered widened street segments; (3) removal of fire-

SHEET 1 OF 4



FOUR (4) MINUTE ENGINE RESPONSE TIME

MAP H

OAKLAND CITY PLANNING DEPARTMENT

NOVEMBER 1985 SCALE: 0 250' 500' 1000'

SHEET 2 OF 4

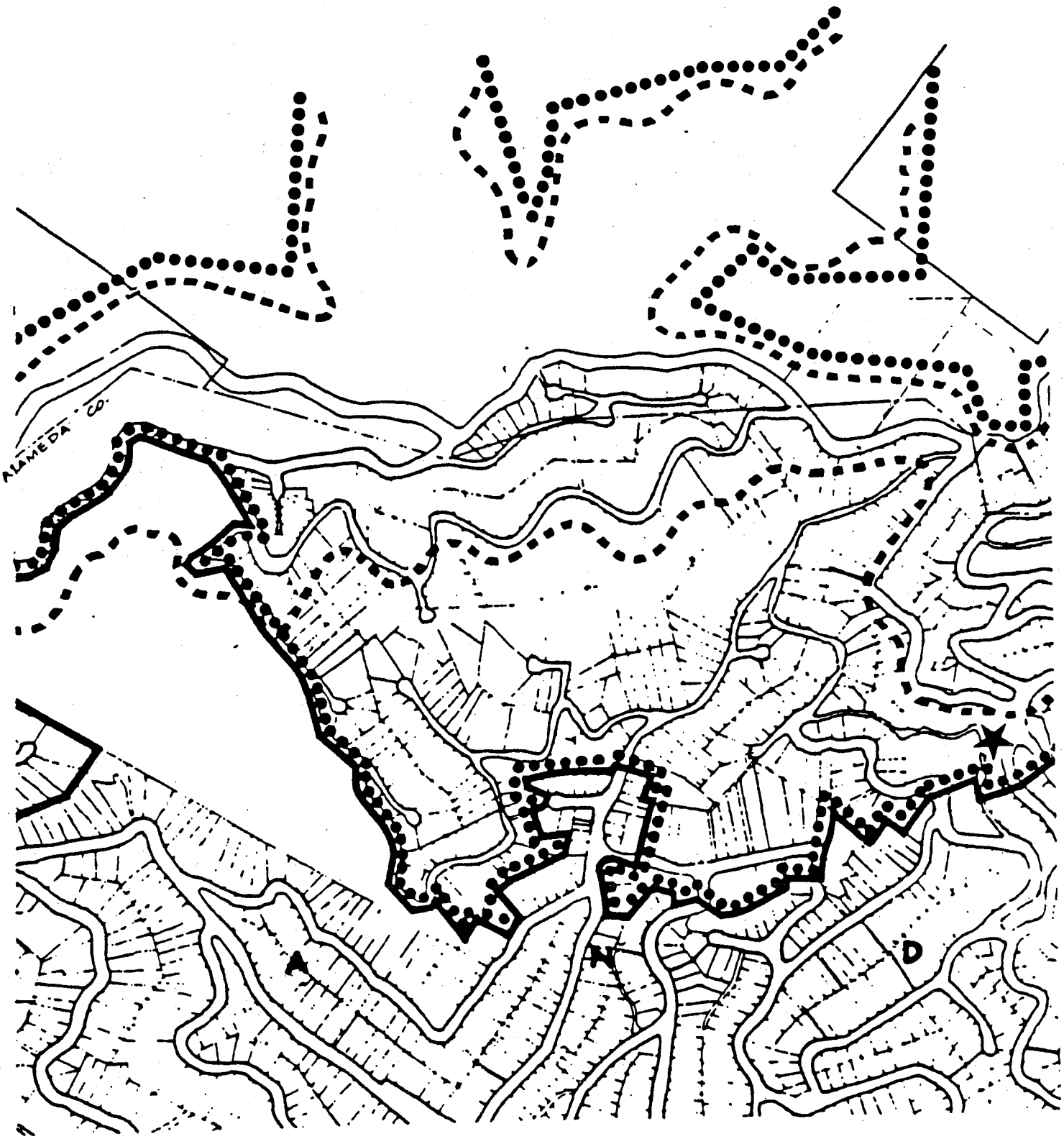
FOUR (4) MINUTE ENGINE RESPONSE TIME

MAP H

SHEET 3 of 4

FOUR (4) MINUTE ENGINE RESPONSE TIME

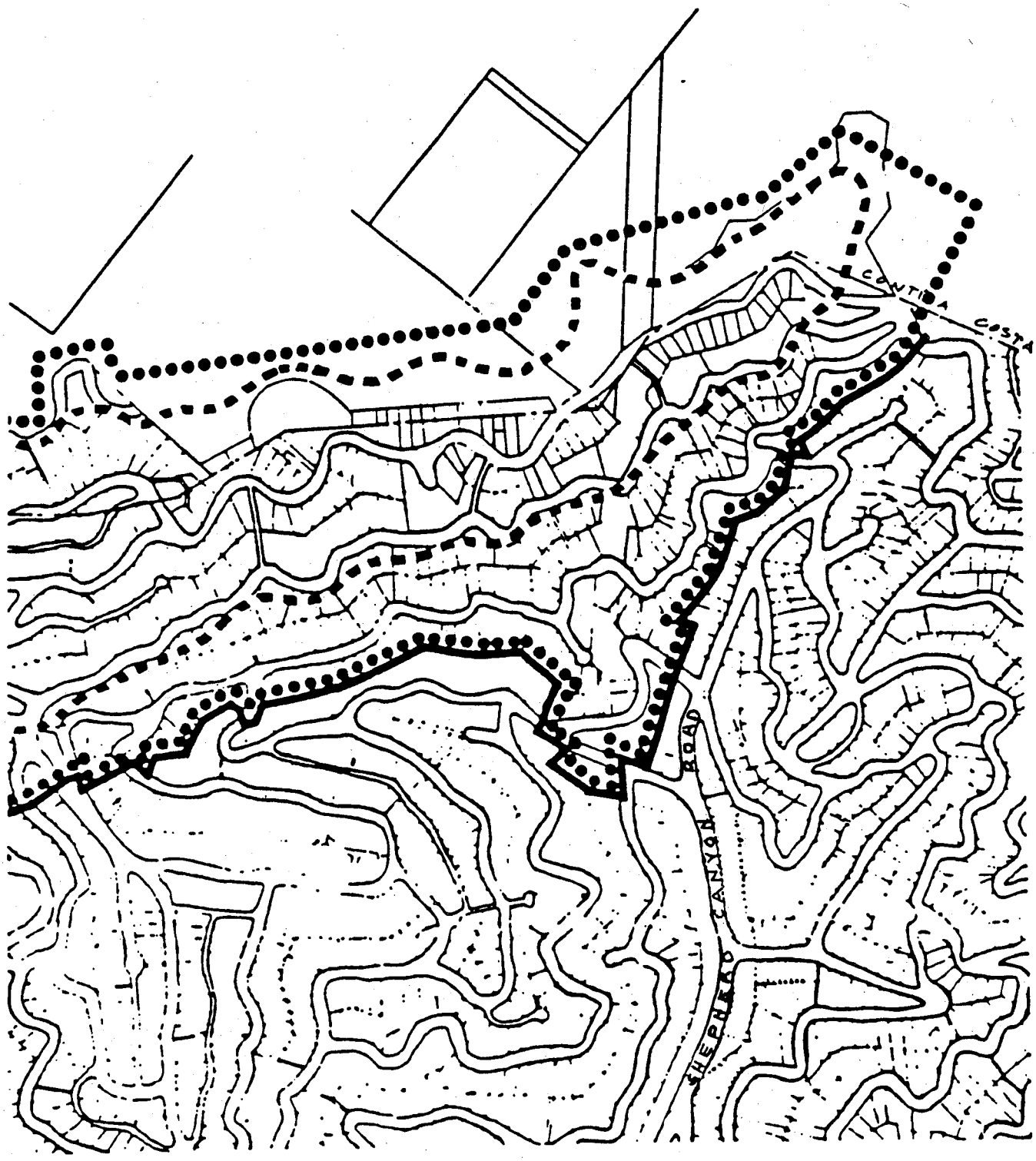
MAP H



FOUR (4) MINUTE ENGINE RESPONSE TIME

SHEET 4 OF 4

MAP H



spreading underbrush as a result of site clearance; and (4) increased chances for early fire-reporting. All of the above apply to wildfires as well.

However, the potential negative impacts of new hillside development could be substantial. Construction on substandard streets might lead to increased response times due to added congestion. The increased number of homes and people could also increase the probability of accidental brush fires in the area.

The Oakland Fire Department has proposed a new fire station in the Marlborough Terrace area to service the potential increase in fire and medical emergencies in the North Oakland hills. A financial analysis was done to determine (1) the capital cost and annual operating cost of a new station in addition to those which now exist and (2) whether revenues generated from the projected increase in property taxes would cover these costs or whether other methods of domestic fire protection would have to be explored.

(1) Public Revenues

New development would result in increased tax revenue for the City. In estimating the potential additional revenue, the plan assumes first that each home will have an average value of $225,000 (Actual home values may range from $200,000 to $289,000 or more depending on such factors as topography, size, accessibility, views, and other factors). Second, for purposes of potential revenue calculation, the plan assumes a constant property tax rate of .0035% (or 35% of 1%)[1] on houses at market value. Thus each new unit within the plan area would generate approximately $788 in property taxes in addition to the other taxes and fees generated.

A study of vacant property in the plan area concluded a theoretical maximum of 718[2] additional dwelling units might be developed. The ultimate, annual revenue from 718 dwelling units would be approximately $565,784. In the shorter term, 80% of these houses might be developed over a ten year period. This might generate about $452,627 in property tax revenues by the tenth year.

(2) Public Costs

The major public costs of new development normally would arise from the need to expand public services. These services would include: (1) police and fire protection, (2) public works support, and (3) public school support. Based on the 1980 census, the average family size for North Oakland Hills Area tracts is 2.55 persons/household. With 718 households projected, a total of 1,831 new persons might require municipal services. The annual costs of providing these services, determined by the "per-capita multiplier"[3] method as cost per person, are listed below:

. Police Protection[5]	$169.98/person	$311,233[4]
. Fire Protection	$122.30/person	$223,931
. Public Works	$103.60/person	$189,691
Total	$395.88/person	$724,855

The construction, equipping, staffing, and operation of a new fire station has the nearly unanimous support of hill area residents. Since new development will expose more residents to fire hazards within the designated "critical fire area", every effort should be made to construct a new fire station that will most effectively meet the safety needs of residents and property within the plan area.

It should be noted that a master plan is being developed to determine the optimum location of all fire stations within the City. It is quite possible that the redistribution of fire stations could achieve the desired level of fire service within the plan area as well as city-wide without additional fire crews. If additional fire crews are called for in the Fire Master Plan, they would be paid for in a manner consistent with traditional financing of services City-wide.

In an area where residences and large amounts of open space overlap, and where the chances of brush fires are great, fire protection measures must be comprehensive in order to be effective. It appears that even if a new fire station were to be built to serve this area it would not be available for some time. Hence, in the interim, the burden for additional mitigation would have to rest with the uncoordinated efforts of developers and residents in this area unless new mitigation measures are enacted.

---

1. Fiscal Year 1984-85 property tax rate: The total tax rate is 1.3167 percent for property within Alameda County; however, the amount over 1% is used to cover long term indebtedness, and only approximately 35% of the remaining 1% actually accrues to the City's general fund.

2. Presumes all lots to be developed; the actual number may be smaller due to geological constraints of particular sites and assumes there would be only minor annexations of land to Oakland.

3. EBMUD Draft EIR, dated October 1983, p. 110.

4. Based on 1984 dollars

5. Excludes potential cost of operating a new fire facility.

b. Wildfires

According to the 1982 Urban Interface Fire Prevention committee established by the EBRPD, the most serious wildland fire hazard exists along the twenty-five mile "urban-wildland interface zone" extending from the north end of Wildcat Canyon Regional Park in Richmond to the south end of Anthony Chabot Regional Park in Oakland. The North Oakland hills area falls within this area.

In developing their comprehensive fire prevention program, the committee excluded the section between Tilden and Redwood--a section which includes the North Oakland hills plan area. This area was excluded from the committee's charge "because of complex property ownership (patterns) and the absence of continuous large areas of publicly-owned land."* It is significant, then, that EBMUD has precluded residential service from the water tanks built for emergency fire use, but this is no substitute for sound vegetation management within the plan area. Subsequent to the fire of 1970, the Fire Department developed an agreement with the Forest Service to receive water bomber support for fires in the critical fire corridor north of the Tunnel.

E. Parking and Property Access Hazards

1. Existing Conditions

a. Narrow, Curvilinear Streets

The roads in the plan area are typically narrow, steep, and curvilinear, and many are in moderate to poor structural condition. The streets generally follow the contours or large draws, eventually tying into one of five major junctions: Grizzly Peak and Claremont Avenue/Fish Ranch Road, Thornhill Drive/Mountain Boulevard, Thornhill Drive/Moraga Avenue, Shepherd Canyon Road/Snake Road, and Mountain Boulevard/Snake Road.

A survey by the Traffic Engineering Department revealed that widths along many existing but unimproved streets in the plan area were much narrower than those in other areas of the city. Many are estimated to be between 12 and 17 feet wide. Often, widths along the same steep, winding street varied at different locations thereby making access to and from abutting property possible only with extreme caution.

---

* There are, however, some recommendations of the blue ribbon report that were developed by the committee for other areas that could be applied to the North Oakland hill area.

b. On-street Parking

In addition to the general conditions of the roads, on-street parking intensifies access hazards for hill residents and visitors alike. Specifically, automobiles parked along the street often block other cars or emergency vehicles from passing. It is an inconvenience for drivers to maneuver their vehicles around parked cars, but it is a serious public safety hazard when fire trucks and medical vehicles are delayed in reaching their destination.

c. Impacts of Existing Development

The street widths and conditions in the area vary from street to street. Only streets in new projects are fully improved. As a result, when major development occurs, extensive street improvements may be necessary in some portions of the North Oakland hills. No funding for even minimum improvements has yet been allocated for any "Local" streets. Improvements to Arterial and Collector streets are eligible for State gas tax monies, though these funds are in short supply.

On the other hand, limited development has also resulted in the retention of many natural features of the hillside local streets. For example, when the streets were established many years ago, a minimum of excavation was undertaken. Thus many streets have retained or regained their rustic nature--usually enhanced by abundant vegetation. The absence of development has also forestalled urbanizing improvements such as curbs, sidewalks, and street lighting. The scattering of housing units in these isolated areas has also diffused any significant noise impacts from the streets. Finally, the unimproved condition of streets within the area has in some cases forced drivers to reduce their speed, thus decreasing the potential for traffic accidents.

2. Potential Access Conflicts with Future Development

In many cases, automobiles must back out onto narrow roads where views of oncoming traffic are blocked by parked cars or topographic features. Often there is little room for maneuvering to avoid oncoming vehicles. The general access problems on these narrow and curvilinear streets will greatly intensify as development proceeds.

F. Infrastructure Deficiencies

1. Existing Conditions

a. Sewers Within the Plan Area

In 1977, the California Regional Water Quality Control Board (CRWQCB) informed the City of inadequacies in the City's septic tank permit program. A major complaint was failure to involve the County Health Officer in the permit approval process.

As a result, the City was ordered to stop issuing septic tank permits until all deficiencies were corrected. The City sub-

sequently amended the septic tank ordinance to conform to CRWQCB regulations, and turned over the function of issuing septic tank permits to the Alameda County Health Department. The amended ordinance was adopted by Council in September, 1979.

When the Alameda County Health Department began regulating septic tanks, it called for: an adequate soil percolation test, less than 30 percent slope, 100-150 feet between leach fields, and 6,000 square feet for each leach field.

In March, 1984, the Public Works Department recommended that septic tanks be banned for health and safety reasons. The clay content of hill soils hinders absorbency, and existing septic systems often cause sewage to reemerge from the ground downhill of the source. On October 13, 1984, the Council prohibited the installation of any new septic tank systems. Consequently, new homes developed in the hills must be connected to City sewer lines. Roughly, 80 percent of the area is lacking sanitary sewers (see Map I). There is currently no overall plan to guide the extension of sewer lines within the plan area.

b. Sewers Outside the Plan Area

The sewer facilities just outside the plan area are more than adequate to serve the current and future demand of the area they currently serve. However, a few short segments of this system which link to the remainder of the trunk line system are undersized. The existing homes in the plan area that are linked to sewers do not overtax the capacity of the existing sewage system; but, assuming the area outside the plan area (but within the drainage basin) develops, the downstream sewers will not be able to accommodate all of the new effluent load from the fully developed plan area.

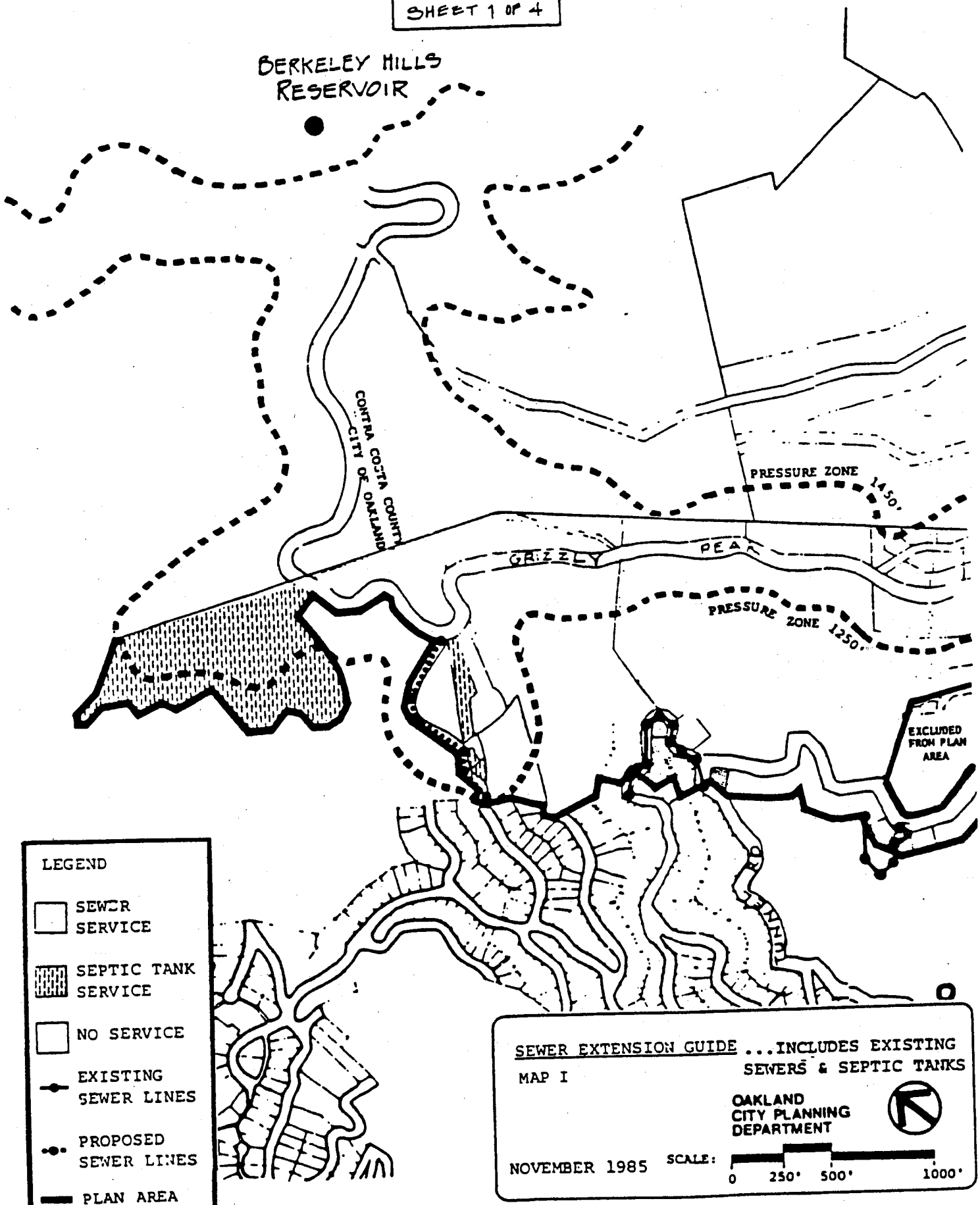
c. Street Improvements Within the Plan Area

There are few fully improved streets in the plan area. Those that exist were constructed as part of recent developments. The Traffic Engineering Department has stated that general street widening to increase capacity is not warranted at this time due to the current low traffic volumes (less than 1,000 ADTs*). However, the department indicated that selective street widening would be desirable for safety reasons but would be costly. It has been city policy to place the burden for such local street improvements on the developers of vacant property.

The majority of residents of the plan area are served by five critical intersections outside the plan area: Grizzly Peak and

* ADTs: Average Daily Trips

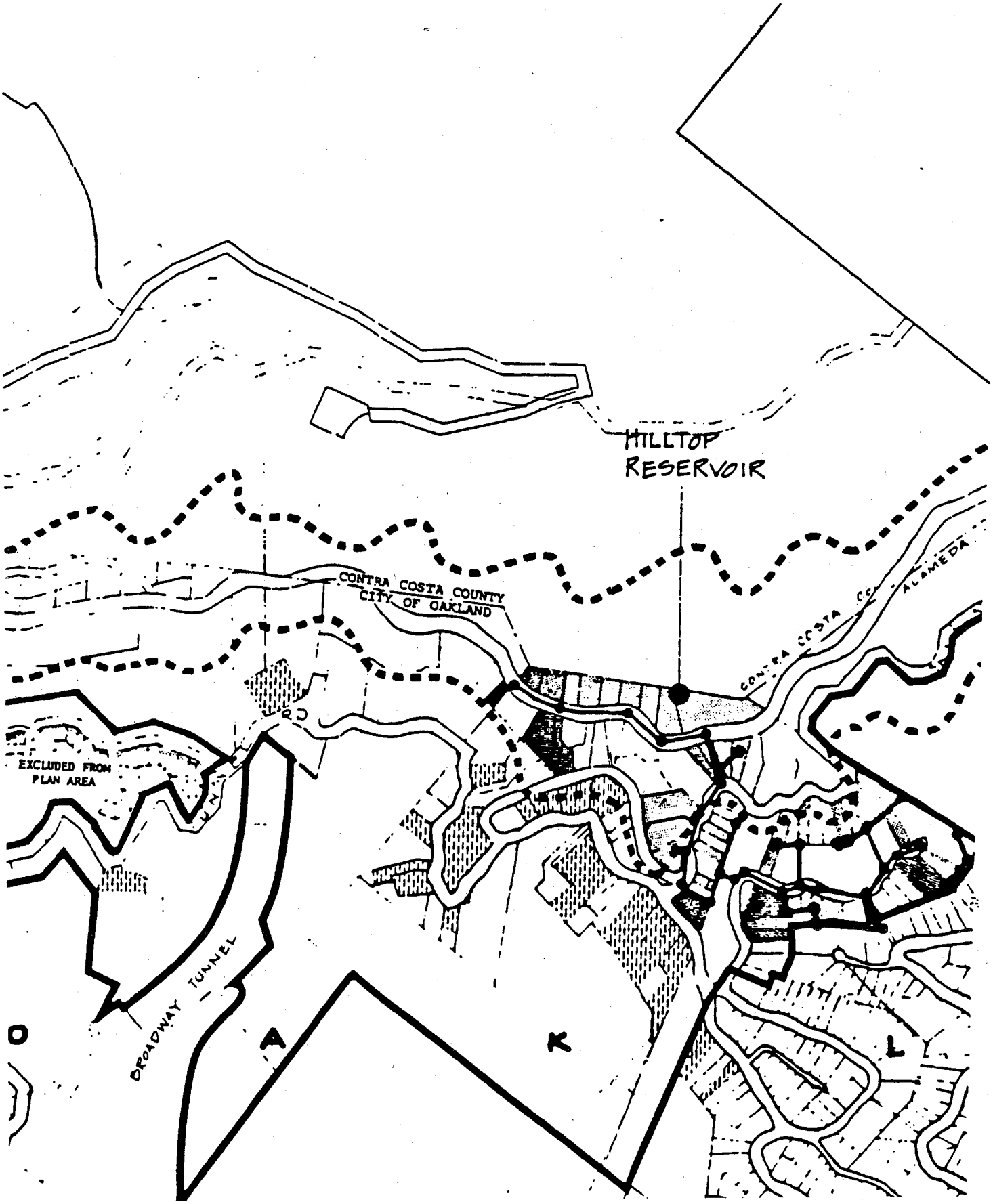
SHEET 1 OF 4


BERKELEY HILLS RESERVOIR
CONTRA COSTA COUNTY
CITY OF OAKLAND
PRESSURE ZONE 1450'
GRIZZLY PEAK
PRESSURE ZONE 1250'
EXCLUDED FROM PLAN AREA
LEGEND
SEWER SERVICE
SEPTIC TANK SERVICE
NO SERVICE
EXISTING SEWER LINES
PROPOSED SEWER LINES
PLAN AREA BOUNDARY
SEWER EXTENSION GUIDE ...INCLUDES EXISTING SEWERS & SEPTIC TANKS
MAP I
OAKLAND CITY PLANNING DEPARTMENT
NOVEMBER 1985
SCALE: 0 250' 500' 1000'

