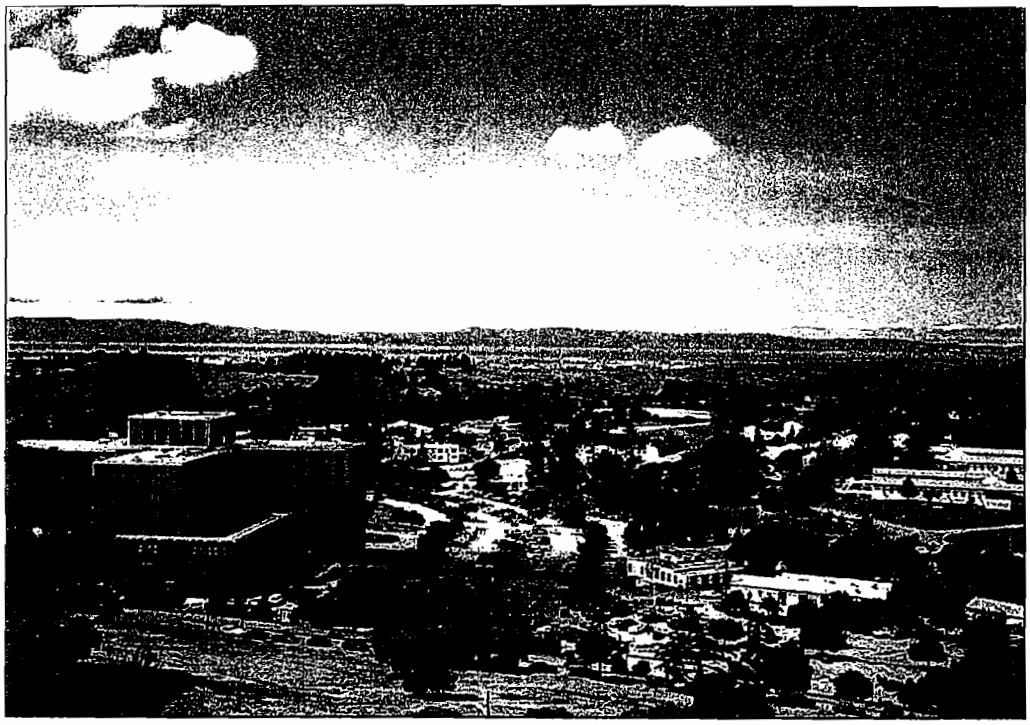
Final

Environmental Impact Statement/ Environmental Impact Report

for the Disposal and Reuse of Naval Medical Center Oakland

SCH #95103035



Volume I

April 1998

ENGINEERING FIELD ACTIVITY, WEST
NAVAL FACILITIES ENGINEERING COMMAND
and
CITY OF OAKLAND, CALIFORNIA

FINAL
ENVIRONMENTAL IMPACT STATEMENT (EIS)/ ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE DISPOSAL AND REUSE OF NAVAL MEDICAL CENTER OAKLAND, CALIFORNIA

Lead Agency for the EIS:	U.S. Department of the Navy
Lead Agency for the EIR:	City of Oakland, California
Title of Proposed Action:	Disposal and Reuse of Naval Medical Center, Oakland, California
Affected Jurisdictions:	City of Oakland and Alameda County, California
Designation:	Final Environmental Impact Statement (EIS)/Environmental Impact Report (EIR)
State Clearinghouse #:	SCH# 95103035

ABSTRACT - This Final EIS/EIR includes the information and analysis contained in the Draft EIS/EIR circulated for public review and comment. It also includes responses to those comments and revisions made in response to those comments.

Pursuant to the Defense Base Closure and Realignment Act of 1990, (Part A of Title XXIX of Public Law 101-510) and the specific base closure decisions approved by President Clinton and accepted by Congress in September 1993, Naval Medical Center Oakland (NMCO) was closed on September 30, 1996. This joint EIS/EIR has been prepared in accordance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) statutes and guidelines to analyze the potential environmental consequences from the proposed Navy disposal and local community reuse of NMCO. The NEPA federal action evaluated in this EIS/EIR is the disposal of federal surplus property, while the local CEQA project evaluated is the proposed reuse of the NMCO site, in accordance with the reuse alternatives described in the NMCO Final Reuse Plan, adopted by the Oakland Base Reuse Authority on June 10, 1996 and published in August 1996. The EIS/EIR evaluates four reuse alternatives: Maximum Capacity, Mixed Use Village, Single Use Campus, and Residential. In addition, the No Action Alternative is evaluated, which is the closure of NMCO with the property remaining in federal ownership. The NMCO Final Reuse Plan is evaluated as part of the Maximum Capacity Alternative, which is the preferred alternative. The EIS/EIR includes analyses of potential environmental impacts relating to land use, socioeconomics, public services, cultural resources, aesthetics and scenic resources, biological resources, water resources, geology and soils, traffic and circulation, air quality, noise, utilities, and hazardous materials and wastes.

CEQA project analysis also includes anticipated discretionary permits that may be required to implement the reuse plan. Such discretionary permits may include a general plan amendment, a specific plan, redevelopment plan, development agreements, a rezoning to either existing zones contained in the City of Oakland's Zoning Regulations or the creation of new zones(s) and/or conditional use permits, or other zoning permit approvals as may be required. Further discretionary permits may include but are not necessarily limited to subdivision applications, tree removal permits, and grading permits.

Potential beneficial impacts associated with implementation of reuse compared to the No Action Alternative include sustained employment opportunities, and the creation of additional recreational facilities and open space areas. The only significant and not mitigable impacts are due to traffic-related ozone precursor and PM_{10} emissions generated in all of the reuse alternatives. Potentially significant and mitigable adverse environmental impacts include impacts to land use, schools, police services, aesthetics and scenic resources, sensitive riparian habitat, public exposure to earthquakes and slope stability, traffic and circulation, air quality, other than traffic-related air emissions, noise, potable water supply, and cumulative impacts to schools, traffic and circulation, and landfill capacity. Mitigation measures identified in the EIS/EIR reduce all of these environmental impacts to acceptable levels. Remediation of contaminated areas will continue to be the responsibility of the Navy.

For Further Information:

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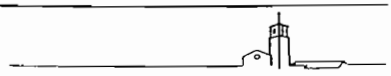

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DEPARTMENT OF THE NAVY
ENGINEERING FIELD ACTIVITY, WEST
NAVAL FACILITIES ENGINEERING COMMAND
900 COMMODORE DRIVE
SAN BRUNO, CALIFORNIA 94066-5006

IN REPLY REFER TO:

5090.1B
7032GM/EP8-1464
27 April 1998

SUBJECT: NOTICE OF AVAILABILITY OF THE JOINT FINAL ENVRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT (EIS/EIR) FOR THE DISPOSAL AND REUSE OF NAVAL MEDICAL CENTER OAKLAND, CALIFORNIA

Naval Medical Center Oakland (NMCO) closed on September 30, 1996 pursuant to the Defense Base Closure and Realignment Act of 1990, Pub. L. 101-510, Title XXIX, 10 U.S.C. Sec. 2687 note, and specific base closure decisions approved by President Clinton and accepted by the 103rd Congress in October 1993.

As part of this process, the Department of the Navy and the City of Oakland prepared a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) to evaluate the potential for significant environmental effects of Navy disposal and community reuse of the Naval Medical Center property located in Oakland, California. The Final EIS/EIR has been prepared in accordance with Section 102 (2)(c) of the National Environmental Policy Act (NEPA) of 1969, as implemented by the Council on Environmental Quality regulations, 40 C.F.R. Parts 1500-1508, and the California Environmental Quality Act (CEQA), Cal. Pub. Res. Code Sec. 21000, *et seq.*, as amended.

The Navy's NEPA action evaluated in the Final EIS/EIR is the disposal of surplus Federal property at NMCO. The local CEQA project evaluated is the reuse of the property in accordance with the Oakland Base Reuse Authority's Final Reuse Plan for NMCO, published in August 1996. The Final Reuse Plan is evaluated as part of the Maximum Capacity Alternative, which is the preferred alternative. The Maximum Capacity Alternative proposes development of residential mix of single-family and multi-family uses, an executive 9-hole golf course with driving range, and mixed uses such as businesses, community and commercial retail. Active recreation and open space are also included.

The Final EIS/EIR also evaluates three additional reuse scenarios and a No Action alternative. The Mixed Use Village Alternative includes residences, businesses, research and development and office facilities, community retail and cultural facilities, and active recreation and open space. Under the Single Use Alternative, NMCO would be occupied by one educational institution or corporate user, neighborhood retail uses, and active recreation and open space. The primary use under the Residential Alternative would be single family residences having a character and identity similar to the surrounding residential development, with some neighborhood retail, active recreation areas, and open space. Under the No Action alternative, the property would remain in Federal ownership in a caretaker status.

CITY OF OAKLAND

1330 BROADWAY, 2ND FLOOR • OAKLAND, CALIFORNIA 94612

Community and Economic Development Agency
Zoning

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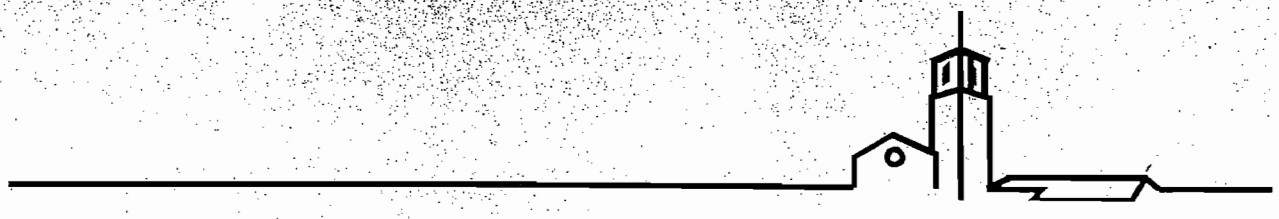
NOTICE OF MEETING

Notice is hereby given that the Oakland City Planning Commission will consider certification of the Final Environmental Impact Statement and Environmental Impact Report for the disposal and reuse of the former Naval Medical Center Oakland (Oak Knoll Medical Facility) located on a 183 acre site south of Keller Avenue and east of Mountain Boulevard in the R-30 One Family Residential Zone. (Planning Area: South Hills) The applicants are the U.S. Navy and the City of Oakland. (Case File No. ERS96-32)

The item will be considered on Wednesday, June 17, 1998, at a meeting beginning at 6:30 p.m., Hearing Room 1, City Hall, One City Hall Plaza, Oakland, California. All interested parties are invited to attend.

For further information, contact Anu Raud, Zoning Division, Community and Economic Development Agency at (510) 238-6346.

Charles S. Bryant
Secretary
City Planning Commission



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NAVAL MEDICAL CENTER OAKLAND
ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ABAG	Association of Bay Area Governments
AC Transit	Alameda County Transit
ACM	asbestos-containing material
AHERA	Asbestos Hazardous Emergency Response Act
AM	morning
ARB	Air Resources Board
AST	aboveground storage tank
ATC	Authority to Construct
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
BCP	Base Realignment and Closure Cleanup Plan
BEAP	Base Exterior Architecture Plan
bgs	below ground surface
BMP	Best Management Practice
BRAC	Base Realignment and Closure
Cal/EPA	California Environmental Protection Agency
CBC	California Building Code
CCR	California Code of Regulations
C&D	Construction & Demolition
CDFG	California Department of Fish and Game
CDHA	Community Development and Homeless Assistance Act
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CSC	California Species of Special Concern
CTA	Census Tract Area
dB	decibel
dBA	A-weighted decibel
dbh	diameter at breast height
DBCRA	Defense Base Closure and Realignment Act
DOD	Department of Defense
DTSC	Department of Toxic Substance Control
DWR	California Department of Water Resources
EBMUD	East Bay Municipal Utility District
EBS	environmental baseline survey

EFA	Engineering Field Activity
EIR	environmental impact report
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FFSRA	Federal Facility Site Remediation Agreement
FIFRA	Federal Insecticide Fungicide and Rodenticide Act
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FPMR	Federal Property Management Regulations
gpm	gallons per minute
HWCL	Hazardous Waste Control Law (California)
HWMP	Hazardous Waste Management Plan
I-580	Interstate Route 580
IRP	Installation Restoration Program
ISTEA	Intermodal Surface Transportation Efficiency Act
kV	kilovolt
kVA	kilovolt amperes
Leq	equivalent noise levels
LOS	Level of Service
LRA	Local Redevelopment Authority
MCE	Maximum Credible Earthquake
MCM	thousand circular mils
MMRP	Mitigation Monitoring and Reporting Program
mm/yr	millimeters per year
mph	miles per hour
MTC	Metropolitan Transportation Commission
NCP	National Contingency Plan
NCSO	Navy Caretaker Site Office
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NMCO	Naval Medical Center Oakland
NO_2	nitrogen dioxide
NOA	notice of availability
NOC	notice of completion
NOI	notice of intent
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OBC/CTF	Oakland Base Closure/Conversion Task Force
OBRA	Oakland Base Reuse Authority
OEA	Office of Economic Adjustment
OPR	Office of Parks and Recreation (Oakland)

OSHA	Occupational Safety and Health Administration
OUSD	Oakland Unified School District
PCB	polychlorinated biphenyl
PG&E	Pacific Gas & Electric Company
PL	Public Law
PM	evening
PM_{10}	Particulate Matter (inhalable component)
PRC	Public Resources Code
psig	pounds per square inch gauge
PTO	Permit to Operate
PVC	polyvinyl chloride
PWCSFB	Public Works Center San Francisco Bay
RCRA	Resource Conservation and Recovery Act
ROD	record of decision
ROI	Region of Influence
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SF	square feet
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	sulfur dioxide
SWPPP	storm water pollution prevention plan
TSCA	Toxic Substances Control Act
UBC	Uniform Building Code
USDA	US Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
V/C	volume to capacity (ratio)
WGCEP	Working Group on California Earthquake Probabilities
WSE	water service estimate
WWII	World War Two

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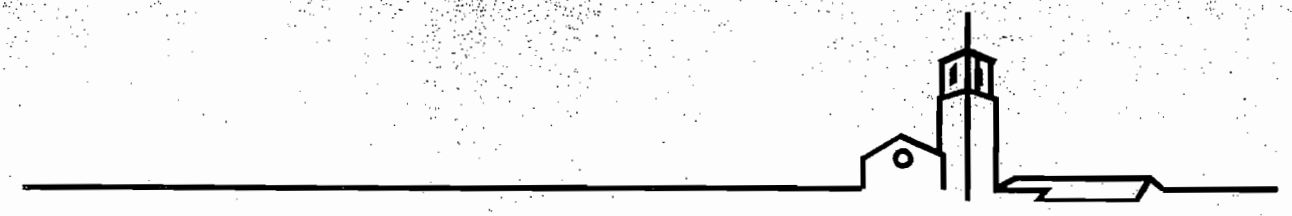

EXECUTIVE SUMMARY

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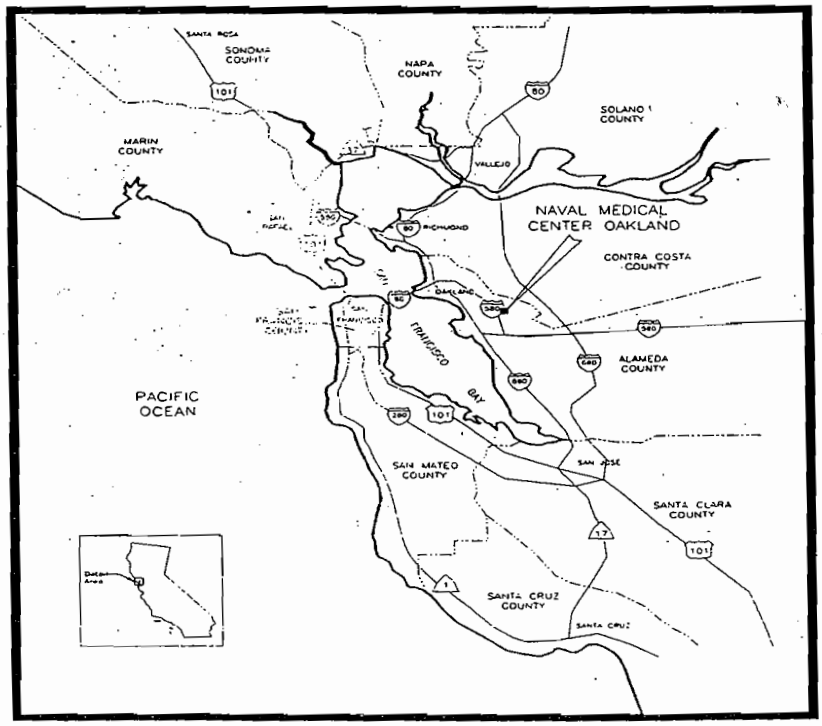
INTRODUCTION

This joint environmental impact statement/environmental impact report (EIS/EIR) evaluates the potential impacts to the environment that may result from the Navy disposal and implementation of land use alternatives proposed by the Oakland Base Reuse Authority (OBRA) for the reuse of Naval Medical Center, Oakland, California (NMCO). NMCO was closed on September 30, 1996, pursuant to the Defense Base Closure and Realignment Act (DBCRA) of 1990 (Part A of Title XXIX of Public Law [PL] 101-510) referred to in this document as BRAC. This EIS/EIR has been prepared in accordance with:

- The National Environmental Policy Act (42 U.S.C., §§ 4321-4370a) (NEPA) of 1969, as amended;
- The California Environmental Quality Act (CEQA) (California Public Resources [Cal. Pub. Res.] Code §§ 21000-21178.1) of 1970, as amended;
- The Council on Environmental Quality (CEQ) regulations on implementing NEPA (40 C.F.R. Parts 1500-1508);

Figure ES-1
Regional Location



- Navy guidelines; and

- The Defense Base Closure and Realignment Act of 1990 (Part A of Title XXIX of PL 101-510) (DBCRA), as amended by the 1993 Base Realignment and Closure process.

This Final EIS/EIR includes all of the information and analysis contained in the Draft EIS/EIR circulated for public review and comment. It also includes responses to those comments and revisions made in response to those comments.

The NEPA federal action evaluated in this EIS/EIR is the disposal of federal surplus property at the NMCO site, while the local CEQA project evaluated is the proposed reuse of the NMCO site, presented as four reuse alternatives.

The 183-acre NMCO site varies from gently to steeply sloping topography, and includes both developed and wooded lands. The area is generally bounded on the south and east by residential development, on the north by Keller Avenue and residential development, and on the west by Mountain Boulevard. Immediately to the west of Mountain Boulevard lies Interstate Route 580 (I-580), the MacArthur Freeway.

The facility is developed with approximately 89 structures. Club Knoll, built in 1927, was the original clubhouse for the golf and country club that occupied much of the site prior to its acquisition by the Navy. The main hospital, five modern buildings, 20 "vintage" wooden buildings, 24 miscellaneous other structures, and 38 family housing structures comprise the remaining buildings.

Before 1942, the NMCO site was used as a golf course and country club. At the climax of the war in the Pacific, the hospital was caring for over 8,000 in-patients with a military and civilian staff of approximately 3,000. After World War II, the activity and population of the hospital declined. Activity increased again during the Korean conflict when the daily population averaged 2,500. This figure subsequently fell to a peacetime low of about 600. Patient care activities increased once again due to casualties from the Vietnam conflict, beginning in 1965.

After the Vietnam conflict, activity decreased, and many of the older medical buildings were demolished and their sites used for parking. Many of the buildings constructed quickly during wartime still remain in use. Most recently, the hospital provided medical support during the Gulf War.

PURPOSE OF AND NEED FOR ACTION

The Department of Defense (DOD) has been directed by Congress to realign and reduce certain military operations, pursuant to the closure process. NMCO was one of the bases directed for closure by the 1993 Defense Base Closure and Realignment Commission. Closure of the facility occurred on September 30, 1996.

Disposal of federal surplus property on the site will occur in compliance with Federal Property Management Regulations (FPMR), the DBCRA, as amended, the Base Closure Community Redevelopment and Homeless Assistance Act, (the "Redevelopment Act," PL 103-421) and the National Defense Authorization Act (PL 101-510, § 2906).

As part of the disposal process, the City of Oakland was recognized by the Secretary of Defense as the local redevelopment authority (LRA). The City of Oakland, in turn, designated OBRA as the LRA for all base conversions in the City. This authority came through the Oakland Base Reuse Authority Joint Powers Agreement of March 1995, an agreement among the City of Oakland, the Oakland Redevelopment Agency, and the County of Alameda. In this role as LRA, OBRA developed a set of reuse plan alternatives for consideration at NMCO.

Pursuant to the Joint Powers Agreement, the City of Oakland reserves and retains its land use, zoning, and building authority. Therefore, the City is the lead agency for CEQA purposes and the decision making body with respect to any land use approvals (general plan amendments, rezoning, etc.) that the reuse plan may require.

Document Purpose

This joint, or integrated, EIS/EIR has been prepared to assess the potential environmental impacts of NMCO disposal and reuse and thereby to fulfill the requirements of NEPA and CEQA. The Navy is required to complete NEPA documentation to evaluate the environmental effects of the disposal of federal surplus property and structures at NMCO. The City of Oakland is required by CEQA to evaluate the environmental effects of implementing a reuse plan.

This EIS/EIR is intended to provide information on the potential environmental impacts of disposal of the NMCO, the impacts of four reuse alternatives that could be implemented on the NMCO site, and a No-Action Alternative. The terms "environmental effects" and "environmental impacts" are used interchangeably in this report. The Navy will use the EIS

in its consideration of disposal. The Record of Decision (ROD) will consider significant impacts that could result, and identify potential mitigation measures recommended to avoid or reduce those significant impacts (i.e. effects, or consequences) as a result of disposal. Following disposal, no additional NEPA review by the Navy will be required.

The City of Oakland will use this document in its consideration of discretionary reuse permits which may include, but are not limited to general plan amendments, rezoning, zoning permits, specific plans or other specific area plans, development agreements, subdivision applications, tree removal permits and grading permits. Should any approvals by the City of Oakland include significant unavoidable environmental impacts, the city would adopt a statement of overriding considerations as required by CEQA. Subsequent project-level environmental review may be required under CEQA for unforeseen developments and impacts that may not have been adequately covered by this document.

Reuse impacts are projected to 2020. Projected year 2020 impacts are compared to existing environmental and socioeconomic conditions. Complete implementation of each reuse alternative is assumed to be achieved by the year 2020 in the determination of impacts. Impacts are differentiated as resulting from disposal or reuse.

Related Studies

The hazardous materials and waste cleanup of NMCO was conducted in accordance with the Base Realignment and Closure program requirements, and the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. § 9601 et seq.) (CERCLA). DOD policy requires preparation of an environmental baseline survey (EBS) prior to selling, leasing, or transferring real property. The Final EBS for NMCO was completed in June 1995 (US Navy 1995b) and documented the known environmental conditions at NMCO. The BRAC Cleanup Plan (BCP) provides the status of ongoing environmental restoration and associated compliance programs. The most recent BCP for NMCO (US Navy 1995a) was completed in March 1995, and has been updated with an Environmental Business Plan in March 1996 (US Navy 1996). It evaluated the status of the cleanup program and summarized compliance items requiring further evaluation and implementation. Documentation of the site's contamination and remediation will be prepared in conjunction with the disposal process.

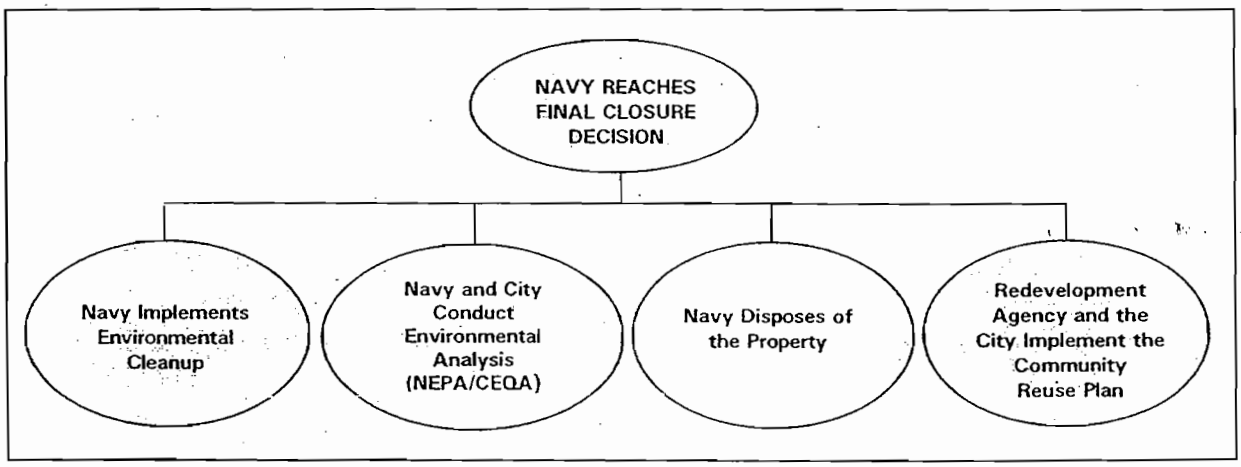
Disposal Process

The federal action considered in this EIS/EIR is the disposal of federal surplus property and structures at NMCO. Approximately 183 acres of

federal surplus property at NMCO have been identified by the Navy for disposal. Predisposal actions include placing the site in caretaker status, site cleanup operations, and, possibly, limited interim use leasing. Following closure on September 30, 1996, the site was placed in caretaker status under Navy control. On-site Navy activity is limited to security, maintenance and environmental cleanup. The property was reassigned to the custody of the Navy's Engineering Field Activity West (EFA West) in San Bruno, California.

The disposal process encompasses several actions (Figure ES-2) with differing jurisdictional responsibilities and schedules. It contains many steps, including DOD and federal agency screening, consideration to local homeless providers, and most likely, eventual transfer of title to state, local, and private entities. No federal agencies indicated a continuing interest in NMCO properties during the DOD and federal screening process. At NMCO, the Navy is responsible for environmental cleanup and disposal of the property.

Figure ES-2
Primary Elements of the Military Base Disposal Process



Limited interim use leasing of NMCO facilities, the purposes of which are to generate employment, continue the use of infrastructure, and better facilitate reuse, may occur prior to property transfer.

Public Involvement Process

The EIS/EIR process is designed to involve the public in federal and local decision making. Opportunities to comment on and participate in the process are provided during preparation of the EIS/EIR. Comments from

agencies and the public are solicited throughout the process to help identify the primary issues associated with the site's disposal and proposed reuse. Efforts have been made during the public notification process to include all interested regulatory agencies, Oakland area residents, and community organizations. In accordance with Executive Order 12898 on Environmental Justice, particular attention has been paid to assure participation by minority and low-income populations in the area potentially affected by disposal and reuse.