SEWER EXTENSION GUIDE

SHEET 2 OF 4

MAP I



SEWER EXTENSION GUIDE

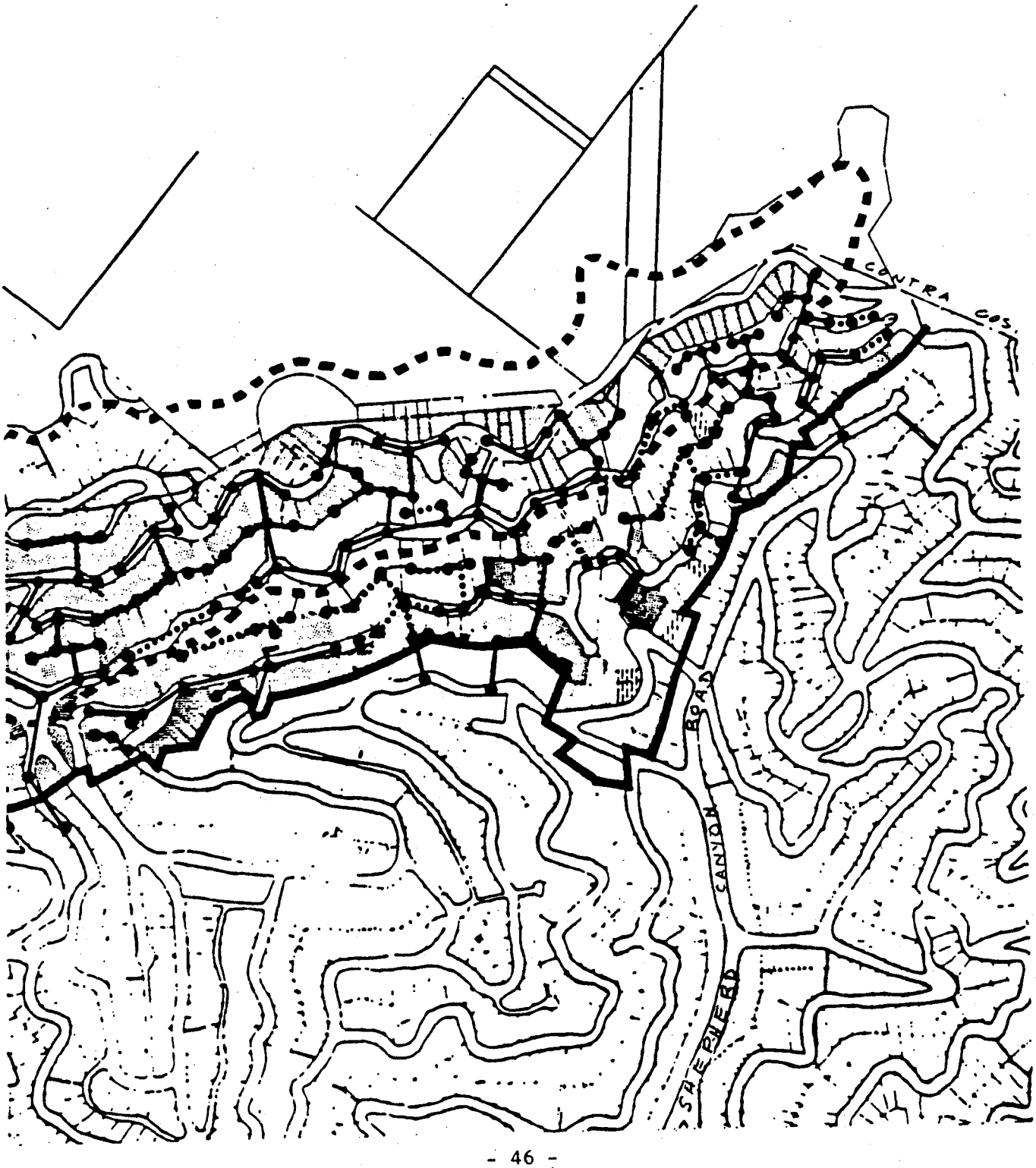
SHEET 3 OF 4

MAP I

SEWER EXTENSION GUIDE

SHEET 4 OF 4

MAP I



Claremont Avenue/Fish Ranch Road; Thornhill Drive/Mountain Boulevard; Thornhill Drive/Moraga Avenue; Shepherd Canyon Road-/Snake Road; and Mountain Boulevard/Snake Road. Some of these key intersections, however, will approach capacity if full development of the plan area occurs.

d. Street Improvements Outside the Plan Area

Although most of the streets within the hill area are unimproved, the pavement widths and alignment of arterial and collector streets outside of the plan area are generally better.

2. Potential Problems

a. Sewer Routing Within the Plan Area

The lack of sewer facilities to service future residents is another major problem within the plan area. Sewer extensions are the responsibility of those developing new homes. In the absence of an overall guide for sewer extensions, developers will extend lines in a manner most expedient for their particular project.

Such alignments may result in greater overall cost and inconvenience to those who must make subsequent sewer connections. Hence, a sewer extensions plan should be developed that addresses the sewerage requirements to serve each drainage basin. A map showing general alignment could guide developers in planning sewer extensions.

b. Sewer Capacity Outside the Plan Area

Staff from the Office of Public Works estimates that, in dry weather, if all of the 718 new dwellings were to be developed, the additional sewage flow would overtax the capacity of the system. Moreover, in wet weather, due to infiltration from storm water runoff, even a modest amount of new development would exacerbate the occasional overflow problems in the flatland areas below.

Map I shows the existing pattern of sanitary sewer lines for areas below the plan area. Staff used gross flow data from the 1985 East Bay Infiltration/Inflow (I and I) Study. Total costs for upgrading the current system to accommodate future residents were then derived. These costs were calculated as though there was not to be a pipe replacement program as an outgrowth of the I and I Study. Done as part of the I and I Study, the marginal cost of increasing pipe size in a few areas would be relatively minor. The projected cost is discussed in full in Chapter III: Potential Mitigation Measures.

c. Traffic Safety and Congestion Within the Plan Area

Additional traffic would significantly increase the congestion and accident potential within some portions of the plan area. Hazardous access conflicts would result in some areas as cars entered and exited private property from the narrow and often times wind-

ing streets clogged with parked cars. In addition, parked cars pose a potential hindrance to fire and emergency vehicles access. Although selective, developer-sponsored street improvements can partially mitigate this problem, the city currently has no effective way to achieve coordinated street improvements other than through voluntary assessment districts.

d. Traffic Safety and Congestion Outside the Plan Area

A total of approximately 12,000 daily trip ends to and from the plan area is possible with ultimate development. The major impacts of these trips would be concentrated at the five critical intersections described earlier.

Both the westbound Grizzly Peak Approach at Grizzly Peak and Claremont Avenue/Fish Ranch Road and the left turn movements at intersection of Mountain Boulevard/Snake Road are currently operating at a service level F* during evening peak hours. Without improvements, any additional traffic will result in prolonging the period of congestion at these intersections.

Under current policy, residents of the area contributing to the congestion at the intersections are not required to pay for mitigating the problems. Such improvements could be funded with the City's share of State Gasoline Tax funds.

G. Summary of Potential Development Impacts

The impacts of potential new development are summarized below. They, along with others, are more carefully addressed in chapters III and IV.

---

*Service Level "D" is the desirable minimum level of service set by CalTrans.

TABLE 2

. DENSITY IMPACTS	
Number of Existing Housing Units	400[1]
Number of Potential Additional Housing Units	718[2]
Existing Population	1,020[3]
Potential Additional Population	1,831[3]
. TRAFFIC IMPACTS	
Number of Current Vehicular Trip Ends	4,000[4]
Total Potential Daily Vehicular Trip Ends	12,000[4]
. INFRASTRUCTURE IMPACTS	
Sanitary Sewers	
. Percent of area needing sewer facilities	80%[5]
Streets	
. Widths of existing streets	12'-30'[4]
. Recommended widths, where feasible, on existing streets	
. Arterial Streets	26 ft./1 ft. shoulder[4]
. Collector and Local Streets	24 ft./1 ft. shoulder[4]
EROSION AND SILTATION IMPACTS	
. EBMUD's estimate of annual increase in sediment load if the provisions of the Grading and Erosion and Siltation ordinances are not enforced	
. Shepard Creek Subwatershed	170%[6]
. Temescal Creek Subwatershed	228%[6]
. Caldecott Subwatershed	640%[6]
. Claremont Canyon Subwatershed	228%[2]

1. Source: City Planning Department Survey, Fall 1984
2. Assumes all potential lots may be developed; actual number may be smaller due to topographical constraints of particular sites.
3. Assumes average North Hill family size of 2.55 persons/household; Source: 1980 census.
4. Source: City of Oakland Traffic Engineering Department.
5. Source: City of Oakland Office of Public Works
6. Source: EBMUD Draft EIR, 1983, p. 207.

III. MITIGATION MEASURES

A. Introduction

A number of significant potential development impacts in the North Oakland hill area were discussed earlier. This section presents specific proposals designed to mitigate the potentially undesirable consequences of development. The proposals will address six major concerns: (1) the regulation of housing density within the plan area; (2) the preservation of vegetation and views of and from the area; (3) methods of decreasing erosion and siltation damage to the environment; (4) techniques of increasing fire safety, especially for residents located beyond the four-minute fire engine response limit; (5) methods of reducing parking and traffic hazards; and (6) the location and extent of needed public improvements. This section also presents, first, three comprehensive mitigation measures that address a number of individual concerns simultaneously.

B. Comprehensive Mitigation Measures

1. The Vegetation Management Prescriptions

The North Oakland hill area is characterized by its vegetation. Seen from a distance, the skyline follows the canopy of pine and eucalyptus. Where these woodlands drape over the ridge and cloak the hillsides, houses and roads are often obscured. Traveling along the winding scenic route, the driver, cyclist, or jogger is enclosed and shaded by forest and then, with a change in plant cover to low-growing scrub, bathed in light and presented with glorious Bay views. A person traveling through the area experiences a combination of steep and sometimes forbidding terrain, a predominance of trees and shrubs, the scent of resin and camphor, and, at times, the exclusive company of plant material--a truly rural image. This place seems far more remote than one that is only six miles from Oakland City Hall.

Currently the vegetation mosaic is a critical determining factor; it affects the quality of the view from the road, the wildland fire potential, erosion control, and wildlife habitat. As more housing is built within the plan area, the relationship of structures to vegetation will affect the prominence of any new development on these highly visible ridgelands. Vegetation will indirectly influence property values insofar as the trees permit or interfere with highly desirable vistas of San Francisco Bay. And with development, the potential for fire hazard increases as residents and structures are brought within a vegetation zone highly susceptible to fire spread.

With or without a change in land use, the plant communities in the North Oakland hill area will themselves change over time due to longevity, health, and natural succession. In order to perpetuate the distinctive North Oakland hill area environment to which the public has become accustomed, "vegetation management" is called for. This term, once reserved for forestry and timber production, is now

used in more urbanized situations. The Vegetation Management Prescriptions included in Appendix A and the Vegetation Management Index (Map J) set forth methods of handling vegetation which will result in (a) the preservation of desirable features, (b) the reduction of dangerous or unattractive features, and (c) the accommodation of development in an environmentally-sensitive manner. These prescriptions are an essential part of long-term planning for the North Oakland hill area because vegetation directly influences the safety of residents and the appearance of a large and visually prominent portion of the Oakland hills.*

A "prescription" is the vegetation management term for the steps required to alter the vegetation on a given piece of land to achieve a desired result. The Vegetation Management Prescriptions are one standard against which North Oakland hill area development proposals can be measured; they can be applied in all cases of discretionary action, including CUPs, Design Reviews, Site Development Reviews, tree removal permits, tree arbitration, grading permits, and street improvements. As these discretionary actions are the province of several city departments (City Planning Department, Office of Public Works, and Office of Parks and Recreation) an interoffice system of referral would have to be established.

To facilitate compliance by developers, architects, and property owners, the prescriptions should, whenever possible, be introduced by staff in a pre-design conference at the onset of a development proposal. (Compliance with the prescriptions would not constitute an exemption from the City's tree removal permit procedure; the provisions of Chapter 7, Article 6, "Trees", of the Oakland Municipal Code would still apply.)

2. The Site Development Map

Like the Vegetation Management Prescriptions (see Appendix A), the Site Development Map (Map K) presents site-specific requirements for the plan area, especially that portion along the scenic routes. On Skyline, Grizzly Peak, and Tunnel Road, the map addresses view protection and enhancement; for the downslope, unsubdivided parcels there, it identifies building sites. Whenever possible, the groups of dwelling units were located where they would be masked by existing vegetation when viewed from lower elevations. The Site Development Map also summarizes vegetation management for the entire plan area.

---

*Development of the Vegetation Management Prescriptions began with an extensive site survey of the existing plant communities and entailed a number of steps, which are described in greater detail in a internal technical report. The report Vegetation Management Program for the North Oakland Hill Area and the survey map "Plant Communities of the North Oakland Hill Area" are available for review at the Oakland City Planning Department.

VEGETATION MANAGEMENT PRESCRIPTION INDEX (Map J)

Legend

Vegetation Management Prescriptions

Preservation:

P1 - Monterey Pine Forest

P2 - Oak Bay Woodland

P3 - Coastal Sage Scrub

Modification:

M1 - Existing Vegetation to Upgrade Fuelbreak

M2 - Monterey Pine Forest to Upgrade Fuelbreak

M3 - Coastal Sage Scrub to Upgrade Fuelbreak

M4 - Existing Vegetation to Create Arterial Fuelbreak

M5 - Existing Eucalyptus for Fire Control and Environmental Quality

M6 - Existing Vegetation to Augment Views

Removal:

R1 - Marginal Trees to Improve Visual Quality

R2 - Obstructing Trees at Key Vantage Points

Introduction:

I1 - Mesic Conifers

I2 - Xeric Conifers

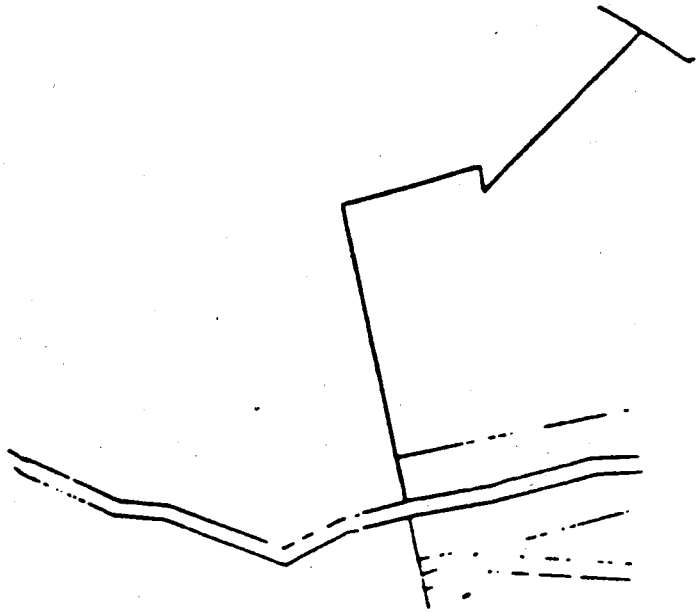
I3 - Oak Bay Woodland

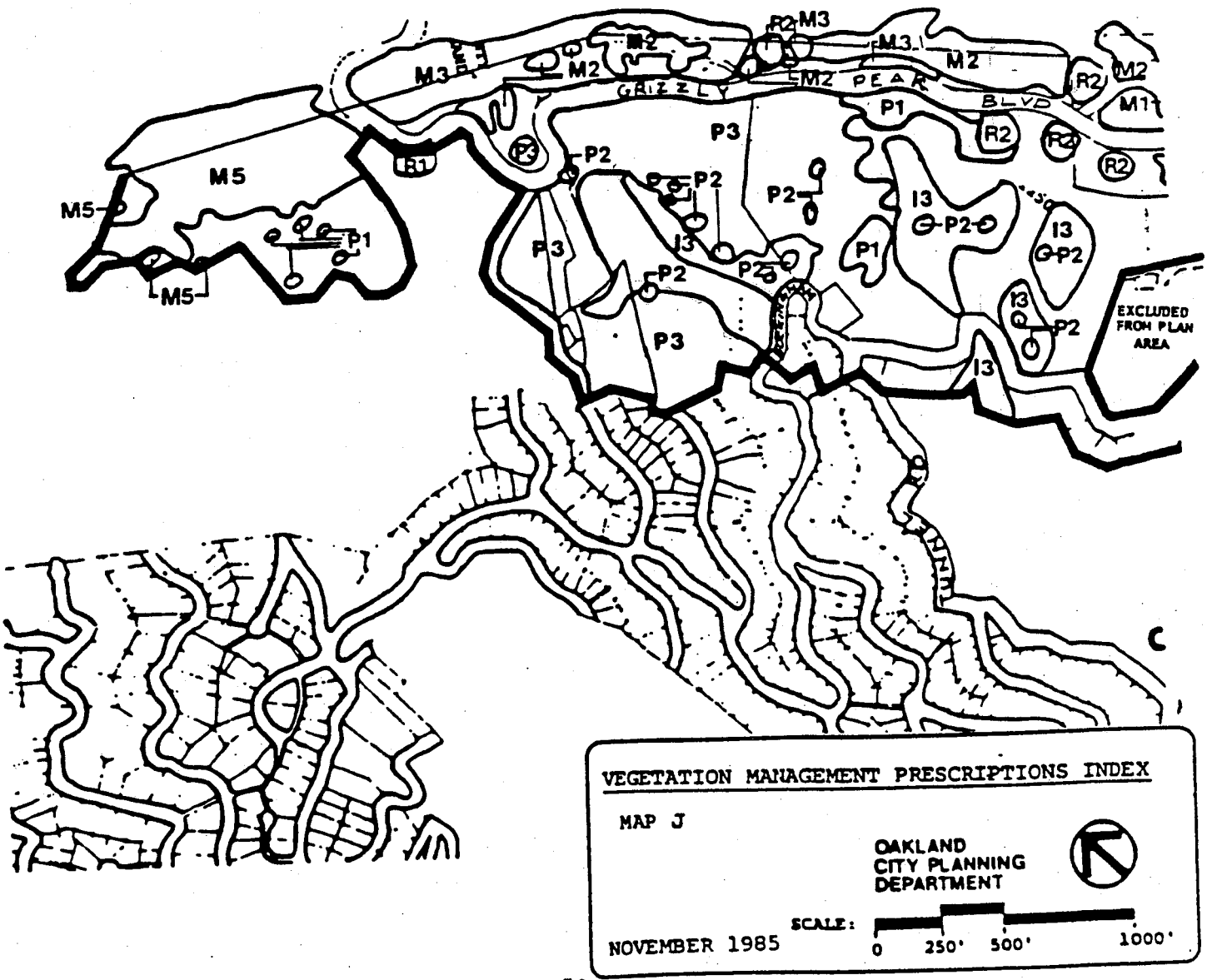
VEGETATION

SHEET 1 OF 4

MAP J

NOTE: Areas with an R2 prescription correspond to Protected View Corridors (as designated on Map K, Site Development Map), in which trees partially or totally interfere with the view from the road's edge. In addition to areas marked R2, there are view corridors which are designated on the Site Development Map but which do not appear here because there is no need for tree removal or other remedial treatment at those locations for view purposes.





VEGETATION MANAGEMENT PRESCRIPTIONS INDEX

MAP J

OAKLAND CITY PLANNING DEPARTMENT

NOVEMBER 1985

SCALE: 0 250' 500' 1000'

VEGETATION

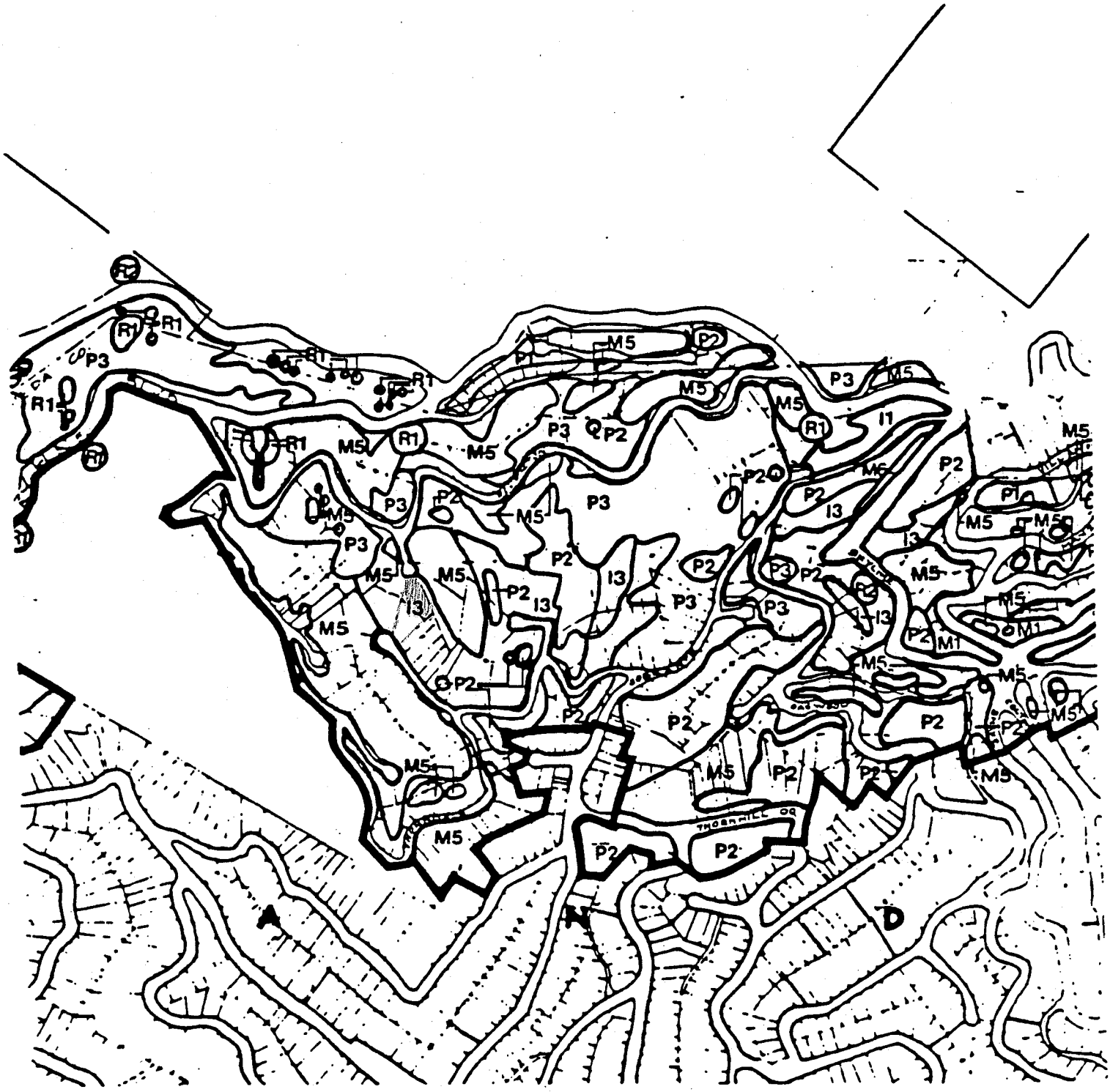
SHEET 2 OF 4

MAP J

VEGETATION

SHEET 3 OF 4

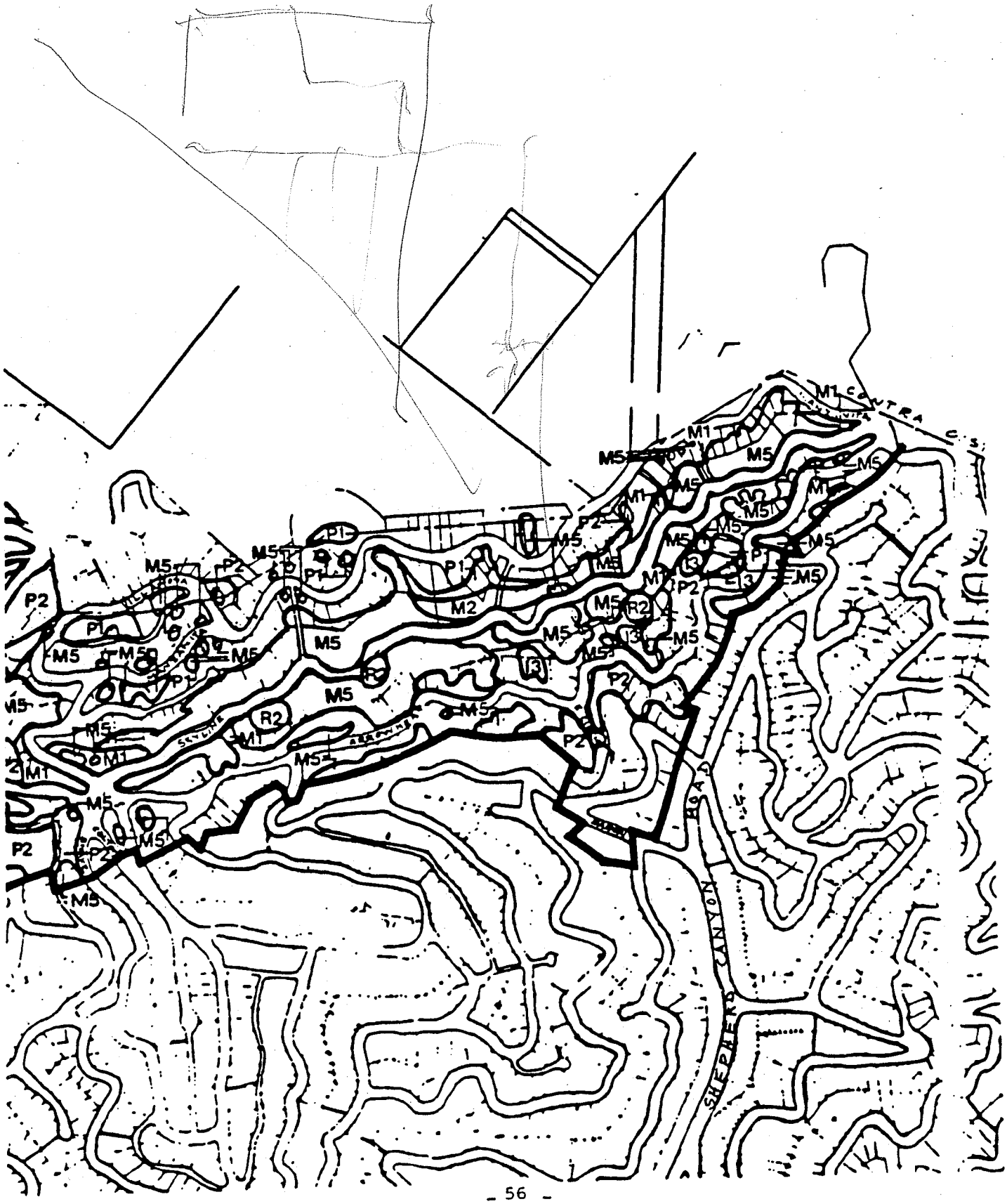
MAP J



SHEET 4 OF 4

VEGETATION

MAP J



The primary site development concerns are to minimize scarring of the hillsides and preserve natural assets to the greatest extent possible within a framework of public safety. Implementation of the Site Development Map should help achieve these goals.