Community Reuse Planning

The reuse planning process for the NMCO began with formation of the Oakland Base Closure/Conversion Task Force (OBC/CTF) in November 1993 by the Oakland City Council immediately after the 1993 BRAC closure list was accepted by President Clinton. The City of Oakland ("Citv") was recognized by the Secretary of Defense as the local redevelopment authority (LRA). The City, in turn, designated the Oakland Base Reuse Authority (OBRA) as the LRA for all base conversions in the City. The subcommittees of OBRA are entitled "Housing and Homeless," "Employment and Social Impacts," "Land Reuse," and "Legislation and Finance."

The Base Closure Community Redevelopment and Homeless Assistance Act of 1994 ("the Redevelopment Act" PL 103-421) requires that consideration of the needs of the homeless be included in reuse plans. OBRA plans to accommodate homeless assistance offsite. In September 1997, the US Department of Housing and Urban Development (HUD) approved OBRA's homeless assistance plan.

The NMCO Final Reuse Plan was adopted by OBRA on June 10, 1996 and published in August 1996 (OBRA 1996). The final plan resulted from the combined efforts of community working groups, OBRA, the Citizen Advisory Committee, City of Oakland staff, and a consultant team of land use and environmental planners, economists, and transportation experts.

ALTERNATIVES

The alternatives evaluated in this EIS/EIR are described below. Disposal will happen prior to the implementation of the reuse plan. The No-Action Alternative retains the site in caretaker status.

During preparation of the reuse alternatives, all meetings of the OBRA and its subcommittees were open to the public and were advertised on local television and in the local newspaper. These meetings were broadcast on the

local television channel. All materials, including reports, videos, and other informational items were made available to the public.

Alternatives analyzed in this EIS/EIR include the Maximum Capacity Alternative, Mixed Use Village Alternative, Single Use Campus Alternative, Residential Alternative, and the No Action Alternative.

Although the Maximum Capacity, Mixed Use Village, Single Use Campus, and Residential alternatives differ in the ways they address the needs and goals of the community and the City of Oakland, they have common elements focused on recognizing constraints of topography, preserving active recreation areas and preserving the riparian corridor. Each reuse alternative also includes the necessary discretionary permits to implement the reuse plan, such as a general plan amendment, a rezoning, a specific plan, if necessary, zoning permits, subdivision applications, tree removal permits, grading permits and any other discretionary permits that might by required.

Maximum Capacity Alternative - Preferred Alternative (includes NMCO Reuse Plan)

The Maximum Capacity Alternative was initially provided to the Navy by OBRA in December 1995 for use in the EIS/EIR as OBRA's estimate of likely site development (Theresa Hughes & Associates 1996a). For the EIS/EIR analysis, the Maximum Capacity Alternative was adjusted to incorporate modifications OBRA made when it adopted its reuse plan for NMCO on June 10, 1996 and published in August 1996 (OBRA 1996).

The Maximum Capacity Alternative is characterized by 86 acres that combine an executive nine-hole golf course with 250 units of single- and multi-family housing. Forty (40) acres of mixed use development is planned to include commercial and corporate campus (i.e. offices), a credit union, museum, parks and recreation uses, the United Indian Nations facility, Seneca Center, and 300 multi-family residential units. United Indian Nations, Inc. (UIN), has proposed the establishment of an American Indian Cultural and Education Center at the site, with a focus on educating Native Americans and all other cultures and ethnic groups on the history, culture, arts, crafts, and contributions of Native Americans locally, regionally, and nationally. UIN is requesting a parcel which includes Building #101 within the mixed use area. This proposal represents approximately .75 acres. Seneca Residential and Day Treatment Center for Children proposes a school and multi-service campus to provide special education, mental health, and support services for emotionally disabled children. Seneca is requesting a parcel which includes Building #69, the Helipad, and limited adjoining acreage for new construction. This proposal represents approximately 6

acres. An additional 10 acres with 34 single-family residential units, 15 acres of active recreation (e.g. Club Knoll, swimming pool, tennis courts, baseball and soccer fields, picnic area, driving range, and clubhouse), and 32 acres of open space uses (e.g. recreation trails, creek restoration, conserved woodlands, wildlife habitat, parkland, and United Indian Nations ceremonial grounds) comprise the remaining land uses proposed for the 183-acre site. It is assumed that about 39 acres of the 183 planned acres would be set aside for unbuildable slopes and roads. It is estimated that this alternative would employ approximately 717 people.

Mixed Use Village Alternative

The Mixed Use Village Alternative is characterized by 23 acres of mixed use development, with an unspecified number of medium density townhouses and/or live-work space units. This mixed use zone also would include a health and social services facility and small professional offices. The exact square footages dedicated to each of these uses, and the number of housing units has not been determined by the OBRA. Twelve (12) acres of research and development is planned to include offices, laboratories, seminar/meeting areas, and storage space. The exact square footages dedicated to each of these research and development uses has not been determined by the OBRA. Five (5) acres would be used for a cultural/meeting facility (e.g. library/museum building, multipurpose/performance area, and community assembly and conference hall). Another five (5) acres of community retail uses (e.g. supermarket, specialty stores, restaurants, personal services, business services [e.g. copy shop, travel agency], and bank) is also proposed. Eight (8) acres of active recreation (e.g. Club Knoll, swimming pool, tennis courts, baseball and playfields, and picnic area), and 86 acres of open space (e.g. recreation trails, creek restoration, conserved woodlands, wildlife habitat, and parkland) comprise the remaining land uses proposed for 139 acres of the 183-acre site. It is assumed that an additional 44 acres on the site, but not included in these 139 acres of planned land uses, would be set aside for unbuildable slopes and roads. It is estimated that this alternative would employ approximately 1,140 people.

Single Use Campus Alternative

The Single Use Campus Alternative is characterized by 35 acres proposed for use as either an educational campus, conference/hotel facility, or an administrative/research headquarters complex. As an educational campus, it could include classrooms, a library, cafeteria, laboratories, multipurpose spaces, offices, student/guest facilities, vocational training center, and a machine wood shop. If used as a conference/hotel facility or administrative/research headquarters complex, the uses would be of a similar

character. One (1) acre would be planned for neighborhood retail use (e.g. convenience shops, restaurants, personal services [beauty shop], business services [copy service], and bank). Twelve (12) acres of active recreation (e.g. Club Knoll, swimming pool, tennis courts, baseball and playfields, and picnic area), and 101 acres of open space (e.g. recreation trails, creek restoration, conserved woodlands, wildlife habitat, and parkland) comprise the remaining land used proposed for 149 acres of the 183-acre site. It is assumed that an additional 34 acres on the site, not included in these 149 acres of planned land uses, would be set aside for unbuildable slopes and roads. It is estimated that this alternative would employ approximately 1,150 people.

Residential Alternative

The Residential Alternative is characterized by single-family residential development that is similar to the surrounding residential community and zoning. It is this "single-family unit" character that differentiates this alternative from the Maximum Capacity Alternative. The Residential Alternative includes two options (Options 1 and 2). Option 1 is the low density option, and Option 2 is the high density option. Option 1 is characterized by 82 acres that would include 357 housing units. Option 2 is characterized by 82 acres that would include 600 housing units. The remaining acreages and land uses are the same for either Option 1 or Option 2. Neighborhood retail development is planned for approximately two acres, and would include convenience shops, restaurants, personal services [beauty shop], business services [copy service], and a bank. Fourteen (14) acres of active recreation (e.g. Club Knoll, swimming pool, tennis courts, baseball and playfields, and picnic area), and 46 acres of open space (e.g. recreation trails, creek restoration, conserved woodlands, wildlife habitat, and parkland) comprise the remaining land uses proposed for 144 acres of the 183-acre site. It is assumed that an additional 39 acres on the site, but not included in these 144 acres of planned land uses, would be set aside for unbuildable slopes and roads. It is estimated that this alternative would employ approximately 170 (Option 1) to 190 (Option 2) people.

No Action Alternative

Inclusion of the No Action Alternative in the environmental analysis and documentation is required by the Council on Environmental Quality regulations, which implement NEPA. The No Action Alternative generally provides a benchmark against which federal actions are evaluated unless such benchmark conditions exceed a regulatory standard. It also fulfills the requirement of CEQA that a "no project" alternative be evaluated.

For this EIS/EIR, the No Action Alternative would retain NMCO in a "caretaker" or inactive status under Navy control, under the custody of the Navy Engineering Field Activity West. The No Action Alternative is defined as the installation being closed, as mandated by law, with on-site activity limited to landscape, structures, and utilities maintenance; fire prevention and protection; security; environmental restoration; and those activities associated with caretaker status of surplus properties.

Environmentally Preferable/Environmentally Superior Alternative

NEPA requires that an environmentally preferable alternative be identified and CEQA requires that an environmental superior alternative be identified. The No Action Alternative is the NEPA environmentally preferable alternative and CEQA environmentally superior alternative. However, consistent only with CEQA requirements, one of the reuse alternatives must further be identified as an environmentally superior alternative.

The Residential Alternative (Option 1 = 357 dwelling units) is the CEQA environmentally superior reuse alternative, as described in sections 2.5.1 and 2.5.2.

AFFECTED ENVIRONMENT

This EIS/EIR provides a description of the existing environmental and socioeconomic conditions at NMCO and of surrounding properties. The setting discussion for each resource area identifies the region of influence (ROI) applicable to the specific resource area. An ROI is a geographic area in which impacts for a particular resource would likely occur. Existing conditions are described for the following resource categories: land use, socioeconomics, public services, cultural, aesthetics, biology, water, geology and soils, traffic and circulation, air quality, noise, utilities, and hazardous materials. NMCO is located entirely in the City of Oakland. The Illustrative Future Land Use Map of the land use element dated 1980 of the Oakland Comprehensive Plan shows NMCO to be "Institutional or Governmental - Medical". The zoning of the site is the R-30 zone (One Family Residential Zone). This zoning allows one unit per lot. The R-30 zone has a minimum lot size of 5,000 square feet.

ENVIRONMENTAL CONSEQUENCES

The EIS/EIR evaluates the potential environmental consequences associated with the disposal of federal surplus land, and with the reuse of NMCO. For every resource area evaluated in the EIS/EIR, reuse consequences, also referred to as impacts, are projected to the year 2020. Complete

implementation of each reuse alternative is assumed in the determination of impacts. Impacts are specified as resulting from disposal or reuse.

For purposes of the Navy NEPA analysis, direct environmental consequences or impacts are those associated with Navy disposal of surplus property and the No Action Alternative. Indirect impacts are associated with community reuse of Navy surplus property. The Navy's roles and responsibilities for disclosing indirect reuse-related environmental impacts is to address reasonably foreseeable impacts. However, property reuse will occur after it is conveyed from federal ownership and in support of local reuse actions. Implementation of mitigation measures for reuse environmental impacts is a local responsibility and not the responsibility of the Navy.

Table ES-1 indicates the most adverse type of impact (either significant and not mitigable, significant or mitigable, not significant, or none) for each issue area and alternative.

Examination of Table ES-1 indicates three important considerations. First, the consequences (impacts) of Navy disposal and of the No Action Alternative will not have environmental impacts as evaluated against NEPA significance thresholds. This is to be expected, since Navy property disposal is basically a transfer of title and not an environmentally disruptive action. Second, impacts from reuse alternatives to the physical environment are primarily either significant and mitigable, not significant, or do not occur as evaluated against CEQA significance thresholds. The only significant and unmitigable impacts are associated with air quality ozone precursor and PM_{10} emissions resulting from all of the reuse alternatives and in combination with cumulative development due to traffic. Some identified socioeconomic and aesthetic/scenic resource impacts would be beneficial when compared to existing conditions. This is also to be expected, given the site constraints criteria used during the OBRA reuse planning process. Third, the impacts of the reuse alternatives are generally similar across all alternatives for any particular resource category. Because the physical development constraints of the site (steep slopes, drainage, erosion, and roads and infrastructure) and the knowledge that each alternative has been formulated to meet common housing, economic, and related planning goals, this similarity is to be expected.

Land Use

Disposal would not impact land use because it would not result in any changes to the physical environment (it is a transfer of title). No significant land use impacts would result from implementation of the Maximum

Table ES-1
Summary of Impacts and Significance

Impact Issues	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Land Use	○	○	◐	◑	◐	◐
Socioeconomics	○	○	◑	◑	◑	◑
Public Services	○	○	◑	◑	◑	◑
Cultural Resources	○	○	○	○	○	○
Aesthetics and Scenic Resources	○	○	◑	◐	◐	◐
Biological Resources	○	○	◑	◑	◑	◑
Water Resources	○	○	◐	◐	◐	◐
Geology and Soils	○	○	◑	◑	◑	◑
Traffic and Circulation	○	○	◑	◑	◑	◑
Air Quality	○	○	●	●	●	●
Noise	○	○	◑	◑	◑	◑
Utilities	○	○	◑	◐	◐	◐
Hazardous Materials and Waste	○	○	◐	◐	◐	◐
Growth-Inducing Impacts	○	○	○	○	○	○
Cumulative School Capacity	○	○	◑	◑	◑	◑
Cumulative Traffic and Circulation	○	○	◑	◑	◑	◑
Cumulative ozone precursor and PM_{10} emissions	○	○	●	●	●	●
Cumulative Landfill Capacity	○	○	◑	◑	◑	◑
Environmental Justice	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

Capacity, Single Use Campus, or Residential (Options 1 or 2) alternatives, because no disruption of existing surrounding land uses would occur. No substantially incompatible land uses would be introduced, and proposed land uses would not have the potential to disrupt or divide the established physical land use configurations. Significant and mitigable land use impacts would result from implementation of the Mixed Use Village Alternative, due to the presence of a research and development facility. Those impacts could be mitigated by restricting uses that conflict with surrounding neighborhoods. The Illustrative Future Land Uses Map of the land use element dated 1980 of the Oakland Comprehensive Plan show this site to be "Institutional or Governmental - Medical." None of the reuse alternatives would fit this designation. Therefore, all of the reuse alternatives would require a general plan amendment. The site is zoned R-30 (One Family Residential Zone). All of the alternatives would also require some type of

rezoning to include the "new" land within the City's planning jurisdiction (i.e. the 183 acre NMCO site), and to permit the uses proposed. However, if only single family residential homes were to be built, the property may not have to be rezoned. The site is one parcel. To implement any of the reuse alternatives, it is presumed that the site would also have to be subdivided.

Socioeconomics

Disposal would not impact local or regional employment or income, population and housing, schools (K-12), or recreation. Each of the four reuse alternatives would beneficially impact employment, income and recreation. There would be no impacts to population and housing. CEQA reuse impacts to schools would be significant and mitigable.

Employment generated as a result of reuse would range from about 170 jobs (Residential Alternative; Option 1) to approximately 1,150 jobs (Single Use Campus Alternative). The Mixed Use Village Alternative would result in an estimated 1,140 jobs, and the Maximum Capacity Alternative would lead to about 717 jobs.

The increase in the population of the City of Oakland and Alameda County due to the number of people previously living elsewhere that move in to the city or county as a result of reuse is estimated to range from about 1,299 (Residential Alternative, Option 1) to about 3,006 (Maximum Capacity Alternative), which represents about six to 14 percent of the City's projected population growth from 1995 to the year 2020, and from about one to two percent of Alameda County's projected population growth over the same period.

Public Services

Disposal would generally have no impact on public services provided at the site because disposal would occur to a jurisdiction capable of providing adequate services. Implementation of the Maximum Capacity, Mixed Use Village, Single Use Campus, and Residential alternatives could result in significant public service impacts due to slight increases in demand for City of Oakland police services. This impact can be mitigated for each alternative by adding one additional police officer to adequately serve the increased demand.

Impacts of disposal and reuse alternatives on Oakland fire protection services and emergency ambulance services would not be significant because current service levels could adequately serve the developments proposed for the site.

Cultural Resources

There would be no impact on cultural resources listed or eligible for inclusion in the National Register of Historic Places as a result of the reuse or any of the proposed alternatives. Previous cultural surveys failed to identify any properties of prehistoric or historic archeological, architectural, or traditional cultural value that would qualify for inclusion in the National Register. Each reuse alternative includes the public use of Club Knoll while protecting its architectural integrity. Club Knoll is the only remaining original building on the site. It has recently been used for community and city sponsored functions, and was formerly used as the original club house for the golf and country club. There would be no impact to Club Knoll.

Aesthetics and Scenic Resources

Disposal would have no impact on aesthetics and scenic resources because there would be no change to the physical environment. The Maximum Capacity Alternative would have significant and mitigable adverse effects due to housing construction on Admiral's Hill. Although housing construction on Admiral's Hill is very doubtful, this impact is mitigable through careful design to reduce visual contrast. The other three reuse alternatives would have no significant adverse effects to aesthetic and scenic resources. All reuse alternatives would have the same nonsignificant adverse effects through minimal loss of mature trees in areas to be redeveloped. They would also introduce beneficial effects through enhancement of the Rifle Range Creek corridor, demolition of NMCO hospital and paved areas, and increase in public viewing opportunities. The visual qualities of Club Knoll would be preserved in all alternatives. There are no impacts anticipated from light and glare.

Biological Resources

The disposal of the NMCO property would not result in any impact to biological resources. Under the reuse alternatives, the removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks, other native trees, and shrub and ground cover could cause significant and mitigable impacts. Those impacts could be mitigated by avoiding removal of such vegetation during construction and by restoring the riparian corridor surrounding the creek. In addition, care should be taken in locating staging areas for construction. Responsible habitat restoration planning, in coordination with the City of Oakland and other restoration specialists is recommended. To meet the requirements of Executive Order 11990 (Protection of Wetlands) the Navy will include a notification in the property deed that wetlands occur on the property in the riparian

(streamside) area. Rifle Range Creek restoration activities planned as a part of reuse would require compliance with Sections 1601 and/or 1603 of the California Fish and Game Code relating to streambed alteration, and to applicable provisions of Section 404 of the Clean Water Act (33 U.S.C. 1251-1387) relating to wetland habitats. Minor reuse impacts to nonsensitive vegetation (including minor losses of mature trees) and wildlife species and vegetation at NMCO would not be considered significant unless a project could disrupt the normal variability of the species or the entire community. Removal of more than minimal numbers of nonsensitive tree species protected under the City of Oakland tree ordinance could be significant and mitigable. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected.

No significant impacts are expected to occur from the potential removal of nonnative habitat on the facility because nonnative habitats do not provide habitat for native plant and wildlife species.

Water Resources

Disposal would have no impact to water resources. No significant impacts to water resources would occur under any of the reuse alternatives. Site developers would be required to comply with all applicable laws, regulations, and standards protecting the quality of surface and ground water resources.

All reuse alternatives would result in a reduction in the paved area within the riparian corridor and in several other areas of the site. Less paved areas effectively increase infiltration, and beneficially decrease the volume of discharged storm water. Assuming continued storm water drainage to creek channels, a reduction in peak storm flows to the creek would have a beneficial impact downstream. However, the beneficial impact would not be enough to reduce the need for flood control improvements downstream.

Geology and Soils

Disposal would have no impact on geology and soils. For CEQA purposes only, significant and mitigable impacts associated with increased exposure of people and structures to earthquakes from the nearby Hayward Earthquake Fault could occur under any of the reuse alternatives. Mitigation for increased public exposure to earthquakes includes compliance with the Uniform Building Code, conduct of required geotechnical studies, and other site specific investigations to determine the extent of seismic upgrades needed for existing buildings to be reused, or to determine the seismic stability needed for new buildings to be constructed. Physical construction activities

associated with any of the reuse alternatives would not increase the likelihood of an earthquake.

Significant and mitigable impacts associated with slope stability could result from construction of any of the reuse alternatives. Mitigation is possible by 1) limiting development to slopes of 30 percent or flatter; 2) obtaining required grading permits and complying with their terms and conditions; and 3) reducing slope failure risk during construction by using accepted professional standards for construction activities.

Traffic and Circulation

Disposal would have no impact on traffic and circulation. All reuse alternatives would add traffic to area roadways. The impacts are generally expected not to be significant except at certain intersections near the project site. All significant impacts can be mitigated without acquisition of additional right of way. Twelve nearby intersections were analyzed for their potential to increase traffic delays (in seconds). Implementation of the Maximum Capacity Alternative would result in significant and mitigable delays at five intersections. Implementation of the Mixed Use Village Alternative would also result in significant and mitigable delays at five intersections. Implementation of the Single Use Campus Alternative would result in significant and mitigable delays at four intersections. Implementation of the Residential Alternative (Option 1) would result in significant and mitigable delays at two intersections, and implementation of the Residential Alternative (Option 2) would result in significant and mitigable delays at four intersections. Impacts at all of these intersections could be mitigated by installing traffic signals and restriping some lanes.

The Single Use Campus Alternative would generate the most estimated morning (AM) peak hour trips (1,679 trips), followed by the Maximum Capacity Alternative (1,043 trips), the Mixed Use village Alternative (676 trips), and the Residential Alternative (476 trips for Option 1, or 637 trips for the more dense Option 2). Both the Mixed Use Village and Residential (both options) alternatives would result in a lower number of estimated AM peak hour trips than occur under existing conditions (733 trips) because there are fewer morning commuters under both of these alternatives.

The Maximum Capacity Alternative would generate the most estimated evening (PM) peak hour trips (1,575 trips), followed by the Mixed Use Village (1,338 trips), the Residential Alternative (Option 2 – 1,109 trips), the Single Use Campus Alternative (1,089 trips), and the Residential Alternative (Option 1 – 887 trips).

The Single Use Campus Alternative would generate the greatest number of average daily trips (13,840 trips), followed by the Maximum Capacity Alternative (13,090 trips), the Mixed Use Village Alternative (10,070 trips) and the Residential Alternative, Option 2 (8,730 trips) and Option 1 (6,815 trips).

None of the reuse alternatives would result in significant impacts to public transit service. Additional transit service would not be needed because demand would not exceed seat capacity.

Maximum Capacity Alternative - Peak hour traffic for the Maximum Capacity Alternative is expected to increase traffic congestion at the Keller/I-580 southbound off-ramp, the Keller/Mountain Boulevard, Mountain Boulevard/I-580 northbound off-ramp, the Mountain Boulevard/Main Entrance, and the Mountain Boulevard/Golf Links Road intersections. Addition of traffic signals at these five locations and minor lane changes would improve the traffic operations and would mitigate significant impacts.

Mixed Use Village Alternative - Peak hour traffic for the Mixed Use Village Alternative is expected to increase traffic congestion at the Keller/I-580 southbound off-ramp, Keller/Mountain Boulevard, Mountain Boulevard/I-580 northbound off-ramp, Mountain Boulevard/Main entrance, and Mountain Boulevard/Golf Links intersections. Addition of traffic signals at five locations and minor lane changes would improve traffic operations and would mitigate significant impacts.

Single Use Campus Alternative - Peak hour traffic for the Single Use Campus Alternative is expected to increase traffic congestion at the Keller/I-580 southbound off-ramp, Keller/Mountain Boulevard, Mountain Boulevard/I-580 northbound off-ramp, and Mountain Boulevard/Main entrance intersections. Addition of traffic signals at four locations and minor lane changes will improve traffic operations and would mitigate significant impacts.

Residential Alternative - Peak hour traffic for the Residential Alternative (Option 1) is expected to increase traffic congestion at the Keller/I-580 southbound off-ramp and Keller/Mountain Boulevard intersections. Peak hour traffic for the Residential Alternative (Option 2) is expected to increase traffic congestion at the Keller/I-580 southbound off-ramp, the Keller/Mountain Boulevard, Mountain Boulevard/I-580 northbound off-ramp, and the Mountain Boulevard/Main Entrance intersections. Addition of traffic signals at four locations and minor lane changes would improve traffic operations and would mitigate significant impacts.

Air Quality

Disposal would have no impact on air quality. Traffic-related ozone precursor and PM_{10} emissions would be significant and unmitigable under all reuse alternatives. Existing air quality planning programs would lead to regional air quality plans being modified to account for the adopted reuse. Building demolition/renovation and construction activities could generate substantial levels of dust. Construction-generated dust would be a significant and mitigable impact that can be reduced to less than significant levels by implementation of dust control measures identified in this EIS/EIR. Carbon monoxide levels at congested intersections would remain within state and federal standards for all reuse alternatives. Existing regulatory programs would adequately control asbestos and lead dust during building renovations for all reuse alternatives. Property disposal actions are exempt from Clear Air Act conformity requirements. Reuse plans are not federal agency actions, and thus are not subject to conformity requirements.

Noise

Disposal would not result in any noise impacts. Building demolition, new building construction, and roadway reconstruction will be the most significant and mitigable noise sources. Any occupied residential locations within 400 feet of construction sites may experience significant and mitigable impacts as temporary disturbance from construction noise. Construction noise impacts can be reduced by restricting most construction activity to normal daytime (7 AM to 7 PM) periods. Careful phasing of demolition, construction, and remodeling activities can also minimize the extent to which occupied areas are exposed to construction noise. Under all reuse alternatives, noise-sensitive land uses (e.g. housing) planned for the western side of the NMCO site would experience significant and mitigable noise levels from I-580 traffic. This impact could be reduced to less than significant levels through the use of berms/soundwalls, vegetation buffer areas, building configurations, or by placing sensitive land uses out of high noise areas.

Utilities

Disposal would have no impact on utilities. Significant and mitigable potable water supply impacts could result under the Maximum Capacity Alternative because projected use exceeds estimated historic annual potable water use. Mitigation to less than significant levels can be achieved by coordination between the City of Oakland and identified water supplier(s) and implementation of best management practices for water conservation. Impacts to potable water use under the Mixed Use Village, Single Use Campus, and Residential alternatives would be nonsignificant because they

would use less water than under preclosure conditions. No significant impacts are expected to landfill capacity, water distribution, sanitary sewer, stormwater drainage, electrical, natural gas, or telephone systems serving the NMCO site. Construction and demolition debris associated with reuse will not affect the Alameda County landfill over the short-term. Its long-term effects to landfill capacity are discussed under "Cumulative Impacts," below.

Hazardous Material and Waste

Disposal would have no impact on hazardous material and waste. Negligible quantities of hazardous materials and waste are expected to be generated, handled or disposed due to operations after base closure. In addition, maintenance operations associated with caretaker status are not expected to generate, handle, or dispose of significant quantities of such materials. As reuse of NMCO is implemented, hazardous waste management would be controlled by the property recipients. Once the responsibilities of hazardous waste management are allocated to individual organizations, proficiency with those materials and spill response plans may be required by Resource Conservation and Recovery Act regulations (42 U.S.C. § 6901 et seq.). Business plans and risk management programs also may be required under state Health and Safety Code requirements. The presence of numerous independent operators/owners at NMCO would change the existing regulatory requirements and may increase the regulatory burden relative to hazardous waste management.

The Navy/Marine Installation Restoration Manual defines an Installation Restoration Program as an evaluation of health and environmental hazards at those naval activities associated with past hazardous materials, operations and waste disposal activities. However, no Installation Restoration Program sites exist at NMCO. No potential for adverse impacts from past hazardous spills or materials operations or activities is expected as no such sites have been found. No PCB-containing equipment or PCB release sites have been identified at NMCO. Minimal use of pesticides is expected at NMCO following closure. The types of pesticides are likely to be consistent with those currently in use. This would not be a significant impact.

It is likely that some of the buildings at the facility built before 1980 have some amount of lead-based paint. Housing constructed prior to 1978 will be inspected for lead-based paint hazards. Lead-based paint hazards in housing constructed prior to 1960 will be abated prior to transfer of the housing if it is to be reused. Results of lead-based paint surveys and lead warning statements will be included in any contract for transfer or lease. No mitigation is required.

Asbestos surveys have been performed at NMCO and friable asbestos has been removed or encapsulated. Additional removal of nonfriable asbestos may be required prior to building demolition. No mitigation is required.

All nuclear medical materials and wastes located at NMCO were removed prior to facility closure. The hospital complex and the former drug screening laboratory were the only generators of medical and biohazardous waste at NMCO. Following base closure, the medical clinic was closed and no wastes are being generated, stored or disposed. No ordnance is known to have been used, stored, or disposed at NMCO.

OTHER NEPA/CEQA CONSIDERATIONS

Certain additional topics are required to be included in an EIS/EIR by NEPA or CEQA. These include the identification of any unavoidable adverse impacts to the environment, the identification of any irreversible and irretrievable commitment of resources, an analysis of cumulative impacts, and an analysis of growth-inducing impacts. Cumulative impacts result from the incremental impact of an action (or project) when added to other past, present, and reasonably foreseeable future actions (or projects). Growth-inducing impacts are the ways in which the proposed action could foster economic or population growth.

Unavoidable Adverse Impacts of the Proposed Action

Significant unavoidable impacts associated with reuse of NMCO are the production of ozone precursor and PM_{10} emissions associated with automobile emissions under all of the reuse alternatives, which exceed the Bay Area Air Quality Management District thresholds.

Short-Term Uses and Long-Term Productivity

The environmental productivity of NMCO historically has been related to its operation as a naval hospital, and the resulting physical conditions maintained. Proposed reuse could enhance long-term site environmental productivity through benefits achieved through disposal and reuse, including provision of jobs, housing and opportunities for various socioeconomic uses, maintenance of open space and biological resources, and maintenance of various infrastructure on the site.

Irreversible and Irretrievable Commitment of Resources

Implementation of the reuse plan would require considerable, but less than significant commitments of site resources for rehabilitation, demolition, and construction of proposed facilities. These commitments, however, would

not irreversibly commit the City of Oakland or any other entity to the land uses or physical changes made.

Growth-Inducing Impacts

Disposal of NMCO and subsequent implementation of a reuse plan could result in secondary growth in jobs, population, and housing, but would not result in significant growth-inducing impacts. Future growth and development both on and off site would be subject to subsequent development and permit applications and their required environmental review and disclosures.

Cumulative Impacts

Disposal would not result in any direct cumulative impacts. Reuse and future private development projects in the region would result in cumulative impacts to several resources.

When considered in combination with projected traffic generated by the Leona Quarry project, cumulative peak hour traffic generation for each of the reuse alternatives is expected to result in three area intersections experiencing significant and mitigable level of service/delay impacts, including the Keller/I-580 southbound off-ramp, Keller/Mountain Boulevard, and Mountain Boulevard/I-580 northbound off-ramp. The installation of traffic signals at the affected locations along with minor lane changes (e.g., restriping) would mitigate the impacts to a nonsignificant level.

The combined effects of the reuse and the Leona Quarry project would result in small cumulative increases in traffic congestion at intersections near the NMCO site, but would not lead to significant carbon monoxide concentrations.

Reuse of NMCO plus other major developments in the region will result in a cumulative contribution to ozone precursor and PM_{10} emissions in the Bay Area. Cumulative air quality issues in the San Francisco Bay Area are addressed through regional air quality plans that are expected to achieve and maintain the federal ozone, carbon monoxide, and PM_{10} standards in the Bay Area. Because the more stringent state standards for ozone and PM_{10} have not yet been achieved, these cumulative impacts have not been fully mitigated.

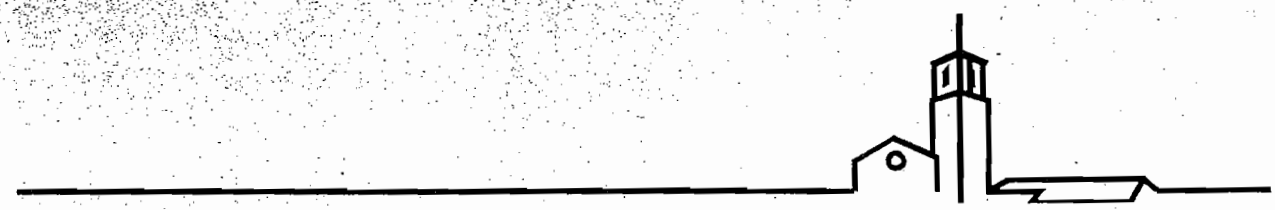
The generation of an estimated 71,346 tons of demolition waste represents a significant and mitigable impact to Alameda County landfill capacity. Over

the long-term, this volume of waste, in combination with waste from other sources, could reduce the County's ability to meet their integrated waste management plan waste diversion (e.g., source reduction, recycling, composting, etc.) goals designed to reduce the amount of waste that is placed at landfills. Implementation, over the long-term, of a construction demolition waste and debris diversion program, in coordination with implementation of County-planned diversion programs and landfill capacity expansion and/or acquisition, would mitigate this impact to a nonsignificant level.

Environmental Justice

The Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-income Populations requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities."

If the mitigation measures associated with the community reuse alternatives are implemented as described in the EIS/EIR, no significant and adverse environmental impacts would disproportionately affect minority communities or low-income communities.



1.0 PURPOSE OF AND NEED FOR ACTION

1. PURPOSE OF AND NEED FOR ACTION

This environmental impact statement/environmental impact report (EIS/EIR) evaluates the potential impacts to the environment that may result from the Navy disposal and community reuse of the Naval Medical Center Oakland (NMCO) in Oakland, California. NMCO closed on September 30, 1996, pursuant to the Defense Base Closure and Realignment Act of 1990 (Part A of Title XXIX of PL 101-510 [DBCRA]), as amended. This document has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, current California Environmental Quality Act (CEQA) statutes (California Public Resources Code [PRC] sec. 21000 et seq.) and implementing guidelines (California Code of Regulations [CCR] sec. 15000 et seq.), the Council on Environmental Quality (CEQ) regulations on implementing NEPA, Navy guidelines (OPNAVINST 5090.1B), and the 1990 Defense Base Closure and Realignment Act (Part A of Title XXIX of PL 101-510), as amended by the 1993 BRAC closure process (U.S. Navy 1994d). The federal action evaluated in this EIS/EIR is the disposal of federal surplus property and structures, while the local project evaluated is the proposed reuse plan for the NMCO site.

This Final EIS/EIR includes the information and analysis contained in the Draft EIS/EIR circulated for public review and comment. It also includes responses to those comments and revisions made in response to those comments.

1.1 PURPOSE AND NEED

The Department of Defense (DOD) has for the past several years been reducing its basing and staffing requirements to match current force structure plans. The identification of NMCO for closure is a result of that process.

Congressional action, under the provisions of the Defense Authorization Amendments and the Base Closure and Realignment Act of 1990 (Part A of Title XXIX of PL 101-510 [DBCRA]), established a process to close and realign military bases, including NMCO. The Base Closure Community Redevelopment and Homeless Assistance Act of 1994 ("the Redevelopment Act" PL 103-421) also addresses disposal methods associated with base closure. As part of this process, the Secretary of Defense submitted a consolidated list of recommended closure and realignment actions to a bipartisan commission appointed by the President and confirmed by the Senate. The Defense Base Realignment and Closure Commission (BRAC

Commission) evaluated the recommendations and sent the findings to the President. The BRAC Commission recommended the closure of NMCO in its June 1993 report to President Clinton, who approved the recommendation in July 1993. The 103rd Congress accepted the closure decision in October 1993. This confirmation mandated Navy closure of the NMCO property and facilities. NMCO was closed on September 30, 1996.

Requirements of BRAC relating to the disposal of DOD property slated for closure include the following:

- Compliance with NEPA and related laws;
- Environmental restoration of the property as soon as possible with funds made available for such restoration;
- Consideration of the local community's reuse plan prior to disposal of the property; and
- Compliance with specific federal property disposal laws and regulations.

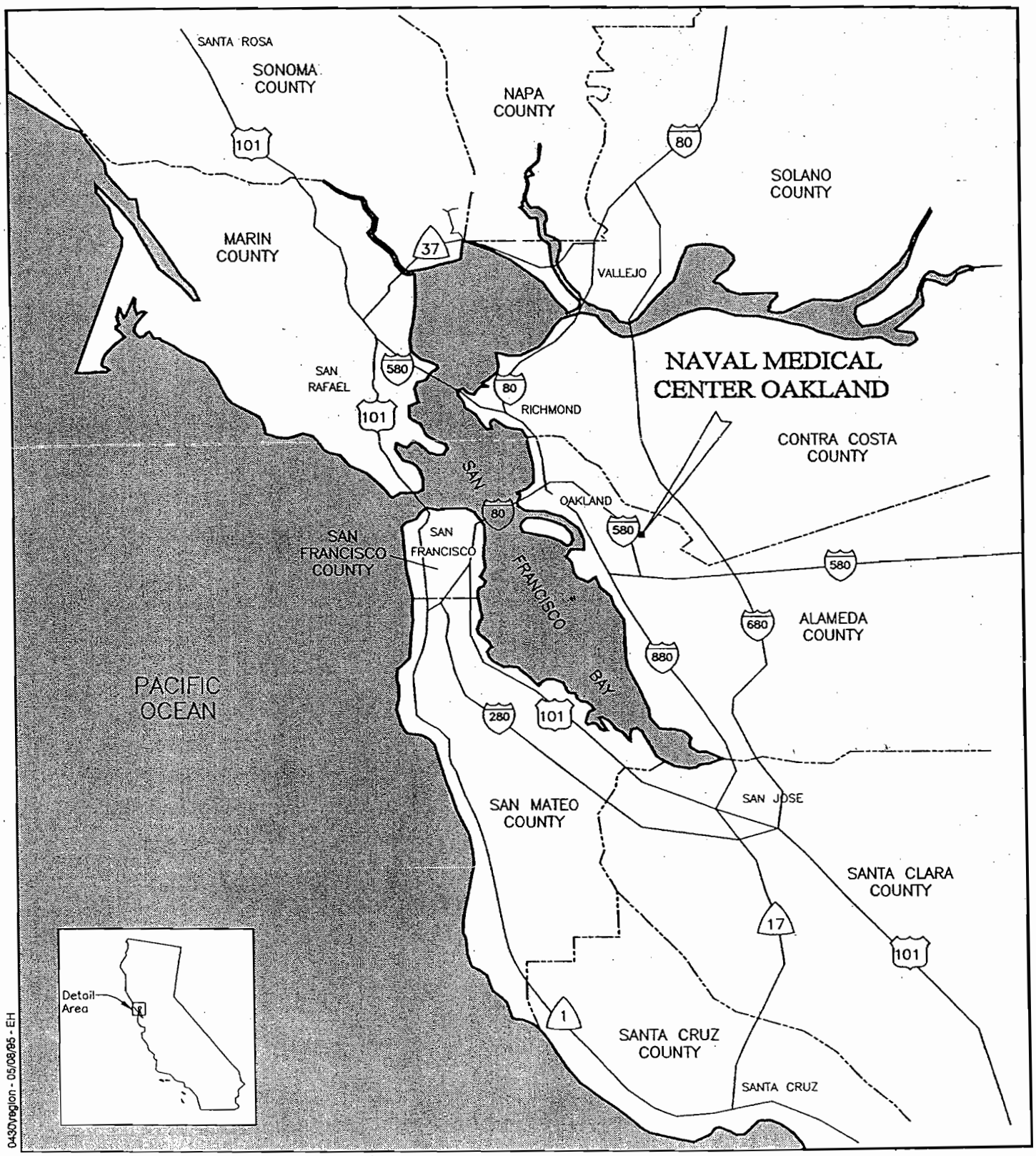
1.2 LOCATION AND HISTORY

1.2.1 Location

NMCO is located in the East Bay Hills in central east Oakland (Figure 1-1). It is approximately nine miles southeast of the City of Oakland central business district and 17 miles east of San Francisco. It lies within the municipal limits of the City of Oakland in Alameda County (Figure 1-2).

The NMCO site is approximately 183 acres of gently to steeply sloping land. It is bounded on the south and east by residential development, on the north by Keller Avenue and residential development, and on the west by Mountain Boulevard. Immediately to the west of Mountain Boulevard lies US Interstate 580 (I-580), also known as the MacArthur Freeway.

NMCO is developed with approximately 89 structures. Club Knoll was built in 1927 as the clubhouse for a golf and country club. The main hospital, five modern buildings, 20 "vintage" wooden buildings, 24 miscellaneous structures, and 38 family housing structures make up the remainder of the buildings. Building use includes medical care, light industrial, residential, commercial, office, recreational, and educational.



Naval Medical Center Oakland is located nine miles southeast of the central business district of the City of Oakland.

LEGEND:

County Lines

Federal and State Highways

N

0 6 12

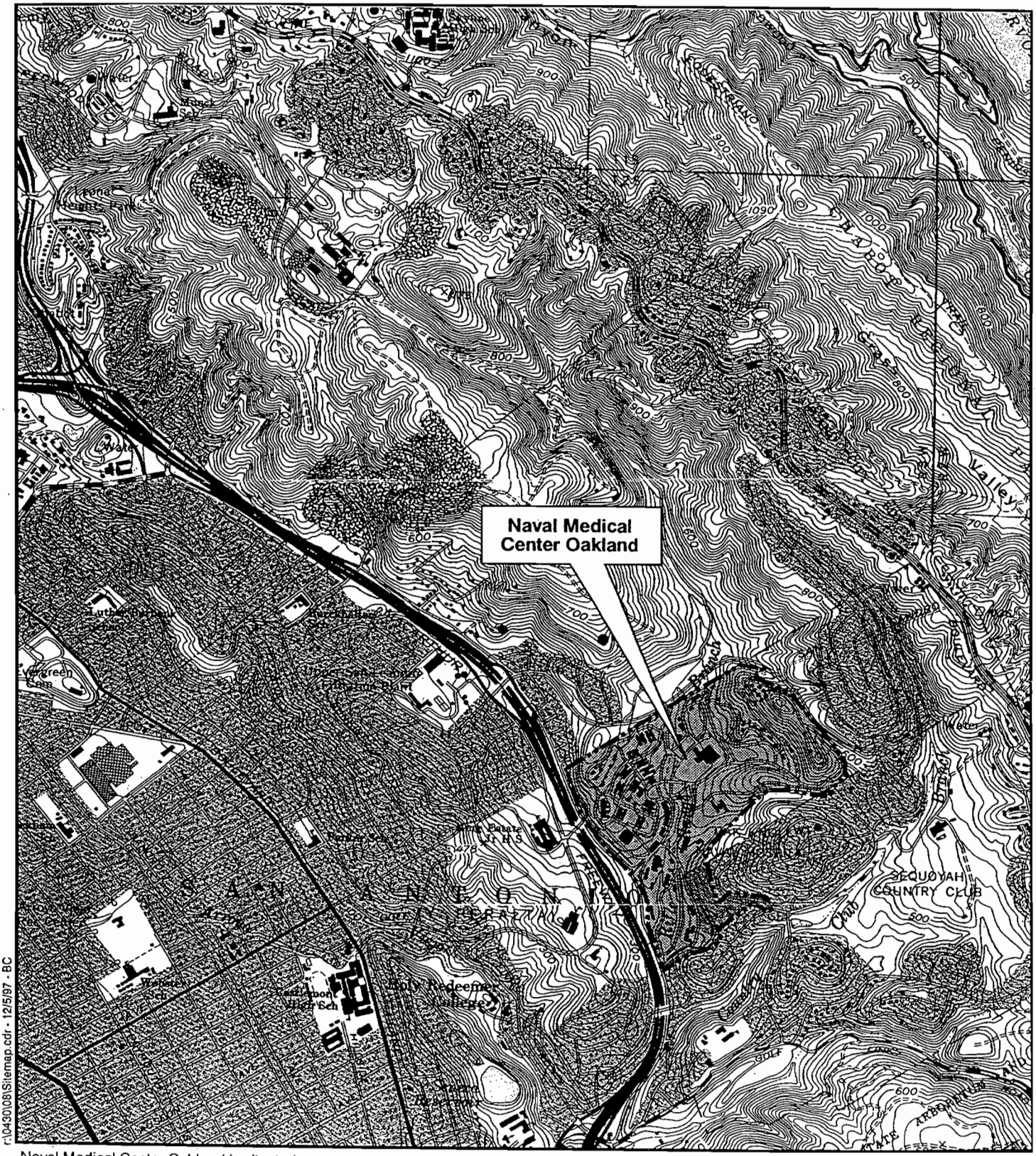
Approximate Scale in Miles

Developed by Tetra Tech

Regional Site Location Map

Naval Medical Center Oakland

Figure 1-1



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Naval Medical Center Oakland is situated on 183 acres in the Oakland Hills.

N

0 1,000 2,000

Approximate Scale in Feet

Site Location

Naval Medical Center Oakland

Source: USGS 7.5' quadrangle, Oakland East, California (1980)

Figure 1-2

The Illustrative Future Land Use Map of the Oakland Comprehensive Plan land use element dated 1980 shows this area to be "Institutional or Governmental - Medical". The site is zoned as a R-30 One Family Residential Zone. The site is located entirely within the City of Oakland.

1.2.2 History

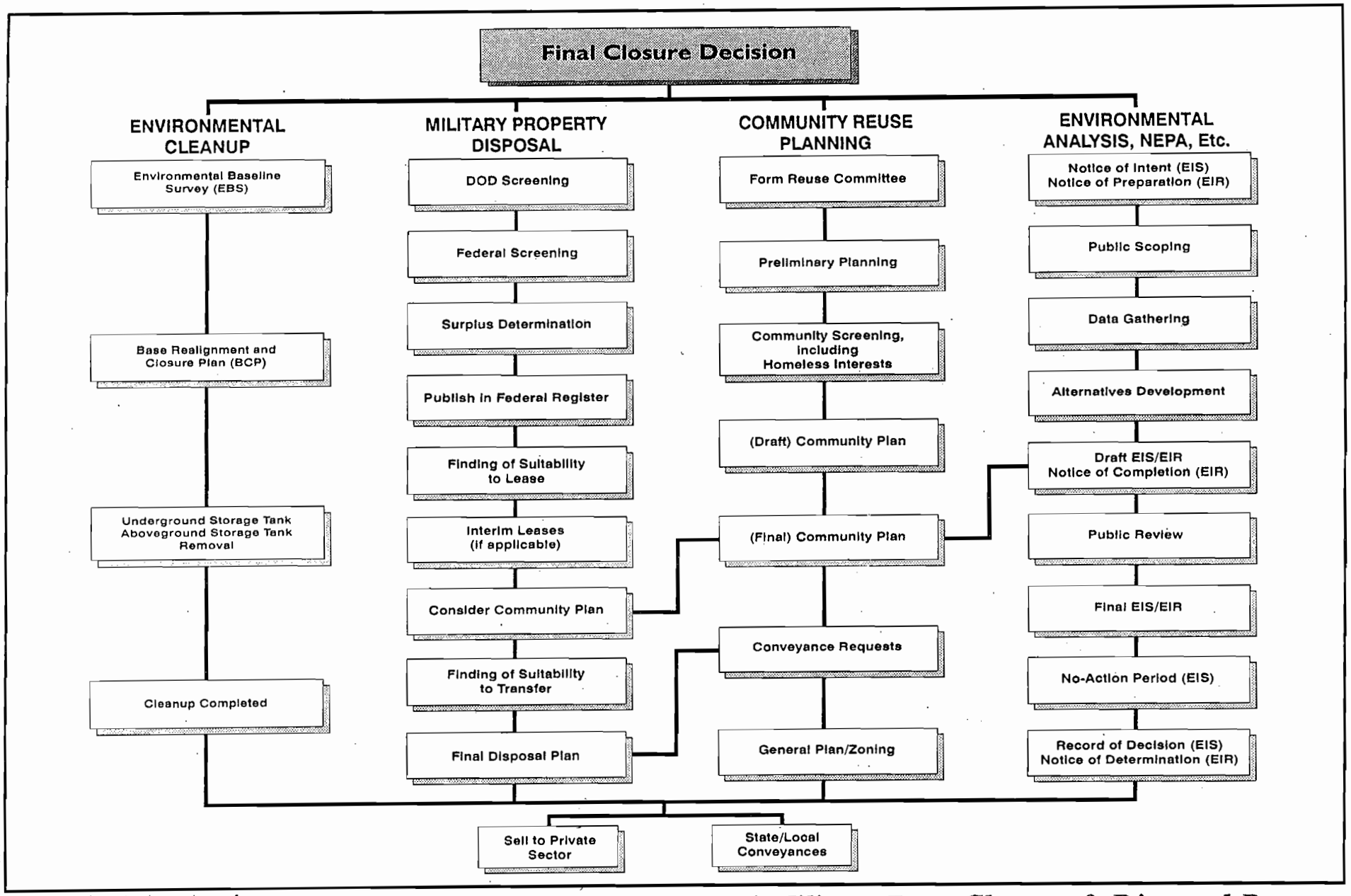
Before 1942, the NMCO site was a golf course and country club. However, with the influx of casualties in 1941 from the war in the Pacific, additional medical facilities were required along the West Coast. The Oak Knoll Golf and Country Club site was chosen for the new hospital because of its accessibility to the Bay Area. The site was acquired through eminent domain in 1942. The "temporary" hospital was commissioned on July 1, 1942, as the "Oak Knoll Naval Hospital" with 25 redwood barracks and six ward buildings housing 204 beds. Construction kept pace with increasing casualties in the Pacific. In 1945, at the climax of the war, the hospital was caring for over 8,000 patients with a military and civilian staff of approximately 3,000.

In 1950, the Navy's West Coast centers for care of amputees and neuropsychiatric patients were transferred from the 100-year-old naval hospital at the Mare Island Naval Shipyard facility to NMCO.

With demobilization of forces after World War II, both the activity and the population of the hospital declined, only to increase again during the Korean Conflict when the daily patient population averaged 2,500. This figure subsequently fell to a peacetime low of about 600 a day. The influx of casualties from the Vietnam Conflict began in 1965, and patient care activities increased once again. Most recently the NMCO provided medical support during the Gulf War and to the United Nations/U.S. forces implementing the peace in Bosnia (U.S. Navy 1984; Theresa Hughes & Associates 1994).

1.3 DISPOSAL OF NAVAL MEDICAL CENTER OAKLAND

The disposal of the federal surplus property at NMCO is the federal action considered in this EIS/EIR. The disposal process encompasses several actions, as outlined in Figure 1-3. The federal government is responsible for environmental cleanup (now completed) and disposal of the property, while the local community is responsible for preparing and implementing a reuse plan for the property. The following narrative describes the actions associated with disposal of the property. Predisposal and disposal actions are described separately. The description of predisposal actions includes



9-1

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After a decision to close a base, four processes can take place prior to property transfer.

Elements of Typical Military Base Closure & Disposal Process

Naval Medical Center
Oakland, California

Source: Developed by Tetra Tech, 1995

Figure 1-3

potential caretaker activities, site cleanup operations, and interim leasing activities. The description of the disposal process includes a summary of the required federal and local screening processes established for determining future uses of the NMCO property.

1.3.1 Predisposal Actions

Caretaker Activities

NMCO is in a temporary caretaker or inactive status under Navy control. The Navy property has been reassigned to the custody of the Navy's Engineering Field Activity West (EFA West) in San Bruno, California. The installation is closed, as mandated by law, with on-site Navy activity limited to security, maintenance, environmental restoration activities, and those actions associated with caretaker status of surplus properties. EFA West has established a Navy Caretaker Site Office at NMCO and is responsible for caretaker services until the property is transferred out of Navy ownership.

Remaining workers oversee security, maintenance, fire prevention and protection services, and environmental work, and include an administrative staff, a fire/security staff, and an environmental management staff. Caretaker employees would be affiliated with the Navy Caretaker Site Office or its contractors, and can be supported using a combination of Navy, contractor, and non-Navy staffing and funding.

Specific caretaker actions performed by on-site employees include the following:

- Inspection and maintenance of utility systems essential to security and telecommunications and of roads to avoid irreparable deterioration. Nonessential elements of utility systems and some entire systems, such as alternate systems, could be abandoned while still meeting caretaker requirements;

- Periodic landscape maintenance around unoccupied structures, as necessary, to protect the structures from fires and prevent nuisance conditions;

- Maintenance of property access to permit the service and maintenance of utility or infrastructure systems;

- Continuation of security patrols and maintenance of security systems, maintenance of perimeter fences, addition of interior fencing, if any, around hazardous waste sites, depending on the length of time the areas may remain in caretaker status;

- Maintenance of fire prevention and protection services;
- Continuation of land management programs, such as natural resource management, pest control, erosion control, and tree removal; and
- Minimal maintenance of structures and other facilities in a manner that facilitates interim use leasing or economical resumption of use.

Characterization and remediation of contaminated sites is the responsibility of the Navy and is completed. This EIS/EIR addresses the areas within NMCO that require characterization or remediation by describing the nature and extent of the contamination in an overall environmental context and by referring to the remedial status.

Interim Use Leasing

Interim use leasing of facilities at NMCO may occur prior to property transfer. The intent of interim use leasing is to create jobs, increase income, and continue the use of infrastructure. Interim use of facilities by a non-Navy entity prior to property transfer can be accomplished through leases, licenses, or permits.

The Military Leasing Act of 1956 (10 USC 2667), as amended, permits the Navy to implement interim leasing. Interim leases may be instituted if the proposed use would promote national defense or be in the public interest. Interim uses cannot preclude any future Navy options or irrevocably commit resources. Prior to any leasing or permitting, the Navy must complete a Finding of Suitability to Lease, which consists of an Environmental Baseline Survey describing the condition of the property and an appropriate NEPA document describing the potential impact on the environment of the leasing activity.

1.3.2 Disposal Process

The disposal process for NMCO is regulated by the Base Closure Community Assistance Act of 1993 (Subtitle A of Title XXIX of PL 103-160), as amended by the 1993 BRAC closure process; the Federal Property and Administrative Services Act of 1949, as amended; the Surplus Property Act of 1944; and the Federal Property Management Regulations. The recent Base Closure Community Redevelopment and Homeless Assistance Act of 1994 ("the Redevelopment Act" PL 103-421) also addresses disposal methods associated with base closure. The Navy must also comply with the 1994 Defense Authorization Act and other laws and regulations, including USC Title 10 and Navy regulations, affecting the disposition of real property.