For the downslope, unsubdivided parcels, which are highly susceptible to visual degradation, the Site Development Map specifies (a) the approximate location of future dwelling units and (b) the maximum number of units allowed on specific parcels.

The potential density for these unsubdivided properties was determined through a two phase analysis. First a theoretical density was calculated by dividing the parcel's street frontage by the minimum required lot width in the existing residential zone. Then a practical density was derived through the application of the proposed S-11 Site Development Review procedure; the S-11 regulations evaluates the site and environmental constraints. The lowest density to result from the aforementioned procedures is shown on the Site Development Map. The arrangement of the dwelling units attempts to provide the best view and vegetation preservation.

The Site Development Map also specifies the location of Protected View Corridors to be preserved or recaptured. Within a Protected View Corridor, development is prohibited on unsubdivided parcels; on subdivided parcels, where outright prohibition is not feasible, development is depressed below the view plane from the road in accordance with S-10 regulations. The map shows the present condition of the view corridors: some are clear of trees; others are partly or fully blocked by trees which must be removed in conjunction with development according to the applicable prescription.

Also view-related, the Site Development Map identifies a park development opportunity. Within its current holding of Robert Sibley Regional Volcanic Preserve, the EBRPD could develop a regional view facility in the area known as "Sibley Island." This would become the first formalized viewing location on the entire ridgeline and would include park amenities such as off-street parking, water, tables and benches, windbreak and shelter, and orientation plaques. The location is at one of the highest and least obstructed points in the North Oakland hill area, and its terrain is adaptable to dispersed parking, paths, and passive recreation.

When a proposed development scheme conforms to the Site Development Map, the Vegetation Management Prescriptions, and all fire safety and infrastructural standards of the specific plan, an environmental impact report or negative declaration will probably not be required. However, if with the passage of time, some unforeseen occurrences were to take place, the City would reserve the right to require a focused EIR to analyze potential impacts and to develop appropriate mitigation measures related to such occurrences. Development schemes which differ substantially from the Site Development Map and the other components of the specific plan would, in any event, require a supplemental environmental impact report.

The development pattern specified on the Site Development Map could prove to be infeasible due to some previously undiscovered constraint peculiar to a specific site. If so, an alternate proposal could be approved providing it meets the criteria employed in the S-11 Site Development Review process which is described in the following section. For example, the map might have located development in an area later found to be geologically unstable. In such an instance, an alternate proposal may be approved without a plan amendment.

If a substantial portion of a site proves unstable, the density shown on the Site Development Map may have to be lowered to that which the site can accommodate. Also since there may be other ways of siting the units to achieve the objectives of the plan, a development scheme which is equal to or better than the one shown on the Site Development Map may be approved upon the granting of a Minor Conditional Use Permit.

3. S-11 Site Development Review Combining Zone

The S-11 Combining Zone (see Appendix B.1.a. for details) establishes the procedure for insuring that development is compatible with the hill environment. The S-11 Zone would overlay both the basic residential zone and the S-10 Scenic Route Combining Zone. S-11 requires greater consideration of design and site planning than the underlying zones, but it can be more flexible in the exact location of a structure.

Other than for building groups shown on the Site Development Map, the S-11 Zone permits a wide latitude in the location and massing of structures to achieve the minimum visual and environmental impact on a given site. For example, on parcels larger than one acre, more than one unit can be constructed. In the two unit building groups the sides of the two buildings may be as close as six feet from one another. The groups must be separated from other structures by two times the sideyard required for a dwelling unit within the zone.

Under the S-11 Zone, all development proposals would be reviewed with respect to the following criteria, in addition to any other considerations pertinent to the property:

a. Conformity with the Vegetation Management Prescriptions.

b. Conformity with the Site Development Map, including avoidance of Protected View Corridors.

c. Access from the safest point of entry from the street.

d. Consideration of special geotechnical or similar constraints.

e. Adherence to the minimum possible grading plan and submission of an acceptable grading and/or erosion and siltation control plan.

f. Avoidance of the use of retaining walls of excessive height and/or length.

g. Provision of fire hydrants as required by the Oakland Fire Prevention Bureau.

h. Proper consideration of solar orientation and energy conservation techniques.

A fee could be charged to developers to recover administrative costs incurred in reviewing the proposed projects. Additional specific requirements for project approval are set forth in the remaining sections of this chapter.

C. Specific Mitigation Measures

The following discrete measures are proposed to mitigate the negative development impacts identified in Chapter II.

1. Density

a. Theoretical Versus Practical Density

Two types of density are referred to in this plan. The first is "Maximum Theoretical Density". This term refers to that number of units that is permitted on the basis of some legislative formula which assumes that all other environmental and site factors can be accommodated. Normally, this density is set forth in the underlying zone. For example, the maximum theoretical density is one dwelling unit per 25,000 square feet in the R-10 zone; one unit per 12,000 square feet in the R-10 zone; and one unit per 5,000 square feet in the R-30 zone. However, the maximum theoretical density can be legislatively set in other ways. This includes area-specific regulations that impose more stringent density controls as part of a specific plan or of an over-lay zone. A number of such area-specific regulations will be discussed shortly.

The second type of density is "Maximum Practical Density". This term refers to the actual density that may be accommodated on a given site once its theoretical density, configuration, access capabilities, topography, and other elements which affect development are evaluated. In flatter areas of the city, the theoretical and practical density may be the same; however, due to the topography in the plan area, it is more likely that the maximum practical density will be significantly less than its counterpart. In any event, it will never exceed the maximum theoretical density.

b. Density Determination

There are three basic methods to be applied in determining the maximum practical density for a given development site. The first two methods involve determining the maximum theoretical density, and the last step involves applying the environmental

and site constraints to arrive at the maximum practical density. The number of methods applied in determining the maximum theoretical density varies with parcel characteristics, ie., unsubdivided parcels have no lots that can be counted.

Method number one determines the density by dividing the street frontage of the parcel by the required lot width for the applicable zone. This approach is most relevant on large, unsubdivided, downslope parcels where it is unlikely that new streets could be built to service the interior of a lot.

Method number two determines the density by counting the number of existing, legally subdivided lots. This approach is most relevant to downslope, subdivided lots because there are fewer site access constraints on downslope lots.

Method three determines the density through the application of the S-11 Site Development review process discussed earlier. This process is applicable to all parcels and allows for thorough consideration of maximum theoretical density, topographical, and other environmental and unique site features that affect the practical density achievable on any given site.

The S-11 Site Development review process was specifically formulated to minimize the impact of development on the fragile ecology found in the plan area.

c. The maximum practical density on deep, steep*, unsubdivided, downslope parcels that abut Skyline and Grizzly Peak Boulevards and Tunnel Road will be determined from the application of methods number one and three.

It has been a common practice, in the past, for developers of more gently sloping hillside land to attempt to compute a maximum density based on the square footage of land. Dwelling units would then be clustered on the most buildable portions of the site while the unbuildable portions would remain as open space. Indeed, the Planned Unit Development provisions of the Zoning Regulations encourage this approach to site planning. Minimum setbacks and yard areas otherwise required by the regulations can be waived to allow such clustering.

This technique for calculating density is not suitable in the North Oakland hill area. Because of the steepness of much of the land here, construction of new streets to provide access to building sites are, for the most part, not feasible. Development, therefore, must generally occur on existing streets. Developers should not be allowed a density bonus for undevelopable land when the result would be greater crowding of units along existing or new streets, especially when these actions can significantly affect the quality of the views along the scenic corridors.

Where there is a conflict between the provisions of the specific plan and the underlying zones with respect to density, the lower density specified in the North Oakland Hill Area Specific Plan would prevail. Unless noted otherwise, the remaining provisions of the basic residential zone and the S-10 Scenic Route Combining Zone would remain in effect, although they would be supplemented by the provisions of the S-11 Site Development Review Combining Zone.

d. The maximum theoretical density permitted on all steep,* upslope, subdivided parcels will be one unit per lot.

While development on downslope parcels generally offers a great deal of flexibility in siting structures and in providing for parking, development on upslope parcels affords little, if any, design flexibility. Typically, construction on upslope lots is characterized by steep driveways, elaborate retaining walls, extensive stairways, and limited provision of parking. In addition, development on upslope terrain is compounded by other site design constraints such as lot size and configuration. Given these parameters, the S-11 Site Development review process would prove invaluable in assuring that the dwelling units are sited in the most environmentally sensitive manner possible. It should be recognized that, for some parcels in this category of properties, the City might find that it is not feasible to build any dwelling units on the property because the required criteria can not be satisfied.

e. The maximum practical density on subdivided but reaggregated, downslope parcels (Where one party owns more than five abutting parcels) will be determined from the application of methods number one through three. The lowest of the three derivations will be the maximum practical density allowed for that site.

f. The maximum practical density permitted on the scattered, subdivided, downslope parcels (Where one party owns fewer than five abutting lots) will be determined from the application of methods number two and three. The lowest of the two derivations, but in no case more than one dwelling unit, will be the maximum practical density allowed for a given site.

*For the purposes of the plan, a "steep" lot is one having average slope in excess of 20 percent.

g. Where the slope of the land permits environmentally-sound alternatives for supplementary access, and the provisions of the Vegetative Management Prescriptions and the Site Development Map are met, density should be determined on the basis of existing density provisions of the underlying zone.

h. With the strong interest on the part of the community in guaranteed opportunity for citizen input in a public forum on most projects, Section 9303(a) of the Design Review Regulations should be amended to require a public hearing before the City Planning Commission on all projects within the S11 zone that involve more than two dwelling units. Similarly, in an effort to provide greater citizen input on cases initially decided by the Planning Department, Section 9203(b) of the Minor Conditional Use Permit procedure should be amended to require (1) posting notices in the general vicinity of the application in question; (2) written notice to adjacent property owners; and (3) notification in a newspaper of general circulation.

i. Special requirements have been established which relate to density and supplementary access in the plan area.

(1) Street Extensions

A general survey of the topography in the plan area revealed that slope gradients throughout the area are typically significantly greater than thirty percent. The steep slopes virtually preclude the construction of new streets or street extensions that would make more land accessible and potentially allow more development. Should a more specific slope analysis reveal the feasibility of street extensions not currently shown on the Site Development Map, an amendment to the Oakland Comprehensive Plan would be required prior to approval of any development proposal.

(2) Private Access Easements And Common Driveways

Developers may propose the use of a private access easement (PAE) to create additional lots on large parcels with limited street frontage; therefore, a potential increase in density could occur through the use of PAEs within the plan area. Given the steep terrain within the plan area, however, very few additional units would likely result from PAEs. By contrast, common driveways are used to provide access to one or more existing parcels; they do not create lots or increase density in any way. While existing regulations and project review procedures control the use of both PAEs and common driveways, the desire to minimize grading on steep slopes suggests their use should be further restricted. As a general policy within the plan area, PAEs and common driveways should not be permitted when their use would assist in making parcels developable when they would otherwise not be. In cases where a PAE is presented as part of a development proposal, a major conditional use permit will be required

to allow for a closer review of its potential impacts,in cases where a common driveway is proposed, a Minor Conditional Use Permit will be required pursuant to existing zoning regulations.

(3) Street Frontage Requirements
Concern has been raisedregarding the development of lots which have inadequate street frontage. Though the existing zoning regulations require that a lot meet the minimum width requirement at the building line, a lot may have a minimum frontage of only 25 feet upon a street. This requirement may be waived under four very specific circumstances setforth in Section 7051 "Exceptions To Street Frontage Requirements". Section 7051 permits lots to have frontage on a PAE, rather than on a street. To insure that development occurs only on those lots with street frontage or on a PAE, Section 7051 will have to be amended.

2. Views and Vegetation

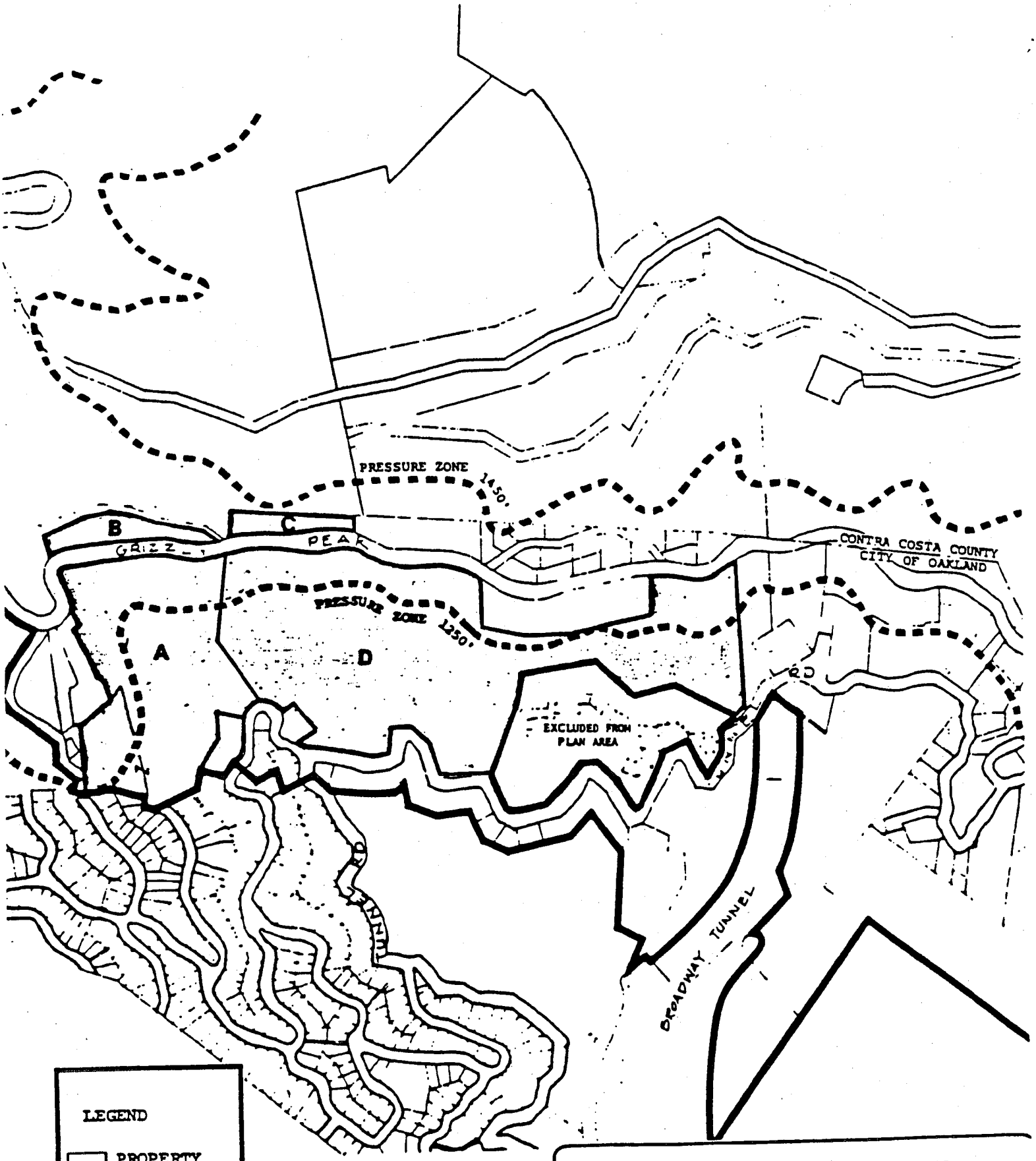
a. Views of the San Francisco Bay and the undeveloped lands in Contra Costa County are highly valued by Oakland residents. The maintenance of these views for the general public amid impending development remains a major focus of this plan. The most effective method of assuring that views are preserved in their present exceptional quality is for the parcels affording key vantage points to be publicly-owned. Specific sites suggested for acquisition are identified on Map L.

b. This specific plan, by necessity, assumes limited public acquisition of property. Hence, workable alternatives must be available if views and vegetation are to be preserved. Those vantage points of special importance have been identified on the Site Development Map (Map K) as "Protected View Corridors". Development and landscape treatment in "Protected View Corridors" could be regulated by:

- The S-11 Site Development Review process which, in accordance with the Site Development Map, prohibits construction within a Protected View Corridor on large, unsubdivided parcels, and discourages construction or calls for it to be below the view plane on smaller or subdivided parcels where outright prohibition is not feasible.

- The Vegetation Management Prescriptions which specify selective tree removal and pruning to perpetuate or recapture significant views in protected corridors (Prescription R2) and attractive views elsewhere in the project area (Prescription M6) in conjunction with development.

- The View Preservation Ordinance which prohibits any new planting in a Protected View Corridor which would obstruct the "S-10 View Plane" and directs that existing



RECOMMENDED EBRPD SITE ACQUISITIONS

MAP L

OAKLAND CITY PLANNING DEPARTMENT

NOVEMBER 1985

SCALE: 0 250' 500' 1000'

obstructions be minimized or eliminated.

When lots are within view sensitive areas, groups of two units may be permitted under design review. A side of a dwelling unit may be as close as six* feet to an adjoining dwelling unit providing that it's opposite side is separated from the side of the other adjoining dwelling unit by at least two times the sideyard normally required for a dwelling unit within that zone. (See Illustration M.1 and M.2.)

c. Regulations presently require developers of new subdivisions to underground utility lines. This was not the case when land within the plan area was first subdivided. Those who construct single-family units in previously subdivided areas have not been required to provide underground utility connections. To avoid the proliferation of overhead lines that will result from the development of single properties over a long period of time, all new projects should locate all electrical and telephone lines underground unless this requirement is waived by the Director of Public Works as being infeasible.

d. There is at present no formalized viewing facility within the plan area. Those touring the scenic route can pause at an occasional turnout, but no facilities are available (water, benches, restroom, shelter, et al), nor is there a publicly accessible viewing facility removed from the road.

A scenic route facility functioning as a recreational viewing station should be developed at "Sibley Island," and EBRPD should be encouraged to undertake its design, construction, and maintenance (See Map K). Sibley Island offers several decided advantages as the location for a passive recreation facility and as a focus for North Oakland hill area view appreciation:

- It commands a superb panorama from one of the highest points on the North Oakland hill ridge.

- It is already in public ownership for park purposes, being a part of Robert Sibley Regional Volcanic Preserve.

- It is cleared and maintained as a fuelbreak; the same clearing operation does double-duty for view preservation.

---

* Distance between the units was increased from five feet to six feet to comply with proposed amendments to the Oakland Building Code (see Appendix B.4.a).

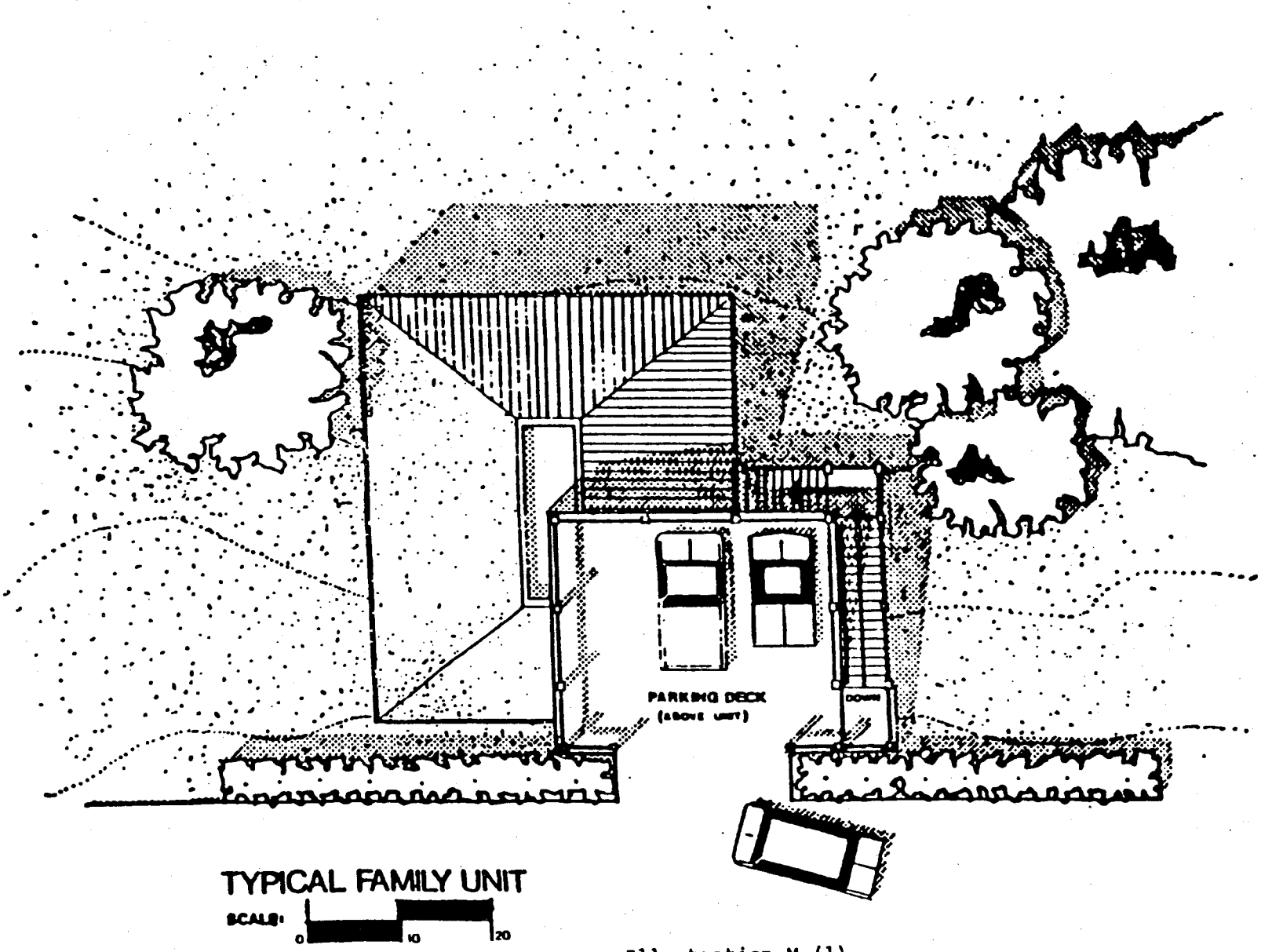
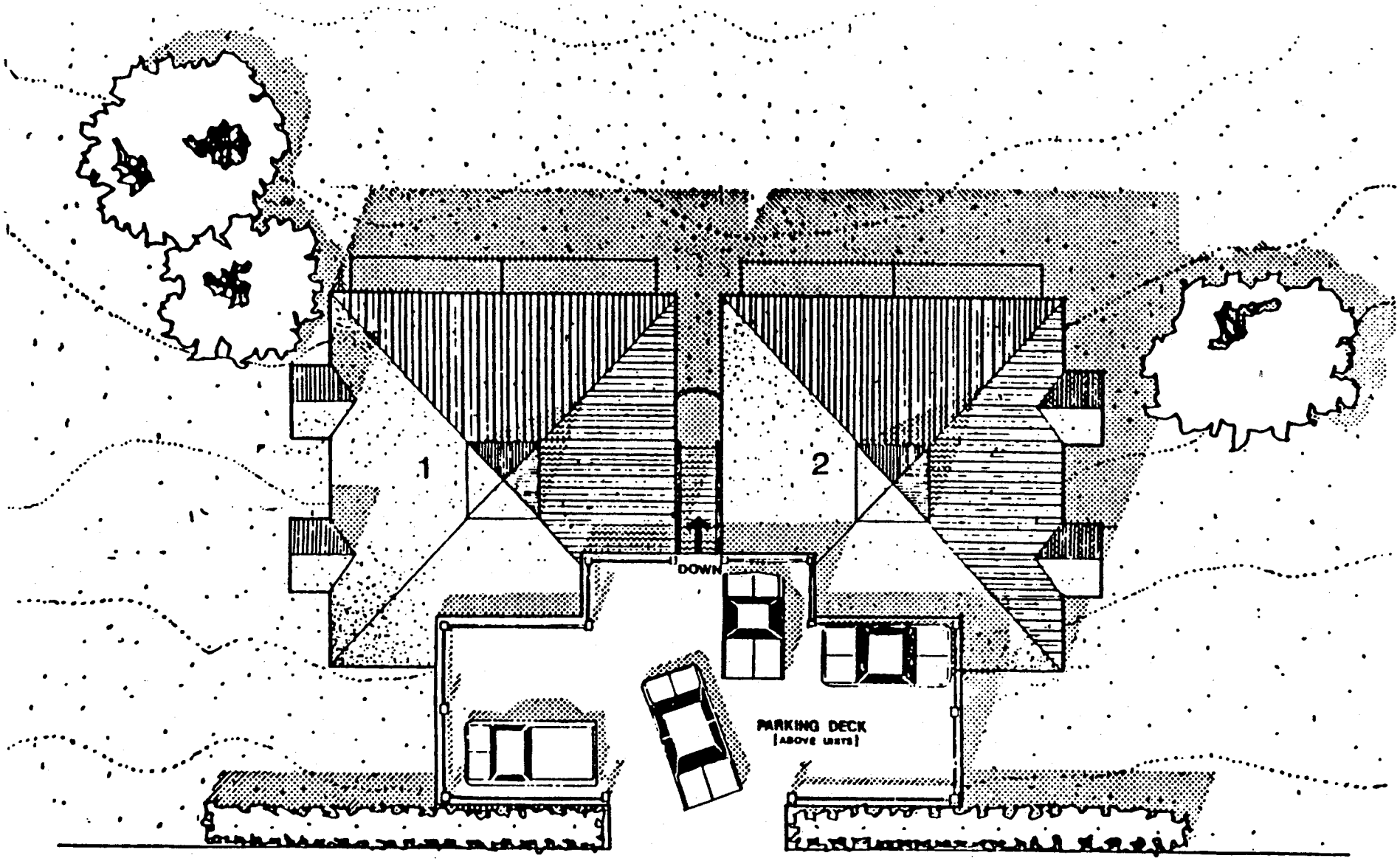


Illustration M (1)



TYPICAL 2-UNIT GROUP

SCALE: 0 10 20

Illustration M (2)

- It overlooks EBRPD property (Robert Sibley Regional Volcanic Preserve), so the quality of the view will be protected in perpetuity.

- There is adequate flat terrain for passive recreation on the ridgetop plateau and for associated parking in small dispersed lots at the base of the knoll.

- Located at the junction of Skyline and Grizzly Peak Boulevards, Sibley Island is accessible from both routes and is a landmark feature at the intersection.

3. Erosion and Siltation

a. The City's grading ordinance and the erosion and sedimentation ordinances should, if carefully administered and monitored, effectively minimize destructive site preparation practices. The City's grading ordinance regulates land excavation when the amount of earth to be moved exceeds a certain minimum. There are, however, some instances where the surface of the site is significantly disturbed, but, because little earth is moved, a grading permit is not required. To correct this deficiency, a supplementary erosion and sedimentation control ordinance was adopted last year.

b. The Vegetation Management Prescriptions contain specific measures to augment, remove, limit, or replant vegetation on specified parcels. These provisions can give additional protection to the fragile slopes as they are disturbed by development.

c. Soils reports are required for all subdivision projects. Because there are numerous recorded landslides and other earth movement within the plan area, development of any parcel could lead to slope failure; hence a soils report is now required for all footings on slopes of 30 percent or more. On other parcels in the plan area, soils reports can be required under the provisions of the grading or foundation ordinances if soil conditions warrant.

d. To assure the opportunity for public input in evaluating potential damage resulting from extensive grading, all projects within the plan area involving retaining walls over eight feet in height and/or grading or removal of materials in excess of 500 cubic yards will be automatically referred to the Director of City Planning for Design Reveiw.

4. Fire Hazards

When EBMUD reclassified its emergency water facilities within the plan area, it did not reclassify the emergency tanks for normal residential service. Instead, water will flow into the area from EBMUD's Skyline tank only. With the exception of the water now being provided to residents from the Hilltop tank, the water in the

emergency tanks will be used exclusively to combat hill fires.

Fire protection agencies set various standards for adequate fire protection. In Oakland, a four-minute response time (see Map H) is one standard. Much of the land in the plan area is outside of this response radius; an average response time of four to seven minutes (from the time a fire truck leaves the station to the destination point) is realistic. That response time is based upon the fire engine driving under normal road conditions. Fog, traffic, or parked cars on narrow streets would further slow the response time.

a. Fire prevention officials have indicated that the installation of home sprinkler systems would significantly reduce fire damage and delay the spread of fire. Units on steep sites are particularly susceptible to fire damage, as it is extremely difficult and hazardous for firefighters to reach the rear and sides of such structures.

   Previously, high costs discouraged many homeowners from installing sprinkler systems. According to one fire sprinkler manufacturer, labor costs to install piping typically make up 50 percent or more of the total cost of the system. The availability of plastic piping has greatly reduced the time and costs for installation, thereby making the system attractive to homeowners.

   Map H indicates the boundaries within which personnel from the Colton/Snake fire station may respond within four minutes. All new dwelling units outside of this radius will be required to have a home sprinkler system installed.

   A copy of the plan's Fire Sprinkler Ordinance is included in Appendices B.3.a.and B.4.a.

b. A number of construction techniques have been identified by fire prevention personnel as being effective in combatting fire hazards. Not all specific fire safety construction techniques outlined in the 1982 edition of the Oakland Building Code are mandatory; some of them should be. In general, all combustible eaves, balconies, unenclosed roofs and floors, and similar architectural appendages should be one-hour fire resistant construction, or heavy timber construction, or protected with an approved automatic fire extinguishing systme (see Appendix B.4.b. and B.4.c.).

c. Where flames and smoke are visible, a burning dwelling requires no further identification. However, a dwelling in the early stages of involvement may be difficult to locate—especially if it is a part of a two unit group. Similarly, emergency medical personnel may experience a critical delay in locating a particular unit. To facilitate faster fire-response times, greater address visibility on individual properties should be required on all new homes (see Appendix B.2.b.).

d. Currently, Private Access Easements created under the subdivision provisions of the Oakland Municipal Code are not officially named. Some have taken on unofficial names. Community driveways are not named.

In the hill area, the physical location of an official street address may reveal no indication of development; it may be a steep embankment. The homes that correspond to the addresses are often located high above the street and are reached by a private drive that may vary from 12 to 20 feet in width.

Providers of emergency service must know that such development exists. Fire personnel in the primary response firehouse generally know of these private drives. Personnel from other firehouses have to find out on their own..

To improve emergency service response, the problem of naming access ways created through the Private Access Easement and Community Driveway procedures should be resolved.

e. The Vegetation Management Prescriptions include a range of actions to mitigate wildfire hazards. These measures are part of a regional, comprehensive effort to reduce fire threat. The measures apply to specific properties as well as to the general siting of buildings within the plan area. Implementation will be the developers responsibility at the initial construction stage; thereafter the maintenance of these measures would be the responsibility of the property owner.

f. The adopted fire master plan will determine the ultimate location of any new and/or relocated fire station that may augment service within the specific plan area.

5. Parking and Property Access Hazards

a. The minimum standard width for an improved street in Oakland is 30 feet. While this standard can be easily accommodated in the less steep hill areas of the City, it may at times be nearly unobtainable in the steeper sections of the hills. Existing, unimproved street widths within the plan area can be as narrow as 12 feet. Steep terrain almost precludes the widening of some segments of many hill area streets to existing standards due to both financial and topographic/geologic considerations. For these reasons, new minimum paving widths should be established for existing unimproved streets. If necessary, further refinements to these minimum widths on the above segments should be made on a case-by-case basis as the initiation of street improvements is triggered. These final widths should represent the minimum safe width whereby an emergency vehicle may safely pass another vehicle.

Establishing minimum street widths of 24 feet and 26 feet with one foot shoulders for existing collector/local and arterial streets, respectively, would eliminate some of the design uncertainty for developers in addition to preserving more of the

natural setting of hill neighborhoods. This can result in reducing extraordinary capital outlays for street improvements. More importantly, the reduced street width minimums may eliminate the need for massive retaining walls along one or both sides of street, thus avoiding potential problems with land instability as well as with aesthetics.

b. Although a street improvement program (Item III.C.5.a.) may create some on-street parking areas along the road, the total number of on-street parking spaces still will be inadequate, and additional off-street parking spaces are a necessity. Therefore, for all new or reconstructed* dwelling units affected by the North Oakland Hill Area Specific Plan, off-street parking requirements of the Oakland Zoning Regulations should be increased from two spaces per unit to one space for each bedroom with a minimum of two spaces per dwelling unit. This will also help reduce potential parking problems caused by communal living arrangements. Tandem parking should be permitted, but at least fifty percent of the vehicles shall not have to cross another parking space to gain access to a required parking space.

c. The narrow, sharply curving streets, often with visual obstructions such as brush or topographic features, create major access problems, especially for cars having to back out of private driveways. Specific access restrictions are already in place within areas subject to the S-10 Scenic Route Combining Zone. For example, the S-10 Zone prohibits driveway access to Grizzly Peak Boulevard, Skyline Boulevard, and Tunnel Road except upon the granting of a conditional use permit. In order to minimize traffic access hazards that may result from the multiplicity of individual parking decks constructed along these corridors, developers should be required to group access points to the maximum extent feasible. Access points could be reviewed as part of the S-11 Site Development Review process. A separate conditional use permit for such access would not then be required.

6. Infrastructure Deficiencies

a. Streets

The average daily traffic that may use the arterial, collector, and local streets in the plan area has been forecast by the Traffic Engineering Department based on the maximum theoretical number of potential residents that might live in the plan area.

*Reconstructed refers to houses rebuilt after sustaining damage amounting to 75 percent or more of the current replacement cost of the structure.

An examination of the hill streets was then conducted to determine their capacity to accommodate the anticipated traffic demands.

(1) There are two circulation and safety improvement projects that will be needed to support development within the plan area; the specifics of these improvements should be determined through the "plan line" process.

These improvements are described below:

- Install a fully actuated signal with a separate left turn phase at the intersection of Snake Road and Mountain Boulevard.

- Install a concrete sidewalk on the east side of Thornhill Drive between Woodhaven Way and Mountain Boulevard to protect pedestrians from the effects of increased traffic flow.

(2) The Office of Public Works studied all the streets in the plan area and concluded that there are five street segments with potential safety problems: the whole length of Elverton Drive, all of Diablo Court within the City limits of Oakland, Thorndale Drive between Elverton Drive and Sobrante Road, Sobrante Road extending for a distance of 250 feet east of Oakwood Drive, and the undeveloped 280 feet of Northwood Court. This determination was based on the development potential of abutting land and on the street geometry. However, resource and time constraints did not permit staff to determine the existing and future extent of improvements needed on these five street segments.

During the plan preparation study, the Office of Public Works could only provide a construction multiplier to generate rough cost estimates. Without more specific information on the need for, extent and timing of, estimated cost for, and possible funding sources for potential street improvements, the use of these estimates resulted in more questions than they answered.

The Director of Public Works therefore recommended that a plan-line process would be the most effective way of dealing with questions related to solving potential street safety problems. The plan-line process involves a detailed field and design examination of a given segment of street to determine its adequacy and safety under existing and future conditions as well as a precise determination and description of potentially needed improvements and their estimated costs. Potential funding sources that might be applicable to such improvements would be identified as an integral part of the plan-line study. In general, however, the financing mechanism and allocation of costs for improvements within the plan area shall be the same as those utilized in any other area of the City.

Plan-line studies would only be undertaken at the direction of the City Council. Such studies would also involve considerable public input and review (including public hearings on study findings and proposed solutions), and might take a year or more to accomplish.

Although only five street segments have been identified as potential problem areas, it is possible that a study of other street segments in the plan area may reveal similar potential problems as the impacts of development are finally realized. In such cases, the plan-line process may be applied to these street segments as well.

Any improvements that might be required would be constructed as nearly as possible to the street width standards established in this plan. Such street improvements would be unlikely to include curbs or sidewalks. At the widest, they would not exceed 24 feet in width, but they may be considerably more narrow where natural constraints prevail. Every attempt should be made to eliminate or reduce the hazards of blind curves and to accomplish any necessary transition in paving width where the sight distance is best.

Maintenance of the streets are the responsibility of the City, except in the case of private streets.

b. Sewers

(1) In order to lessen sewer design costs and inconvenience for future developers and to insure that they build the least expensive and most convenient system to accommodate the growth forecast, a Sewer Extension Guide (Map I) was developed. The Sewer Extension Guide identifies the location of existing sewer facilities and the appropriate general location for new facilities based on the projected development patterns.

(2) The undersized sections of sewer pipe outside the plan area are rather discrete and not extensive. Viewed as a series of separate projects, independent of other needed improvements, the pro rata share for residents of the plan area would amount to approximately $100,000; however, if accomplished in conjunction with the City's inflow and infiltration sewer replacement project, the marginal cost of increasing the diameter of these few segments of pipe would be very small. It is a burden that would be shared city-wide. No special assessment would be borne by those in the specific plan area. As needs develop, therefore, the City should allocate sewer improvement funds to cover the cost of constructing needed sewer improvements downstream of the plan area.

IV. SUMMARY OF PLAN POLICIES AND ACTIONS

All of the following policies shall apply as indicated and shall augment existing Comprehensive Plan policies applying to the area.

A. Density

1. Policies

The following density policies shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

a. The following three methods will be applied as specified below to determine the maximum practical density:

(1) Divide the street frontage of the property by the minimum lot width requirement in the respective zone;

(2) Count the number of legally platted lots within the proposed development area; and

(3) Apply the S-11 Site Development review procedure.

b. The maximum practical density on deep, steep*, unsubdivided, downslope parcels that abut Skyline and Grizzly Peak Boulevards and Tunnel Road shall be the lowest number derived from the application of methods number one and three.

c. The maximum theoretical density on steep,* subdivided, upslope parcels shall be one dwelling unit per lot.

d. The maximum practical density on steep,* reagregated, downslope parcels shall be the lowest number derived from the application of methods number one through three.

e. The maximum practical density on steep,* subdivided, downslope, scattered parcels shall be the lowest number derived from the application of methods number two and three, but in no case more than one dwelling unit.

f. Parcels With Less Than Twenty Percent Slope

Where the slope of the land permits environmentally sound alternatives for supplementary access and where the provisions of the Vegetative Management Prescriptions and the Site Development Map are met, density may be determined by the underlying zone.

*For the purposes of the specific plan, steep lots are those having a slope in excess of 20 percent.

g. With the strong interest on the part of the community in having a guaranteed opportunity for citizen input in a public forum on most projects Section 9303(a) of the Design Review Regulations should be amended to require a public hearing before the City Planning Commission on all projects within the S-11 zone that involve more than two dwelling units. Additionally, in an effort to provide greater citizen input on cases initially decided by the Planning Department, Section 9203 (b) of the Minor Conditional Use Permit Procedures should be amended to require 1) posting notices in the general vicinity of the project in question; 2) written notice to adjacent property owners; and 3) notification in a newspaper of general circulation.

h. In addition, the following access policies, related to density, shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

(1) Private access easements (PAEs) and common driveways shall not be permitted when their use would assist in making parcels developable when they would otherwise not be.

(2) A major conditional use permit shall be required to construct a PAE.

(3) An amendment to the Oakland Comprehensive Plan shall be required to construct any street extension not shown on the Site Development Map where such street is not a part of an approved subdivision.

2. Implementation

Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, all of the following actions will also have been taken to implement all of the above policies:

a. The S-11 Site Development Review Combining Zone (see Appendix B.1.a. for text) has been added to the Oakland Zoning Regulations; the area covered by the North Oakland Hill Area Specific Plan has been placed in the S-11 Zone; the Vegetation Management Prescriptions (see Appendix A) has been adopted as a part of the North Oakland Hill Area Specific Plan; and the Site Development Map (see Map K) has been adopted as a part of the North Oakland Area Specific Plan.

b. In addition, the following amendments have been made to the Oakland Zoning Regulations to apply in the S-11 Zone: Section 9303 (a) has been amended to require a public hearing for projects involving more than two units; Section 9203 (b) has been amended to require additional notification for Minor Conditional Use Applicatons; and Section 9201 has been amended to require a conditional use permit to construct a PAE. An amendment to the Oakland Comprehensive Plan is required to build a street extension not shown on the Site

Development Map of the North Oakland Hill Area Specific Plan where such street is not a part of an approved subdivision.

B. Views and Vegetation

1. Policies

The following view and vegetation policies shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

a. New development shall preserve view corridors and a desirable vegetation mosaic in conformity with the Site Development Map, the Vegetation Management Prescriptions, and the View Preservation Ordinance.

b. When lots are within view sensitive areas, dwelling units in groups of two may be permitted where the side of one dwelling unit may be as close as six* feet from the other dwelling unit. The other side of said dwelling unit must be separated from the side of another dwelling unit by at least two times the side yard normally required for a dwelling unit within the underlying zone.

c. All new utility lines to serve new development shall be undergrounded to minimize obstruction of views.

d. The City urges EBRPD to acquire, as a Regional Panoramic Preserve parcels having special view potential which adjoin existing EBRPD parklands, preserves, or other permanent open space.

e. The City urges EBRPD to develop "Sibley Island" as a scenic route facility with appropriate park amenities for view appreciation.

2. Implementation

The following actions, in addition to A.2 actions, have been or shall be taken to implement the above policies:

a(1) Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, the "View Preservation Ordinance" will also have been amended to incorporate the definition of Protected View Corridors within the North Oakland hill area, and to regulate vegetation within the corridors, consistent with the Vegetation Management Prescriptions (see Appendix B.2.a.).

* Distance between the unit was increased from five feet to six feet to comply with proposed amendments to the Oakland Building Code (see Appendix B4.a).

a(2) The conformance of all new projects to the Vegetation Management Prescriptions will be monitored through a coordinated review by the City Planning Department and the Office of Parks and Recreation. Continued conformance will be monitored by zoning enforcement staff of the City Planning Department.

b. See IV.A.2. actions.

c. A Utility Underground District shall be declared within the plan area covering those parcels not served by electric power.

d. EBRPD shall be advised of the parcels identified as important to the visual quality of the North Oakland hill area (see Map L) and urged to budget for the eventual acquisition of these parcels.

e. EBRPD shall be advised of the City's policy concerning "Sibley Island".

C. Erosion and Siltation

1. Policies

The following additional Soil and Erosion Policies shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

a. Applicable erosion and siltation measures of the Vegetation Management Prescriptions shall be applied to each site proposed for development within the plan area.

b. The requirement for a soils report, where such reports are not mandatory, shall be determined for each individual property.

c. All projects involving retaining walls over eight feet in height and/or grading or removal of materials in excess of 500 cubic yards will be automatically referred to the Director of City Planning for Design Review.

2. Implementation

The following actions, in addition to IV.A.2. actions, have been or shall be taken to implement the above policies:

a. The conformance of all new projects to the Vegetation Management Prescriptions will be monitored through a coordinated review by the City Planning Department and the Office of Parks and Recreation. Continued conformance will be monitored by the zoning enforcement staff of the City Planning Department.

b. The Office of Public Works shall identify all plan area parcels that require a soils report on a case-by-case basis

as part of the grading and foundation ordinance procedures.

c. The Office of Public Works shall identify all projects which have the aforementioned retaining walls and/or grading volumes, and shall notify the City Planning Department of the need for design review of these projects.

D. Fire Hazards

1. Policies

The following fire hazard policies shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

a. All homes built beyond the mapped four-minute fire engine response time shall be equipped with a residential fire sprinkler system.

b. A number of existing optional fire-safe construction practices set forth in the Oakland Building Code shall be incorporated into the design of all new or reconstructed houses within the plan area.

c. At the entrance of each home or group of homes, the address or addresses shall be displayed in a manner that is clearly readable from the street during day and night.

d. To improve emergency service response, the problems of naming access ways created through the Private Access Easement and Community Driveway procedures shall be resolved.

e. Firesafe construction techniques shall be supplemented with all applicable fire prevention measures specified in the Vegetation Management Prescriptions.

f. Should the findings of the Fire Master Plan indicate that new and/or relocated fire stations are necessary within the area subject to the Site Development Map and the City Council approves the construction of such facilities, those service improvements will be financed in a manner consistent with the financing of such services City-wide.

2. Implementation

The following actions, in addition to IV.A.2. actions, have been or shall be taken to implement the above policies:

a. Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, the Oakland Fire Code will also have been amended, as set forth in Appendix B.3.a. to apply to those homes within the Plan Area that are located beyond the four-minute fire engine response time.

b. Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, the Oakland Building Code will also have

been amended, as set forth in Appendix B.4., to make a number of optional fire-safe construction practices apply to all new units.

c. Section 7-2.01 of the Oakland Municipal Code shall be modified to specify that all addresses must be displayed in a manner that is clearly readable from the street both night and day on all new homes (see Appendix B.2.b.).

d. An effective procedure shall be developed by the Office of Public Works in cooperation with the Department of City Planning for naming "Private Access Easements" and "Community Driveways," and for disseminating this information to emergency personnel, the United States Postal Service, the utility companies, and others who may need to know this information.

e. See IV.A.2. Actions.

f. Implement the City-wide Fire Master Plan.

E. Parking and Property Access Hazards

1. Policies

The following parking and access policies shall apply to all parcels subject to the North Oakland Hill Area Specific Plan:

a. New minimum street width standards for existing unimproved streets shall be:

(1) Arterial Streets - 26 feet* of paving with one-foot shoulders.

(2) Collector and Local Streets - 24 feet* of paving with one-foot shoulders.

b. Site access shall be determined during the S-11 Site Development Review process.

c. Off-street parking space requirements of the Oakland Zoning Regulations shall be increased from two spaces to one space per bedroom with a minimum of two spaces per dwelling unit. Tandem parking will be permitted, providing that at least fifty percent of the vehicles shall not have to cross another parking space to gain access to a required parking space.

*Exceptions to these standards may be made based on topographic and geotechnical conditions.

2. Implementation

The following actions have been or shall be taken to implement the above policies:

a. The Director of Public Works shall, to the extent feasible, employ the new minimum standards whenever improvements on any existing street are required.

b. Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, Section 6557 of the Oakland Zoning Regulations dealing with driveway access limitations in the S-10 Zone will also have been amended, as set forth in Appendix B.1.b., to allow access in locations determined pursuant to the S-11 Site Development Review process.

c. Simultaneously with the adoption of the North Oakland Hill Area Specific Plan, Section 7511 of the Oakland Zoning Regulations (dealing with the table of parking requirements in the R-10, R-20 and R-30 zones) will also have been amended, as set forth in Appendix B.1.b., to require, within the plan area, one off-street parking space for each bedroom in all new or reconstructed dwelling units, with a minimum of two spaces per dwelling unit. Section 7543 has also been amended, as set forth in Appendix B.1.b., to permit tandem parking, provided that at least fifty percent of the vehicles shall not have to cross another parking space to gain access to a required parking space.

F. Infrastructure Deficiencies

1. Policies

The following infrastructure policies shall apply both within the area subject to the North Oakland Hill Area Specific Plan and to the area impacted by development within it:

a. Streets

(1) Plan-line studies shall be undertaken at the direction of the City Council where health and safety may be threatened by the construction of new homes on a given street segment.

(2) Plan-line studies shall be undertaken at the direction of the City Council to determine the specifics of the needed off-site circulation and safety improvements described in the North Oakland Hill Area Specific Plan.

(3) The financing mechanism and and the allocation of costs for improvements identified by the plan-line process shall be the same as that utilized in any other area of the City.

b. Sewers

(1) The Sewer Extension Guide (Map I) shall direct and control the extension of all sewer lines within each drainage basin of the plan area to the extent of the coverage shown on the Map.

(2) As needs develop, the City shall allocate sewer improvement funds to cover the cost of constructing needed downstream sewer improvements to accommodate the effluent generated by new sewer connections within the plan area.

2. Implementation

The following actions shall be taken to implement the above policies:

a. Streets

(1) The Director of Public Works shall monitor construction activity to determine if a threat to public health or safety may result from said construction. If it appears that such a potential threat exists or may be created, the Director shall recommend to the City Council that the plan-line process be initiated to determine what, if any, street improvements may be needed, the cost may be, and potential means of financing such improvements exist.

(2) The Director of Public Works shall monitor traffic and safety conditions at the off-site locations described in the plan to determine if a threat to public safety appears to be resulting from development within the plan area. If it appears that such a potential threat exists or may be created, the Director shall recommend to the City Council that a plan-line study with respect to off-site circulation and safety improvements described in Chapter 3 of the plan be undertaken.

b. Sewers

(1) As developers and owners extend sewer lines to serve their property, the Office of Public Works shall ensure that such extensions conform in all important aspects to the lines shown on the Sewer Extension Guide (Map I).

(2) As the need develops, the Director of Public Works shall initiate requests for sewer funds to construct the improvements required outside the plan area.

A P P E N D I C E S

APPENDIX A

VEGETATION MANAGEMENT PRESCRIPTIONS

This table of specific requirements (P1, P2, etc.) corresponds to land units defined on the Vegetation Management Prescription Index (Map J).

Those portions of the North Oakland hill area without prescriptions are subject to standard review for site planning and landscape treatment in accordance with sound principles of landscape architecture and site engineering. Consideration will be given to views, visibility, fire safety, erosion control, solar access, wind break, esthetics, and site suitability.