Property Screening Process

The Navy is responsible for the screening and disposal of real and personal property that has been declared excess to the needs of the Department of the Navy as a result of the closure. The disposal process contains several steps, beginning with DOD and federal agency screening whereby the excess property is offered to other DOD and federal agencies. Following completion of this initial screening, if no DOD or federal agency officially expresses an interest in the property (all or portion), it is then declared "surplus" to the federal government. Consideration is then given to local homeless providers for use of federal surplus property on NMCO, in accordance with PL 103-421. Following completion of the federal and homeless screening, the remaining federal surplus property is available for transfer to state, local, and private entities. The screening process for NMCO is described below.

DOD Screening and Federal Agency Screening. The first step in the real estate screening process is to offer excess property to other DOD agencies and then to other federal agencies. Under the 1994 Defense Authorization Act, DOD and federal screening should be completed within six months after the installation's closure date is approved.

The Navy has completed the DOD and federal screening process for NMCO. Two federal agencies within the U.S. Department of Justice, the Federal Bureau of Prisons and the Immigration and Naturalization Service, expressed interest in property at NMCO. These agencies subsequently withdrew their request.

Homeless Assistance Screening. The Base Closure Community Redevelopment and Homeless Assistance Act of 1994 (PL 103-421) (Redevelopment Act) established revised procedures for addressing the needs of the homeless as an alternative to the McKinney Act (42 U.S.C. § 11411 as implemented by PL 101-510, PL 100-526, and PL 103-160). The revised procedures require that the needs of the homeless be balanced with the economic development and other development of the base in the community's reuse planning process. The City of Oakland ("City") was recognized by the Secretary of Defense as the local redevelopment authority (LRA). The City, in turn, designated the Oakland Base Reuse Authority (OBRA) as the LRA for all base conversions in the City.

In March 1995, OBRA recognized the Alameda County Base Conversion Homeless Collaborative (ACBCHC) as the sole representative for all homeless assistance providers in the county under the Redevelopment Act. The ACBCHC (ACBCHC 1995) submitted a notice of interest to OBRA listing properties at NMCO for homeless assistance. OBRA and the

ACBCHC and community representatives subsequently negotiated a homeless assistance submission (plan) for approval by the US Department of Housing and Urban Development (HUD) and the ACBCHC agreed to the terms of the plan in lieu of obtaining real property at NMCO. The OBRA reuse plan, including the homeless assistance plan, was submitted to HUD in August 1996. The OBRA plan proposed to provide $2,000,000 to ACBCHC for use in the provision of new homeless services in Alameda County. The OBRA plan also proposed providing NMCO personal property such as furniture and equipment to support homeless services, and proposed a goal of hiring homeless persons to fill 15 percent of the future positions hired in support of the use or development of NMCO.

HUD (HUD 1996) advised OBRA in September 1996 of recommended modification to OBRA's homeless assistance plan. OBRA (OBRA 1997) submitted a revised homeless assistance plan on 17 July 1997. On 24 September 1997, HUD approved OBRA's revised homeless assistance plan (HUD 1997b).

Methods of Conveyance

Following base closure, environmental remediation, and completion of NEPA requirements, the Navy may transfer property to other federal agencies or convey property to state, local, or private entities. Federal law provides for a variety of conveyance methods to implement Navy property disposal decisions after completion of the NEPA process.

Transfer to Another Federal Agency. The Navy could transfer the real property to another federal agency.

Public Benefit Discount Conveyance. State or local government agencies or other qualified entities may obtain property at less than fair market value when sponsored by a federal agency for uses that would benefit the public. Public benefit conveyances typically restrict uses to airports, ports, prisons, educational facilities, recreational facilities, public health, wildlife conservation, and historic monuments and memorials.

Negotiated Sale. State and local government agencies or other qualified entities may request a sale at fair market value with negotiation of the payment terms.

Economic Development Conveyance. Economic development conveyances are mechanisms to convey property to an LRA at or below fair market value using flexible payment terms for the purpose of economic development and job creation. To qualify for this conveyance, the LRA must submit a request to the Department of the Navy describing its proposed economic

development and job creation program. The conveyance mechanism further requires that the Navy prepare a statement to explain why fair market value was not received.

As part of the disposal process, the City of Oakland was recognized by the Secretary of Defense as the LRA. The City, in turn, designated the OBRA as the LRA for all base conversions in the City. This authority came through the Oakland Base Reuse Authority Joint Powers Agreement of March 1995, an agreement between the City of Oakland, the Oakland Redevelopment Agency, and the County of Alameda. In this role as LRA, OBRA has developed a reuse plan for NMCO.

Pursuant to the Joint Powers Agreement, the City of Oakland reserves and retains its land use, zoning, and building authority. Therefore, the City is the lead agency for CEQA purposes and the decision making body with respect to any land use approvals (general plan amendments, rezoning, etc.) that the reuse plan may require.

Competitive Sale. Sale to the public would occur through either an invitation for bids or an auction.

1.4 USE OF AN INTEGRATED DOCUMENT

Use of an integrated EIS/EIR is encouraged by both NEPA and CEQA. CEQA and its guidelines have numerous provisions allowing state and local agencies to use an EIS/EIR as a substitute for an EIR. These provisions were reinforced in 1994 by the adoption of California legislation (Assembly Bill [AB] 3774) that specifically authorizes a lead agency to use an EIS/EIR as the EIR for a federal base reuse plan, provided public involvement is at least as substantial as that required by CEQA.

1.4.1 Document Purpose

This integrated EIS/EIR has been prepared to assess the potential environmental impacts of NMCO property disposal and reuse, and thereby to fulfill requirements of NEPA and CEQA. Decisions regarding which bases to close, relocate, or realign were exempted by Congress from NEPA documentation requirements under DBCRA (PL 101-510, Section 2905). However, under NEPA, the Navy must consider the direct environmental effects of reasonable alternatives for the disposal, and indirect impacts from the reuse of surplus property at closing bases.

For purposes of the Navy NEPA analysis, direct environmental consequences or impacts are those associated with Navy disposal of surplus property. The No Action Alternative and indirect impacts are associated

with community reuse of Navy surplus property. The Navy's roles and responsibilities for disclosing indirect reuse-related environmental impacts is to address reasonably foreseeable impacts. However, property reuse will occur after it is conveyed from federal ownership and in support of local reuse actions. Implementation of mitigation measures for reuse environmental impacts is a local responsibility and not the responsibility of the Navy. The City of Oakland is required by CEQA to evaluate the environmental effects of implementing a reuse plan.

This EIS/EIR meets both NEPA and CEQA content requirements. As required under NEPA, the disposal action has been identified, the potential impacts of each alternative have been analyzed at equal levels of detail, and socioeconomic impacts have been identified.

The Navy will use the EIS/EIR in its consideration of disposal options for surplus property and structures at NMCO. The Navy will issue a Record of Decision (ROD) describing the final disposal plan after consideration of the environmental impacts identified in this EIS/EIR. Following disposal, no additional NEPA review by the Navy will be required.

The City of Oakland would certify the EIS/EIR and use the document in its consideration of any necessary amendments to its general plan, rezoning, adoption of a specific plan, other specific area plan, development agreements, or any other discretionary approvals. Should any approvals by the City of Oakland include significant unavoidable environmental impacts, the City of Oakland would be required to adopt a statement of overriding considerations as required by CEQA. As required under CEQA, an environmentally superior reuse alternative is identified in Chapter 2.

For purposes of CEQA, this joint EIS/EIR document is a program EIR. A program EIR is prepared for an agency program or series of actions that can be characterized as one large project. Typically, this includes actions that are closely related either geographically or temporally. Use of a program EIR allows a public agency to characterize the overall program as the "project" being approved at that time. The agency may dispense with further environmental evaluation for later approvals or activities as long as the analysis adequately discloses potential impacts in the program EIR. The EIS/EIR is intended to provide decision makers, responsible agencies, and the public with adequate information on the potential range of environmental impacts to make decisions on reuse alternatives at a level of detail consistent with reuse planning efforts to date.

1.4.2 Document Organization

Contents of an EIS under NEPA and an EIR under CEQA are similar and generally parallel one another. NEPA and CEQA differ in their level of description and evaluation of alternatives. NEPA requires a consistent level of detail for a federally proposed action and each alternative. CEQA allows a less detailed description and analysis of alternatives than that conducted for the proposed project. Under NEPA, socioeconomic impacts may be considered potentially significant. The identificaiton of significant socioeconomic impacts are not strictly required under CEQA. CEQA contains some mitigation monitoring requirements not included under NEPA. This EIS/EIR is organized as follows.

Chapter 1, Purpose of and Need for Action, provides an overview of the reasons for Navy disposal and community reuse of NMCO. It includes a description of the EIS/EIR content and approach, a description of the decision process for disposal of NMCO, and a description of the disposal process and of the public agency involvement process used to solicit input on the potentially significant environmental impacts.

Chapter 2, Alternatives, Including the Proposed Action, provides a description of the proposed Navy disposal action and a summary of the community planning process leading to formation of the community reuse alternatives. In addition to Navy disposal, this EIS/EIR analyzes four community reuse alternatives: 1) The NMCO Reuse Plan, or preferred alternative, described as the Maximum Capacity Alternative containing an executive (9-hole) golf course and driving range, a range of housing units, active recreation, public benefit conveyances as health and social services and cultural facilities, and professional offices; 2) a Mixed Use Village Alternative, with retail, community facilities, recreation facilities, and an office, live-work, and residential mixed-use zone; 3) a Single Use Campus Alternative for occupancy by either an educational institution, a research and development facility, or similar-sized campus; and 4) a Residential Alternative. In addition, a No Action Alternative is described.

Chapter 3, Affected Environment, presents a description of the existing environmental and socioeconomic conditions that may be affected by the proposed action at NMCO. The setting discussion also includes identifications of the regions of influence (ROI) applicable to each resource area.

Chapter 4, Environmental Consequences, describes the potential environmental consequences, or impacts, of the disposal and reuse of NMCO. Impacts are described at a level of detail consistent with the level of detail provided in the reuse plan. For each impact a determination is

made as to whether it would constitute a significant impact, a less than significant impact, or beneficial impact. Direct and indirect impacts are identified. Mitigation measures are identified for any impact determined to be significant and mitigable. The purpose of this chapter is to provide the public, interested agencies, and decision makers with a clear understanding of the environmental ramifications of disposal, and of adopting (or not adopting) the reuse plan or any of its alternatives.

Chapter 5, Other Considerations Required by NEPA/CEQA, addresses seven other topics required by state or federal regulations. These include identification of any unavoidable adverse impacts to the environment (NEPA/CEQA), short-term uses and long term productivity (NEPA/CEQA) identification of irreversible and irretrievable commitments of resources (NEPA/CEQA), analysis of cumulative impacts (NEPA/CEQA), and analysis of growth-inducing impacts (CEQA). Any potential disproportionate impacts on low-income or minority populations are also described, in accordance with Executive Order 12898 on Environmental Justice (NEPA). Effects found not to be significant are identified (CEQA).

Chapters 6 through 10 provide the reader with background information on consultation with interested and responsible agencies, a list of references, a list of preparers, an index/glossary, and distribution list.

Technical appendices are presented under separate cover as Volume II. They include supporting information for the public involvement process, the sensitive species survey, site photographs supporting the aesthetics and scenic resources analysis, site utilities diagrams, the site tree study, the Alameda whipsnake survey, and Alameda County Congestion Management Agency countywide transportation demand model traffic volume analysis.

1.5 RELATED STUDIES

The reuse planning process for NMCO will occur over several years. During this process, additional environmental and planning studies might be required for property leases and other land use proposals. These related studies are discussed below.

1.5.1 Related NEPA/CEQA Documentation

For purposes of CEQA, this EIS/EIR is intended to address the potential impacts of reuse of NMCO at a programmatic level. The City of Oakland intends to use this program EIS/EIR for all project approvals required to implement the reuse plan. Such approvals may include, but are not limited to subsequent project-level environmental review that may be required

under the California Environmental Quality Act for as yet unforeseen developments and impacts that may not have been adequately covered by this document. However, no additional NEPA review by the Navy will be required following disposal.

1.5.2 Environmental Restoration Studies

The Base Realignment and Closure Cleanup Plan (BCP) for a closing base provides the status of ongoing environmental restoration and associated compliance programs. The BCP for NMCO (U.S. Navy 1994b) was completed on March 8, 1994, and was updated with an Environmental Business Plan in March 1996 (US Navy 1996). The BCP provides an evaluation of the status of various cleanup programs and summarizes the compliance items that require further evaluation and implementation. The document is scheduled for update annually or as necessary in response to the changing conditions and level of completion of these restoration programs until full restoration is complete.

DOD policy requires the preparation of an environmental baseline survey prior to selling, leasing, or transferring real property. The environmental baseline survey also is used to meet the requirements of the Community Environmental Response Facilitation Act (PL 102-426). The Final Environmental Baseline Survey for NMCO was completed in December 1994 (U.S. Navy 1994c) and documented the environmental conditions of real property at NMCO and adjacent properties. NMCO property was classified into one of seven BRAC types based on known storage, release, disposal, or migration of hazardous materials. Uncontaminated property also was identified in this process.

1.6 PUBLIC INVOLVEMENT PROCESS

The EIS/EIR process is designed to involve the public in federal and local decision making. Opportunities to comment on and participate in the process are provided during preparation of this EIS/EIR, as outlined in the following sections. Comments from agencies and the public have been solicited throughout the process to help identify the primary issues associated with NMCO disposal and proposed reuse. The public notification process is intended to include the full spectrum of City of Oakland residents and community organizations. Chapter 10 includes the distribution list for the EIS/EIR. Appendix A provides copies of relevant public involvement materials, including a copy of the current mailing list for the EIS/EIR.

Methods to involve the public in the EIS/EIR process have included the following:

- Conducting a public scoping meeting to solicit comments and to identify issues of concern;
- Conducting a public meeting to receive comments on the Draft EIS/EIR and providing the required 45-day public comment period;
- Providing copies of the Draft EIS/EIR at local libraries and the Oakland City Hall;
- Publishing public notices of hearings, mailing public announcements, and coordinating media coverage, press releases, and feature articles; and
- Creating and updating an extensive mailing list to disseminate information. More than 1,300 letters were mailed to agencies and the community for the public scoping meeting.

The goal for public involvement, under Executive Order 12898 regarding Environmental Justice, is to include all affected low-income and minority populations in the public participation process. To achieve this, the following actions were implemented:

- Conducted public meetings at Club Knoll and NMCO with easy access by car or public transit;
- Notified and requested comments from several neighborhood associations and minority organizations that may be affected by or interested in the proposed action; and
- Announced the public meetings in newspapers with a wide circulation and encouraged written comments for those unable to attend the meetings.

1.6.1 Scoping Process

The purpose of scoping is to identify potential environmental issues and concerns regarding the disposal and reuse of NMCO. The scoping process for the NMCO Disposal and Reuse EIS/EIR included notification in the Federal Register, newspaper ads, a public meeting, and direct mail. The City of Oakland, the Navy, and the EIS/EIR consulting team considered comments received during the scoping process in determining the issues to be evaluated in the EIS/EIR. The main issues identified during the scoping process were impacts to public services and utilities, transportation, and biological resources. These issues are addressed in Chapters 3, 4, and 5.

The public was notified of the Navy's intent to prepare this EIS/EIR by a notice of intent published in the September 12, 1995, issue of the Federal Register (Vol. 60, No. 176). An announcement of the Navy's intent to prepare this EIS/EIR was also sent to the California Office of Planning and Research. The City of Oakland filed a notice of preparation with the California Office of Planning and Research on September 12, 1995, to prepare a joint EIS/EIR (State Clearinghouse Number 95103035). Both the notice of intent and notice of preparation were sent to the California State Clearinghouse for distribution to state agencies for their review and comments.

To initiate the scoping process, press releases were sent to the news media and a public notice was published in two local newspapers, including the Oakland Tribune and the San Francisco Chronicle, on Sunday, September 17, 1995 and Monday, September 18, 1995. Scoping letters, with an attached summary of the draft reuse plan and a description of alternatives and environmental issues to be considered in the EIS/EIR, were mailed to a total of 1,300 public agencies, public interest groups, and individuals either known or thought to have an interest in the disposal and reuse of NMCO. The scoping letter invited written comments and announced that a public scoping hearing would be held in the City of Oakland on September 27, 1995. The scoping hearing was attended by approximately 48 individuals, including agency representatives and members of the public. Issues identified through the scoping process are summarized below.

1.6.2 Summary of Scoping Issues

During the EIS/EIR scoping process, which ended October 12, 1995, 15 letters were received from members of the public, interested groups, and federal, state, and local agencies. In addition, nine speakers, representing either themselves or a local homeowners association, contributed comments regarding the scope of the EIS/EIR. These comments identified several issues and concerns that are summarized below. Many of these concerns have been incorporated into the EIS/EIR analyses. Because this document is an environmental evaluation of property disposal and reuse alternatives, comments on the choice of land uses developed for the OBRA-approved reuse plan (NMCO Reuse Plan) itself are not addressed in the EIS/EIR, except as they have bearing on environmental issues. Following each issue statement, a response is provided that indicates how the issue is treated in the EIS/EIR evaluation. Detailed summaries of the scoping concerns are included in Appendix A.

Police and Fire Protection, Medical Care Response Times - Many commenters expressed concern regarding the quality of police and fire

protection and medical care response times associated with implementation of the reuse plan.

Response. These issues are discussed in Sections 3.3 and 4.3 of this document.

Cultural Resources - Several commenters expressed their desire to preserve Club Knoll without compromising its appearance or integrity, and requested that the impacts to Club Knoll be analyzed.

Response. These issues are discussed in Section 4.4 of this document.

Transportation - Commenters expressed the concern that some reuse land uses may create traffic and parking problems or exacerbate existing traffic problems. Commenters requested analysis of traffic congestion, public transportation, and parking impacts. Some respondents requested information regarding the availability of public access points on the site.

The State of California Department of Transportation recommended a complete traffic study to assess impacts of the proposed project and alternatives on State Routes 13 and 580, and on affected streets and intersections. The Department stated that the analysis should include all approved and proposed projects in the area, including those projects not under the jurisdiction of the lead agency.

Response. Traffic and circulation issues are discussed in Sections 3.9, 4.9, and 5.5 of this document.

Utilities - Respondents, including the East Bay Municipal Utility District, expressed concern regarding reuse considerations for water conduits, a power plant, water storage tanks, and local streets.

The EPA commented that the EIS/EIR should include a survey of regional water supplies available to the NMCO and an analysis of the net increase or decrease in water demand as a result of the proposed reuse.

Response. Water supply, transmission, storage, wastewater, solid waste management, and power issues are addressed in Sections 3.12, 4.12, and 5.5 of this document.

Air Quality/Noise - The EPA commented that the EIS/EIR should discuss the current air quality (attainment) status of the Bay Area Air Quality Management District and the proposed project's impacts on that status. Some residents were concerned about the dust and noise that could result from construction activities associated with reuse plan implementation.

Response. These issues are addressed in Sections 3.10, 4.10, and 4.11 of this document.

Wetlands and Water Quality - Several commenters expressed a desire to retain the existing riparian corridor as part of reuse. The EPA requested that the Draft EIS/EIR consider alternatives that will preserve wetland resources, and include maps, text, and tables that feature areas occupied by wetlands, aquatic systems, and nonwetland riparian habitat, and that direct, indirect, and cumulative impacts to these resources be fully described. EPA commented that the Draft EIS/EIR should ensure that the proposed disposal and reuse would not affect the DOD's obligation to meet water quality standards.

Response. The existing riparian corridor is retained in all reuse alternatives to a width of 50-feet, as discussed in Chapter 2. Wetlands issues are discussed in Sections 3.6 and 4.6 of this document. Water quality issues are discussed in Sections 3.7 and 4.7 of this document because they relate to water resources. Water treatment is discussed in Sections 3.12 and 4.12.

Biological Resources - EPA commented that the Draft EIS/EIR should discuss how protected and endangered species may be affected by the proposed action.

Response. Protected and endangered wildlife species are discussed in Sections 3.6 and 4.6 of this document. Appendix B of this document includes a sensitive species survey of the site conducted in the spring of 1995. Appendix E includes a study of heritage trees that may be affected by reuse.

Hazardous Materials - The EPA commented that the Draft EIS/EIR should identify NMCO's hazardous materials storage, disposal, and containment history as relevant to the siting of future uses under the proposed lease and redevelopment action. They stated that any plans to remediate contaminated areas or to demolish or disturb facilities or areas with existing contamination should be discussed in detail.

The California Department of Toxic Substances Control commented that the Navy should submit a remedial action plan based on Section 25350, subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan if it becomes necessary to remediate hazardous waste at NMCO.

Response. These issues are discussed in Sections 3.13 and 4.13 of this document.

NEPA Requirements - EPA commented that nearby residential areas should be documented and described in the Draft EIS/EIR, and that the document should determine the potential magnitude of redevelopment-related effects on such areas.

EPA commented that the Draft EIS/EIR should include an analysis of potential cumulative effects in the NMCO's region of influence. EPA also stated the importance of mitigation to avoid, minimize, rectify, or compensate for significant adverse environmental impacts.

Response. Residential areas are documented and described in Section 2.1.1 and Section 3.1.2. Direct, indirect, and cumulative impacts and mitigation measures are discussed in Chapters 4 and 5.

1.6.3 Public Review

Public review is an important part of the NEPA and CEQA process. Public review periods are typically 45 days under NEPA and CEQA. Responses to comments received on the Draft EIS/EIR are provided in the Final EIS/EIR. NEPA provides for a 30-day no-action review period after preparation of the Final EIS.

Draft EIS/EIR

The public was invited to review and comment on the Draft EIS/EIR. Public notices were mailed to those on the mailing list and press releases were furnished to the local news media. A notice of completion (CEQA) was filed with the Governor's Office of Planning and Research, State Clearinghouse, the notice of availability (NEPA) was published in the Federal Register on October 11, 1996 and the Notice of Public Hearing was published in the Federal Register on October 24, 1996. The Draft EIS/EIR was circulated for public and agency review from October 11, 1996 to November 27, 1996. This public comment period (required to be at least 45 days) provided an opportunity for the public to review the issues addressed in the impact analysis and to offer comments on any aspect of the process. The Draft EIS/EIR distribution list is included in Appendix A of Volume II.

A public hearing was held on November 13, 1996 to formally receive verbal and written comments on the Draft EIS/EIR. The location, date, and time of the meeting was announced in the media and was included in the transmittal letter accompanying the Draft EIS/EIR. Approximately 30 individuals from the public attended this hearing and 12 individuals presented oral comments. A transcript of their comments and responses to the comments is provided at the end of Volume I of the Final EIS/EIR.

California Environmental Quality Act Recirculation of New Significant Information

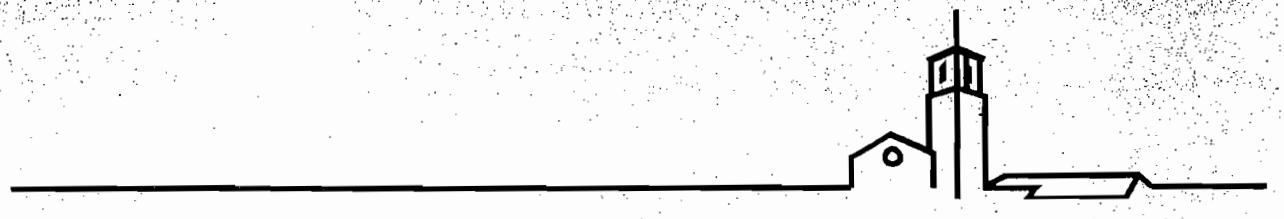
A Bay Area Air Quality Management District comment on the Draft EIS/EIR recommended including an estimate of fine particulate matter (PM_{10}) for each of the alternatives in the Final EIS/EIR. After this analysis was completed, the City of Oakland evaluated this increase in PM_{10} emissions and concluded that it is a significant, unavoidable impact, and represented significant, new information under CEQA and required recirculation for public comment prior to inclusion in the Final EIR. Therefore, this new significant information was recirculated for a 45-day comment period under CEQA starting September 21, 1997 and ending November 4, 1997. Responses to comments on CEQA recirculation are included in the comments and responses section. Four comment letters were received and none recommended changes to the PM_{10} analysis. Therefore, the PM_{10} analysis as recirculated has been incorporated into the Final EIS/EIR.

In addition, a further review of the environmental document identified another threshold that has been exceeded that was not identified in the previous document. Specifically, it was discovered due to an arithmetic error, the calculation of air emissions under the Maximum Capacity Alternative was higher than previously estimated. Prior to recalculation, PM_{10} emissions and nitrogen oxide (NO_x) emissions were already above the significance threshold and could not be mitigated. However, reactive organic compounds (ROG) for the Maximum Capacity Alternative were below the significance threshold in the Draft EIR, but now exceed the threshold. After the air quality analysis was corrected, the City of Oakland evaluated this increase in ROG emissions and concluded that this would be a significant and unavoidable impact under CEQA. This new impact required recirculation for comment prior to inclusion in the Final EIR. Therefore, this new significant information was recirculated for a 45-day minimum comment period under CEQA starting January 22, 1998 and ending March 12, 1998. Responses to comments on the CEQA recirculation are also included in the comment and responses section. Two comment letters were received and neither recommended changes to the air quality analysis. Therefore, the air quality analysis as recirculated has been incorporated into the Final EIS/EIR.

Final EIS/EIR

This Final EIS/EIR incorporates and responds to comments received on the Draft EIS/EIR. Copies of the comment letters regarding the Draft EIS/EIR and responses to these letters are in this Final EIS/EIR. The distribution list for this Final EIS/EIR is in Section 10 of Volume I.

As required under NEPA, there will be a 30-day waiting period after the Final EIS/EIR is published. During this period, the public may comment on the adequacy of responses to comments and the Final EIS. After that time, the Navy will issue a Record of Decision. The Oakland Redevelopment Agency, City of Oakland, and Oakland Base Reuse Authority cannot take final action on the project without review, consideration and certification (as appropriate) of the Final EIS/EIR.



2.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

2. ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This chapter describes the Oakland Base Reuse Authority (OBRA) planning process, and the alternatives considered in this Environmental Impact Statement/Environmental Impact Report (EIS/EIR). Alternatives that were considered but eliminated from detailed review are also described. The four reuse alternatives analyzed in this EIS/EIR are the Maximum Capacity Alternative, the Mixed Use Village Alternative, the Single Use Campus Alternative, and the Residential Alternative. In addition, a No Action Alternative is analyzed, as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

The Mixed Use Village, Single Use Campus, and Residential Alternatives are based on the Oak Knoll preliminary alternatives report (Theresa Hughes and Associates 1995). The densities in the Residential Alternative have been made consistent with local residential zoning for environmental analysis purposes. The Maximum Capacity Alternative was initially provided to the Navy by OBRA in December 1995 for use in the EIS as OBRA's estimate of likely site development. For the EIS/EIR analysis, the Maximum Capacity Alternative was adjusted to incorporate modifications when OBRA adopted its reuse plan for NMCO on June 10, 1996. OBRA published the NMCO Final Reuse Plan, incorporating the June 10, 1996 revision, in August 1996 (OBRA 1996).