(P) Preservation

P1. Preserve Monterey Pine Forest

Perpetuate community in a manner which will preserve visual quality.

RX - Stands with sufficient natural regeneration of Monterey pine (Pinus radiata):

- Remove dead and infested or diseased pine trees or pine limbs to deter attack of remaining stand by insect, fungus, or disease; and

- Remove unstable pines or limbs which threaten structures, vehicles, people, or other trees.

RX - Stands with insufficient natural regeneration of Monterey pine (Pinus radiata):

If understory is dominated (greater than 50 percent cover) by oak and bay species over three feet in height (i.e., little to no grass understory):

- Let Monterey Pine Forest succeed naturally to Oak Bay Woodland; and

- Remove dead and dying pines (per above).

If less than 50 percent of understory is Oak and Bay:

- Remove dead and dying pines (per above);

- Given revised pattern of healthy trees, additionally thin to an average spacing of diameter at breast height (dbh) in inches x 2 = number of feet between trees;

- Plant with at least 2-0 seedlings (or one gallon can) of Monterey pine (Pinus radiata) and/or Monterey cypress (Cupressus macroacarpa) at 10' x 10' spacing.

- Clear away all brush at least three feet from seedling.

- Check seedlings periodically to ensure that adequate light and moisture requirements are being met.

  Note: In areas where grass species dominate the understory, it may be worthwhile to attempt natural regeneration by creating pockets of bare mineral soil. The regeneration progress should be periodically checked.

P2. Preserve Oak Bay Woodland

Protect all Oak Bay Woodland from environmental degradation and enhance regeneration capacity.

RX - All stands (subject to health of tree):

- Do not remove oak trees or oak seedlings, or disturb grade or roots within dripline.

- Do not remove bay trees, except as noted below.

- Avoid removing madrone trees of any size.

- Protect oak, bay and madrone with barriers if in proximity to construction.

- Do not disturb shrub understory.

RX - Stands with sufficient natural regeneration of coast live oak (Quercus agrifolia):

- Determine amount, if any, of destruction due to deer browse.

- Protect seedlings in browsed areas with vexar or plastic netting.

RX - Stands with insufficient natural regeneration of coast live oak:

- Determine why natural regeneration of oak is insufficient (deer browse, lack of light and/or moisture).

- If due to deer browse, plant coast live oak and associated species and protect with vexar or plastic netting.

- If due to lack of moisture, plant oaks in ravines and shaded areas of property and protect with netting. Evaluate suitability of drip irrigation.

- If due to lack of light, thin overstory to allow sufficient light penetration by:

  1. removal of dead and dying trees or limbs, and/or

2. selective removal of bay (Umbelularia californica)

- Use 10' x 10' spacing of 2-0 oak seedlings (or one gallon cans) for artificial regeneration. Check seedlings periodically to ensure adequate light and moisture requirements are being met.

P3. Preserve Coastal Sage Scrub

Protect the Coastal Sage scrub community where it occurs in units of five acres or more, especially those in close proximity to Coastal Sage scrub held in public open space as habitat for the Alameda Striped Racer. Limit changes in land use, and inhibit plant succession. (Perpetuation of this vegetation type may require proper use of control burning techniques.)

(M) Modification

Alter planting density and layout in order to reduce fire hazard or improve view from Scenic Route.

(For Fuelbreak Design and Brush Modification Guidelines, refer to the report, Vegetation Management Program for the North Oakland Hill Area, pages 29-34.)

M1. Modify existing vegetation to upgrade regional fuelbreak.

RX - Follow fuelbreak design guidelines.

- Adopt erosion control measures.

M2. Modify Monterey Pine Forest to upgrade regional fuelbreak.

RX - Preserve stands according to RX P1. In addition, limb up to approximately 1/3 tree height to interrupt vertical fuel ladder.

- Follow spacing set forth by fuelbreak guidelines.

M3. Modify Coastal Sage Scrub (five plus acres) to upgrade regional fuelbreak.

RX - Preserve according to RX P3.

- In addition, selectively remove shrubs in accordance with Brush Modification Guidelines. Maintain 40 percent shrub cover.

- Seed cleared areas with local annual grass species.

M4. Modify existing vegetation to create arterial fuelbreak.

RX - Enlist cooperation from P.G.& E. to control vegetation under high voltage lines in accordance with Brush Modification Guidelines.

- Maintain adequate erosion control measures.

M5. Modify Eucalpytus Forest to upgrade regional fuelbreak, reduce fire hazard nearby, and improve environmental quality.

RX - In mature stands (average dbh greater than 6"):

- Thin trees to a minimum spacing of 2 x dbh in inches = number of feet between trees, or up to 40'-50' between trees.

- Limb up to interrupt fuel ladder.

- Leave maximum of one sprout per stump.

- Remove all eucalyptus stems less than 6" in dbh.

- Remove all dead and downed woody material.

- Frill cut stumps and treat with "Round-Up."

RX - In young stands (average dbh less than 6"):

- Same as above, except thin to a minimum spacing of 15' between trees, or up to 40'-50' between trees.

M6. Modify existing vegetation to augment views from Scenic Route.

RX - In Eucalyptus Forest: thin trees to spacing which provides view through stand.

RX - In Monterey Pine Forest: Do not remove healthy trees. Remove dead or dying trees or limbs, per P1. If additional aperture needed, limb up healthy pine and cypress to provide view from the road through branch structure or under tree canopy.

(R) Removal

Undertake tree removal to protect or recapture important vistas from the Scenic Route.

R1. Remove marginal trees to improve visual quality.

RX - Remove pines along ridgeline at Sibley Island in the East Bay Regional Park District.

R2. Selectively remove obstructing trees at key vantage points along Scenic Route.

NOTE: Areas with and R2 prescriptions correspond to those Protected View Corridors (as designated on Map K, Site Development Map) in which trees partially or totally interfere with the view from the road's edge. Within all view corridors, development is restricted (see III.C.2). In addition to areas marked R2, there are view corridors which are designated on the Site Development Map

but which do not appear on the Vegetation Management Prescription Index because there is no need for tree removal or other remedial treatment at that location.

RX - Selectively remove trees in a fan-shaped wedge downhill from the road to the distance necessary to reveal or enhance the panoramic view. On steep slopes, proceed until reaching an elevation where the top of the tree canopy is below the view plane from the Scenic Route (as defined by Planning Code Section 6509). Orient the "wedge" to avoid a straight-on view from populous locations outside the North Oakland hill area. The "wedge" does not mean outright clearcut. Therefore, artfully design the tree removal layout to minimize visual impact by preserving oak, madrone, and other desirable species; saving specimen or other distinctive trees; feathering the boundaries of the wedge; framing the view; and providing essential shade.

- Establish groundcover to control erosion. Utilize net, mulch, or other means to hold soil during establishment period. Planting should be ecologically site-appropriate and could include species such as: California sage (Artemesia californica), bush monkey flower (Mimulus aurantiacus), or coyotebrush (Baccharis pilularis). Also consult the groundcover recommendations in the report Vegetation Management Program for the North Oakland Hill Area.

- Maintain existing and recaptured views by pruning vegetation as needed.

(I) Introduction

Clear as needed and initiate preferred plant communities for environmental purposes.

I1. Introduce mesic (high moisture) conifers.

High-moisture requirement:

Sugar Pine (Pinus lambertiana)

Douglas Fir (Psuedotsuga menziesii)

Coast Redwood (Sequoia sempervirens)

Bishop pine (Pinus muricata)

High-moisture tolerant:

Monterey Cypress (Cupressus macrocarpa)

Incense Cedar (Calocedrus decurrens)

RX - Remove inappropriate trees.

- Plant 2-0 seedlings (or one gallon cans) at 10' x 10' spacing.

- Remove inappropriate brush over four feet tall and to a distance of three feet from the seedling.

- Maintain clear space around seedling by removal of encroaching brush (every year) until seedling canopy has topped competing brush.

- Check seedlings periodically to ensure that light and moisture requirements are being met.

Note: When planting mesic conifers in fuelbreak areas, space seedlings accordingly. Coast Redwood is the preferred fuelbreak species because of its relatively low flammability.

I2. Introduce xeric (low moisture) conifers.

Monterey Pine (Pinus radiata)

Monterey Cypress (Cupressus macrocarpa)

Ponderosa Pine (Pinus ponderosa)

Incense Cedar (Calocedrus decurrens)

Giant Sequoia (Sequoiadendron giganteum)

Due to their relatively high flammability, xeric conifers are restricted to sites which require conifers for visual quality but will not support mesic species.

RX - Per RX I1.

I3. Establish or tend Oak Bay Woodland.

RX - Remove inappropriate trees.

- Reduce height of brush canopy to five feet.

- For best results, clear all remaining vegetation to a distance of two feet from seedling and maintain yearly by clearing encroaching vegetation.

- Plant 2-0 seedling mixes of coast live oak (Quercus agrifolia) and California bay (Umbellularia californica) in the following proportion: oak--65 percent; bay 35 percent. Allow madrone to regenerate naturally.

- Plant native shrub species associated with the Oak Bay Woodland.

- Protect all newly planted seedlings from deer browsing by using vexar and/or plastic netting.

- Check seedlings periodically to ensure adequate light and moisture requirements are being met.

APPENDIX B

TEXT OF NEW OR AMENDED REGULATIONS*

1. Oakland Zoning Regulations

a. S-11 Regulations

1) Add Sections 6600 through 6623 to read as follows:

*S-11 SITE DEVELOPMENT REVIEW COMBINING ZONE REGULATIONS

Section 6600 TITLE, PURPOSE, AND APPLICABILITY.

The provisions of Section 6600 through Section 6624, inclusive, shall be known as the S-11 SITE DEVELOPMENT REVIEW COMBINING ZONE REGULATIONS. The S-11 Zone is intended to create, preserve, and enhance areas subject to the North Oakland Hill Area Specific Plan adopted by the City Council and to assure that development there is sensitively integrated with the land forms, view corridors, and vegetation masses. These regulations shall apply in the S-11 Zone and are supplementary to the regulations applying in the zones with which the S-11 Zone is combined.

Section 6601 ZONES WITH WHICH THE S-11 ZONE MAY BE COMBINED.

The S-11 Zone may be combined with any other zone.

6602 DESIGN REVIEW FOR CONSTRUCTION OR ALTERATION.

In the S-11 Zone no building, Sign, or other facility shall be constructed or established, or altered in such a manner as to affect exterior appearance, unless plans for such proposal shall have been approved pursuant to the DESIGN REVIEW PROCEDURE at Section 9300 and the provisions of Section 6612. However, design review approval is not required for Realty Signs, Development Signs, holiday decorations, and displays behind a window; and it is not required, except as otherwise provided in Section 7430(c), for mere changes of copy, including cutouts, on Signs the customary use of which involves frequent and periodic changes of copy.

Section 6608 SITING OF UNITS, ON CERTAIN PROPERTIES.

On the properties for which the Site Development Map of the North Oakland Hill Area Specific Plan depicts siting of dwelling units, those facilities shall be located only at those approximate locations, however, a Minor conditional use permit for an alternative development scheme may be granted pursuant

* Deletions to existing text are indicated by strike out and additions are underlined.

to the CONDITIONAL USE PERMIT PROCEDURE at Section 9200 upon determination that the alternative scheme would serve the goals of the North Oakland Hill Area Specific Plan as well as, or better than, the pattern depicted on the Site Development Map.

Section 6612 DESIGN REVIEW CRITERIA

Design Review approval pursuant to Section 6602 may be granted only upon determination that the proposal conforms to the general design review criteria set forth in the DESIGN REVIEW PROCEDURE at Section 9300 and to all of the following additional criteria:

(a) That the siting, clearing, landscaping, and other relevant features of the proposal will conform in all significant respects with the Vegetation Management Prescriptions of the North Oakland Hill Area Specific Plan.

(b) That the proposal will conform in all significant respects with the Site Development Map of the North Oakland Hill Area Specific Plan with respect to the protection of view corridors and vegetation masses.

(c) That, after due consideration has been given to other criteria, any proposed vehicular access will be provided at the safest point of entry from the appropriate street.

(d) That the proposal will duly take into account any special geotechnical or similar constraint affecting the property.

(e) That the proposal will involve the minimum possible amount of grading, consistent with the attainment of other criteria set forth in this Section, and that an acceptable grading and/or erosion and sedimentation control plan, where required, has been or will be submitted.

(f) That, in conjunction with criterion (e) above, retaining walls of excessive height and/or length will be avoided. Projects involving retaining walls over eight feet in height and/or grading or removal of materials in excess of 500 cubic yards shall be automatically referred to the Director of City Planning for design review pursuant to Section 9300.

(g) That fire hydrants will be provided consistent with the City of Oakland Fire Prevention Bureau's requirements.

(h) That, where feasible, solar orientation and energy conservation techniques will be suitably incorporated in the overall design.

(i) That if the proposal involves developing dwelling units, on a property for which the Site Development Map of the North Oakland Hill Area Specific Plan depicts siting of those facilities, the provisions of Section 6608 will be met.

(j) That if the proposal involves creating driveway access to Grizzly Peak Boulevard, Skyline Boulevard, Tunnel Road, or Shepherd Canyon Road, it will meet the same criteria as are specified in subdivisions (a) and (b) of Section 6557.

Section 6615 LIMITATIONS ON RESIDENTIAL DENSITY.

(a) Overall Density. The maximum overall number of Residential dwelling units within any development shall be whichever of the following is applicable and lowest:

1. The number of dwelling units implied by the applicable basic zone's minimum lot area requirement, and defined in the same manner as prescribed in subsection (a) and the first three sentences of subsection (b) of Section 7813.

2. In the case of those properties for which the Site Development Map of the North Oakland Hill Area Specific Plan depicts siting of dwelling units, the number of dwelling units indicated by that map.

3. In the case of those properties where dwelling units are not shown on the Site Development Map of the North Oakland Hill Area Specific Plan the lowest number of dwelling units derived from:

a. Dividing the street frontage of the property by the minimum lot width requirement in the respective residential zone; and

b. Counting the number of legal platted lots within the proposed development area; and

c. Analyzing the project under the site development review process to affirm or lower the maxium theoretical density pursuant to Sections 6602 and 6612.

One through three above shall not be deemed to preclude such additional secondary units in the S-11 Zone as may be approved in accordance with all the provisos listed in whichever of Sections 3265(b), 3365(b), or 3465(b) is pertinent.

(b) Number of Units Per Unsubdivided Lot. An unsubdivided lot may not have more dwelling units when subdivided than are permitted per lot by the applicable basic zone.

Section 6623 WAIVER OF CERTAIN REQUIREMENTS THROUGH SITE DEVELOPMENT REVIEW.

(a) Reduction of Yard Requirements. Upon approval pursuant to Sections 6602 and 6612, the sideyard may be varied within the following limits:

The side of a dwelling unit may be as close as six* feet to the side of an adjoining dwelling unit providing that its opposite sides are separated from the sides of other adjoining dwelling units by at least two times the sideyard normally required within that zone."

b. Regulations Supporting The S-11 Zone

1) Amend Section 7051 to read as follows:

"Section 7051 EXCEPTIONS TO STREET FRONTAGE REQUIREMENTS

Notwithstanding the requirements prescribed in the applicable individual ZONE REGULATIONS with respect to minimum frontage upon a street, a lot which does not meet such requirements may be created and developed in each of the following situations:

(a) If it has a frontage of not less than 25 feet upon an undedicated vehicular way, other than one similar in function to an alley or path, which has a right-of-way not less than 40 feet in width and which was shown on the sewer maps on file with the City Engineer on the effective date of the ZONING REGULATIONS.

(b) If it is served by a private access easement approved pursuant to the Real Estate Regulations.

(c) If it consists of a parcel of contiguous land which was on the effective date of the ZONING REGULATIONS, or of any subsequent rezoning or other amendment thereto which makes such parcel fail to meet such requirements, and continuously thereafter has been, of record in single or unified ownership separate from that of any abutting property, and if such parcel existed lawfully under the previous zoning controls.

(d) If it meets the same conditions as are prescribed in Section 7050 for lot area and width exceptions.

(e) With the exception of Subsection (b) above, Nnothing in this section shall exempt parcels in the S-11 Zone from any street frontage requirement."

---

* Distance between the units was increased from five feet to six feet to comply with proposed amendments to the Oakland Building Code (see Appendix B.4.a.).

2) Amend Table in Section 7511 OFF-STREET PARKING--RESIDENTIAL ACTIVITIES (R-10,R-20, and R-30 Zones only) to read as follows:

"Residential Facility Type	Zone	Requirement
One-Family Dwelling.	R-10,R-20,R-30.	Two spaces for each dwelling unit~~;~~ however, in the S-11 Zone, the requirement shall be one (1) space per bedroom with a minimum of two spaces per dwelling unit.
One-Family Dwelling with Secondary Unit.	R-10,R-20,R-30.-	One space for each secondary unit unless the lot already contains a total of at least three spaces~~;~~ however,in the S-11 Zone the requirement shall be one space for each bedroom in any secondary unit."

3) Amend Section 7543 to read as follows:

"Section 7543 TANDEM SPACES AND BERTHS.

(See illustration I-21) A vehicle shall not have to cross another loading berth, or a parking space, in order to gain access to any required loading berth. On any lot containing three or more required off-street parking spaces, or containing required spaces for two or more Residential living units, a vehicle shall not have to cross another parking space, or a loading berth, in order to gain access to a required parking space, except that:

(a) In any zone, tandem parking may be permitted for non-residential activities upon the granting of a conditional use permit pursuant to the CONDITIONAL USE PERMIT PROCEDURE at Section 9200 and upon determination that such proposal conforms to either or both of the following use permit criteria:

~~(a)~~ 1. That a full-time parking attendant supervises the parking arrangements at all times when the activities served are in active operation.

~~(b)~~ 2. That there are a total of 10 or fewer parking spaces on a lot, or within a separate parking area or areas on a lot, which spaces are provided solely for employees.

(b) In the S-11 Zone, with the provision of three (3) or more required parking spaces for a given dwelling unit, at least fifty percent of the vehicles shall not have to cross another parking space in order to gain access to a required parking space."

4) Amend Section 9201 as follows:

"Section 9201 DEFINITION OF MAJOR AND MINOR CONDITIONAL USE PERMITS.

(a) Major Conditional Use Permit. A major conditional use permit is a conditional use permit which involves any of the following purposes:

1. Any proposal which involves more than one acre of land area.

2. Any adult entertainment activity, massage service activity, Residential Care or Extensive Impact Civic Activity, Convenience Market, Fast-Food Restaurant, Group Assembly, Automotive Servicing, Automotive Repair and Cleaning, or Undertaking Service Commercial Activity, Heavy Manufacturing Activity, or Mining and Quarrying Extractive Activity, except where the proposal involves only accessory parking, the resumption of a discontinued nonconforming activity, or an addition to an existing activity which does not increase the existing floor area by more than 20 percent.

3. Any Alcoholic Beverage Sales Commercial Activity, or sale of alcoholic beverages at any full-service restaurant in a location described by Section 7023(b), except where the proposal involves only accessory parking or an addition to an existing activity which does not increase the existing floor area by more than 20 percent.

4. The provision of mechanical or electronic games in any case where the restrictions of Section 7023(c) apply, except where the proposal involves only accessory parking, the resumption of a discontinued nonconforming activity, or an addition to an existing operation which does not increase the existing floor area devoted to such games by more than 20 percent.

5. Any pawnbroking, poolroom, or secondhand merchandise activity which is located in the C-55 Zone, except where the proposal involves only accessory parking, the resumption of a discontinued nonconforming activity, or an addition to an existing activity which does not increase the existing floor area by more than 20 percent.

6. An increase in the number of living units on a lot to a total of two in the R-10, R-20, R-30, or R-35 Zone, three or more in the R-40 Zone, or seven or more in the R-50, R-60, R-70, R-80, or R-90 Zone~~,~~ except in the S-11 Zone as defined pursuant to Section 9303a.

7. Any Commercial or Manufacturing Activity, or portion thereof, which is located in any residential zone and occupies more than 1,500 square feet of floor area, except where the proposal involves only the resumption of a discontinued nonconforming activity.

8. An activity or off-street parking or loading area which is located at ground level within 20 feet of a street line or street facade of a building in the C-31 or S-8 Zone, or an activity or off-street parking located at ground level in the C-27 or S-9 Zone, except where the proposal involves only the resumption of a discontinued nonconforming activity.

9. Any demolition of a facility containing, or intended to contain, rooming units or any conversion of a living unit from its present or last previous use by a Permanent Residential Activity, a Semi-Transient Residential Activity, or a Transient Habitation Commercial Activity to its use by a nonresidential activity other than Transient Habitation Commercial in any nonresidential zone.

10. Any development which is located in the R-80, R-90, C-51, C-55, or S-2 Zone and involves more than 100,000 square feet of new floor area, or a new building or portion thereof of more than 120 feet in height.

11. Any General Food Sales Commercial Activity located in the C-27, C-31, S-8 or S-9 Zone.

12. Any Sidewalk Cafe.

13. Off-street parking facilities in the C-40, C-51, C-52, and S-2 Zones serving 50 or more vehicles.

14. Any proposal which involves constructing a private access easement where land is subject to the provisions of the North Oakland Hill Area Specific Plan."

5) Amend Section 6557 to read as follows:

"Section 6557 RESTRICTION ON DRIVEWAY ACCESS.

No driveway shall have access to Grizzly Peak Boulevard, Skyline Boulevard, Tunnel Road, or Shepherd Canyon Road, except upon the granting of a conditional use permit pursuant to the CONDITIONAL USE PERMIT PROCEDURE at Section 9200 and upon determination:

(a) That vehicular access cannot reasonably be provided from a different street or other way; and

(b) That every reasonable effort has been made to share means of vehicular access with abutting properties.

However, a conditional use permit is not required in cases where design review approval authorizing the driveway access has been granted pursuant to Sections 6602 and 6612."

6) Amend Section 9203 to read as follows:

"Section 9203 PROCEDURE FOR CONSIDERATION.

(a) Major Conditional Use Permits. An application for a major conditional use permit shall be considered by the City Planning Commission. A public hearing shall be held on each such application. Notice of such public hearing shall be given by posting at least five notices thereof in the vicinity of the property involved in the petition and by written notice to owners of record of all real property involved in the petition and by written notice to owners of record of all real property immediately adjacent as such owners are shown on the records of the Alameda County Assessor's Office, at least five days prior to the date of the hearing. The Commission shall determine whether the proposal conforms to the general use permit criteria set forth in Section 9204 and to other applicable use permit criteria, and may grant or deny the application for the proposed conditional use permit or require such changes or impose such reasonable conditions of approval as are in its judgment necessary to ensure conformity to said criteria. The determination of the Commission shall become final 10 days after the date of decision unless appealed to the City Council in accordance with Section 9206.

(b) Minor Conditional Use Permits. An application for a minor conditional use permit shall be considered by the Director of City Planning. At his discretion, except in the S-11 Zone, the Director may give such notice as is deemed appropriate to adjacnet property owners or other affected parties, and a public hearing may be held. In the S-11 Zone, notice shall be given (a) by posting at least five notices thereof in the vicinity of the property involved in the petition; (b) by written notice to owners of record of all real property immediately adjacent as such owners are shown on the records of the Alameda County Assessor's Office; and (c) by notification in a newspaper of general circulation. The Director shall determine whether the proposal conforms to the general use permit criteria set forth in Section 9204 and to other applicable use permit criteria, and may grant or deny the application for the conditional use permit or require such changes in the proposed use or impose such reasonable conditions of approval as are in his judgment necessary to ensure conformity to said criteria. The determination of the Director of City Planning shall become final 10 calendar days after the date of decision unless appealed to the City Planning Commission in accordance with Section 9205. In the event the last date of appeal falls on a weekend or holiday when City offices are closed the next date such offices are open for business shall be the last date of appeal.

(c) Period of Consideration. Should a decision not be rendered pursuant to subsections (a) or (b) within 60 days after filing, the application shall be deemed approved except when, pursuant to the California Environmental Quality Act, an environmental document is required prior to decision, in which case should a decision not be rendered within 60 days after final action on the environmental document the application shall be deemed approved. In any case, however, the date by which a decision must be rendered

may be extended by agreement between the Director of City Planning or the City Planning Commission and the applicant.

7) Amend Section 9303(a) of the Oakland Zoning Regulations to read as follows:

(a) Proposals in General Design Review Zones and Miscellaneous Cases -- Decisions Ultimately Appealable to City Council. ~~This procedure~~ The following procedures shall apply if design review is required under any provision of the ZONING REGULATIONS other than, or in addition to, Section 3752, 3802, 3852, or 3902:

(1) Except for proposals involving more than two units in the S-11 Zone, an application for design review shall be considered by the Director of City Planning . However, the Director may, at his discretion, refer the application to the City Planning Commission rather than acting on it himself. At his or its discretion, the Director or the Commission, as the case may be, may give such notice as is deemed appropriate to adjacent property owners or other interested parties; and a public hearing may be held by the Director or the Commission.

(2) Proposals involving more than two dwelling units in the S-11 Zone shall be considered by the City Planning Commission. The Director shall give notice to the owners of adjacent developed properties as well as such additional notice deemed appropriate to other adjacent owners or interested parties. A public hearing shall be held on each such application.

Notice of such public hearing under (1) and (2) above shall be given by posting at least five notices thereof in the vicinity of the property involved in the petition, and by written notice to owners of records of all real property immediately adjacent as such owners are shown on the records of the Alameda County Assessor's Office, at least five days prior to the date of the hearing, except that within the S-11 Zone notice shall be given at least 10 days prior to the date of the hearing. For projects in the S-11 Zone, written notice shall be given by registered mail to an officer of each homeowner's association that has registered on a mailing list maintained by the Director. Such registration shall be effective one calender year. It is the responsbility of each association to maintain a current name and address for such notification.