2.1 DEVELOPMENT OF ALTERNATIVES

2.1.1 OBRA Reuse Planning Process

The reuse planning process for NMCO began with formation of the Oakland Base Closure/Conversion Task Force (OBC/CTF) in November 1993 by the Oakland City Council, immediately after the 1993 Base Realignment and Closure (BRAC) list was accepted by President Clinton. The OBRA was established by a Joint Powers Agreement among the City of Oakland, Oakland Redevelopment Agency and the County of Alameda in March 1995. The OBRA was designated to be the local redevelopment authority for the development of a reuse plan for NMCO. The OBC/CTF recommends actions to OBRA that will minimize the adverse economic effects of base closure to the region. The city is the lead agency for CEQA purposes. The City of Oakland is also the decisionmaking body for land use approvals (e.g. discretionary permits, such as general plan amendments and rezoning, etc) that may be needed as part of the approvals process for the alternative ultimately selected as the reuse plan (i.e. NMCO mix of land uses to be implemented).

Since OBRA is the authority for formulating a reuse plan for NMCO, it has recruited the participation of several interested parties to help with plan development. OBRA and its subcommittees consist of a range of elected officials, city and agency staff, and citizens. The voting members of OBRA include five City of Oakland representatives and four county-wide representatives, most of whom are elected officials. Local and regional agency staff, City of Oakland staff, and representatives of neighborhood associations are represented on four subcommittees of OBRA. These subcommittees are titled "Housing and Homeless," "Employment and Social Impacts," "Land Reuse," and "Legislation and Finance." The mission statement, which refers to NMCO as "Oak Knoll," was adopted by OBRA in March 1995, with the following goals:

- To provide a comprehensive plan for the reuse of Oak Knoll;
- To provide a plan for retaining and placing City of Oakland workers at Oak Knoll and other bases in the region;
- To work with the East Bay Conversion and Reinvestment Commission and other regional bodies to coordinate planning efforts throughout the region;
- To develop and implement mitigation measures for the social impacts of base closures;
- To serve as a forum for neighborhood and local response to base closures and reuse and to develop a community consensus on a reuse plan compatible with the neighborhood, the City of Oakland, and the region; and
- To insure that the proposed uses will lend diversity to the area and will, to the extent feasible, provide needed medical, education, housing, employment, and open space opportunities.

During the reuse planning process, OBRA has held several meetings wherein these voting members have considered various mixes of land uses intended to meet these goals. Some of those meetings concluded with the OBRA members voting either to eliminate some mixes of land uses or to continue to consider other mixes of land uses.

During preparation, evaluation, and voting regarding land uses mixes to be included in preliminary alternatives, all meetings of the OBRA subcommittees were open to the public and were advertised on local

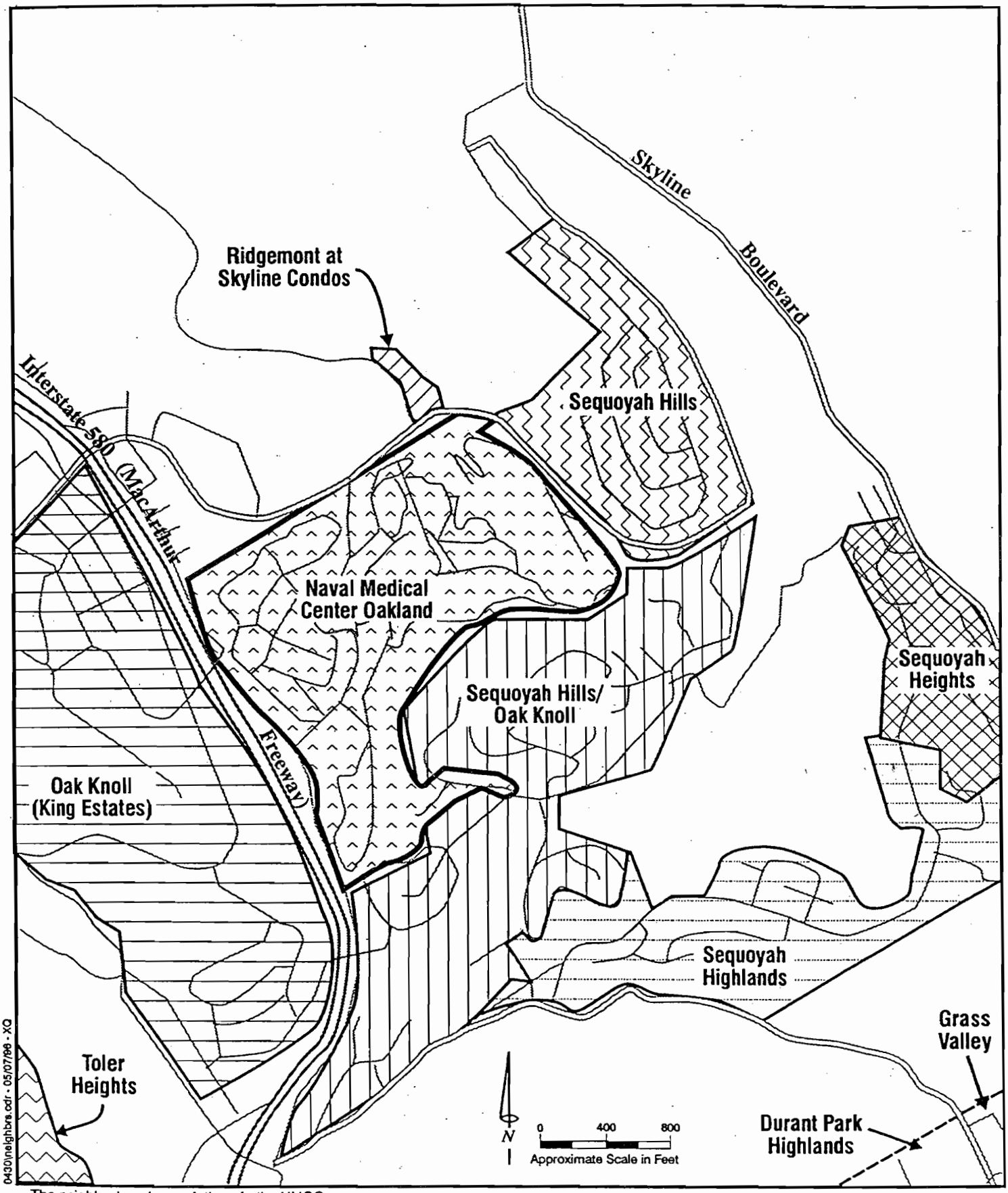
television and in the local newspaper. Participation in the subcommittees was open to anyone who wanted to contribute time and ideas. As of August 1995, approximately 700 individuals participated in five open meetings that were held at NMCO. Monthly public meetings were convened, and more public participants heard regarding their desires for future land uses at the NMCO site. These meetings focused on familiarizing everyone with the site, recording community goals and concerns, sharing data compiled by the consultant team, and developing community based land use concepts. These meetings were broadcast on the local television channel, KTOP. The September 25, 1995 OBRA meeting, in which the preliminary alternatives were presented, was videotaped and shown three times on KTOP. All materials, including reports, videos, and other informational items, were made available to the public. The neighborhood associations in the immediate area surrounding NMCO played a substantial role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group. The president of the group is a member of the Homeless Negotiation Team.

The four reuse alternatives are evaluated equally as the potential CEQA project in this EIS/EIR. The OBRA reuse planning process was supported by the combined efforts of community working groups, OBRA, the Citizen Advisory Committee, City of Oakland staff, and a consultant team of land use and environmental planners, economists, and transportation experts.

2.1.2 Selection of Alternatives for Environmental Analysis

The criteria used by OBRA to select their preliminary alternatives included, but were not limited to physical site opportunities and limitations (e.g., slopes, sensitive habitats, access, visibility), future land uses on and off the site, transportation corridors, real estate market demand, and open space and recreation needs. A cost/revenue analysis was conducted for the land uses in the Maximum Capacity Alternative (OBRA 1996).

NEPA and CEQA require that an EIS/EIR consider a range of reasonable alternatives for environmental impacts analysis. NEPA requires that alternatives be evaluated at the same level of detail as the proposed action. CEQA allows consideration of alternatives at a lesser level of detail but requires that alternatives be evaluated that would reduce or eliminate significant adverse impacts of a proposed project. Both acts require consideration of a No Action (or no project) alternative. The No Action Alternative in this EIS/EIR evaluates NMCO in caretaker status, closed but remaining in federal ownership.



The neighborhood associations in the NMCO area played a major role in developing reuse alternatives.

Neighborhoods Near the NMCO

Naval Medical Center Oakland

Source: Theresa Hughes & Associates 1995

Figure 2-1

This EIS/EIR evaluates four reuse alternatives at the NEPA and CEQA required levels of detail. The Mixed Use Village, Single Use Campus, and Residential Alternatives are based on the Oak Knoll preliminary alternatives report (Theresa Hughes and Associates 1995) prepared by OBRA. For environmental analysis purposes, the Residential Alternative has been made consistent with local residential zoning, land use, and density of most of the surrounding area. The Maximum Capacity Alternative was initially provided to the Navy by OBRA in December 1995 for use in the EIS/EIR as OBRA's estimate of likely site development (Theresa Hughes & Associates 1996a). For the EIS/EIR analysis, the Maximum Capacity Alternative was adjusted to incorporate modifications OBRA made when it approved the NMCO Reuse Plan on June 10, 1996 and published the final reuse plan in August 1996 (OBRA 1996). These alternatives were selected to provide a range of land use mixes to show a range of potential environmental impacts, based on differences in land use. They allow local and federal decision-makers, interested agencies, and the public to understand reuse choices and the potential environmental impacts of these choices.

2.2 COMMON ELEMENTS OF ALTERNATIVES

Although the reuse alternatives differ in the way they address the needs and goals of OBRA, they have common elements focused on being compatible with the constraints of steep topography, providing active recreation areas, preserving the riparian corridor, and assuring compliance with the Oakland Comprehensive Plan and zoning. These common elements are discussed below.

- *Topographic Constraints*—Steep slopes at the NMCO site are a constraint to development. Almost one third of the 183 acres at NMCO have slopes steeper than 30 percent. These areas contain oak woodlands and native grasslands that may be used for open space and passive recreation. Each of the reuse alternatives has the intent of using hillslopes compatibly with the natural setting, topographic constraints, and surrounding hillslope uses. A few pedestrian trails wind through the hills in all of the reuse alternatives.

  Conversely, flatter areas, especially those that already have been developed by the Navy, are the areas proposed for most of the more intense development in the alternatives. Some of these areas, such as those along Rifle Range Creek, may be restored. Primary entrances and exits will remain at Mountain Boulevard and Keller Avenue under each of the four reuse alternatives. The north and west quadrants, as shown on Figure 2-2, currently are occupied by hospital and medical facilities

and are the primary development areas under all of the reuse alternatives.

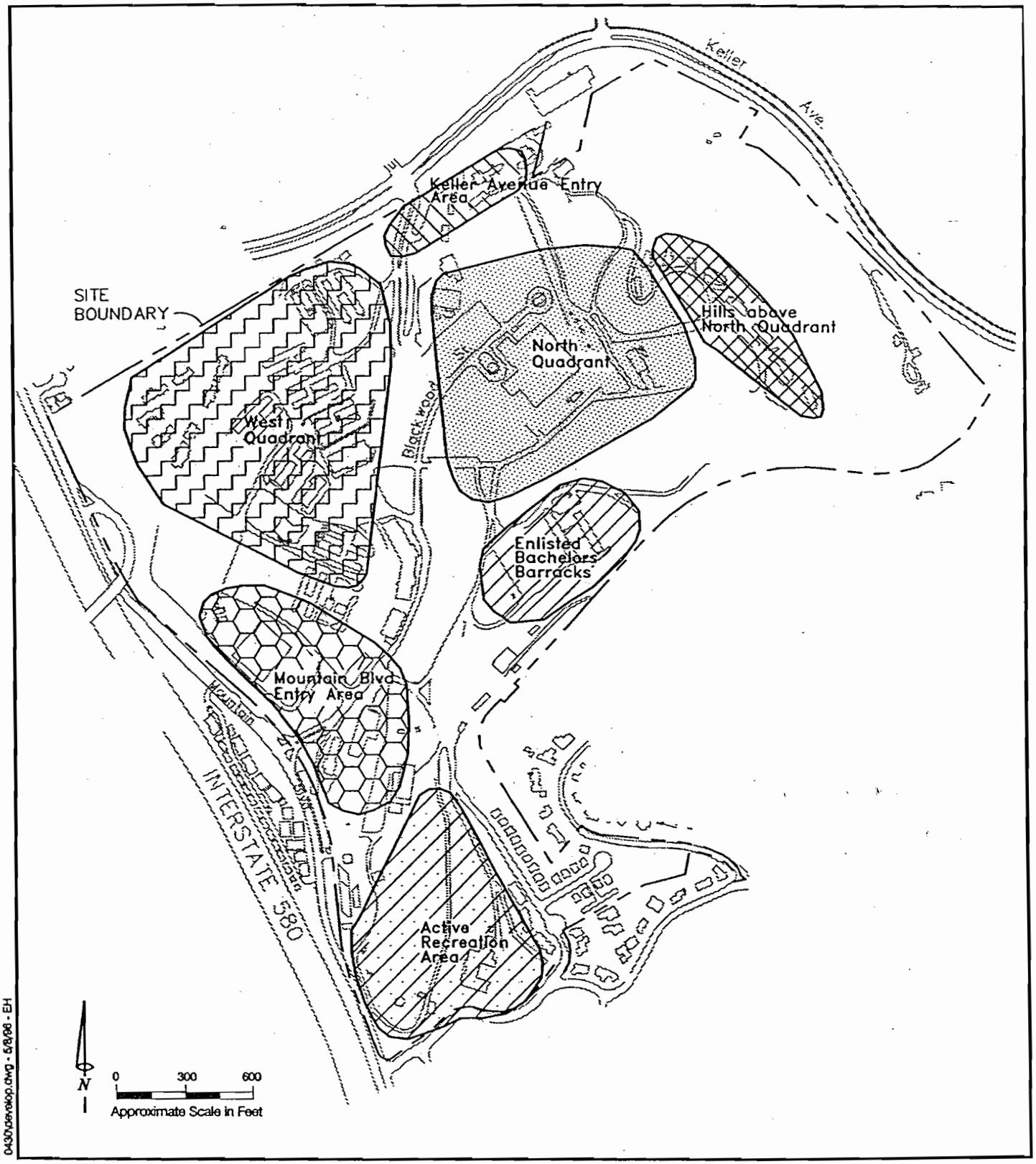
- *Active Recreation Areas*—The active recreation area shown in Figure 2-2 contains existing indoor facilities, such as the racquetball courts and swimming pool, and outdoor facilities, such as tennis courts (5), baseball fields (2), lighted playfields, and a picnic area. All of these facilities, except the gymnasium and bowling alley, are proposed for public use under every reuse alternative. However, OBRA has recommended that the baseball fields, playfields, and tennis court be relocated in the Maximum Capacity Alternative (OBRA 1996). Club Knoll is preserved under each of the four reuse alternatives.

- *Riparian Corridor on Rifle Range Creek*—A greenbelt along Rifle Range Creek, which extends across the site from north (at Keller Avenue) to south (at Mountain Boulevard), will be maintained under each of the reuse alternatives. A portion of the creek is underground, immediately to the east of the west quadrant. Pedestrian trails proposed along the creek may connect to the Leona Regional Open Space to the north and onto Arroyo Viejo Creek to the south.

- *Compliance with Local Discretionary Approvals*—Each of the reuse alternatives will require a general plan amendment and rezoning and perhaps other permits, including a specific plan, subdivision plan, tree removal permits, and grading permits.

- *Reuse of Existing Buildings*—The following buildings as shown in Figure 2-3 are proposed for continued use in all of the community reuse alternatives:

  Garage (Building #19);
  Club Knoll (Building #18);
  Bachelor Quarters (Building #69);
  Post Office and boiler plant (Building #101 and Building #101A);
  Human Resources Office (Building #131);
  Command Ed & Training (Building #133)
  Swimming pool (Building #138);
  Indoor racquetball court (Building #147A);
  Outdoor racquetball court (Building #147B);
  Medical storage (Building #505);
  Restroom (Building #507); and
  Credit Union (Building #517).



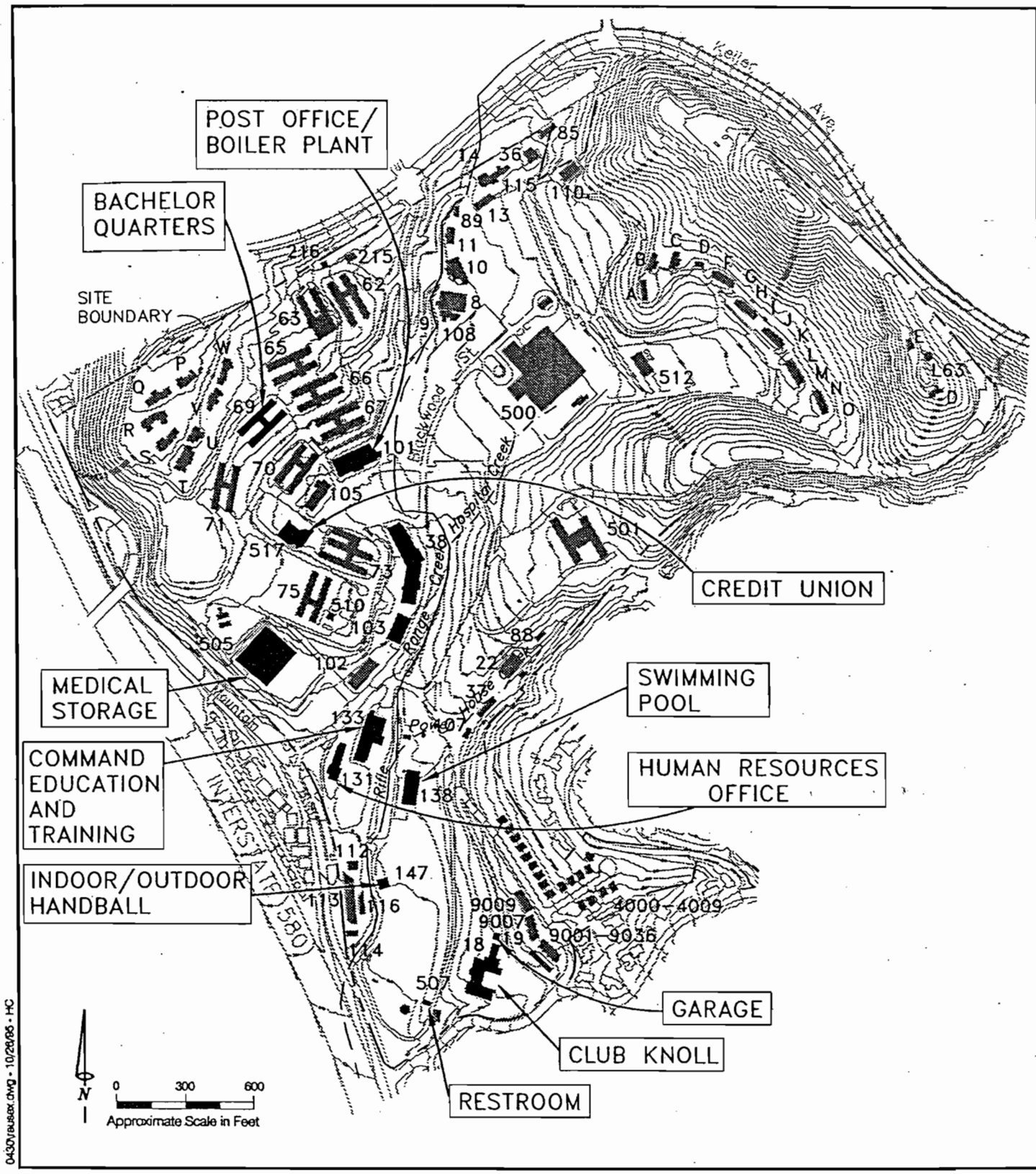
Areas where development has already occurred are the primary focus of proposed development in all four reuse alternatives.

Development Areas

Naval Medical Center Oakland

Source: Theresa Huges & Associates 1995

Figure 2-2



The existing buildings indicated in this figure are proposed to be retained and reused in all of the reuse alternatives.

Reuse of Existing Buildings

Naval Medical Center Oakland

Source: Theresa Hughes & Associates 1996

Figure 2-3

2.3 DESCRIPTION OF ALTERNATIVES

Four reuse alternatives are analyzed in this EIS/EIR. Three of the reuse alternatives were identified in the preliminary alternatives report (Theresa Hughes & Associates 1995). The fourth reuse alternative, the Maximum Capacity Alternative, was developed from information supplied by OBRA from December 1995 through August of 1996 (OBRA 1996). Each of these four proposed land use plans is evaluated as a separate alternative, at the same level of analysis. This section describes land uses included in each of the reuse alternatives and the No Action Alternative.

- *Maximum Capacity Alternative (Preferred Alternative)*—Residential (a mix of single-family and multi-family) uses, an executive 9-hole golf course with driving range, and mixed uses (such as businesses, community, and commercial retail) are the dominant uses that will be developed in this alternative. Active recreation and open space are also included. This alternative reflects land uses presented in the June 1996 NMCO Reuse Plan (OBRA 1996).

- *Mixed Use Village Alternative*—This alternative includes residences, businesses, research and development and office facilities, community retail and cultural facilities, and active recreation and open space.

- *Single Use Campus Alternative*—Under this alternative, NMCO would be occupied by one educational institution or corporate user, neighborhood retail uses, and active recreation and open space.

- *Residential Alternative*—The primary use under this alternative would be single family residences having a character and identity similar to the surrounding residential development, with some neighborhood retail, active recreation areas, and open space.

- *No Action Alternative*—The property would remain under federal ownership in caretaker status.

Table 2-1 and Figure 2-4 provide an overview and illustration of the land uses and other features proposed for each of the reuse alternatives.

2.3.1 Navy Disposal

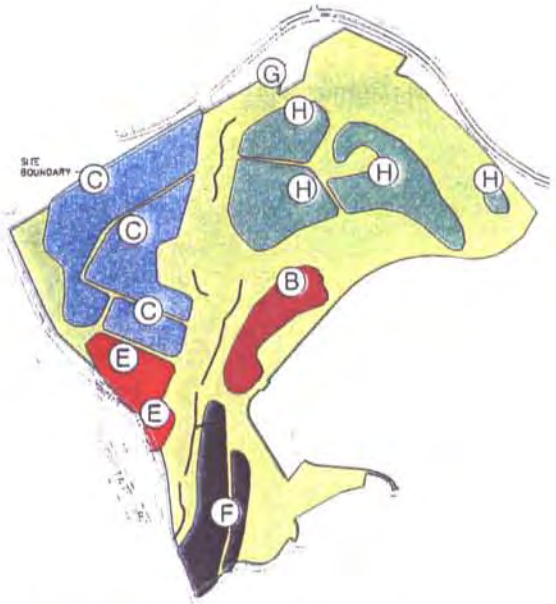
Navy disposal is included in this document to evaluate the direct impacts that would result from the disposal of the NMCO property out of federal ownership.

Table 2-1
Summary of Community Reuse Alternatives

Community Reuse Alternatives - Main Features	Development (square feet or units)	Total Open Space (acres)	Total Employment[1]
Maximum Capacity Alternative Mixed use development (Seneca Center, United Indian Nations, Oakland Museum, Oakland Parks and Recreation, commercial, multi-family residential, offices) Townhouses, attached garden houses, and single family houses Executive 9-hole golf course club house, and driving range interspersed with 250 housing units Single family houses Club Knoll and credit union building retained Riparian corridor along Rifle Range Creek Open space	544,000 square feet 584 units	32	717
Mixed Use Village Alternative Mixed use (townhouses, live/work, health and social services, offices) Research and development (offices, laboratories, seminar/meeting areas, storage) Cultural/meeting facility (library/museum, multipurpose, assembly hall) Neighborhood retail (supermarket, specialty stores, restaurants, personal services, business services, bank) Active recreation facilities Club Knoll and credit union building retained Riparian corridor along Rifle Range Creek Open space	729,000 square feet 90 units	86	1,140
Single Use Campus Alternative Designated for an educational institution or corporate headquarters (classrooms, library, cafeteria, laboratories, multipurpose, offices, student/guest facilities, vocational training) Neighborhood retail (convenience shops, restaurants, personal services, business services, bank) Active recreation facilities maintained Club Knoll and credit union building retained Riparian corridor along Rifle Range Creek Open space	828,000 square feet	101	1,150
Residential Alternative Single family houses in either 6,000 or 10,000 square foot lots Neighborhood retail (convenience shops, restaurants, personal services, business services, bank) Active recreation facilities maintained Club Knoll and credit union building retained Riparian corridor along Rifle Range Creek Open space	83,000 square feet 357 units (Option 1) or 600 units (Option 2)	46	170 or 190

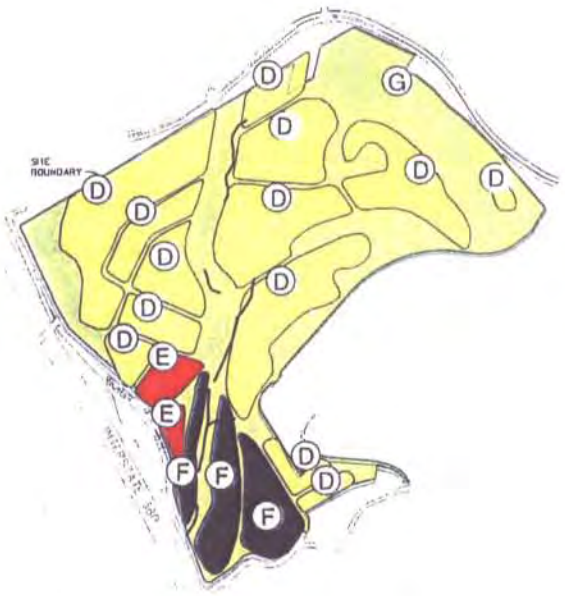
[1]Total employment figures in this table include the 8 jobs that will be held under the No Action Alternative as caretaker status jobs.
Source: Theresa Hughes & Associates 1995, 1996a, 1996b

Maximum Capacity Alternative



Mixed Use Village Alternative

Single Use Campus Alternative



Residential Alternative

N

0 750 1500

Approximate Scale in Feet

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In this figure, the variation in land use configurations of the four community reuse alternatives can be compared at a glance.