The Director or the Commission may seek the advice of outside design professionals. The Director or the Commission, as the case may be, shall determine whether the proposal conforms to the applicable design review criteria, and may approve or disapprove the proposal or require such

changes therein or impose such reasonable conditions of approval as are in the Director's or its judgment necessary to insure conformity to said criteria. A determination by the Director shall become final 10 days after the date of decision unless appealed to the City Planning Commission in accordance with Section 9305. In those cases which are referred to the Commission the decision of the Commission shall become final 10 days after the date of decision unless appealed to the City Council in accordance with Section 9306.

2. Oakland Municipal Code.

a. View Preservation Ordinance.

1) Amend Section 7-8.02 to add the following definition immediately after the definition of "View Claim":

"1). Protected View Corridor: The wedged-shaped view, afforded by a specific vantage point and designated on the Site Development Map of the North Oakland Hill Area Specific Plan."

2) Add Section 7-8.035 to read as follows:

"1).The planting of vegetation which will obstruct the view plane from the road within any protected view corridor is prohibited. Trees or vegetation which obstruct a protected view corridor shall be removed or altered to eliminate or minimize view obstruction in conjunction with development of said property per the Vegetation Management Prescriptions for the North Oakland Hill Area Specific Plan.

For parklands, preserves or other types of open spaces, obstructions of protected view corridors shall be eliminated or minimized in accordance with said management prescriptions."

b. Building Numbers

Amend Section 7-2.01 as follows:

"SECTION 7-2.01 BUILDING NUMBERS REQUIRED. At all primary entrances from public streets ~~of~~ within the City of Oakland, ~~to~~ building addresses shall be ~~numbered~~ displayed as hereinafter ~~in this Article~~ provided. The ~~number~~ address of each and every entrance shall be placed upon or immediately above the door or gate closing said entrance or adjacent to the fence or wall opening leading to an entrance. ~~Each figure~~ The numbers ~~of said numbers~~ of such address shall be at least two inches in height and of corresponding width; more over, such address shall be displayed in a manner so as to be clearly readable from the street both night and day.

The appropriate street number ~~of any entrance to any~~ shall be displayed as specified above ~~building shall be placed thereon~~ within ten days after the receipt by the owner, occupant, lessee, tenant, or subtenant of such building, of a notice from the Building Inspector of the number or numbers designated for such building; and all numbers other than the

number provided for in this Article for the respective entrances shall be removed from every building by the owners, occupants, lessees, tenants, or sub-tenants thereof within ten days from the service of said notice designating the appropriate numbers to be placed thereon. It shall be the duty of the Building Inspector to designate the respective numbers for buildings fronting on streets heretofore laid out or hereafter to be laid out or extended.

3. Oakland Fire Code

   a. Residential Sprinkler Systems

      Add Section 10.309(h) to read follows:

      "All new or reconstructed dwelling units subject to the North Oakland Hill Area Specific Plan shall be equipped with an approved automatic fire extinguishing system if they are situated beyond a four minute response time from the nearest fire station."

4. Oakland Building Code

   a. Add a new Subsection to 504--"Location on Property" to read as follows:

      "Buildings Subject to the North Oakland Hill Area Specific Plan.

      Buildings or building groups subject to the provisions of the North Oakland Hill Area Specific Plan shall be located at least 30 feet apart to minimize fire spread potential. This may be reduced to a minimum of six (6) feet for each building or group of buildings provided all exterior walls within thirty (30) feet of another building or group of buildings are one-hour fire resistive construction or equipped with an approved automatic fire extinguishing system. The distance shall be measured at right angles from the adjacent building. This provision shall not apply to walls at right angles to the adjacent building or group of buildings."

   b. Amend Paragraph 3, of Section 1710--"Projections" to read as follows:

      "Projections from walls or Type III, IV or V construction may be of noncombustible or combustible materials. Combustible exterior balconies, unenclosed roofs and floors, eaves and similar architectural appendages on structures subject to the provisions of the North Oakland Hill Area Specific Plan and located within thirty (30) feet of another building or group of buildings shall be one-hour fire-resistant construction or heavy timber construction conforming to Section 2106 or protected with an approved automatic fire extinguishing system."

   c. Add a new Subsection to 3802--"Automatic Fire Extinguishing System" to read as follows:

Group R Occupancies.

All new or reconstructed dwelling units as defined in and subject to the North Oakland Hill Area Specific Plan shall be equipped with an approved automatic fire extinguishing system if they are situated beyond a four-minute response time from the nearest fire station."

File No. ER 85-34
Ref. No. _____

City of Oakland
Oakland, California

DRAFT ENVIRONMENTAL IMPACT REPORT FOR:
North Oakland Hills Area Specific Plan
(Project Name)
California Environmental Quality Act (CEQA)

RELEASE OF REPORT FOR PUBLIC REVIEW

The City of Oakland is hereby releasing this draft Environmental Impact Report (EIR), finding it to be accurate and complete and ready for public review. Members of the public are invited to respond to the EIR. Comments should focus on the sufficiency of the EIR in discussing possible impacts on the environment, ways in which adverse effects might be minimized, and alternatives to the project in light of the EIR's purpose to provide useful and accurate information about such factors. Please address all comments to the Oakland City Planning Commission, 6th Floor, City Hall, 1 City Hall Plaza, Oakland, California, 94612. Comments should be received no later than August 26, 1985.

☒ The City Planning Commission will conduct a public hearing on the draft EIR on August 14,1985 at 1:30 in Room 115, City Hall.

☐ After all comments are received, a final EIR will be prepared and considered for acceptance by the City Planning Commission on _____ at _____ in Room 115, City Hall.

☒ The draft EIR is attached.

☐ The draft EIR is available at the City Planning Department.

If you have any questions, please telephone the City Planning Department at 273- 3941. Ask for Elois Thornton, Assistant Planner.

Norman J. Lind

NORMAN J. LIND
Director of City Planning

DATE: July 18, 1985

File No. ER 85-34
Ref. No.

City of Oakland
Oakland, California

DRAFT ENVIRONMENTAL IMPACT REPORT FOR:
North Oakland Hills Area Specific Plan
(Project name)
California Environmental Quality Act (CEQA)

SUMMARY

A. GENERAL INFORMATION

Project Title North Oakland Hills Area Specific Plan

Location North Oakland Hills Area

Project Sponsor Oakland City Planning Department

Address 1 City Hall Plaza, Oakland, CA 94612

B. PROJECT DESCRIPTION: The "project" is a specific area plan for the North Oakland Hill Area aimed at regulating the future residential development which will occur following the provision of water service by East Bay Municipal Utilities District.

C. SUMMARY OF ENVIRONMENTAL CONSEQUENCES OF THE PROJECT:

The expected consequences of the project include: (1) regulation of housing density in the plan area; (2) preservation of vegetation and views; (3) decrease in erosion and siltation damage to the environment; (4) an increase in fire safety; (5) reduced parking and traffic hazards; and (6) the creation of guidelines for the installation of public sewers.

D. POSSIBLE MITIGATION MEASURES TO MINIMIZE ANY ADVERSE EFFECTS OF THE PROJECT: The plan includes measures to mitigate the potential impacts of development on land use, circulation, scenic views, erosion and siltation, fire hazards, traffic safety, infrastructure, public services, and the long-term environmental quality of the area. The measures include: (a) Site Development Map; (b) Vegetation Management Prescriptions; (c) S-11 Site Development Review Combining Zone; (d) Fire Sprinkler Systems; (e) New Parking Requirements; (f) Sewer Extension Guide, and (g) Improvement Guide.

E. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED:

See Chapter V

F. PUBLIC AGENCIES HAVING JURISDICTION BY LAW OVER THE PROJECT:

City of Oakland

G. PRELIMINARY DRAFT EIR PREPARED BY: Oakland City Planning Department
One City Hall Plaza
Oakland, CA 94612

DATE COMPLETED:

July 1985

Report Supervisor: Franklin Ehrhardt

TABLE OF CONTENTS

	Page
PREFACE	109
I. SUMMARY	109
II. DESCRIPTION OF PROJECT	110
III. ENVIRONMENTAL SETTING	110-116
A. Local Environment	110-114
1. Topography	110
2. Scenic Views	111
3. Biotic Resources	111
4. Geology: Soils, Land Stability, and Seismic Activity	111
5. Hydrology and Drainage	112
6. Fire Safety	112
7. Transportation: Access, Circulation, and Traffic Safety	113
8. Sewer Service	113
9. Utilities and Other Public Services	114
10. Noise	114
11. Air Quality	114
B. Environmental Character of the Region	114
C. Relationship Between Project and Applicable General and Regional Plans	115-116
1. Oakland Comprehensive Plan	115
2. Zoning Ordinances	116
3. Regional Plans	116
IV. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION	116-125
A. Significant Environmental Effects	116-117
B. Adverse Impacts of Development Which Cannot Be Avoided And Mitigation Measures Proposed by the Project	117-123
1. Scenic Views	117
2. Biotic Resources	118
3. Ground Stability, Erosion, and Sedimentation	118
4. Fire Safety	119
5. Circulation, Traffic Safety, and Public Transit	119
6. Sewer Service	110
7. Solid Waste Disposal	121
8. Police Protection	121
9. Schools	121
10. Fiscal Impacts	122
11. Noise	122
12. Air Quality	123

	Page
C. Alternatives to the Proposal	123-124
1. No Project	123
2. No Development	124
3. A More Restrictive Plan	124
4. A Less Restrictive Plan	124
D. Relationship Between Local Short-Term and Long-Term Productivity of the Environment	124-125
E. Significant Irreversible Environmental Changes	125
F. Growth Inducing Impact of the Proposal	125
V. AGENCIES, ORGANIZATIONS AND INDIVIDUALS CONSULTED	126-129
1. City of Oakland	126
2. Public Agencies	126
3. Others	126
VI. DISTRIBUTION LIST	127-129

ENVIRONMENTAL IMPACT REPORT FOR THE NORTH OAKLAND HILL AREA SPECIFIC PLAN

Preface

The California Environmental Quality Act of 1970 (CEQA), as amended, requires an environmental impact report (EIR) for specific area plans as well as elements of a general plan. Because the environmental effects of a general or area plan cannot in many cases be predicted as accurately as those of a specific construction project, CEQA guidelines permit the EIR on a plan element to be more general in nature; however, the North Oakland Hill Area Specific Plan does deal with project level issues both in a general way and explicitly through the S-11 site review process.

Since the EIR on a general plan element or area plan may be combined with the plan document, this has been done. The North Oakland Hill Area Specific Plan is intended to serve as its own draft EIR; this has been accomplished by using this appendix to relate the various sections of the plan to the topics listed in the CEQA guidelines.

I. SUMMARY

The "project", the North Oakland Hill Area Specific Plan, establishes measures for addressing the effects of both past unregulated development and future residential development of privately owned land in the designated area.

Large portions of the North Oakland Hill Area were subdivided previous to any effective subdivision controls by the City. These subdivisions and scattered developed lots exhibit an almost total lack of basic public improvements and utilities such as roads, curbs, gutters, sidewalks, sewers or storm drains.

In addition, now that EBMUD has agreed to provide water service to the area from its facilities, future development of the area is certain to occur--with or without new regulations from the City of Oakland--as a result of pent-up demand for additional residential construction. The proposed plan sets guidelines and establishes new regulations for the orderly development of these parcels in order to preserve existing land use patterns, scenic beauty, and unique environmental characteristics of the region, as well as insures the development of necessary street and sewer system improvements to service the area.

Certain provisions of the "project", i.e., the North Oakland Hill Area Specific Plan, are aimed at mitigating development-related problems not currently covered by city regulations, such as those related to traffic safety. The most significant effect of the "project" will be to ensure that future development follows those new City policies set forth in Chapter IV, as well as the existing policies in the Oakland Comprehensive Plan and specific regulations which apply to development in the hill area.*

---

*Pertinent regulations include the Site Development Review Combining Zone regulations, the Erosion and Sedimentation Ordinance, and the Grading Ordinance.

The proposed specific plan addresses the issues identified by the staff and the public, relating to density, scenic views, erosion and siltation, fire hazards, traffic safety, and infrastructure needs in the North Oakland Hill Area, issues that would not be addressed under current regulations.

The proposed specific plan seeks to mitigate the impact of future development through specific measures including Vegetation Management Prescriptions, a street improvement program, a Sewer Extension Guide, S-11 Site Development Review Combining Zone, fire safety requirements, and provisions for future road improvements.

The potential impacts of development within the North Oakland Hill Area are addressed through a series of mitigation measures proposed in Chapter III.

II. DESCRIPTION OF PROJECT

The "project" is a proposed specific plan for the North Oakland Hill Area, encompassing the area shown by Map A (see Chapter I, Section C, "Plan Area Location").

The objectives of the project are to regulate future development in the North Oakland Hill Area, as well as correct planning deficiencies from past development that has occurred in the area. The plan addresses the issues of circulation, housing density, open space, conservation, safety scenic highways, and the fiscal impacts of future development in the North Oakland Hill Area.

The objectives of the project are discussed more fully in Chapter I, Section B, "Purpose of Plan". Chapter II outlines existing conditions in the area, indicates potential impacts of development, and identifies relevant City policies and issues which currently guide the Plan's mitigation of these impacts. Chapter III describes the mitigating measures, while Chapter IV summarizes the policies and actions to be carried out.

III. ENVIRONMENTAL SETTING

A. Local Environment

A detailed discussion of the existing conditions in the immediate area is presented in Chapter II of the proposed plan. These characteristics are listed below:

1. Topography

The plan area is located primarily on the west-facing slopes of the North Oakland Hills below the ridgeline which separates Alameda and Contra Costa Counties. The elevation of the land ranges from 900 to 1,475 feet, with the majority of the area lying within the 1,250 to 1,450 EBMUD pressure zone. The land is very steep, with a substantial amount of the area with slopes as steep as 70 percent; most of the slopes in the area exceed 30 percent.

2. Scenic Views

Numerous vista points within the North Oakland Hill Area provide spectacular westward views of the San Francisco Bay, as well as views eastward toward the hills of Contra Costa County and Mount Diablo. In addition, the heavily forested and undeveloped state of much of this area affords beautiful views of the Oakland Hills for pedestrians, bikers, and drivers from below the plan area.

Three major thoroughfares within the project area are designated as scenic routes: Skyline Boulevard, Grizzly Peak Boulevard, and Tunnel Road.

3. Biotic Resources

The environment of the North Oakland Hills displays a number of vegetative habitats. Eucalyptus stands cover much of the upper slopes, along with scattered stands Monterey pines and cypresses. Native tree species include coastal live oaks, California bays, and madrones, most commonly found growing within riparian woodlands. Central coast scrub species cover the open slopes, including poison oak, California blackberry bush, monkey flower, coffeeberry, coyote brush, scotch broom, and native manzanita.

The variety of vegetative habitats in the North Oakland Hill Area supports a broad range of wildlife, especially various resident and migratory bird species. Common mammals include brush rabbits, striped skunk, oppossums, western gray squirrels, and raccoons.

4. Geology: Soils, Land Stability, and Seismic Activity

Soils in the North Oakland Hill Area are mixtures of thin bedded chert, soft sandstone, shale, claystone, and siltstone. These soil types derive from the three basic geologic formations within the area: Claremont Shale, Sobrante Formation, and Orinda Formation. (Chapter II, Section C describes the characteristics of these geologic formations).

Soil depths range from 3 to 4 inches on Claremont Shale/Chert regions to several feet thick above Sobrante formations. Both formations exhibit good slope stability in general, but show a tendency to ravel and slump on east slopes. Weathered units within the Orinda Formation are much weaker and susceptible to poor stability.

For the most part, ground stability is determined by the type of rocks, degree of jointing and fracturing, and level of precipitation or underground water sources. Although the steep land slopes suggest unstable building foundations, it has been found that the steeper slopes are formed in the more resistant bedrock units, and thus may be more stable than other slopes.

The North Oakland Hill Area is still quite susceptible to land- and mud-slides. Map G identifies the location of the 32 reported slides within the plan area. Such slides endanger lives and cause irreparable damage to property, as well as the deterioration of streets and driveways, the collapse of retaining walls, and the weakening of foundations.

Like most areas within the San Francisco Bay Region, the plan area experiences a significant degree of seismic activity. Although no known or suspected active faults lie beneath the North Oakland Hills Area, the Hayward Fault generally follows the alignment of nearby Warren Freeway (State Highway Route 13).

5. Hydrology and Drainage

The drainage pattern of the North Oakland Hill Area follows a series of cross ridges which flow down west-facing slopes into Oakland and east-facing slopes into Contra Costa County. Since most of the land is steep with shallow soil depths and low to medium infiltrative capacity, heavy rains cause high flow velocities in natural water courses, resulting in natural erosion problems.

The concentrated run-off from existing development in the Hill Area causes sedimentation problems for drainage basins, especially Lake Temescal. In fact, inflow measurements at the San Pablo Reservoir in Contra Costa County indicated that run-off from adjacent urbanized areas there is as much as twice the natural rate.* Until recently, Oakland's erosion and sedimentation control practices too were inadequate to prevent significant siltation of Lake Temescal; the sedimentation detention center upstream on Temescal Creek traps less than one-half of incoming sediment.

6. Fire Safety

A large part of the North Oakland Hill Area lies outside the radius of a standard four-minute response from the nearest fire station, i.e, at Snake, Colton and Skyline (see Map H), which presents a significant safety problem, especially in the dry season in the summer and early fall months. The steep terrain increases the difficulty of fast and effective fire-fighting. Fires rapidly spread upslope due to highly flammable vegetation and strong easterly winds during the dry season.

In addition to naturally-occurring fires, the potential for accidental fires has increased as a result of urbanization in the area. With increasing urbanization, plant species such as eucalyptus (see Map J) and highly flammable ornamental vegetation have been introduced to the area. Eucalyptus trees pose a fire hazard due to their rapid growth, volatile oils, and ability to

*Carpenter, Montclair Heights Environmental Inventory and Development Plan Analysis, February 1985, p. 28.

root from a stump.

7. Transportation: Access, Circulation, and Traffic Safety

The following roads provide access to the North Oakland Hill Area from Warren Freeway (State Highway Route 13): Tunnel Road, Broadway Terrace, Thornhill Road, and Shepard Canyon Road (from north to south). Motorists gain access from the ridgeline via Grizzly Peak and Skyline Boulevards. Local access streets include Colton, Snake, Manzanita, Elverton, and a number of other narrow, winding roads.

In fact, most roads in steep sections of the North Oakland Hill Area are significantly more narrow than the City's minimum standard of 30-foot street widths. In addition to these narrow, winding streets, the presence of parked cars along the roads further exacerbates traffic safety problems in the area.

Current residents in the North Oakland Hill Area overwhelmingly depend on private vehicles for transportation. Public transit to and from the North Oakland Hill Area remains very limited. Only two bus lines from Alameda/Contra Costa County (AC) Transit provide service to any portion of the area, both at points which cross the area's boundary. To the southwest, Route Number 18 stops at the intersection of Arrowhead and Colton and proceeds west along Saroni before heading down Heartwood to Snake Road. This route operates 7 days a week, with service from 5:00 a.m. to 1:00 a.m. AC Transit Route Number 59C stops at the northwestern edge of the area on Upper Broadway Terrace just below Skyline Boulevard and continues down to Mountain Boulevard. This bus line operates weekdays only, from 7:00 a.m. to 6:00 p.m. Route Number 59, which stops just outside the North Oakland Hill Area at Thornhill Drive and Woodhaven Road provides daily service from 6:00 a.m. to 8:00 p.m. The nearest Bart stations are located in Rockridge, west of the Hill Area, and Orinda to the east.

8. Sewer Service

No comprehensive sewer system presently services the North Oakland Hill Area. For the most part, existing urbanization has been serviced by lines extending off sewer mains located to the south of the area, with piecemeal extensions northward as development occurs. The individual developer is responsible for the costs of extending the sewer lines to each proposed lot.

In addition, a number of lots are serviced by on-site sewage disposal systems (see Map I, Sewer Extension Guide). Due to the steep slopes and clay soils of the hill area, water from these septic tanks may seep to the surface downhill of the source before it is entirely absorbed into the ground, resulting in downslope health hazards. In October of 1984, following recommendations from the City's Public Works Department, the Oakland City Council banned the installation of all new septic tanks in the hills. All new homes built in the North Oakland

Hill Area must be connected to city sewer lines, while existing homes with septic tanks must plan for future connection to city sewer lines when their septic systems fail.

9. Utilities and Other Public Services

Like the rest of the City of Oakland, the North Hill Area is serviced by private companies for residential utility and garbage collection needs. Pacific Gas and Electric provide gas and electricity, while Pacific Bell provides telephone service. Oakland Scavenger Company serves as the City's trash collection agency and disposes of solid waste at its Altamont landfill in Southern Alameda County.

Police protection for the North Oakland Hill Area is provided by the police force that serves City Beat Number 14, which currently has a relatively low incidence of crime.

The project area is served by schools within the Oakland Public School System, including Kaiser and Thornhill Elementary, Montera Junior High, and Skyline High Schools. According to 1980 enrollment records, the capacity of each of these schools is substantially greater than the number of students enrolled.

Due to its present relatively undeveloped nature, the North Oakland Hill Area does not contain various other community services, such as libraries, community centers, or neighborhood parks. The nearest public library is located in the Montclair District. The bordering Robert Sibley Regional Park and Huckleberry Botanic Preserve provide a large expanse of wooded trails, creeks, forested hillsides and grassland for passive recreation activities which preserve the natural environment.

10. Noise

The primary noise source in the North Oakland Hill Area at present is vehicular traffic on Highway 24. Due to the relatively undeveloped nature of the area, only minor noise disturbances originate from traffic on Skyline Boulevard, Grizzly Peak Boulevard, and other major thoroughfares.

11. Air Quality

The air quality of the North Oakland Hill Area at the present time is relatively good, owing to the area's sparse development and low level of traffic compared to the rest of the City. In addition, the natural features of the area, such as eucalyptus stands and riparian woodlands, serve as a natural buffer to ambient air pollution. However, during the hot summer months, pollution from Bay Area flatlands rises eastward against the Berkeley and Oakland Hills.

B. Environmental Character of the Region

The hills and ridges of the North Oakland Hill Area make up part of the larger system of Coast Range mountain ridges that run north-south along the eastern border of Oakland and other densely-populated East Bay cities.

Large portions of the Oakland and Berkeley Hills have been incorporated into the East Bay Regional Park District (EBRPD) system of parks and natural wildlife centers, providing essential natural resources to inhabitants from the entire Bay Area. The North Oakland Hill Area itself borders on two parks within that system--Robert Sibley Park to the north and Huckleberry Botanic Preserve to the southeast--and includes a number of other parcels owned by EBRPD.

The North Oakland Hill Area makes up part of Oakland's open space system, which is further described in the Open Space, Conservation and Recreation Element (OSCAR) of the Oakland Comprehensive Plan. Additional land use policies and pertinent ordinances governing development in the Hills will be discussed in the following section.

C. Relationship Between Project and Applicable General and Regional Plans

1. Oakland Comprehensive Plan

The "project" complements specific policies designed to implement the goals of conservation and compatible development within the Oakland Comprehensive Plan. In particular, the project permits development only where compatible with the preservation of scenic views, existing residential neighborhoods and unique environmental characteristics of the North Oakland Hill Area.

The North Oakland Hill Area Specific Plan, or "project", is in accord with the following policies identified by the Oakland Comprehensive Plan to regulate hillside development:

> In all development and construction in the Hills...special efforts should be made to conserve open space and natural resources. Every development which occurs here on a site of substantial size should reserve the most appropriate portions as permanent open space, and these should generally add up to a significant proportion of the site. (55637)
>
> Development on slopes of 15 to 30 percent should generally be designed with special attention to controlling run-off and erosion and to preserving the natural topography as much as possible. Cuts and fills and the removal of desirable vegetation should be minimized. (55637)
>
> Development involving significant alteration of natural land forms or surface conditions should generally be discouraged on slopes greater than 30 percent. Where develop-

ment does occur here, graded and natural slopes should be planted to hold easily eroded soil in place and cover unsightly scars. (55637, from Oakland Policy Plan, Land Use, H-2).

2. Zoning Ordinances

All land within the North Oakland Hill Area is zoned for residential use ranging from the R-10 (one unit per 25,000 square feet) to the R-30 zone (one unit per 5,000 square feet). In addition, a series of lots bordering Skyline and Grizzly Peak Boulevards and Tunnel Road are part of the S-10 (Scenic Combining Route) zone which require design review and downslope height restrictions on all proposed construction to preserve vistas and unique topographic features.

In keeping with the principles of the City's Comprehensive Plan and zoning measures, the project maintains current zone designations but changes the method by which density is calculated for future development and adds a special combining zone. In this way, new development will take place only in those locations which will ensure adequate street access and the preservation of open space, scenic views, and hillside topography. (See Chapter III, Specific Mitigation Measures, Section C, B(3)--S-11 Zone and C(1)--Density.)

The project complements other pertinent zoning measures for hillside development, including the Grading Ordinance and the Erosion and Sedimentation Control Ordinance.