Legend:

- A Educational
- B Cultural Meeting
- C Mixed Use
- D Housing
- E Retail
- F Active Recreation
- G Open Space
- H Office/Research
- I Residential/Golf Course

Source: Theresa Hughes & Associates 1995; OBRA 1996

Comparison of Reuse Alternatives

Naval Medical Center Oakland

Figure 2-4

2.3.2 Maximum Capacity Alternative—Preferred Alternative (includes NMCO Reuse Plan)

The Maximum Capacity Alternative would provide various types of housing units, an executive nine-hole golf course, social service facilities, corporate offices, and commercial development, as shown in Figure 2-5. It represents OBRA's maximum capacity of developed land uses. These uses meet OBRA's goals (hence the name Maximum Capacity Alternative) as of December 1995, as modified to incorporate the NMCO Reuse Plan, adopted by OBRA in June 1996 and published in August 1996. The name does not refer to any other type of "maximum capacity" (for traffic, housing, etc). This description of the Maximum Capacity Alternative differs slightly from the NMCO Reuse Plan. These differences, explained below, are presented in order to evaluate a higher density development then proposed on the NMCO Reuse Plan. This allows this EIS/EIR to encompass the greatest range of potential adverse environmental impacts.

The Maximum Capacity Alternative includes land uses approved by OBRA at their June 10, 1996 public meeting. The Maximum Capacity Alternative also includes residences in the hills along Keller Avenue. The southern set of single family houses would be on Admiral's Hill, where there are two existing residences that served as officer family housing. The residences in the hills were included to provide analysis of the greatest density of development that has been considered feasible. This residential area, near Admiral's Hill (Figure 2-5), was considered by OBRA in December 1995, but was not included in the August 1996 NMCO Reuse Plan (OBRA 1996).

Admiral's Hill is located at the northeast corner of the NMCO site. It has not been developed, except for the Commanding Officer's quarters, which provide sweeping views of the East Bay Hills to the west, and across the San Francisco Bay to the northwest.

To clearly indicate that the riparian corridor includes a buffer, Figure 2-5 depicts open space around Rifle Range Creek that is not shown in the graphic that OBRA approved.

The Maximum Capacity Alternative would include 554,000 square feet of non-residential development and 584 residential units. The open space in this alternative would be 32 acres. This alternative would lead to approximately 717 jobs (Theresa Hughes & Associates 1996b).

The land use categories and components, their acreages, the square feet or number of units in the built area, and the type of development are shown in Table 2-2. Each of the land use categories in the Maximum Capacity

Alternative is described below. The location of the proposed land uses are shown in Figure 2-5.

Mixed Use Zone

The mixed use zone, as recommended, would occupy 40 acres in the west quadrant and the western portion of the Mountain Boulevard entry area. It would include 25 acres of a wide variety of uses, such as corporate offices, commercial development, and residences. The residential development would consist of 300 multi-family apartment units. The existing credit union would be retained on two acres within this mixed use zone.

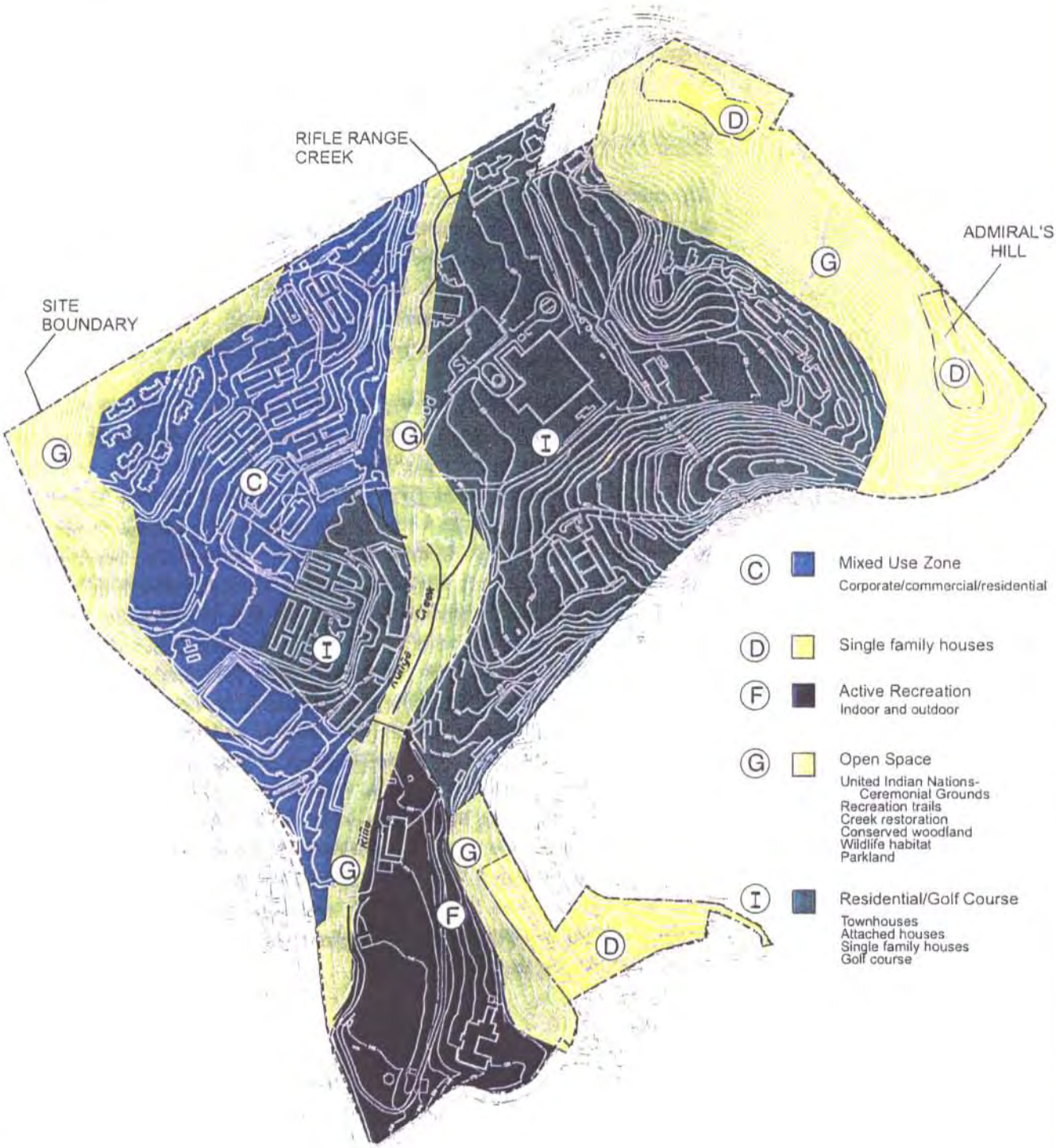
In accordance with the NMCO Reuse Plan, adopted by OBRA on June 10, 1996 and published in August 1996, the mixed use zone also would include the Seneca Center, which provides services for emotionally disabled children, would be sited on six acres. Seneca Residential and Day Treatment Center for Children proposes a school and multi-service campus to provide special education, mental health, and support services for emotionally disabled children. Seneca is requesting a parcel which includes Building #69, the Helipad, and limited adjoining acreage for new construction. United Indian Nations, Inc. (UIN) would establish an American Indian Culture and Education Center on 0.75 acres. UIN has proposed the establishment of an American Indian Cultural and Education Center at the site, with a focus on educating Native Americans and all other cultures and ethnic groups on the history, culture, arts, crafts, and contributions of Native Americans locally, regionally, and nationally. UIN is requesting a parcel which includes Building #101 within the Mixed Use Area. The Oakland Museum would occupy 1.5 acres to store museum artifacts, artwork, and natural history specimens. The Oakland Parks and Recreation Department is requesting a total of 6.5 acres. The Youth Center would be established on 1.5 acres. Baseball and soccer fields would be relocated from the active recreation area to five acres within the mixed use zone.

Housing

Most of the residences (250 units) are located within the residential/golf course area and the mixed use zone. Three hundred multi-family apartments would be located in the mixed use zone, on 10 acres with 34 single family residences.

Residential/Golf Course

A variety of housing types, including townhouses, attached garden houses, and single family houses, would be located on 32 acres. The remaining 54 acres would have an executive 9-hole golf course.



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The Maximum Capacity Alternative features a residential area with a golf course. It includes 32 acres of open space.

Legend:

- A Educational
- B Cultural Meeting
- C Mixed Use
- D Housing
- E Retail
- F Active Recreation
- G Open Space
- H Office/Research
- I Residential/Golf Course

Sources: OBRA 1996

Maximum Capacity Alternative

Naval Medical Center Oakland

Figure 2-5

Table 2-2
Maximum Capacity Alternative
Land Use

Use Categories and Components	Sub-area (acres)	Floor Area Ratio[1] or Density	Development
Mixed use zone			
Seneca (6 acres) United Indian Nations (0.75 acre) Oakland Museum (1.5 acres) Oakland Parks & Recreation (OPR) (6.5 acres)	15	0.3	100,000 square feet
Corporate/Commercial/Residential			
Credit union (2 acres)	25		
Commercial		0.3	100,000 square feet
Residential (multi-family apartments)		20 units/acre	300 units
Offices		0.5	300,000 square feet
Housing			
Single family houses	5	4 units/acre	18 units
Single family houses	5	3 units/acre	16 units
Residential/Golf Course			
Townhouses; attached garden houses; single family houses	32	8 units/acre	250 units
Executive golf course	54		
Active recreation			
Indoor: Club Knoll Swimming pool	15	Shared use of all facilities outside the recreation zone	44,000 square feet (existing)
Outdoor: Tennis courts - relocated Baseball fields - relocated Soccer fields - relocated Picnic area Driving range (6 acres) Clubhouse (3 acres)		Preserve existing facilities	
Open Space			
United Indian Nations - Ceremonial Grounds (3 acres) Oakland Parks & Recreation	32	not applicable	not applicable
Recreation trails Creek restoration Conserved woodlands Wildlife habitat Parkland			
TOTAL	183[2]	–	544,000 square feet + 584 units

[1]Floor area ratio represents the percentage of the total square footage that is dedicated to usable floor space.
[2]It is assumed that about 39 acres would be set aside for unbuildable slopes and roads within developable sites.
Source: OBRA 1996

Active Recreation

Active recreation in the Maximum Capacity Alternative would be sited on 15 acres. This area would include Club Knoll and the existing swimming pool. In accordance with the NMCO Reuse Plan, existing tennis courts, baseball fields and soccer fields would be abandoned and replaced with similar upgraded facilities. The tennis courts would probably be located within the residential/golf course area and the ballfields would be located within the mixed use area. A six-acre driving range and three-acre clubhouse would be located in place of the existing ball fields. (OBRA 1996).

Open Space

The Maximum Capacity Alternative would include 32 acres of open space, including three acres dedicated to the United Indian Nations for ceremonial grounds and the remaining acres dedicated to the Oakland Parks and Recreation Department for recreation, trails, creek restoration, conserved woodlands, wildlife habitat, and parkland. The Rifle Range Creek riparian corridor would be protected with a 50-foot wide restricted-access buffer zone.

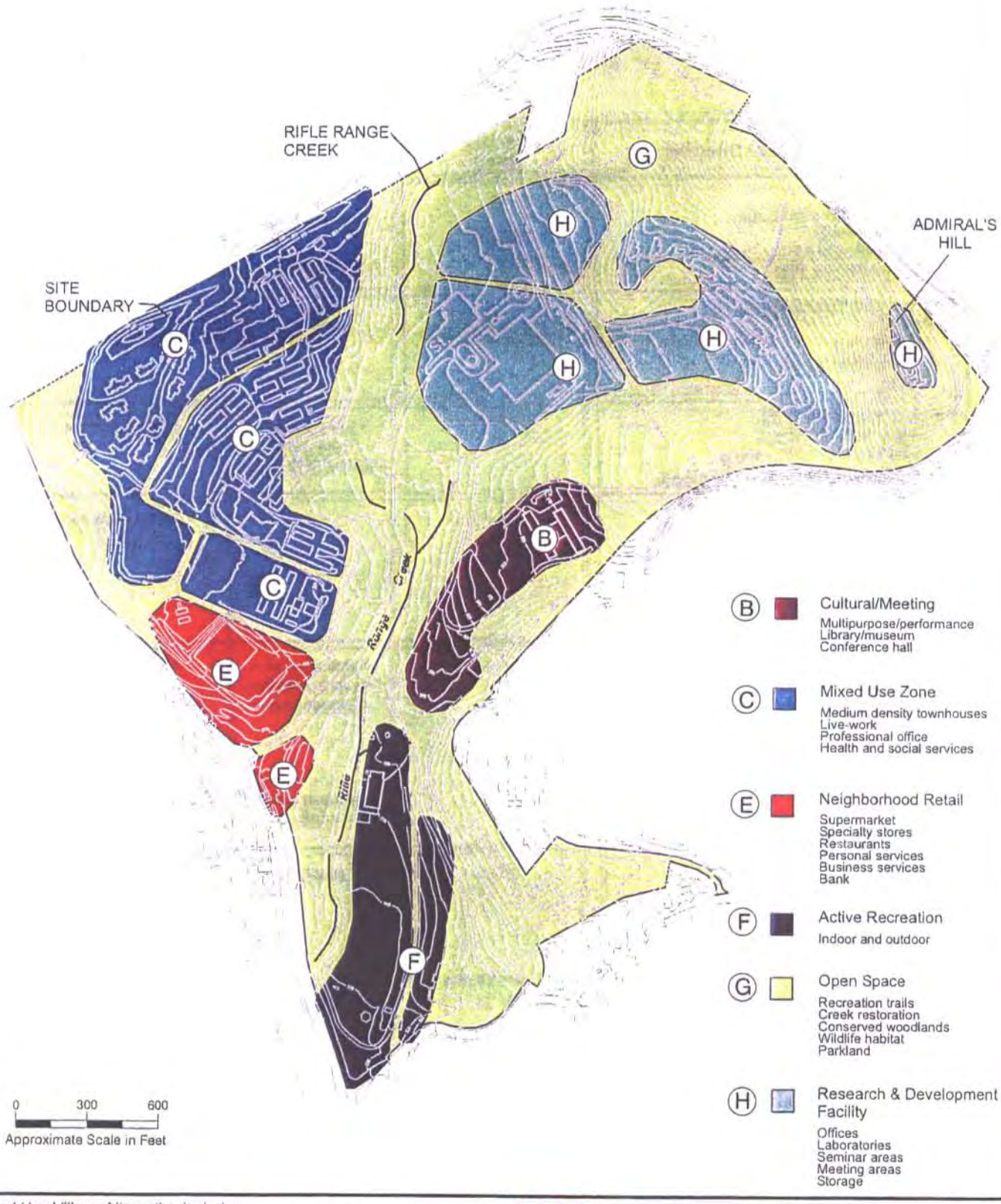
2.3.3 Mixed Use Village Alternative

The Mixed Use Village Alternative would combine residences and offices with cultural facilities and community retail, as shown in Figure 2-6. This alternative would include 729,000 square feet of development. Open space would cover 86 acres. Homeless services, if needed, would depend on the specified need, training, or social services in the Mixed Use Village Alternative. Homeless housing would be accommodated as described earlier in Section 1.3.2 of this EIS/EIR. The Mixed Use Village Alternative would lead to approximately 1,140 jobs.

The land use categories and components, their acreages, the square feet or number of units in the built area as specified to date by OBRA, and the type of development are shown in Table 2-3. Each of the land use categories in the Mixed Use Village Alternative is described below. The locations of the proposed land uses are shown in Figure 2-6.

Mixed Use Zone

The dominant land use in this alternative would be the 23-acre mixed use zone, located primarily in the west quadrant. As the name implies, the mixed use zone would include a wide range of uses, including medium



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The Mixed Use Village Alternative includes housing, cultural/meeting area, a neighborhood retail area, offices, recreation facilities and open space. In this alternative, the total built area is 729,000 square feet; 86 acres would remain open space.

Legend:

- A Educational
- B Cultural Meeting
- C Mixed Use
- D Housing
- E Retail
- F Active Recreation
- G Open Space
- H Office/Research
- I Residential/Golf Course

Source: Theresa Hughes & Associates 1995

Mixed Use Village Alternative

Naval Medical Center Oakland

Figure 2-6

Table 2-3
Mixed Use Village Alternative
Land Use

Use Categories and Components	Sub-area (acres)	Floor Area Ratio[1] or Density	Development
Mixed use zone Medium density townhouses Live/work spaces Health and social services facility Small professional offices	23 90 units	0.3 20 units/acre	300,000 square feet
Research and development Offices Laboratories Seminar/meeting areas Storage	12	0.5	261,000 square feet
Cultural/meeting facility Library/museum building Multipurpose/performance area Community assembly and conference hall	5	2 or 3 buildings on site as per cultural facility needs	59,000 square feet
Neighborhood retail Supermarket Specialty stores Restaurants Personal services Business services (copy, travel) Bank	5	0.3	65,000 square feet
Active recreation *Indoor:* Club Knoll Swimming pool *Outdoor:* Tennis courts - 5 Baseball fields - 2 Playfields Picnic area	8	Shared use of all facilities outside the recreation zone Preserve existing facilities	44,000 square feet (existing)
Open space Recreation trails Creek restoration Conserved woodlands Wildlife habitat Parkland	86	not applicable	not applicable
Area set aside for unbuildable slopes and roads within developable sites	44	not applicable	not applicable
TOTAL	183	–	729,000 square feet

[1]Floor area ratio represents the percentage of the total square footage that is dedicated to usable floor space.
Source: Theresa Hughes & Associates 1995.

density townhouses, live/work spaces, a health and social services facility, and small professional offices. The area developed for this use would be 300,000 square feet.

Research & Development

In addition to the mixed use zone, a major portion of the developed area at the site in the Mixed Use Village Alternative would be devoted to the 12-acre research and development facility. The offices, laboratories, seminar/ meeting rooms, and other uses of this land would occupy 261,000 square feet of built area in the north quadrant and in the hills above the north quadrant.

Cultural/Meeting Facility

The barracks are proposed to be used for the library, museum, or flexible meeting/conference/performance space in a five-acre lot. Approximately 59,000 square feet of development would be anticipated.

Neighborhood Retail

Neighborhood retail would be an expanded or modified version of retail development that is included in the Single Use Campus and Residential alternatives (discussed below). A supermarket would serve site residents, neighbors, and employees, and specialty stores would replace the convenience shops. It also could include restaurants, personal services, business services, and a bank. A total of 65,000 square feet of retail buildings would be constructed. The five-acre retail area would be located in the Mountain Boulevard entry area, adjacent to the mixed use zone. The retail area and the mixed use zone may be designed to have restaurants and stores overlooking the Rifle Range Creek corridor.

Active Recreation

All of the existing active recreation facilities, except the bowling alley and gymnasium, would be retained in an area of eight acres. These facilities would include Club Knoll, the swimming pool, tennis courts and ball fields, playfields, and the picnic area.

Open Space

Eighty-six acres would be devoted to open space in the Mixed Use Village Alternative. This includes the Rifle Range Creek corridor and the areas of steep slopes. Riparian vegetation, consistent with other creeks in the East Bay Hills, would be maintained using a 50-foot wide restricted access buffer strip along Rifle Range Creek. Recreation and open space nodes would be located along the creek corridor. Oak woodlands and native grasslands would be used for nature trails and conservation efforts.

2.3.4 Single Use Campus Alternative

The Single Use Campus Alternative would use 35 acres for an educational institution or corporate user. Other possible similar uses include a conference/hotel facility or institutional headquarters for a regional or national research company. The concentrated development in this alternative allows the greatest acreage of open space of any alternative (as shown in Figure 2-7). A total of 101 acres would be devoted to open space. Homeless housing would be provided off-site. This alternative has the potential to lead to approximately 1,150 jobs.

The land use categories and components, their acreages, the square feet or number of units in the built area as specified to date by the OBRA, and the type of development are shown in Table 2-4. Each of the land use categories in the Single Use Campus Alternative is described below. The location of the proposed land uses are shown in Figure 2-7.

Educational Campus

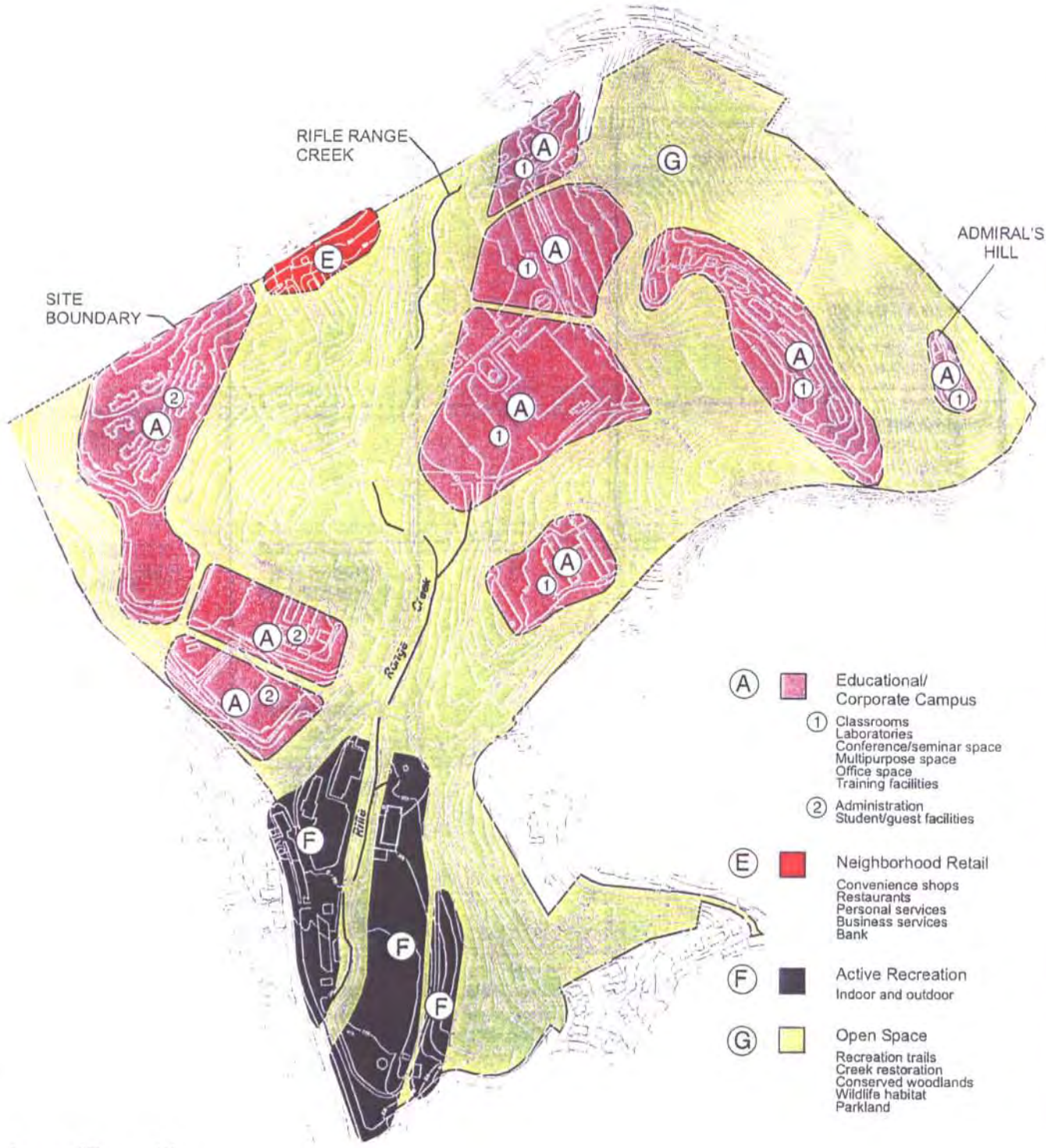
Most of the developed areas (35 acres) would be occupied by an educational or corporate campus with 762,000 square feet of built area. The campus would be divided into two distinct areas. Classrooms, research laboratories, conference/seminar facilities, library, multipurpose space, office space, and training facilities would be located in the north quadrant and the hills above the north quadrant. Administrative offices, student/guest facilities, storage and other secondary functions would be located in the west quadrant and the northern portion of the Mountain Boulevard entry area.

Neighborhood Retail

Neighborhood retail uses would be located on one acre in the northern portion of the west quadrant and in the western portion of the Keller Avenue entry area. The neighborhood retail built area would be about 22,000 square feet.

Active Recreation

The existing active recreation facilities, except the bowling alley and gymnasium, would be maintained on 12 acres. Recreation facilities would be maintained and operated for public use, perhaps in association with City of Oakland Parks and Recreation Department or East Bay Regional Park District. These facilities also would be available for students, employees, and other users of the campus.



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The Single Use Campus Alternative is designed to be used by an educational institution, research corporation, or a conference/hotel facility. In this alternative, the total built area is 828,000 square feet; 101 acres would remain open space.

Legend:

- A Educational
- B Cultural Meeting
- C Mixed Use
- D Housing
- E Retail
- F Active Recreation
- G Open Space
- H Office/Research
- I Residential/Golf Course

Source: Theresa Hughes & Associates 1995

Single Use Campus Alternative

Naval Medical Center Oakland

Figure 2-7

Table 2-4
Single Use Campus Alternative
Land Use

Use Categories and Components	Sub-area (acres)	Floor Area Ratio[1] or Density	Development
Educational campus[2] Classrooms Library Cafeteria Laboratories Multipurpose spaces Administrative offices Student/guest facilities Vocational training center Machine/wood shop	35	0.5	762,000 square feet
Neighborhood retail Convenience shops Restaurants Personal services (laundry, beauty) Business services (copy service) Bank	1	0.5	22,000 square feet
Active recreation *Indoor:* Club Knoll Swimming pool *Outdoor:* Tennis courts - 5 Baseball fields - 2 Playfields Picnic area	12	Shared use of all facilities outside the recreation zone Preserve existing facilities	44,000 square feet (existing).
Open space Recreation trails Creek restoration Conserved woodlands Wildlife habitat Parkland	101	not applicable	not applicable
Area set aside for unbuildable slopes and roads within developable sites	34	not applicable	not applicable
TOTAL	183	–	828,000 square feet

[1]Floor area ratio represents the percentage of the total square footage that is dedicated to usable floor space.
[2]The educational campus use for this option is interchangeable with a conference/hotel facility or an administrative/research headquarters complex of comparable size, with no significant change in peak hour traffic generation.
Source: Theresa Hughes & Associates 1995.

Open Space

Approximately 101 acres of the site would remain open space in the Single Use Campus Alternative. Pedestrian trails along Rifle Range Creek and in the hills would provide links to adjoining parks. The Rifle Range Creek riparian corridor would be protected by a 50-foot wide restricted-access

buffer strip. Use of the site as a private campus, such as a research facility or corporate headquarters, may limit public access to some open space areas.

2.3.5 Residential Alternative

The uses and densities proposed in the Residential Alternative are similar to those that have been developed in the surrounding neighborhoods over the past 30 to 40 years. The primary use would be single family residences with some neighborhood retail, active recreation areas, and open space as shown in Figure 2-8. No community services, health services, or educational facilities are proposed. The residential use at the proposed densities would not conflict with the site's existing zoning. However, the retail and active recreation area would require rezoning. This alternative provides a means to compare the more varied uses of the other alternatives with residential development similar to that of the surrounding area. Although the Residential Alternative's higher density option contains only 16 more residential units than the Maximum Capacity Alternative (600 versus 584 units, respectively), it is the character of these units, primarily as single-family residences, that differentiates it from the Maximum Capacity Alternative. The differences in these two alternatives go well beyond a simple count of the number of residential units, and include consistency with surrounding community residential development and the overall placement and mixes of uses combined within each alternative.

Homeless housing and activities would be provided as discussed earlier in Section 1.3.2 of this EIS/EIR. Approximately 170 to 190 new jobs would result from this alternative.

The land use categories and components, their acreages, the square feet or number of units in the built area as specified to date by the OBRA, and the type of development are shown in Table 2-5. Each of the land use categories in the Residential Alternative is described below. The locations of the proposed land uses are shown in Figure 2-8.

Single Family Housing

In the Residential Alternative, 82 acres would be used for single family residences. Residences would be located in all of the development areas except the active recreation area and the southern two-thirds of the Mountain Boulevard entry area. Two densities of single family residential development are proposed. The first option calls for 357 units to be built on 10,000-square foot lots (4.4 units per acre), and the second option calls for 600 units to be built on 6,000-square foot lots (7.3 units per acre).

Table 2-5
Residential Alternative
Land Use

Use Categories and Components	Sub-area (acres)	Floor Area Ratio[1] or Density	Development
Single family housing			
Option 1	82	4.4 units/acre (10,000 square feet/lot)	357 units
OR	*or*	*or*	*or*
Option 2	82	7.3 units/acre (6,000 square feet/lot)	600 units
Neighborhood retail Convenience shops Restaurants Personal services (laundry, beauty) Business services (copy service) Bank	2	0.5	39,000 square feet
Active recreation *Indoor:* Club Knoll Swimming pool *Outdoor:* Tennis courts - 5 Baseball fields - 2 Playfields Picnic area	14	Shared use of all facilities outside the recreation zone Preserve existing facilities	44,000 square feet (existing)
Open space Recreation trails Creek restoration Conserved woodlands Wildlife habitat Parkland	46	not applicable	not applicable
Area set aside for unbuildable slopes and roads within developable sites	39	not applicable	not applicable
TOTAL	183	–	83,000 square feet + 357 units or 600 units

[1]Floor area ratio represents the percentage of the total square footage that is dedicated to usable floor space.
Source: Theresa Hughes & Associates 1995.

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The Residential Alternative includes low density residential areas, similar to adjacent residential areas and a small commercial area. In this alternative, the total built area is 357 or 600 units, depending on lot size, 83,000 square feet of retail and recreation facilities; 46 acres would remain open space.

Legend:

- A Educational
- B Cultural Meeting
- C Mixed Use
- D Housing
- E Retail
- F Active Recreation
- G Open Space
- H Office/Research
- I Residential/Golf Course

Source: Theresa Hughes & Associates 1995

Residential Alternative

Naval Medical Center Oakland

Figure 2-8

Neighborhood Retail

A small neighborhood retail area would be located east of the proposed public library, social services, and post office on two acres in the Mountain Boulevard entry area. It would include 39,000 square feet of convenience shops, restaurants, personal services (laundry, beauty shop), business services (copy service), and a bank.

Active Recreation

The 14 acres of existing active recreation facilities, except the bowling alley and gymnasium, would be maintained. It would include the swimming pool, tennis courts, baseball fields, playfields, and the picnic area.

Open Space

This alternative has 46 acres of open space. The riparian corridor along Rifle Range Creek would include a 50-foot wide restricted-access buffer zone, and would be proposed for creek restoration. No additional park areas are planned along the creek. Most of the creek would be bordered outside of the 50-foot buffer zone by private property associated with the residences. The hills, oak woodlands, and native grasslands would remain mostly undeveloped. Club Knoll would be retained in this alternative.

2.3.6 No Action Alternative

Inclusion of the No Action Alternative in the environmental analysis and documentation is required by the Council on Environmental Quality, which implements NEPA. It substantially fulfills the requirement of CEQA that a no project alternative be evaluated.

A No Action Alternative of Navy property disposal to the City of Oakland or other entity with no subsequent community reuse would have the same environmental impacts as the Navy No Action Alternative except that the new owner would be responsible for providing caretaker services. Therefore, a separate alternative describing a No Action reuse was unnecessary. Although the project objective, costs, and jurisdictional responsibilities would differ administratively from Navy caretaker status, the site would be in an equivalent status for CEQA purposes, and impacts would be the same as projected under the No Action Alternative.

For this EIS/EIR, the No Action Alternative would retain NMCO in a caretaker status or inactive status under Navy control, under the custody of the Navy Engineering Field Activity West. The No Action Alternative is

defined as NMCO being closed, as mandated by law, with on-site caretaker activity limited to maintenance, security, environmental restoration, and those activities associated with caretaker status.

Specific on-site caretaker actions performed by on-site employees include the following:

- Inspection and maintenance of utility systems essential to security and telecommunications and of roads to avoid irreparable deterioration. Elements of all utility systems and some entire systems, such as alternate systems, could be abandoned while still meeting caretaker requirements;
- Periodic landscape maintenance around unoccupied structures, as necessary, to protect the structures from fires or nuisance conditions;
- Maintenance of property accesses to permit the service and maintenance of utility or infrastructure systems;
- Continuation of security patrols and maintenance of security systems; maintenance of perimeter fences; addition of interior fencing around hazardous waste sites, depending on the length of time the areas may remain in caretaker status;
- The level of necessary fire protection services is being reviewed by the Navy in consultation with the Oakland Fire Department. Currently, the Navy anticipates that one 24-hour engine company will be present on NMCO until transfer of fire protection responsibility to the City of Oakland. The Navy will continue to maintain firebreaks and landscaping, and control weeds during caretaker status;
- Continuation of land management programs, such as natural resource management, pest control, erosion control, and tree removal; and
- Minimal maintenance of structures and other facilities in a manner that facilitates interim use leasing or economical resumption of use.

2.4 COMPARISON OF ALTERNATIVES

NEPA and CEQA require that the EIS/EIR include a presentation of the alternatives in comparative form, to define the issues and provide a clear basis for choice among options by the decisionmakers and the public. Table 2-6 lists the significant impacts and corresponding mitigation measures for each alternative. This table may be used to compare the potential impacts of one alternative to those of another.

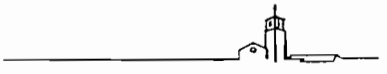


Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives

Resource Category	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Land Use	No impacts are expected.	No impacts are expected.	No significant land use impacts would result from implementation of this alternative, because no disruption of existing surrounding land uses would occur. No substantially incompatible land uses would be introduced, and proposed land uses would not have the potential to disrupt or divide the established physical land use configurations.	*Impact:* Significant and mitigable land use impacts would result from conflicts with existing residential uses due to the development of a research and development facility, particularly a biotechnology tenant. Certain safety measures would be required to ensure isolation of laboratory areas and potentially hazardous materials from the general population. *Mitigation:* The impacts of a research and development facility would be mitigable to a level that is nonsignificant by limiting all operations conducted on-site to those with a low level of risk consistent with surrounding neighborhoods.	No significant land use impacts would result from implementation of this alternative, because no disruption of existing surrounding land uses would occur.	No significant land use impacts would result from implementation of this alternative, because no disruption of existing surrounding land uses would occur.
Socioeconomics	No impacts are expected	No impacts are expected.	*Impact*. A significant and mitigable impact may result from overcrowding in the Oakland Unified School District (OUSD). The Maximum Capacity Alternative would generate 261 students by 2020, assuming full buildout. This increase would represent less than one percent of the total 1994 Oakland Unified School District (OUSD) enrollment. Additional students also may have significant and mitigable	*Impact*. A significant and mitigable impact would result from overcrowding in the Oakland Unified School District (OUSD). The Mixed Use Village Alternative would generate approximately 110 students by 2020, assuming full buildout. This increase would represent less than one percent of the total 1994 OUSD enrollment. Additional students also may have significant and mitigable impacts on Oak Knoll Study	*Impact*. A significant and mitigable impact would result from overcrowding in the Oakland Unified School District (OUSD). The Single Use Campus Alternative would generate approximately 79 students by 2020, assuming full buildout. This increase would represent less than one percent of the total 1994 OUSD enrollment.	*Impact*. A significant and mitigable impact would result from overcrowding in the Oakland Unified School District (OUSD). The Residential Alternative would generate approximately 141 (Option 1) to 231 (Option 2) students by the year 2020, assuming full buildout. This would represent an increase of less than one percent for both Option 1 and Option 2 of the total 1994 OUSD enrollment. Additional

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Socioeconomics *(continued)*	No impacts are expected.	No impacts are expected.	impacts on Oak Knoll Study Area schools if it results on new school construction. *Mitigation:* Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement.	Area schools if it results in new school construction. *Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative.	students also may have significant and mitigable impacts on Oak Knoll Study Area schools if it result in new school construction. *Mitigation:* For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Socioeconomics *(continued)*			specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).			
Public Services	No impacts are expected.	No impacts are expected.	*Impact*: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant because the City of Oakland Police Department has determined that the mix of residential, retail, recreation/golf course and open space areas would require one new full-time police officer working 40 hours per week in Beat 35 to adequately provide coverage at the Naval Medical Center Oakland (NMCO).	*Impact*: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant because the City of Oakland Police Department has determined that the mix of residential, retail, and open space areas would require one new full-time police officer working 40 hours per week in Beat 35 to adequately provide coverage at the Naval Medical Center Oakland (NMCO).	*Impact*: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant because the City of Oakland Police Department has determined that the mix of retail, educational campus, and open space areas would require one new full-time police officer working 40 hours per week in Beat 35 to adequately provide coverage at the Naval Medical Center Oakland (NMCO).	*Impact*. A significant and mitigable impact would result from an increase in demand for City of Oakland police services. Police services impacts due to buildout of this alternative would require one new police officer, which is the same as the Maximum Capacity Alternative. Although Option 2, with 600 residential units, would generate more demand than Option 1, with 357 units, both options would require one additional officer.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

Resource Category	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
			Mitigation. The impact of increased demand for one additional police officer could be mitigated by the City of Oakland utilizing general fund money to pay for the new officer. In the event that the general fund is insufficient to pay for the increased demand, an alternative method would be for the site developer, in consultation with the City of Oakland, to explore methods of providing for an additional officer.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative. In addition, it is foreseeable that private security guards would be used for the type of development described under this alternative.	*Mitigation:* For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.
Cultural Resources	No impacts are expected.	No impacts are expected.	Implementation of the Maximum Capacity Alternative would have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.	Implementation of the Mixed Use Village Alternative would have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.	Implementation of the Single Use Campus Alternative would have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.	Implementation of Options 1 and 2 of the Residential Alternative would have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Aesthetics/ Scenic Resources	No impacts are expected.	No impacts are expected.	*Impact*: A significant and mitigable impact would result from visual contrasts due to the introduction of new structures and grading on the crest and northern end of Admiral's Hill, together with potential loss of trees at the northern end. These would be seen in views from NMCO use areas, Keller Avenue, and existing residences to the north, east, and south within foreground and middleground viewing distances. Admiral's Hill forms a prominent scenic feature in the immediate area, and visual contrasts could be augmented by "skylining" of houses (appearance of houses along ridge of hills) in some closer views from the NMCO site. *Mitigation*: The impact is mitigable to a level that is less than significant through careful siting and design of new construction and minimizing losses of mature trees at the northern end of the hill. Contour grading should be used to minimize cuts and fills. Landscaping that is consistent with the more natural appearing vegetation on the surrounding	This alternative would not introduce significant adverse effects to aesthetic or scenic resources. The retention of Admiral's Hill in its existing visual condition as open space would lead to reduced visual impacts as compared with the Maximum Capacity Alternative. However, the Mixed Use Village Alternative provides less dramatic public viewing opportunities due to access restrictions at Admiral's Hill.	The Single Use Campus Alternative would introduce no significant adverse aesthetic or scenic effects. The retention of Admiral's Hill as open space would lead to reduced visual impacts as compared with the Maximum Capacity Alternative. The increase in landscaped open space and public viewing opportunities throughout the site would lead to more beneficial impacts than the Mixed Use Alternative.	The Residential Alternative would not introduce significant adverse effects on aesthetic or scenic resources. This alternative is similar in overall effect to the Maximum Capacity Alternative, except without the adverse impacts of development on Admiral's Hill. The Residential Alternative provides less open space and fewer beneficial visual effects than either the Mixed Use Village or Single Use Campus Alternatives. The Residential Alternative contains two options, with residential development of 357 and 600 units, respectively. These would have noticeable differences in density but no major difference in overall scenic quality or visual impact.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Aesthetics/ Scenic Resources			hills should be developed to provide some screening and shade for new buildings.			
Biological Resources	No impacts are expected.	No impacts are expected.	*Sensitive Habitats* *Impact*: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation.	*Sensitive Habitats* *Impact*: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation.	*Sensitive Habitats* *Impact*: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation.	*Sensitive Habitats* *Impact:* Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Biological Resources *(continued)*			*Mitigation.* Avoid the removal of native vegetation in the riparian corridor during demolition, earth moving, construction, habitat restoration, and trail-building activities. Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor. Locate all staging areas in already disturbed sites. A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone. This plan, to be prepared by the project applicant prior to construction, should specify all activities necessary to restore the drainage with minimal erosion, and should be supervised by restoration specialists. If some vegetation removal is required, project developers should confer with the City of Oakland and the California Department of Fish and Game regarding the type of vegetation to be removed, the extent of removal, and corresponding revegetation mitigation requirements.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Biological Resources *(continued)*			*Nonsensitive Species and Habitats* *Impact*. A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected. *Mitigation*: When a more specific site plan for development (i.e. grading) of the area is presented to the City, a tree removal permit would have to be obtained for any protected trees that are to be removed. The applicant would have to conduct a site-specific survey of which trees would be removed and comply with all other requirements of the ordinance.	*Nonsensitive Species and Habitats* *Impact*: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected. *Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Nonsensitive Species and Habitats* *Impact:* A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected *Mitigation*: Same as indicated for the Maximum Capacity Alternative.	Nonsensitive Species and Habitats Impact: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected. *Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.
Water Resources	No impacts are expected.	No impacts are expected.	No significant water resources impacts would result from implementation of the Maximum Capacity Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or	No significant water resources impacts would result from implementation of the Mixed Use Village Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or.	No significant water resources impacts would result from implementation of the Single Use Campus Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or	No significant water resources impacts would result from implementation of Options 1 and 2 of the Residential Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay,

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Water Resources *(continued)*			exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur.	exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur	exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur.	or exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur.
Geology and Soils	No impacts are expected.	No impacts are expected.	*Public Exposure to Earthquakes* *Impact*: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Maximum Capacity Alternative. Although the physical changes required to implement the Maximum Capacity Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines. *Mitigation*: At a minimum, seismic upgrades to reduce life safety risks associated with structural failures for a moderate-probability earthquake, should be performed prior to reuse to meet life safety criteria. Any existing	*Public Exposure to Earthquakes* *Impact:* A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Mixed Use Village Alternative. Although the physical changes required to implement the Maximum Capacity Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines *Mitigation*: A detailed, site-specific seismic evaluation should be performed to identify and quantify the potential hazards associated with reuse of existing structures. Because of the proximity of NMCO to the Hayward Fault, all new	*Public Exposure to Earthquakes* *Impact:* A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Single Use Campus Alternative. Although the physical changes required to implement the Maximum Capacity Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines. *Mitigation:* Same as indicated for the Mixed Use Village Alternative.	Public Exposure to Earthquakes Impact: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Options 1 and 2 of the Residential Alternative. Although the physical changes required to implement the Maximum Capacity Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines. *Mitigation:* New housing units would be designed, at a minimum, to meet the requirements of the California Building Code. Because NMCO is located very close to the Hayward Fault and because some of the proposed

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Geology and Soils *continued)*			structures identified for retention for future use should be evaluated in detail to determine the cost-effectiveness of seismic upgrades. Existing utilities needed to support emergency services should be evaluated prior to reuse to determine if upgrades are needed to meet existing code requirements. *Slope Stability* *Impact:* Significant and mitigable impacts would result from slope failure under the Maximum Capacity Alternative. Since most of the areas proposed for future development are already developed, significant and mitigable impacts on slope stability probably would be limited to those areas at the base of steep slopes.	structures should be designed to meet the site specific seismic design criteria. *Slope Stability* *Impact:* Significant and mitigable impacts would result from slope failure under the Mixed Use Village Alternative. As with the Maximum Capacity Alternative, slope failure could result in significant and mitigable impacts under the Mixed Use Village Alternative. Impacts would be similar to the Maximum Capacity Alternative, except that no development is planned on the ridgetop in the northern corner of the property, nearest the existing landslide deposits.	*Slope Stability* *Impact:* Significant and mitigable impacts would result from slope failure under the Single Use Campus Alternative. Impacts would be similar to the Maximum Capacity Alternative, except that no development is planned on the ridgetop in the northern corner of the property, nearest the existing landslide deposits.	development would be in areas underlain by thick alluvium, the structures should be designed to account for site specific conditions. *Slope Stability* *Impact:* Significant and mitigable impacts would result from slope failure under the Residential Alternative. The potential for slope failures to impact developed areas under the Residential Alternative would be similar to the potential for failures under the Maximum Capacity Alternative, except that no development is proposed in the northern corner of the property above the existing landslide deposit identified by Nilsen (1975). The proposed development area corresponds with the area of existing development, so that it is Unlikely that slope failure would occur provided that the existing terrain is not severely altered.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Geology and Soils *(continued)*			*Mitigation:* Development on slopes greater than 30 percent should be minimized. Grading permits from the City of Oakland will be required. Compliance with requirements of the grading permit should reduce risks of slope failure in new development areas. Geotechnical investigations should be conducted to identify potential geologic hazards that may affect new building or road sites in potentially vulnerable areas, adjacent to or including slopes greater than 20 percent. Stability of the slope underlain by existing landslide deposits at the north end of the site should be specifically evaluated to identify potential hazards to development in this area.	*Mitigation:* Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.
Traffic and Circulation	No impacts are expected.	No impacts are expected.	*Impact:* A significant and mitigable impact would result from a substantial increase in traffic congestion at five project area intersections due to peak hour traffic from the Maximum Capacity Alternative. Significant and mitigable impacts to the following intersections would occur:	*Impact:* A significant and mitigable impact would result from a substantial increase in traffic congestion at five project area intersections due to peak hour traffic from the Mixed Use Village Alternative. Significant and mitigable impacts to the following intersections would occur:	*Impact:* A significant and mitigable impact would result from a substantial increase in traffic congestion at four project area intersections due to peak hour traffic from the Single Use Campus Alternative. Significant and mitigable impacts to the following intersections would occur:	*Impact:* A significant and mitigable impact would result from a substantial increase in traffic congestion at two project area intersections due to peak hour traffic from the Residential Alternative (Option 1). Significant and mitigable impacts to the following intersections would occur:

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic and Circulation *(continued)*			• Keller / I-580 southbound off-ramp; • Keller / Mountain Boulevard; • Mountain Boulevard / I-580 northbound off-ramp; • Mountain Boulevard / Main Entrance; and • Mountain Boulevard / Golf Links Rd. *Mitigation:* The installation of traffic signals at the above locations along with minor lane changes (e.g. restriping) would mitigate the impacts to a level of nonsignificance. Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue / I-580 overcrossing to provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic. The mitigation measures described above would reduce the traffic impacts to a level of nonsignificance.	• Keller / I-580 southbound off-ramp; • Keller / Mountain Boulevard; • Mountain Boulevard / I-580 northbound off-ramp; • Mountain Boulevard / Main Entrance; and • Mountain Boulevard / Golf Links Rd. *Mitigation:* Same as indicated for the Maximum Capacity Alternative.	• Keller / I-580 southbound off-ramp; • Keller / Mountain Boulevard; • Mountain Boulevard / I-580 northbound off-ramp; and • Mountain Boulevard / Main Entrance. *Mitigation:* Same as indicated for the Maximum Capacity Alternative.	• Keller / I-580 southbound off-ramp; and • Keller / Mountain Boulevard. *Mitigation*: Same as indicated for the Maximum Capacity Alternative. *Impact:* A significant and mitigable impact would result from a substantial increase in traffic congestion at four project area intersections due to peak hour traffic from the Residential Alternative (Option 2). The traffic impacts for the Residential Alternative (Option 2) are similar to the impacts for the Maximum Capacity Alternative. The intersections that would be significantly impacted are as follows: • Keller / I-580 southbound off-ramp; • Keller / Mountain Boulevard; • Mountain Boulevard / I-580 northbound off-ramp; and

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic and Circulation *(continued)*						• Mountain Boulevard / Main Entrance. *Mitigation*: Same as indicated for the Maximum Capacity Alternative.
Air Quality	No impacts are expected.	No impacts are expected.	*Traffic-related Ozone Precursor Emissions* *Impact*: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. Traffic associated with the Maximum Capacity Alternative would generate reactive organic compounds and nitrogen oxide emissions which exceed the BAAQMD impact significance threshold of 80 pounds per day. *No Mitigation*. The air emissions analysis already accounts for voluntary trip reduction program efforts (five percent of total trips) and multi-purpose linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards. Since state law effectively precludes implementation of	*Traffic-related Ozone Precursor Emissions* *Impact*: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. Traffic associated with the Mixed Use Village Alternative would generate nitrogen oxide emissions which exceed the BAAQMD impact significance threshold of 80 pounds per day. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Traffic-related Ozone Precursor Emissions* *Impact*: A significant and mitigable impact would result from an increase in traffic-related ozone precursor emissions. This impact is the same as described for the Maximum Capacity Alternative, where traffic-related ozone precursor emissions and reactive organic compounds also would exceed the 80 pounds per day BAAQMD significance threshold. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Traffic-related Ozone Precursor Emissions* *Impact*: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. Traffic associated with Options 1 and 2 of the Residential Alternative would generate nitrogen oxide emissions which exceed the BAAQMD impact significance threshold of 80 pounds per day. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Air Quality *(continued)*			mandatory trip reduction programs, few mechanisms are available to the City of Oakland for achieving significant additional trip and emission reduction. *Traffic-related PM_{10} Emissions* *Impact:* A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. The Maximum Capacity Alternative would generate emissions above the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions. *No Mitigation.* The air emissions analysis already accounts for voluntary trip reduction program efforts (five percent of total trips) and multi-purpose linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within Since state law effectively precludes implementation of mandatory trip reduction programs, few mechanisms are available to the City of Oakland for achieving significant additional trip and emission reduction.	*Traffic-related PM_{10} Emissions* *Impact:* A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. The Mixed Use Alternative would generate emissions above the BAAQMD threshold of 80 pounds per day for PM_{10} emissions. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Traffic-related PM_{10} Emissions* *Impact:* A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. The Single Use Alternative would generate emissions above the BAAQMD threshold of 80 pounds per day for PM_{10} emissions. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Traffic-related PM_{10} Emissions* *Impact:* A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. The Residential Alternative (Options 1 and 2) would generate emissions above the BAAQMD threshold of 80 pounds per day for PM_{10} emissions. *No Mitigation*: Same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Air Quality *(continued)*			*Dust from Demolition and Construction* *Impact:* A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Demolition, construction, and building renovation under the Maximum Capacity Alternative would occur incrementally over an extended buildout period, precluding specific estimates of construction-related emissions for any particular year. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures. *Mitigation:* Use the following dust control practices during demolition, construction, and renovation activities: • Use mowing rather than discing for weed control, thus minimizing ground disturbance and leaving a soil cover in place; • Seed and water inactive portions of construction sites to maintain a grass cover;	*Dust from Demolition and Construction* *Impact:* A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Demolition, construction, and building renovation under the Mixed Use Village Alternative would occur incrementally over an extended buildout period, precluding specific estimates of construction-related emissions for any particular year. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures. *Mitigation*: Same as indicated for the Maximum Capacity Alternative.	*Dust from Demolition and Construction* *Impact:* A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Demolition, construction, and building renovation under the Single Use Campus Alternative would occur incrementally over an extended buildout period, precluding specific estimates of construction-related emissions for any particular year. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures. *Mitigation*: Same as for the Maximum Capacity Alternative.	*Dust from Demolition and Construction* *Impact*: A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Demolition, construction, and building renovation under the Options 1 and 2 of the Residential Alternative would occur incrementally over an extended buildout period, precluding specific estimates of construction-related emissions for any particular year. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures. *Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Air Quality *(continued)*			• Minimize the area disturbed by clearing, earthmoving, or excavation activities; • Prevent excessive dust generation by using water or dust control solutions on all unpaved areas subject to vehicle traffic, grading or excavation; • Ensure that any petroleum-based dust control products used on the site meet BAAQMD regulations for cutback asphalt paving materials; • Halt all site clearing, grading, earthmoving, and excavation activities during periods of sustained strong winds (hourly average wind speeds of 20 mph or greater); • Sweep streets adjacent to the construction site as necessary to remove accumulated dust and soil; and • Properly maintain all construction vehicles and avoid excessive idling of inactive equipment.			
Noise	No impacts are expected.	No impacts are expected.	*Construction and Demolition* *Impact*: A significant and mitigable impact would result from temporary noise disturbance to adjacent land uses associated with demolition,	*Construction and Demolition* *Impact*: A significant and mitigable impact would result from temporary noise disturbance to adjacent land uses associated with demolition,	*Construction and Demolition* *Impact*: A significant and mitigable impact would result from temporary noise disturbance to adjacent land uses associated with demolition,	*Construction and Demolition* *Impact*: A significant and mitigable impact would result from temporary noise disturbance to adjacent land uses associated with demolition,

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Noise *(continued)*			construction, and remodeling of buildings on the NMCO site. Building demolition, and new roadway reconstruction would be the most substantial noise sources. Community Noise Equivalent Level increments could exceed 70 dB for locations within about 400 feet of the work site. Any occupied residential locations within 400 feet of construction sites may experience substantial temporary disturbance from construction noise. This would result in a significant and mitigable impact. The Maximum Capacity Alternative is dominated by land uses that are considered noise-sensitive. The phasing of construction and occupancy would determine the extent to which demolition and construction activities cause impacts to on-site land uses. Most existing off-site residential development is far enough away from the major construction areas to avoid noise impacts. Construction activities within 400 feet of the NMCO site boundary could cause temporary noise impacts on the surrounding property.	construction, and remodeling of buildings on the NMCO site. This impact is the same as indicated for Maximum Capacity Alternative.	construction, and remodeling of buildings on the NMCO site. This impact is the same as indicated for Maximum Capacity Alternative.	construction, and remodeling of buildings on the NMCO site. For Options 1 and 2, this impact is the same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

Resource Category	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Noise *(continued)*			*Mitigation:* Construction noise impacts could be reduced by restricting most construction activity to normal daytime (7:00 am to 7:00 pm) periods. Careful phasing of demolition, construction, and remodeling activities should be implemented to minimize the extent to which occupied areas are exposed to construction noise. *Noise Exposure of Proposed Land Uses* *Impact:* A significant and mitigable impact would result from traffic noise. The western side of the NMCO site would experience high noise levels from traffic on I-580 and, to a lesser extent, Mountain Boulevard. Areas within 500 feet of Mountain Boulevard will generally be exposed to CNEL levels above 65 dB. CNEL levels above 65 dB are higher than normally acceptable levels for residential or other noise-sensitive land uses.	*Mitigation*: Same as indicated for Maximum Capacity Alternative. *Noise Exposure of Proposed Land Uses* *Impact:* A significant and mitigable impact would result from traffic noise. This impact is the same as indicated for Maximum Capacity Alternative.	*Mitigation*: Same as indicated for Maximum Capacity Alternative. *Noise Exposure of Proposed Land Uses* *Impact:* A significant and mitigable impact would result from traffic noise. This impact is the same as indicated for Maximum Capacity Alternative.	*Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative. *Noise Exposure of Proposed Land Uses* *Impact:* A significant and mitigable impact would result from traffic noise. For Options 1 and 2, this impact is the same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

Resource Category	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Noise *(continued)*			*Mitigation*: Indoor noise levels could be adequately reduced through building design. Outdoor noise levels could be controlled through the use of berms/sound-walls, vegetation buffer areas, building configurations, and other site planning tools, or by placing sensitive land uses beyond 500 feet from Mountain Boulevard.	*Mitigation*: Same as indicated for Maximum Capacity Alternative.	*Mitigation*: Same as indicated for Maximum Capacity Alternative.	*Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.
Utilities	No impacts are expected.	No impacts are expected.	*Impact 1. Potable Water Supply.* A significant and mitigable impact would result from an increased water supply demand of about 112 percent over the historic annual demand. The Maximum Capacity Alternative is estimated to increase population in the region of influence by 3,006 which includes 1,565 residential users, and 1,441 commercial users (please see Table 4-5). Multiplying 1,565 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 187, 800 gallons of residential use per day. Multiplying 1,441 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 100,870 gallons of commercial use per	No significant impacts to utilities systems or waste management service and landfill capacity would result under the Mixed Use Village Alternative.	No significant impacts to utilities systems or waste management service and landfill capacity would result under the Single Use Campus Alternative.	No significant impacts to utilities systems or waste management service and landfill capacity would result under the Residential Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Utilities *(continued)*			day. Adding these estimated daily residential (187,800 gallons) and commercial (100,870) uses equals 288,670 gallons per day estimated water use on site. Multiplying this use rate times 365 days subtotals 105,364,550 gallons. Adding at estimated 85,490,000 gallons per year to irrigate the 83-acre golf course (based on an irrigation rate of 1.03 million gallons per acre per year) totals 190,854,550 gallons per year estimated potable water demand. This represents an increase of about 112 percent over the estimated historic annual use of 90,000,000 gallons per year. *Mitigation 1.* The City of Oakland will expressly identify the water supplier(s) that will provide water service to the alternative (Cal. Pub. Res. Code Section 21151.9; Cal. Wat. Code Sections 10910-10915). The City will ask those suppliers whether the water demand associated with the alternative has been included and assessed in the suppliers' urban water management plans, and will require such plans to be updated to account for estimated demand from this alternative.			