3. Regional Plans

The North Oakland Hill Area Plan must be viewed within the context of a number of regional plans which envision comprehensive and sound long-term development planning for the San Francisco Bay Area. These plans include the following:

1. ABAG, Regional Plan: 1970-1990;
2. ABAG, Regional Housing Element, (1983);
3. ABAG, Regional Open Space Plan, Phase II;
4. EBRPD, Master Plan;
5. MTC, Regional Transportation Plan.

IV. ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION

A. Significant Environmental Effects

The reclassification of EBMUD's water facilities from emergency service to standard service will permanently alter the local environment by providing the water service necessary to develop privately-owned land. The subsequent change from open space to residential land use may significantly effect the visual and environmental quality of the area, with impacts on both natural and urban resources.

The entire North Oakland Hill Area Specific Plan, or "project", is an attempt to mitigate the impacts that are almost certain to occur with development of land that was previously unserviced by EBMUD's water facilities, impacts that would not be possible to mitigate under existing regulations and procedures. The effects of this "proposed action" follow from the implementation of those measures in Chapter III, "Mitigation Measures".

The guidelines within the Vegetation Management Prescriptions and Site Development Map serve to accommodate housing development at densities suitable to topographic constraints while preserving the natural assets of the hillsides, including numerous scenic views both to and from the area's ridgelines. The Vegetation Management Prescriptions provide recommendations for creating, preservingand enhancing view corridors and integrating housing construction with existing natural resources. The Site Development Map provides site-specific locational guidelines for parcels within the plan area. For all unsubdivided parcels it addresses building and driveway siting, as well as screening mechanisms, and view corridor protection and enhancement applicable to other parcels.

The text of the proposed North Oakland Hill Area Specific Plan identifies additional impacts of hillside development on erosion and siltation, fire safety, traffic safety, and sewer services, and proposes specific measures to mitigate negative impacts. These impacts and mitigation measures are summarized in Chapter VI. The following discussion will address unavoidable significant environmental effects of development in the area, as well as mitigation measures proposed by the North Oakland Hill Area Plan.

B. Adverse Impacts of Development Which Cannot Be Avoided and Mitigation Measures Proposed by the Project

1. Scenic Views

New construction in the North Oakland Hill Area will have significant negative impacts on views both from and of the Oakland Hills. The removal of trees and native vegetation preceding construction would substantially impact views of the Hill Area, while the new structures themselves will block panoramic views from various streets in the plan area.

The application of the S-10 Scenic Route Combining zone to Skyline and Grizzly Peak Boulevards and Tunnel Road will help preserve existing views on these streets. The S-10 zone requirements restrict the height above the roadway and within the view plane. The S-11 Site Development Review Combining Zone regulates the location of structures anywhere within the specific plan area, thus further minimizing the impact on views. In addition, proper landscaping that utilizes natural screening and appropriate design of new vegetation will minimize the negative visual impact of new construction as much as possible. (See

Vegetation Management Prescriptions.)

However, the S-10 controls apply to only three streets within the plan area, and even with the S-11 regulations all negative impacts of development on scenic views cannot be eliminated, even through proper siting and landscaping practices. In particular, adjacent natural preserves such as Robert Sibley Regional Park and Huckleberry Botanic Preserve will likely be negatively effected by the visual impacts of development in the area.

2. Biotic Resources

Residential construction will result in both temporary and permanent loss of vegetation and wildlife due to major ground disturbances from site preparing, utilities, driveways, and access roads. Some vegetation losses will be off-set by natural increases in other species; for example, the removal of eucalyptus trees will increase the presence of coastal scrub species over time.

In addition to the loss of particular species of vegetation, construction activities will permanently alter wildlife habitats. Changes in the understory resulting from the removal of trees will change the availability of food for certain species who depend on such undergrowth. Given the proximity of regional parks and preserves, it is likely that the impacts on wildlife will be displacement, rather than elimination, of those species whose habitats will be significantly altered.

Although the negative impacts on wildlife and vegetative habitats can be minimized by following the guidelines established by the Vegetation Management Prescriptions and Site Development Map, some displacement of wildlife and loss of vegetation will inevitably result from new construction in the North Oakland Hill Area.

3. Ground Stability, Erosion, and Sedimentation

Given the area's general susceptibility to land- and mud-slides, adequate measures to prevent development on unstable land formations must be taken. The proposed plan requires the inspection of a soils engineer prior to the development of each parcel of land within the area. The land type of each individual property will be assessed, including rock type, degree of jointing and fracturing, and moisture content of the land.

Future development in the North Oakland Hill Area could result in a substantial amount of additional erosion and sedimentation of the existing natural drainage system. Grading from construction disturbs natural slopes and allows exposed soils to be washed away by rainfall. In particular, new construction could exacerbate the current siltation of Lake

Temescal, as well as clog local culverts and inhibit downstream channel flows.

Chapter II, Section C ("Erosion and Siltation") of the proposed plan shows the possible increase in annual sedimentation load for the various subwatersheds in the North Oakland Hill Area which will potentially result from future development. Chapter III, Section C(3) describes the mitigation measures proposed by the plan to minimize erosion and siltation.

In short, the requirements for soils reports, proper landscaping according to the Vegetation Management Prescriptions, and compliance with the provisions of the Grading and Erosion and Siltation Ordinances will serve to minimize site disturbance and reduce sedimentation loads within the project area. However, some additional erosion and siltation may inevitably result from future construction on hillsides within the North Oakland Hill Area.

4. Fire Safety

New residential development will significantly increase the potential for loss of life and damage to property from fire hazards in the North Oakland Hill Area, especially given the relatively poor accessibility of the area to fire-fighting stations. As previously mentioned, the introduction of flammable eucalyptus trees long ago and the more recent introduction of ornamental vegetation associated with increased urbanization exacerbates the hazards due to naturally-occurring fires. In part, additional residential development in the hills will probably reduce the actual danger of spreading wildfires, since a greater number of persons will be present to spot such fires before they get to the critical stage. Nevertheless, as Chapter II, Section D points out, the increase in the chance of domestic fires more than outweighs this advantage accruing from future development.

The mitigation measures proposed by the North Oakland Hill Area Specific Plan reduce potential fire hazards by mandating the installation of residential fire sprinkler systems in all new homes beyond a four-minute response from the nearest fire station. In addition, the proposed plan requires fire-safe construction practices in the design of these homes. Fire hazards from landscaping and ornamental vegetation introduced to the area will be mitigated through adherence to the fire prevention measures of the Vegetation Management Prescriptions. Difficulties in reaching and locating properties during fire or other emergencies will be reduced by requiring address identification of all homes in the area, as well as by widening the streets in certain places according to the new street paving widths for existing streets.

5. Circulation, Traffic Safety, and Public Transit

Given the narrow, substandard size and condition of many of

the roads in the North Oakland Hill Area, additional development will certainly exacerbate present traffic safety and circulation difficulties, both on arterial and local streets. According to the City's Traffic Engineering Department, a total of 12,000 vehicular trip ends would be generated daily under maximum development in the plan area. The negative impact on traffic safety and congestions would be felt most acutely at those five critical intersections identified in Chapter II, Section E.

The project identifies specific road segments where street widening is necessary to ensure traffic safety. However, widening all streets to meet city standards on a broad scale could be very difficult due to problems of land stability, as well as prove financially infeasible. Instead, the plan adopts a number of specific measures in Chapter III, Section C(6a) of the proposed plan that address potential circulation and safety hazards.

In the first place, the off-site street improvements will mitigate the negative impacts of increased traffic flow on the arterial streets outside the immediate plan area. This appendix identifies specific intersections and street segments which require improvements such as traffic lights and other safety improvements to accommodate a higher level of daily traffic.

To prevent obstruction from parked cars along narrow roads within the North Oakland Hill Area, the project calls for an increase in required off-street parking spaces for all new homes. Furthermore, street access from lots will be allowed only at those points identified on the Site Development Map or through the S-11 procedure. This will minimize both traffic hazards and, in some cases, developer costs, as current S-10 regulations require conditional use permits for each driveway onto scenic highways such as Grizzly Peak and Skyline Boulevards.

In all likelihood, future residents of the North Oakland Hill Area will rely on private transportation, given the inconvenience and scarce provision of public transit within the area. Due to AC Transit budget constraints, no expansion of service is envisioned for the Hill Area in the immediate future. Thus, one unavoidable impact of development that is not addressed by the project is the increase in vehicular traffic and consequent increase in congestion, noise, and pollution caused by a greater number of automobiles in the area. On the other hand, if demand for public transit in the North Oakland Hill Area increases significantly, AC Transit may be able to justify more service to the area in the future.

6. Sewer Service

According to the City's Office of Public Works, maximum development in the North Oakland Hill Area will increase the present wastewater flow by nearly 60,000 gallons per day. It has been determined that the existing downstream sewer mains

that service the area will not be adequate to support increased service loads.

Given the present pattern of decentralized lot ownership and the uneven pace of development of parcels in the North Oakland Hill Area, the expansion of sewer service will continue to be piecemeal and costly for each individual developer. The Sewer Extension Guide outlined in the project is aimed at reducing such costs and inconvenience. By directing and controlling the extension of sewer lines within the area, this guide will ensure that the least expensive and most convenient sewer system is built to accommodate future growth. (See Chapter III, Section C.6.b. and Map I for more details.)

7. Solid Waste Disposal

Development in the North Oakland Hill Area will increase the amount of solid waste for collection and disposal. Using an estimate of 2.5 pounds of solid waste per person per day* and a total of 1,831 persons from the maximum level of development, the maximum increase in solid waste generated would be 4,578 pounds of garbage per day. This is equivalent to approximately 821 tons of solid waste produced every year.

The financial impact of additional waste disposal service caused by new development in the North Oakland Hill Area will be absorbed by private user fees to the Oakland Scavenger Company. The unavoidable environmental impact of wastes disposed from new residential development will affect the County as a whole, as Bay Area landfills reach their capacity. The capacity of the Altamont landfill in southern Alameda County will be adequate for another 60 years.

8. Police Protection

New residential development in the North Oakland Hill Area will increase the area of the City's police beat which must be patrolled, resulting in some deterioration of police service for existing residents in the beat area. Since any deterioration in police protection is expected to be minimal, no mitigation measure has been proposed by the project to counter this impact.

9. Schools

Based on a maximum of 718 new units, the maximum number of new students from future development in the project area would not be likely to exceed 100-120 students (about 15% of the total population under the maximum development scenario). Existing schools within the Oakland Public School District can adequately accommodate this increased enrollment.

* Carpenter, Montclair Heights Environmental Inventory and Development Plan Analysis, February 1985, p. 53.

10. Fiscal Impacts

Increased residential development in the project area will have a number of fiscal impacts on the City of Oakland, both from the necessary expanded provision of public services and from the planning process itself.

Direct costs to the City will result from the need to expand public services such as police protection, fire protection, public works, and public schools (see Chapter II, Section D.2.a.(2) for the per capita costs for these public services). However, given the assumed value of new homes in the North Oakland Hill Area, and the substantial level of property taxes generated, the net fiscal impact of development on public services is positive, unless an attempt is made to operate a new fire station. Footnote #4 in Section D.2.a.(2) shows the difference between the expected revenue from property taxes and expected incremental costs from additional public services.

In addition, the City will incur costs from the implementation of the North Oakland Hill Area Specific Plan. These planning costs include the following:

- the cost of producing and administering the provisions of the Site Development Map and the Vegetation Management Prescriptions;
- street improvements for City-owned lots mandated by the Plan Line process;
- the Sewer Extension Guide which directs and controls the sewer line extensions necessary for orderly development;
- the cost of downstream improvements in the sewer system outside of the North Oakland Hill Area.

The project ensures that the net costs are paid by the beneficiaries of future development in the area through fees and assessments. The plan calls for the assessment of residents only when, and to the extent that improvements are needed, rather than a blanket district fee for costs to be incurred far in the future.

Funds from the existing sewer service charges will be used to cover the costs of removing downstream sewer constrictions affecting the plan area. Before construction begins, a development fee based on the number of units will be levied against developers to cover the costs of preparing the specific plan. The cost of preparing the Sewer Extension Guide is covered in the plan preparation costs. A zoning administration fee will cover the Site Development review process.

11. Noise

Additional development in the project area will increase noise levels from both housing construction and permanent traffic noise. Given the temporary nature of any increase in noise from new construction, no further mitigation measures are proposed.

In contrast, noise generated from increased traffic to and from the North Oakland Hill Area will have a more lasting impact on existing noise levels. The Traffic Engineering Department estimates that a total of 12,000 daily trip ends will occur under maximum development in the area. The additional traffic represents a 175% increase over the present 4,000 daily vehicular trip ends, and will likely generate a corresponding increase in the ambient noise level. Even this, though, is not a significant noise level.

12. Air Quality

Similar to noise levels, the air quality of the North Oakland Hill Area will be adversely affected by the increase in daily traffic caused by new residential development; however, this is not a significant level and no mitigation measures have been proposed within the project.

C. Alternatives to the Proposal

The following discussion illustrates the possible alternatives to the proposed North Oakland Hill Area Plan. Here it may be useful to keep in mind the distinction between the "project" and the new development predicted for the area. The impacts of new development in the North Oakland Hill Area caused by the extension of water service from EBMUD's facilities to privately-owned land will occur with or without the proposed plan. The "project" encompasses a set of actions designed to mitigate the impacts of impending development to the greatest extent possible and provide for adequate financial resources to cover the costs of expanded city services. The discussion below examines alternatives to this proposed plan, ranging from "no project" to a more stringent regulation of private development.

1. No Project

Without the proposed North Oakland Hill Area Specific Plan, new development will follow the relatively uncontrolled and unplanned pattern of existing development in the area. Single-family homes might be built without regard for the preservation of scenic views (if outside the S-10 Combining Zone), existing vegetation, and significant open space between houses. Given the steepness of many slopes in the area, downslope houses would most likely be built first along all streets. Existing density regulations would allow developers to build upon interior lots and thus increase the intensity of land use if they found it economically feasible. Without the new Site Development Review procedure a combination of overgrading and retaining walls might come into being as developers attempt to get the maximum

theoretical density permitted.

In the absence of the fire and traffic safety mitigation measures imposed by the proposed plan, new and existing residents in the North Oakland Hill Area would face a greater threat to life and property from fires and traffic accidents. The lack of any comprehensive plan to improve streets or extend sewer lines would result in piecemeal and inefficient improvements in such necessary infrastructure as roads and sewers.

In short, without any specific area plan for the North Oakland Hills, the adverse impacts of growth will be greater for both residents of the area and the City as a whole.

2. No Development

Of course, the environmental quality and scenic views of and from the area could best be preserved by preventing all future development in the North Oakland Hill Area. Given the limits of its police powers, any such prohibition on development would require the City to purchase an enormous quantity of privately-held land. Outside of those parcels recommended in the proposed plan for purchase by the East Bay Regional Park District, the City cannot hope to remove a substantial amount of land from private ownership. Given the City's obvious financial constraints, the "no development" alternative is infeasible from any practical point of view.

3. A More Restrictive Plan

Although a more restrictive plan would result in greater overall environmental protection, it would require development controls that may cause prohibitively expensive residential homes or infringe on property rights. Furthermore, such measures as lower density zoning would be impractical for the presently subdivided lands, given the scattered and irregular pattern of lot ownership. Lower density regulations could only be imposed on the relatively few large parcels of land, while the greater part of the North Oakland Hill Area is already divided into small, separately-owned lots.

4. A Less Restrictive Plan

A plan which incorporates only certain features of the proposed project would, of course, be better than no project, but would fail to provide the most effective and comprehensive strategy for limiting the impacts of development.

D. Relationship Between Local Short-Term and Long-Term Productivity of the Environment

The North Oakland Hill Area Plan seeks to retain long-term environmental assets while permitting controlled and orderly development in the area. Given the private ownership of the

majority of the land within the project area, as well as the infeasibility of alternative commercial and/or natural uses of the land in the future, it appears that low-level residential development in the Oakland Hills will not prove harmful to the long-term productivity of the land. Some unavoidable adverse environmental impacts will result from such development, such as the possible increase in erosion and sedimentation, noise levels, and traffic congestion, as well as the minor deterioration of air quality and some loss of wildlife habitats. The plan serves to minimize these adverse impacts in the long run.

Given the additional regulations imposed on developers by the plan, some degree of short-term convenience may be sacrificed for longer-term land use considerations. However, the proposed plan will also serve to reduce design and development uncertainty for developers. Furthermore, by serving as an environmental impact report in its own right, the North Oakland Hill Area Plan will save future developers the time and cost of preparing individual environmental reports for each subdivision or parcel of land.

E. Significant Irreversible Environmental Changes

Significant irreversible environmental impacts of development will be some loss of scenic views and open space, natural habitats, and sedimentation that will result from additional construction, as well as a permanent increase in ambient noise and air pollution from higher population densities in the area.

The proposed plan itself poses no significant negative irreversible impacts on the environment. The permanent changes in infrastructure mandated by the plan, such as street and sewer improvements, will not harm the environment, and will provide the basis for sound fiscal and physical planning. The regulations which govern building and driveway siting, landscaping, and erosion control will serve to lessen the environmental changes associated with residential development in the Hill Area.

F. Growth-Inducing Impact of the Proposal

As mentioned previously, the growth-inducing impact stems from the extension of water service to privately-owned land, not from the project outlined here.

However, in providing for the orderly and efficient development of the North Oakland Hill Area, the proposed plan may provide some mechanisms, such as infrastructural plans and assessment districts, by which the north hill area undergoes a more rapid and rational rate of urbanization than might otherwise have occurred.

V. AGENCIES ORGANIZATIONS AND INDIVIDUALS CONSULTED

1. City of Oakland

. Office of Parks and Recreation

V. Hap Smith,
Director

C.W. Weatherton,
Park Services Manager

. Office of Public Works

Terry Roberts, Director

John Soderling, Deputy Director

Vern Sullivan, Principal Civil Engineer
Engineering & Design Services
Ken Wong, Supervising Civil Engineer,
Storm & Sanitary Sewer Design

Warren Boyd, Supervising Civil Engineer
Ray Choy, Civil Engineering, Sewer Desi
Mike Granatt, Assistant Civil Engineer,
Storm & Sanitary Sewer Design
I. Jeeva,
Supervising Transportation Engineer
Michael Pickering,
City Transportation Engineer
Eugenie Thomson,
Transportation Engineer

.Fire Prevention Bureau

Paul F. Bailey,
Fire Marshal

James Art,
Fire Protection Engineer

. Oakland Fire Department

Don Matthews, Assistant Chief

2. Public Agencies

. East Bay Regional Parks District

Tom Lindenmeyer, Environmental Coordinator

. East Bay Municipal Utilities District

Jerome B. Gilbert,
General Manager

William W. McGowan, Jr.

3. Others

. Martin Carpenter Associates

Mac Carpenter

. University of California, School of Forestry

Lars Pierce, Intern

. Oakland Unified School District

Walt Lee, Administrative Assistant

. CALTRANS

Burch C. Bachtold, Regional Director

VI. DISTRIBUTION LIST

State

State Clearinghouse
1400 Tenth Street
Sacramento, California 95814

Executive Office
Regional Water Quality Control Board
1111 Jackson Street, Room 6040
Oakland, California 94607

County

Mr. William Fraley, Director
Alameda County Planning Department
399 Elmhurst Street
Hayward, California 94544

Roland Mayne, Executive Director
(Alameda County)
399 Elmhurst, Room 233
Hayward, California 94544

Anthony A. DeHaesus, Director
Contra Costa County Planning Director
P.O. Box 951
Martinez, California 94553

Dewey Mansfield, Executive Director
Local Agency Formation Commission
(Contra Costa County)
651 Pine Street, 8th Floor
Martinez, California 94553

Shinji Momono, Acting Engineering Manag
Alameda County Flood Control District
399 Elmhurst
Hayward, California 94544

Local

City of Alameda
City Hall
Alameda, California 94501

City of Piedmont
City Engineer
120 Vista Avenue
Piedmont, California 94611

City of Berkeley
City Hall
2134 Martin Luther King Jr. Way
Berkeley, California

City of Emeryville
2449 Powell Street
Emeryville, California 94608

Oakland City Staff

Norman Lind, Director
Oakland Planning Department

Franklin Ehrhardt
Oakland Planning Department

Alvin James, Assistant Director
Oakland Planning Department

Willie Yee, Jr.
Oakland Planning Department

Thomas Doctor
Oakland Planning Department

V. Hap Smith, Director
Office of Parks and Recreation

C.W. Weatherton, Park Services Manager
Office of Parks and Recreation

Paul F. Bailey, Fire Marshal
Fire Prevention Bureau

Anne Haden
City Attorney's Office

Terry Roberts, Director
Office of Public Works

John Soderling, Deputy Director
Office of Public Works

Vern Sullivan
Office of Public Works

Bill Algire
Office of Public Works: Erosion

Ken Wong
Office of Public Works; Sewers

Michael Pickering
Office of Public Works; Traffic Enginee

City Planning Commissioners

Ed Sue
Chairperson

Jose Antonio Arce
Vice Chairperson

Bruce Black

Lucille Gudger

Doug Jones

Sam Lazar

Elijah Turner

Interested Groups and Persons

ABAG
Metro Center
P.O. Box 2050
Oakland, CA 94603

Grizzly Peak Neighborhood Association
Attention: Dolores Bermak
5999 Grizzly Peak Boulevard
Oakland, CA 94611

Merriewood Forest Park Homeowners Association
Attention: Gerald Rose
5724 Thornhill Drive
Oakland, CA 94611

Skyline Boulevard Neighborhood Association
c/o Nadine & Paul Rhodes
6130 Skyline Boulevard
Oakland, CA 94611

Walt Lee, Administrative Assistant
Oakland Public Schools
1025 Second Avenue
Oakland, CA 94606

Ray Randall
2423 Wilbur Street
Oakland, CA 94602

Jerome B. Gilbert, General Manager
East Bay Municipal Utility District
2130 Adeline Street
Oakland, CA 94607

Mary Jefferds
East Bay Municipal Utilities District
11500 Skyline Boulevard
Oakland, CA 94619

Shiraz Kaderali
Planning & Research
Pacific Gas & Electric Company
77 Beale Street
San Francisco, CA 94106

Burch C. Bachtold, Regional Director
CALTRANS
P.O. Box 7310
San Francisco, CA 94120

Bruce B. & Helen Black
5855 Skyline Boulevard
Oakland, CA 94611

Mac Carpenter
5308 Golden Gate Avenue
Oakland, CA 94618

Tom Lindenmeyer
East Bay Regional Park District
11500 Skyline Boulevard
Oakland, CA 94619

Save The Hills Association
Attention: May Blos
29 Live Oak Road
Berkeley, CA 94705

Press

Post Newspaper
Attention: Harry Best
630 20th Street
Oakland, CA 94612

Gerald Davis
The Tribune
City Hall Basement, Room 34
City Hall

Kathy Zimmerman
The Montclarion
City Hall Basement, Room 34
City Hall

Karen Welk
The Enterprise
City Hall Basement, Room 34
City Hall

APPENDIX D

FINAL EIR SUPPLEMENT

I. INTRODUCTION

This appendix is organized into three sections. Section I describes the composition of the Final EIR and the chronology of events that have occurred since the Draft EIR was produced and sent to those on the distribution list. Section II sets forth the comments received by the Oakland City Planning Department and the response to those comments. Section III describes the specific text changes made as a result of the review process.

A. Composition of the Final EIR

The material in this appendix together with the material and text referenced in Appendix D of the North Oakland Hill Area Specific Plan comprise the Final Environmental Impact Report for the North Oakland Hill Area Specific Plan.

B. Chronology of Events Since Publication of Draft EIR

The following events have occurred since the production of the specific plan/Draft EIR:

. Individual Notices of specific plan/Draft EIR availability prepared and distributed.	July 18, 1985
. Notice of specific plan/Draft EIR availability and August 14 public hearing before the City Planning Commission (CPC); printed in the Tribune Newspaper.	July 25, 1985
. Specific plan and Draft EIR filed with State Clearinghouse and Association of Bay Area Governments.	July 25, 1985
. Review Period Begins.	July 26, 1985
. Specific plan/Draft EIR mailed to Distribution List.	July 30, 1985
. Notices posted within Plan area for August 14, 1985 CPC public hearing.	August 8, 1985
. First CPC public hearing held.	August 14, 1985
. CPC public hearing continued until September 18, 1985.	August 14, 1985
. Notices of next hearing on specific plan and Draft EIR distributed to all on mailing list.	September 5, 1985
. Forty-five day review period for draft EIR ends.	September 9, 1985
. Notice of 9/18/85 CPC public hearing and plan Draft EIR availability; printed in Tribune	September 10, 1985

and Montclarion newspapers.

- Plan area posted for 9/18/85 continued CPC public hearing. — September 12, 1985
- 9/18/85 CPC public hearing held; hearing tentatively continued to November 6, 1985. — September 18, 1985
- Notice of 11/6/85 CPC public hearing on Specific Plan distributed to all individuals on the mailing list. — October 15, 1985

C. Distribution List for the Specific Plan/Draft Environmental Impact Report

State

State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Executive Office
State of California Regional
Water Quality Control Board
1111 Jackson Street, Room 6040
Oakland, CA 94607

County

Mr. William Fraley, Director
Alameda County Planning Department
399 Elmhurst Street
Hayward, CA 94544

Dewey Mansfield, Executive Director
Local Agency Formation Commission
(Contra Costa County)
651 Pine Street, 8th Floor
Martinez, CA 94553

Anthony A. DeHaesus, Director
Contra Costa County Planning Department
P.O. Box 951
Martinez, CA 94553

Shinji Momono, Acting Engineering Manag
Alameda County Flood Control District
399 Elmhurst
Hayward, CA 94544

Roland Mayne, Executive Director
Local Agency Formation Commission
(Alameda County)
399 Elmhurst, Room 233
Hayward, CA 94544

Local Government

City of Alameda
City Hall
Alameda, CA 94501

City of Piedmont
City Engineer
120 Vista Avenue
Piedmont, CA 94611

City of Berkeley
City Hall
2134 Martin Luther King Jr. Way
Berkeley, CA

City of Emeryville
2449 Powell Street
Emeryville, CA 94608

Oakland City Staff

Norman J. Lind, Director
Oakland Planning Department

Thomas H. Doctor
Oakland Planning Department

Alvin D. James, Assistant Director
Oakland Planning Department

Franklin Ehrhardt
Oakland Planning Department

Willie Yee, Jr.
Oakland Planning Department

V. Hap Smith, Director
Office of Parks and Recreation

C.W. Weatherton, Park Services Manager
Office of Parks and Recreation

Paul F. Bailey, Fire Marshal
Fire Prevention Bureau

Anne Haden
City Attorney's Office

Terry Roberts, Director
Office of Public Works

John Soderling, Deputy Director
Office of Public Works

Vern Sullivan
Office of Public Works

Bill Algire
Office of Public Works, Erosion

Ken Wong
Office of Public Works, Erosion

Michael Pickering
Office of Public Works, Traffic Enginee

City Planning Commissioners
Ed Sue
Chairperson

Jose Antonio Arce
Vice Chairperson

Bruce Black
Lucille Gudger
Doug Jones
Sam Lazar
Elijah Turner

Interested Groups and Persons
ABAG
Metro Center
P.O. Box 2050
Oakland, CA 94603

Grizzly Peak Neighborhood Association
Attention: Dolores Bermark
5999 Grizzly Peak Boulevard
Oakland, CA 94611

Merriewood Forest Park Homeowners Association
Attention: Gerald Rose
5724 Thornhill Drive
Oakland, CA 94611

Skyline Boulevard Neighborhood Association
c/o Nadine & Paul Rhodes
6130 Skyline Boulevard
Oakland, CA 94611

Walt Lee, Administrative Assistant
Oakland Public Schools
1025 Second Avenue
Oakland, CA 94606

Jerome B. Gilbert, General Manager
East Bay Municipal Utility District
2130 Adeline Street
Oakland, CA 94607

Mary Jefferds
East Bay Regional Park District
11500 Skyline Boulevard
Oakland, CA 94619

Shiraz Kaderali
Planning & Research, P.G.& E.
77 Beale Street
San Francisco, CA 94106

Burch C. Bachtold, Regional Director
CALTRANS
P.O. Box 7310
San Francisco, CA 94120

Tom Lindenmeyer
East Bay Regional Park District
11500 Skyline Boulevard
Oakland, CA 94619

Mac Carpenter
5308 Golden Gate Avenue
Oakland, CA 94618

Perry Shers, et.al.
6311 Wood Drive
Oakland, CA 94611

Ray Randall
2423 Wilbur Street
Oakland, CA 94602

Dr. & Mrs. Marg
c/o Robb A. Scott
Steinhart and Salconer
333 Market Street, Suite 3200
San Francisco, CA 94105

Kathleen Horn
1950 Gouldin Road
Oakland, CA 94611

Bob Hunka
2410 Russell Street, Apt. A
Berkeley, CA 94705

Stephanie McCloskey
7050 Paso Robles Drive
Oakland, CA 94611

Lee Karney
363 13th Street
Oakland, CA 94612

Charles Steidtman
7755 Skyline Blvd.
Oakland, CA 94611

Nate Powers
4 Captain Drive, #410
Emeryville, CA 94608

Rosenbuch Associates
Attn: Guy Wulfing
303 Hegenberger Road, Suite 403
Oakland, CA 94621

Harlan Kessel, Director Ward 2
East Bay Regional Park District
11500 Skyline Blvd.
Oakland, CA 94619

Donna Kokubum
Sierra Club
6014 College Avenue
Oakland, CA 94618

Save The Hills Association
Attention: May Blos
29 Live Oak Road
Berkeley, CA 94705

R.H. James
1118 Glengarry Drive
Walnut Creek, CA 94696

John English
2500 Hillegass
Berkeley, CA 94704

Harry Reich
6733 Colton Boulevard
Oakland, CA 94611

MTC
Attn: Jeff Georgevich
Metro Center
101 8th Street
Oakland, CA 94607

E. Rehag
6669 Hartwood Drive
Oakland, CA 94611

John Zimmerman
247 University Hall
University of CA
Berkeley, CA 94720

Raydon D. Shippey
1430 Franklin Street
Oakland, CA 94612

Carolyn Draheim
17045 Broadway Terrace
Oakland, CA 94611

Janet Martin
15010 Broadway Terrace
Oakland, CA 94611

Dr. Chetkowski
53 Villanova Lane
Oakland, CA 94611

William W. McGowan, Jr.
East Bay Municipal Utility District
2130 Adeline Street
Oakland, CA 94623

Oakland Public Library
Montclair Branch
1687 Mountain Blvd.
Oakland, CA 94611

Susan Chamberlin
2050 Manzanita Drive
Oakland, CA 94611

Michael C. Bowman
Shepherd Canyon Homeowners Assn.
6752 Evergreen Avenue

Thomas E. Cooper
6821 Balsam Way
Oakland, CA 94611

Lila McGrouther
6230 Clive Avenue
Oakland, CA 94611

H.S. Naraghi
8161 Skyline Blvd.
Oakland, CA 94611

B.G. Anderson
1736 Manzanita Drive
Oakland, CA 94611

E. Robinson
6824 Paso Robles
Oakland, CA 94611

Adolph Fibel
17074 Broadway Terrace
Oakland, CA 94611

Aleksei Shestakov
17070 Broadway Terrace
Oakland, CA 94611

Glenda Leidan
7251 Skyline Blvd.
Oakland, CA 94611

Michael Hartley
509 41st Street
Oakland, CA 94609

Sally Devor
7000 Devon Way
Berkeley, CA 94705

Shelley Siegel

Judith Knecht
2100 Manzanita Drive
Oakland, CA 94611

Eric Jorgensen
7144 Marborough Terrace
Berkeley, CA 94705

Keith Wilson
320 Lee, #1102
Oakland, CA

David K. Wufford
Wilson Riles' Office

Walter Chinn
Frank Ogawa's Office

Richard E. Daniel
1921 Wrenn Street
Oakland, CA 94602

Paul Giardina
City of Martinez - Planning
525 Henrietta Street
Martinez, CA 94553

Susan Nork
7150 Thorndale
Oakland, CA 94611

Rudy Marchese
4006 35th Avenue
Oakland, CA 94619

Carlos Benemann
P.O. Box 1034
Ferndale, CA 95536

Ed Lindorfer
1960 Mountain Blvd.
Oakland, CA 94611

Helen M. Battle
1877 Melvin Ave.
Sonoma, CA 95476

Gloria Novak
6925 Balsam Way
Oakland, CA 94611

Gwin Richards
Glen Oaks Way Neighborhood Assn.
6601 Glen Oaks Way
Oakland, CA 94611

Pat Peterson
30 Lane Court
Oakland, CA 94611

Thomas Baker
401 Grand Ave., 5th Floor
Oakland, CA 94610

Lori Consolo
5751 Merriewood Drive
Oakland, CA 94611

Mr. Boyd (no address given)

Harold Goldstein
7038 Syre Drive
Oakland, CA 94611

David Cohen
5538 Balboa Drive
Oakland, CA 94611

Mike Smith
6221 Ascot Drive
Oakland, CA 94611

Dr. & Mrs. Lester Fisher
18040 Broadway Terrace
Oakland, CA 94611

Press

Post Newspaper
Attn: Harry Best
630 20th Street
Oakland, CA 94612

Karen Welk
The Enterprise
Basement, Room 34
Oakland City Hall

Kathy Zimmerman
The Montclarion
Basement, Room 34
Oakland City Hall

Gerald Davis
The Tribune
City Hall Basement, Room 34
Oakland City Hall

II. COMMENTS AND RESPONSES TO COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE NORTH OAKLAND HILL AREA SPECIFIC PLAN

A. List of Commentors

The following individuals and agencies submitted written or verbal comments to the Draft Environmental Impact Report:

1. Wallace J. Rothbart, District CEQA Coordinator
   California Department of Transportation

2. John V. Fashing, Chairman of the Environmental Committee
   East Bay Municipal Utility District

3. T.H. Lindenmeyer, Environmental Coordinator, Planning & Design
   East Bay Regional Park District

4. Roger McCardle, Citizen

B. Written Comments

Written comments from the aforementioned agencies have been

State of California

Business and Transportation Agency

Memorandum

TO: Price Walker, Manager
State Clearinghouse
1400 Tenth St., Rm. 121
Sacramento, CA 95814

Date: August 30, 1985

File: ALA013-PM9.07
SCH #85062512
AL013005

From : Department of Transportation-4

Subject: North Oakland Hills Area Specific Plan

Caltrans has reviewed the above-referenced document and forwards the following comments:

1-1 When specific developments are proposed like the addition of 718 housing units (page 2) which are expected to generate 8000 daily vehicle trip ends, the environmental document needs to address the cumulative impact in detail. Caltrans is concerned with project(s)-generated impacts on state highways, on-ramps and off-ramps and their intersections with surface streets. These impacts will need to be addressed in terms of ADT, AM and PM peak hour volumes, V/C and Levels of Service. Also, any adverse impact on state highway drainage should be addressed.

Should you have any questions regarding these comments, please contact Peter Estacio of my staff at (415) 557-9192.

for Peter C. Estacio
WALLACE J. ROTHBART
District CEQA Coordinator

EBMUD

EAST BAY MUNICIPAL UTILITY DISTRICT — 2130 ADELINE STREET P.O. BOX 24055 OAKLAND CA 94623 • (415) 835-3000

JOHN R. FASHING
Assistant General Manager
Water Administration

August 26, 1985

Ms. Elois Thornton
City of Oakland Planning Department
One City Hall Plaza, 6th Floor
Oakland, California 94612-1929

Subject: North Oakland Hill Area Specific Plan and Draft Environmental Impact Report

Dear Ms. Thornton:

Thank you for the opportunity to review the subject Draft Specific Plan/ EIR. The District has the following comments regarding water service.

2-1 In March, 1984, the District Board of Directors approved the EIR, "Water Service from Emergency Facilities in the North Oakland Hills Area," as referenced in subject document. Water service is available to building pads in the study area where the meter elevation is between 1250 feet and 1450 feet from the District's Skyline Pressure Zone, in accordance with the District's special regulations for the North Oakland Hill area. Water service to building pads where the meter elevation is below 1250 feet is available under the District's usual water service regulations.

2-2 The District requires a System Capacity Charge (SCC) of all new customers where a standard service connection does not exist. The charge is payment for the cost of major facilities in a region to provide capacity for service to new customers. Where the densities in the Specific Plan/EIR are lower than that planned in the EBMUD EIR, the number of customer charges collected would be reduced. The amount per customer, therefore, would need to be increased to recover District costs.

2-3 The District is developing water conservation guidelines that will be applicable to new construction. The development must be designed to include inside water-saving appliances and devices as required by law. The EBMUD guidelines will cover the use of such equipment, devices, and methodology for irrigation that will provide long-term efficient water use, limited use of turf, and, in non-turf areas, the use of inert material or low-water-use plants.

3-1 The study area is within the District's Wastewater Service area. Currently, the District's wastewater collection and treatment system is at capacity in wet weather flow conditions. In conditions of extreme storms, the

3-1 collection system can surcharge and overflow untreated wastewater. Development within the study area will aggravate this problem.

If you have any questions, or if the District can be of further assistance, please contact Mr. William W. McGowan, Jr., Associate Civil Engineer, at 835-3000, extension 322.

Yours truly,

John V. Fashing, Chairman
Environmental Committee

JVF:WWMcG:z DG7-W52

Rcvd 9/18/85

East Bay
Regional Park District

11500 SKYLINE BOULEVARD, OAKLAND, CALIFORNIA 94619 TELEPHONE (415) 531-9300

September 18, 1985

Mr. Franklin Elrhardt
Oakland Planning Dept.
One City Hall Plaza
Oakland, CA 94612

Subject: DEIR for North Oakland Hills Area Specific Plan ER 85-84

Dear Frank:

The East Bay Regional Park District has reviewed the subject document and offers the following comments:

4-1 The discussion of Views and Vegetation (p. 65) as it relates to future East Bay Regional Park District acquisitions is consistent with District policies. However, there is, at present, no funding available to fund such acquisitions.

5-1 The discussion of Geology Soils and Land Stability (pp. 102-3) should be augmented to note that areas where the soil is stable may still lie in the path of a debris flow from nearby unstable areas. Additionally, there may be bedrock hollows which are less stable within generally stable bedrock areas.

The discussion of impacts and mitigation (pp. 108-115) would be easier to understand if mitigation measures were specifically listed rather than making reference to other places in the text where they may be found.

5-2 The discussion of mitigation for adverse impacts of erosion and sedimentation (p. 73) should be augmented with the following additional measures: First, the construction of a siltation basin at the Caldecott inlet to Lake Temescal. Second, the diversion of all streamflow and sediment from the Caldecott inlet to Lake Temescal so that it bypasses the lake. These measures should be identified as to whether or not they are part of the project. If they are not, the reason for rejection should be given.

6-1 The fuelbreak and the management policies for it as outlined in the Blue Ribbon Task Force Report and adopted by the City of Oakland should be incorporated in this specific area plan.

The District appreciates the opportunity to review and comment on the subject document. It looks forward to future cooperative efforts to meet the environmental problems of mutual concern in the North Oakland Hills Area.

Very truly yours,

T. H. Lindenmeyer
Environmental Coordinator
Planning and Design

TL:lm

cc: Jerry Kent
Lew Crutcher
Bob Doyle
Ken Burger
Rich Aronson
L. Collins

grouped into seven categories:

Category	Area of Concern
1	Traffic
2	Water Service
3	Wastewater
4	Views and Vegetation
5	Soils and Land Stability
6	Fire
7	Biotic Resources

The Department's responses to the comment are keyed to the table above. For example, in Response "1-1", the first figure indicates the category of the concern (in this case, traffic impacts) and the second figure indicates the order of the comment (1-1 is the first comment on traffic impacts; 1-2 is the second comment; and so on).

C. Comment from the Public Hearings

During the public hearing on September 18, 1985, Mr. McCardle commented that the report did not adequately discuss the impacts that development would have on animals within the plan area (see Response 7-1). No other EIR-related concerns were expressed.

D. Responses to Comments (Copies of the four comment letters are available for review at the Oakland City Planning Department)

1. Traffic

The cumulative impacts of additional traffic on state highways, on-ramps, off-ramps and their intersections with surface streets were analyzed by the City of Oakland Traffic Engineering Department. According to their report, the project will have no significant impacts at the freeway ramps and their intersections.

A summary of the volume/capacity ratios at each of the interchange ramps within the vicinity of the project area is provided in Table 1 which follows.

2. Water Service

Comments one through three noted

3. Wastewater

Staff acknowledges the concern for wastewater overflow, and has consulted with the Sewers and Drainage Design Division of the Office of Public Works (OPW). Using density projections and information from the East Bay Infiltration/Inflow Study (I & I Study, November 1982), OPW identified the sewage facilities improvements necessary to mitigate untreated wastewater overflow hazards (see page 75). An estimated amount of $98,978 would be the proportional share of project

TABLE 1-

LEVEL OF SERVICE AT SELECTED RAMPS

LOCATION	LEVEL OF SERVICE* 1985 EXISTING		1990 ** W/O PROJECT		1990 WITH PROJECT	
RTE. 24	AM	PM	AM	PM	AM	PM
EB FRONTAGE OFF	A (0.08)	A (0.09)	A (0.08)	A (0.09)	A (0.09)	A (0.12)
EB FRONTAGE ON	A (0.32)	D (0.82)	A (0.32)	D (0.82)	A (0.32)	D (0.82)
WB CALDECOTT OFF	A (0.23)	A (0.34)	A (0.23)	A (0.34)	A (0.23)	A (0.34)
WB CALDECOTT ON	A (0.23)	A (0.10)	A (0.23)	A (0.10)	A (0.25)	A (0.12)
EB FISH RANCH OFF	A (0.02)	A (0.03)	A (0.02)	A (0.03)	A (0.03)	A (0.04)
EB FISH RANCH ON	A (0.12)	A (0.53)	A (0.12)	A (0.53)	A (0.12)	A (0.53)
WB FISH RANCH OFF	A (0.26)	A (0.08)	A (0.26)	A (0.08)	A (0.26)	A (0.08)
WB FISH RANCH ON	A (0.05)	A (0.04)	A (0.05)	A (0.04)	A (0.06)	A (0.05)
WB RTE 13 (NB) OFF	A (0.53)	A (0.25)	A (0.53)	A (0.25)	A (0.53)	A (0.25)
WB RTE 13 (SB) OFF	E (0.99)	C (0.77)	E (0.99)	C (0.77)	E (1.00)	C (0.78)

* ASSUMING RAMP CAPACITY IS 1500 vph

** ASSUMING NO OTHER SIGNIFICANT DEVELOPMENT 1990 TRAFFIC SIMILAR TO 1985.

CITY of OAKLAND	TRAFFIC ENGINEERING AND PARKING DEPARTMENT	
APPROVED BY TRAFFIC ENGINEER	NORTH OAKLAND HILLS DEVELOPMENT	DRAWN BY LTT
APPROVED BY	ESTIMATED L.O.S.	SCALE —
		DATE 10/23/85
		DWG. NO.

TABLE 1:

LEVEL OF SERVICE AT SELECTED RAMPS

LOCATION	LEVEL OF SERVICE* 1985 EXISTING		1990 W/O PROJECT **		1990 WITH PROJECT	
RTE. 13	AM	PM	AM	PM	AM	PM
NB PARK OFF RAMP	A (0.29)	A (0.30)	A (0.29)	A (0.30)	A (0.30)	A (0.31)
NB PARK ON RAMP	A (0.17)	A (0.24)	A (0.17)	A (0.24)	A (0.19)	A (0.25)
SB PARK OFF RAMP	A (0.27)	A (0.31)	A (0.27)	A (0.31)	A (0.28)	A (0.33)
SB PARK ON RAMP	A (0.33)	A (0.22)	A (0.33)	A (0.22)	A (0.34)	A (0.23)
NB MORAGA OFF	A (0.19)	A (0.19)	A (0.19)	A (0.19)	A (0.19)	A (0.20)
NB MORAGA LOOP ON	A (0.07)	A (0.10)	A (0.07)	A (0.10)	A (0.07)	A (0.10)
NB MORAGA ON	A (0.41)	A (0.22)	A (0.41)	A (0.22)	A (0.45)	A (0.25)
SB MORAGA OFF	A (0.26)	A (0.55)	A (0.26)	A (0.55)	A (0.28)	B (0.61)
SB MORAGA ON	A (0.29)	A (0.23)	A (0.29)	A (0.23)	A (0.30)	A (0.25)
NB BROADWAY OFF	A (0.27)	A (0.23)	A (0.27)	A (0.23)	A (0.28)	A (0.24)
NB BROADWAY ON	A (0.12)	A (0.07)	A (0.12)	A (0.07)	A (0.14)	A (0.09)
SB BROADWAY OFF	A (0.05)	A (0.17)	A (0.05)	A (0.17)	A (0.06)	A (0.20)
SB BROADWAY ON	A (0.19)	A (0.23)	A (0.19)	A (0.23)	A (0.19)	A (0.24)
NB RTE 24 ON	C (0.78)	F (1.24)	C (0.78)	F (1.24)	C (0.78)	F (1.24)
SB RTE 24 OFF	A (0.13)	A (0.49)	A (0.13)	A (0.49)	A (0.14)	A (0.52)

* ASSUMING RAMP CAPACITY IS 1500 vph

** ASSUMING NO OTHER SIGNIFICANT DEVELOPMENT 1990 TRAFFIC SIMILAR TO 1985

CITY of OAKLAND	TRAFFIC ENGINEERING AND PARKING DEPARTMENT	
APPROVED BY TRAFFIC ENGINEER	NORTH OAKLAND HILLS DEVELOPMENT	DRAWN BY LTT
APPROVED BY	ESTIMATED L.O.S.	SCALE —
		DATE 10/23/85.
		DWG. NO.

costs attributed to the plan area. These improvements are not needed until there is substantial development within the plan area. Fortunately this permits the city to address the scattered spot improvements in conjunction with its city-wide plan of sewer replacement which was an outgrowth of the I & I Study.

4. Views and Vegetation

1. While the acquisition of selected parcels by East Bay Regional Park District (EBRPD) is highly desirable, the city understands the financial resources to accomplish this are not available at this time.

Consequently, siting criteria and Vegetative Management Prescriptions have been proposed as alternative methods for protecting views along scenic corridors and other locations where view preservation is of paramount importance.

5. Soils and Land Stability

1. Staff acknowledges the additional information, and will revise the discussion on soil stability accordingly.

2. Although the staff acknowledges that such measures may offer greater protection to the water quality of Lake Temescal than is afforded, the city has no funds to do such work, and without the proposed plan the impacts would be probably far worse. If the district were able to purchase the lands recommended by the city, much of the development which may contribute to the siltation of Lake Temescal would be precluded from development.

6. Fire

The significant fire safety measures outlined in the Blue Ribbon Task Force Report (adopted August 1982) are incorporated in the Vegetation Management Prescriptions. More detailed discussion of fuelbreaks and the related management policies can be found in the Vegetation Management Program, a background technical report prepared in conjunction with the development of the Vegetation Management Prescriptions in the Specific Plan.

7. Biotic Resources

Staff acknowledges the comment and will revise the discussion on the impacts of development on animals within the plan area accordingly.

III. CHANGES TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

A. Text Amendments

As a result of extensive review of the draft environmental impact report, text revisions will be made in the following sections. Deletions are indicated by strike-out type (example) and additions are underlined. Page and line numbers refer to the Draft EIR.

. Amendment to Discussion of Wastewater Impacts
Page 112, Lines 25-32--Amend to read as follows:

6. Sewer Service

According to the City's Office of Public Works, maximum development in the North Oakland Hill Area will increase the present wastewater flow by nearly 60,000 gallons per day. During periods of extreme storms, problems with the wastewater collection and treatment systems would be exacerbated, as the existing systems may be overburdened and expel untreated wastewater.[1]

It has been determined that short portions of the existing downstream sewer mains that service the area will not be adequate to support the increased service loads when the area is substantially developed. Necessary infrastructural improvements have been identified. These improvements will be done in conjunction with the city's recently adopted "Inflow and Infiltration" replacement program.

. Amendments to Discussion of Soil Stability
Page 103, Line 6--Amend to read as follows:

For the most part, ground stability is determined by the type of rocks, degree of jointing and fracturing, and level of precipitation or underground water sources. There may be bedrock hollows which are less stable within generally stable bedrock areas.[2] Although the steep land slopes suggest unstable building foundations, it has been found that the steeper slopes are formed in the more resistant bedrock units, and thus may be more stable than other slopes. Even areas with great soil stability can be vulnerable to damage or destruction, if located in the path of a debris flow from nearby unstable areas, however the city's restrictions on modifying water courses and controls on uncompacted fills minimizes such hazards.

. Amendments to discussion of the impacts of development on animals.
Page 109, lines 50-55; page 110, lines 1-10--amend as follows:

In addition to the loss of particular species of vegetation, construction activities will permanently alter small portions of wildlife habitats. Potential impacts can be grouped into three major categories: (a) Habitat alteration; (b) Displacement; and (c) Changes in Productivity.

a) Habitat Alteration. Changes in the understory resulting from the removal of trees will change the availability of food for certain species who depend on such undergrowth.

b) Displacement. Residential development may result in temporary or permanent displacement of wildlife species. Although the negative impacts on wildlife and vegetative habitats can be minimized by following the guidelines established by the Vegetation Management Prescriptions and Site Development Map, some displacement of wildlife and loss of vegetation will inevitably result. ~~from new construction in the North Oakland Hill Area~~ Given the proximity of regional parks and preserves, it is likely that the impacts on wildlife will be displacement, rather than elimination, of those species whose habitats will be significantly altered.

c. Changes in productivity. Some changes in the mortality rates of wildlife may occur. For example, excavations for foundations and utility systems would endanger animals such as rodents, moles and the striped skunk. Other increases in wildlife mortality would also result from an inability of permanently displaced animals in finding alternative habitats.

---

[1] John V. Fashing, East Bay Municipal Utility District Letter, 8/26/85

[2] EBMUD Draft EIR, 1983, p. 162

OAKLAND CITY PLANNING DEPARTMENT

NORMAN J. LIND*
Director of City Planning (Retired)
ALVIN D. JAMES
Director of City Planning

FRANKLIN M. EHRHARDT
Project Supervisor

HELAINE KAPLAN PRENTICE
KLOIS A. THORNTON
MARILYN CHU*
Plan Preparation

ROSANNE DiMAGGIO
Graphics Designer

CARMELITA HICKMAN
CELIA RIVERO
TINA DAWSON *
Typing

Jesse Cortes*
Darryl Daniels*
Aron Hermes*
Janet Mack*
Onju Roy*
Craig Tanaka*
Ned Wales
Jody White*
Graphic Assistance

Nancy Conover*
Draft EIR Preparation

Lars Pierce*
Vegetation Management Prescriptions

Jean Nilsson*
Initial Cost/Revenue Analysis

---

*Former Staff Members