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Utilities *(continued)*			Government Code Sections 65352 and 65352.5 require cities to consult with water suppliers in connection with such proposed projects. Moreover, Government Code Section 65302, subdivision (d), requires cities to coordinate with such suppliers in preparing the conservation elements of their general plans. That coordination is required to include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city. In addition to supplier identification and coordination, the following best management practices will be implemented by future site developers: • Interior and exterior water audits and incentive programs for single family residential, multi-family residential, and commercial users; • requirement of ultra low flush toilets in all new construction; • distribution system water audits, leak detection and repair; • metering for all new connections and billing by volume of use;			

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Utilities *(continued)*			• large landscape water audits (golf course and recreational areas); • landscape water conservation for new single family homes; and • water waste prohibitions. Implementation of these water conservation practices will be consistent with the guidelines and schedules set forth in the Memorandum of Understanding Regarding Urban Water Conservation in California (California Urban Water Conservation Council 1994). Supplier identification, coordination, and best management practices implementation would reduce water supply impacts to a less than significant level by ensuring that the water supply system will have adequate capacity prior to development approval. No other significant impacts to utilities systems or waste management service and landfill capacity would result under the Maximum Capacity Alternative. The generation of about 71,346 tons of demolition waste would, however, be a significant but mitigable cumulative impact, and			

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Utilities *(continued)*			is discussed in Chapter 5 of this EIS/EIR.			
Hazardous Materials and Waste	No impacts are expected.	No impacts are expected.	There will be no significant hazardous materials and waste impacts from implementation of the Maximum Capacity Alternative, because the relatively low quantities of such materials and wastes generated would not result in releases that could expose the public or the environment to hazardous levels of substances.	Same as indicated for Maximum Capacity Alternative.	Same as indicated for Maximum Capacity Alternative.	For Options 1 and 2, same as indicated for the Maximum Capacity Alternative
Cumulative Impacts	No impacts are expected.	No impacts are expected.	*Socioeconomics* *Impact:* A significant and mitigable impact may result from adding students to the capacity-constrained local schools due to the project and cumulative development. *Mitigation:* Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not	*Socioeconomics* *Impact:* A significant and mitigable impact may result from adding students to the capacity-constrained local schools due to the project and cumulative development. *Mitigation:* Same as indicated for Maximum Capacity Alternative.	*Socioeconomics* *Impact:* A significant and mitigable impact may result from adding students to the capacity-constrained local schools due to the project and cumulative development. *Mitigation:* Same as indicated for Maximum Capacity Alternative.	*Socioeconomics* *Impact:* A significant and mitigable impact may result from adding students to the capacity-constrained local schools due to the project and cumulative development. *Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Cumulative Impacts *(continued)*			reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).			

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

Resource Category	Navy Action		Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Cumulative Impacts *(continued)*			*Traffic and Circulation* *Impact:* A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project intersections, which were analyzed for cumulative conditions. These intersections are as follows: • Keller/I-580 southbound off-ramp; • Keller/Mountain Boulevard; and • Mountain Blvd./I-580 northbound off-ramp. *Mitigation:* The installation of traffic signals at the above locations along with minor lane changes (i.e. restriping, etc.) would mitigate the impacts to a level of nonsignificant. Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing. The restriping will provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.	*Traffic and Circulation* *Impact:* A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project intersections, which were analyzed for cumulative conditions. *Mitigation:* Same as indicated for Maximum Capacity Alternative.	*Traffic and Circulation* *Impact:* A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project intersections, which were analyzed for cumulative conditions. *Mitigation:* Same as indicated for Maximum Capacity Alternative.	*Traffic and Circulation* *Impact:* A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project intersections, which were analyzed for cumulative conditions. *Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Cumulative Impacts *(continued)*			The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant. *Air Quality* *Impact*: A significant and unmitigable impact would result from regional ozone precursor and PM_{10} concentrations that exceed state air quality standards. This impact is due to vehicle emissions associated with traffic from project plus cumulative development. *No Mitigation:* Cumulative air quality issues in the San Francisco Bay Area are addressed through regional air quality plans developed jointly by the Bay Area Air Quality Management District (BAAQMD), the Association of Bay Area Governments, and the Metropolitan Transportation Commission. These plans reflect anticipated regional land use and transportation patterns, and are subject to periodic review and revision. BAAQMD regulations require most new industrial facilities to fully offset emissions that would be generated by their operations. However, the impacts from the reuse alternatives are related to vehicle	*Air Quality* *Impact* A significant and unmitigable impact would result from regional ozone precursor and PM_{10} concentrations that exceed state air quality standards. This impact is due to vehicle emissions associated with traffic from project plus cumulative development. *No Mitigation:* Same as indicated for the Maximum Capacity Alternative.	*Air Quality* *Impact*: A significant and unmitigable impact would result from regional ozone precursor and PM_{10} concentrations that exceed state air quality standards. This impact is due to vehicle emissions associated with traffic from project plus cumulative development. *No Mitigation:* Same as indicated for the Maximum Capacity Alternative.	*Air Quality* *Impact*: A significant and unmitigable impact would result from regional ozone precursor and PM_{10} concentrations that exceed state air quality standards. This impact is due to vehicle emissions associated with traffic from project plus cumulative development. *No Mitigation:* For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Cumulative Impacts *(continued)*			emissions, which relies on voluntary reduction in vehicle trips for mitigation. Therefore, this impact cannot be fully mitigated. *Utilities* *Impact:* A significant and mitigable impact would occur if solid waste diversion (reduction and recycling) goals are not met on a regional basis. There is a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010. Demolition of the hospital and all other buildings that would not be used as part of one of the reuse alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Although it is a very small percentage of available landfill capacity, it still represents a potentially significant impact, because of the estimated eight	*Utilities* *Impact:* A significant and mitigable impact would occur if solid waste diversion (reduction and recycling) goals are not met on a regional basis. There is a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010. Demolition of the hospital and all other buildings that would not be used as part of one of the reuse alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Although it is a very small percentage of available landfill capacity, it still represents a potentially significant impact, because of the estimated eight	*Utilities* *Impact:* A significant and mitigable impact would occur if solid waste diversion (reduction and recycling) goals are not met on a regional basis. There is a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010. Demolition of the hospital and all other buildings that would not be used as part of one of the reuse alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Although it is a very small percentage of available landfill capacity, it still represents a potentially significant impact, because of the estimated eight	*Utilities* *Impact:* A significant and mitigable impact would occur if solid waste diversion (reduction and recycling) goals are not met on a regional basis. There is a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010. Demolition of the hospital and all other buildings that would not be used as part of one of the reuse alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Although it is a very small percentage of available landfill capacity, it still represents a potentially significant impact, because of the estimated eight

Table 2-6
Summary of Significant Environmental Impacts and Mitigations from the Proposed Action and Reuse Alternatives *(Continued)*

	Navy Action		Community Reuse Alternatives			
Resource Category	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Cumulative Impacts *(continued)*			million ton shortfall of landfill capacity in the County. This would significantly impact Alameda County's ability to meet their integrated waste management plan diversion goals. This would not be an immediate impact, since existing landfill capacity is adequate to absorb NMCO demolition waste. However, over the long term, in combination with other activities that generate substantial quantities of solid waste that will need to be diverted or landfilled, the generation of this demolition waste represents a potentially significant and mitigable impact. *Mitigation*: The city shall develop and implement, over the long term and in consultation with the CIWMB, a construction and demolition materials waste diversion program integrating materials exchange, recycling, salvage, and other waste recovery and reuse activities to realize maximum reasonable diversion of such materials from landfills. Effective implementa-tion of that program, combined with long-term Alameda County policies and plans to expand existing, or acquire and develop new landfill capacity, should accommodate increased volumes of solid waste.	million ton shortfall of landfill capacity in the County. This would significantly impact Alameda County's ability to meet their integrated waste management plan diversion goals. This would not be an immediate impact, since existing landfill capacity is adequate to absorb NMCO demolition waste. However, over the long term, in combination with other activities that generate substantial quantities of solid waste that will need to be diverted or landfilled, the generation of this demolition waste represents a potentially significant and mitigable impact. *Mitigation:* Same as for Maximum Capacity Alternative.	million ton shortfall of landfill capacity in the County. This would significantly impact Alameda County's ability to meet their integrated waste management plan diversion goals. This would not be an immediate impact, since existing landfill capacity is adequate to absorb NMCO demolition waste. However, over the long term, in combination with other activities that generate substantial quantities of solid waste that will need to be diverted or landfilled, the generation of this demolition waste represents a potentially significant and mitigable impact. *Mitigation:* Same as for Maximum Capacity Alternative.	million ton shortfall of landfill capacity in the County. This would significantly impact Alameda County's ability to meet their integrated waste management plan diversion goals. This would not be an immediate impact, since existing landfill capacity is adequate to absorb NMCO demolition waste. However, over the long term, in combination with other activities that generate substantial quantities of solid waste that will need to be diverted or landfilled, the generation of this demolition waste represents a potentially significant and mitigable impact. *Mitigation*: For Options 1 and 2, same as indicated for the Maximum Capacity Alternative.

2.5 ENVIRONMENTALLY PREFERABLE/ENVIRONMENTALLY SUPERIOR ALTERNATIVE

NEPA requires an environmentally preferable alternative be identified and CEQA requires that an environmental superior alternative be identified. The No Action Alternative is the environmentally preferable NEPA alternative and environmentally superior CEQA alternative because no significant impacts would occur under this CEQA alternative. However, consistent with CEQA requirements, one of the reuse alternatives must further be identified as an environmentally superior alternative. NEPA has no such requirement.

The Residential Alternative (Option 1 = 357 dwelling units) is the CEQA environmentally superior CEQA reuse alternative, as described in sections 2.5.1 and 2.5.2.

2.5.1 Identification Process

Identification of an environmentally superior CEQA reuse alternative requires consideration of three major factors. First, the number of significant impacts is important because it shows how many times an alternative could exceed one or more significance thresholds without mitigation. Next, the severity of each significant impact is considered. Some significant impacts are more severe than others. For example, a significant impact to an endangered species (which is not identified in this EIS/EIR) may be more important than a significant noise impact (which is not identified in this EIS/EIR). The context of an impact is also considered. Context generally refers to the relative importance of impacts to the potentially affected region, potentially affected interests, and the locality. For example, a significant socioeconomic impact in an area where socioeconomic improvements are needed may be more important than a significant air quality impact in the same area.

In order to identify an environmentally superior CEQA alternative, environmental impacts were compared across the four reuse alternatives for the issue areas analyzed in Chapters 4 and 5. This comparison was used to determine which alternative would result in the least overall adverse environmental CEQA impact, and could therefore be identified as the environmentally superior reuse alternative. Environmental impacts are substantially similar for the following areas under the four reuse alternatives as shown in Chapter 4:

1. Socioeconomics;
2. Public Services;
3. Cultural Resources;
4. Biological Resources;
5. Water Resources;
6. Geology and Soils;
7. Noise;
8. Hazardous Materials and Waste.

Other NEPA and CEQA environmental issues evaluated in Chapters 4 and 5 also reflect similarities in potential impacts, as explained below.

These similarities can be confirmed by reviewing the tables summarizing impact determinations at the beginning of each subsection of Chapter 4. Cumulative traffic and circulation impacts identified in Chapter 5 result in significant level of service/delay impacts at the same three intersections (e.g., Keller/Interstate 580 southbound off-ramp, Keller/Mountain Boulevard, and Mountain Boulevard/Interstate 580 northbound off-ramp) regardless of alternative or option. The evaluation of short-term uses versus long-term environmental productivity, irretrievable or irreversible commitment of resources, growth-inducing impacts, and environmental justice are generally equal regardless of reuse alternative or option. These similarities effectively lead to the conclusion that the reuse alternatives are substantially equivalent with respect to their environmental impacts for these issue areas.

2.5.2 Determination of Environmentally Preferable and Environmentally Superior Alternative

The determination of an environmentally superior CEQA alternative was based on a comparison of the differences in the following areas analyzed in Chapter 4, which are:

9. Land Use;
10. Aesthetics and Scenic Resources;
11. Traffic and Circulation;
12. Air Quality; and
13. Utilities.

For each of these five issue areas, differences in the environmental impacts of the reuse alternatives are reviewed below and compared in Table 2-7. These differences are then considered together to identify the environmentally superior CEQA reuse alternative, which is the Residential Alternative (Option 1).

Table 2-7
Identification of CEQA Environmentally Preferable and Superior Alternative

Impact Issues			Community Reuse Alternatives			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Land Use						
Conflicts with existing residential uses	○	○	◐	◑	◐	○*
Conflicts with surrounding land uses	◐	◐	○*	◐	◐	○*
Aesthetics and Scenic Resources						
Visual effect on natural landscape and open space	○	○	◑	◐*	◐*	◐*
Traffic and Circulation						
Intersections experiencing significant level of service/delay impacts (number of intersections)	○	○	◑(5)	◑(5)	◑(4)	◑(2/4)a*
Air Quality						
Traffic-related ozone precursor and PM_{10} emissions	○	○	●	●	●	●*
Utilities						
Potable water supply	○	○	◑	◐*	◐*	◐*

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

Notes:
* = Indicates environmentally preferable and environmentally superior alternative for a particular issue area
a = "/" differentiates between Options 1 and 2 for the Residential Alternative, respectively
(#) = Numbers in parentheses refer to number of intersections that may experience significant level of service/delay impacts (for Traffic and Circulation).

Land Use

The Residential Alternative is the environmentally superior alternative when considering only land use impacts. Its implementation would conflict the least with existing residential land uses, and the character of surrounding land uses. The Mixed Use Village Alternative could result in significant but mitigable impacts with existing residential uses, rendering it the least compatible alternative with respect to land use.

Aesthetics and Scenic Resources

Construction of housing on Admiral's Hill associated with the Maximum Capacity Alternative could cause significant, but mitigable aesthetic impacts.

The other three reuse alternatives are substantially equivalent in that they would not result in significant aesthetic impacts.

Traffic and Circulation

Option 1 of the Residential Alternative would result in only two intersections experiencing significant and mitigable level of service/delays. It is considered the CEQA environmentally superior alternative with respect to traffic and circulation because it would require less mitigation for environmental impacts than the other reuse alternatives. The other reuse alternatives would result in either four (Residential Alternative Option 2 and Single Use Campus Alternative), or five (Maximum Capacity and Mixed Use Village Alternatives) intersections experiencing significant and mitigable level of service/delay impacts requiring mitigation.

Air Quality

All reuse alternatives would have similar less-than-significant impacts on carbon monoxide levels along area roadways. All of the reuse alternatives would result in traffic-related ozone precursor and PM_{10} emissions that exceed the BAAQMD impact significance threshold. The Single Use Campus Alternative would generate the highest quantity of air emissions, exceeding the impact thresholds for reactive organic compounds, nitrogen oxide, and PM_{10} emissions. The other reuse alternatives would exceed the impact significance threshold for nitrogen oxide and PM_{10} emissions but not for reactive organic compound emissions. Option 1 of the Residential Alternative would generate the lowest quantity of emissions, and thus is the environmentally preferable and superior alternative.

Utilities

The Maximum Capacity Alternative could cause a significant and mitigable water supply impact by increasing water demand by 112 percent over the estimated historic annual use. This water supply impact is mitigable through effective coordination and implementation of best water conservation management practices. Impacts to potable water use under the Mixed Use Village, Single Use Campus, and Residential alternatives would be nonsignificant because they would use less water than under preclosure conditions.

Summary

Based on this review, the Residential Alternative (Option 1) is the CEQA environmentally superior alternative. It is superior overall with respect to land use and air quality impacts. It requires the least mitigation to keep

traffic and circulation within acceptable levels of service. Similarly, local aesthetics and water supply impacts are equivalently superior for the Mixed Use Village, Single Use Campus, and Residential alternatives. They are each slightly superior to the Maximum Capacity Alternative with respect to potential aesthetic impacts.

The significant, but mitigable aesthetics impacts associated with the Maximum Capacity Alternative may never occur if housing on Admiral's Hill is not built.

2.6 ALTERNATIVES ELIMINATED FROM DETAILED REVIEW

Potential reuse alternatives were discussed at five meetings of the Oakland Base Closure/Conversion Task Force. Participants at two of these meetings divided into ten working groups, five at each meeting. Each group developed a concept plan of the site and identified key issues. Overall concepts and specific land uses from the resulting ten plans were incorporated into the preliminary alternatives. These concepts and land uses were incorporated based on voting conducted by OBRA and on concept plans formulated as part of the reuse planning process described earlier in this chapter.

Ideas ranged from returning the site to primarily open space and recreation uses to a mix of uses, including residences. All of the plans included maintaining the recreational facilities and open space. Explanations are provided below of how some land uses that were suggested during the community meetings, (which are not explicitly identified in the alternatives), may eventually be included in one or more of the alternatives if so desired. Reasons for rejecting two suggested uses of the entire site also are provided.

Partial Use of the Site

- *Veteran/retiree health center*—None of the alternatives specifically address the medical needs of veterans. It was determined that there was no market demand for such services because they are already met through existing government programs. However, the Maximum Capacity Alternative and the Mixed Use Village Alternative include a health and social services function that could be used by veterans and retirees.

- *Fire/police station or emergency command center*—Although none of the alternatives specifically include a fire or police station or an emergency command center, these options could be incorporated into any of the proposed alternatives.

- *Art/cultural center, small concert/theater venue, nature center*—The cultural/meeting facility in the Mixed Use Village Alternative may be used for these purposes. As a result of meetings among the City of Oakland Department of Parks and Recreation, the Oakland Museum, and the Oakland Public Library, the Parks Department has amended its application for public benefit conveyance to include the Oakland Museum and the Oakland Public Library. These entities would share facilities and establish a cultural center. The cultural and active recreation uses would be combined as a result of this action.

- *Artist colony*—Although an artist colony is not specified in any of the alternatives, it could be included in the Mixed Use Village Alternative.

- *Apprenticeship training, "second chance" training*—Training programs could be incorporated into social services provided in the Maximum Capacity Alternative and the Mixed Use Village Alternative.

- *Transitional homeless housing*—In all of the alternatives, homeless housing would be accommodated as described earlier in Section 1.3.2 of this EIS/EIR.

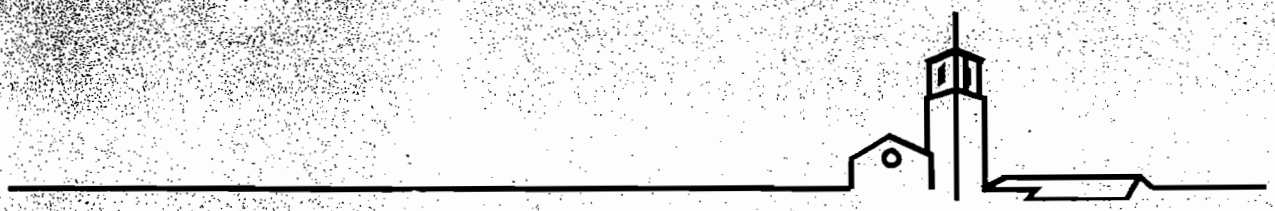
- *Consideration of Other Uses by OBRA*—OBRA received fourteen public benefit conveyance proposals. Through a series of reviews by the Community Advisory Group and a Technical Review Team in coordination with the City of Oakland, Alameda County and the East Bay Conservation and Reinvestment Commission, four qualified applicants were selected by OBRA and are included in the Maximum Capacity Alternative. These four uses are the Seneca Center, the United Indian Nations proposal, the Oakland Museum, and the Oakland Parks and Recreation Department uses discussed in Section 2.3.2.

Use of the Entire Site

- *Return to "original state"*—It was determined that complete restoration of the site to its original state would not be feasible, due to lack of funding and technical unfeasibility. It would require removal of all structures and restoration of the land, including a return to the original topography and planting of native vegetation. It would not be possible to return the site completely to its "original state" because the vegetation was radically changed by the Spanish in the 1600-1700's. In particular, native perennial grasslands were replaced by nonnative annual grasslands. Seed sources for all of the species originally present are no longer available. Neither the East Bay Regional Parks District nor the City of Oakland have sufficient funds to restore and maintain

the site in its original state. In addition, it would not generate revenue and would not create jobs, which would not be consistent with OBRA's mission and goals.

- *Seniors/Community Option*—This alternative was included in the preliminary alternatives report, but was replaced with the Maximum Capacity Alternative. Based on community interest and market studies, OBRA decided in a November 1995 meeting that the Seniors/ Community Option would not be considered further. The version of the Maximum Capacity Alternative that replaced it included 30 senior housing units to partially accommodate the needs that were covered by the Seniors/Community Option. However, the August 1996 NMCO Reuse Plan (OBRA 1996) does not include senior housing separately from other housing requirements. Although the Maximum Capacity Alternative in this EIS/EIR does not consider senior housing separately, any of the housing units would be available to seniors. The Seniors/Community option included housing, medical, and educational services catering to seniors as well as community retail facilities and a public library. Similar services and facilities are provided in the four reuse alternatives that have been retained.



3.0 AFFECTED ENVIRONMENT

3. AFFECTED ENVIRONMENT

This chapter contains a description of the existing environmental and socioeconomic conditions at Naval Medical Center Oakland (NMCO). This information will serve as the existing conditions and is also used in Chapter 4 to identify and evaluate environmental and socioeconomic impacts resulting from the Navy disposal and community reuse of the facility.

The setting discussion for each resource area identifies the region of influence (ROI) applicable to the specific resource area. An ROI is a geographic area in which impacts for a particular resource would likely occur. The ROI for a resource having regional impacts will be different from the ROI for a resource with localized impacts.

3.1 LAND USE

NMCO is located within the boundaries of Alameda County and the municipal limits of the City of Oakland (City). The site is approximately nine miles southeast of downtown Oakland and 12 miles from the Oakland-San Francisco Bay Bridge. This section describes land uses on the NMCO property and surrounding areas.

The 183-acre site slopes downward from east to west, with the ridge at the eastern edge of the site offering panoramic views. The elevation of the site ranges from 275 to 650 feet above sea level. Site topography is diverse, and approximately 70 percent of the site has slopes steeper than 15 percent. Many of the developed areas have natural slopes of between 10 and 30 percent that required extensive cutting and filling and the construction of berms and retaining walls. The site includes about 135 acres of buildings, roads and parking lots, and recreation facilities and 48 acres of undeveloped land.

The site is bounded on the west by Mountain Boulevard, which is closely paralleled by Interstate 580 (I-580). Keller Avenue runs from Mountain Boulevard north to the eastern border of the site. Access to the site is through guarded entrances on Mountain Boulevard (west) and Keller Avenue (north).

The ROI for the land use analysis includes the NMCO site, surrounding residential neighborhoods, commercial and retail areas, and other areas that could be directly or indirectly affected by the reuse.

3.1.1 Naval Medical Center Land Uses

Office/Institutional Military Activities and Residential

Most buildings are located on the northwestern portion of the site, with larger concentrations of open space in the northeast quadrant. The hospital and parking occupy the center of the property. Recreational facilities are located in the southern portion of the site where the slopes are flat to gentle (Figure 3-1). There are 89 structures on the NMCO property, many of which were classified for temporary use (5 to 24 years) but have been in use longer. Building numbers used below (refer to Figure 3-1) are based upon a 1994 Oak Knoll Existing Conditions Report (Theresa Hughes & Associates 1994).

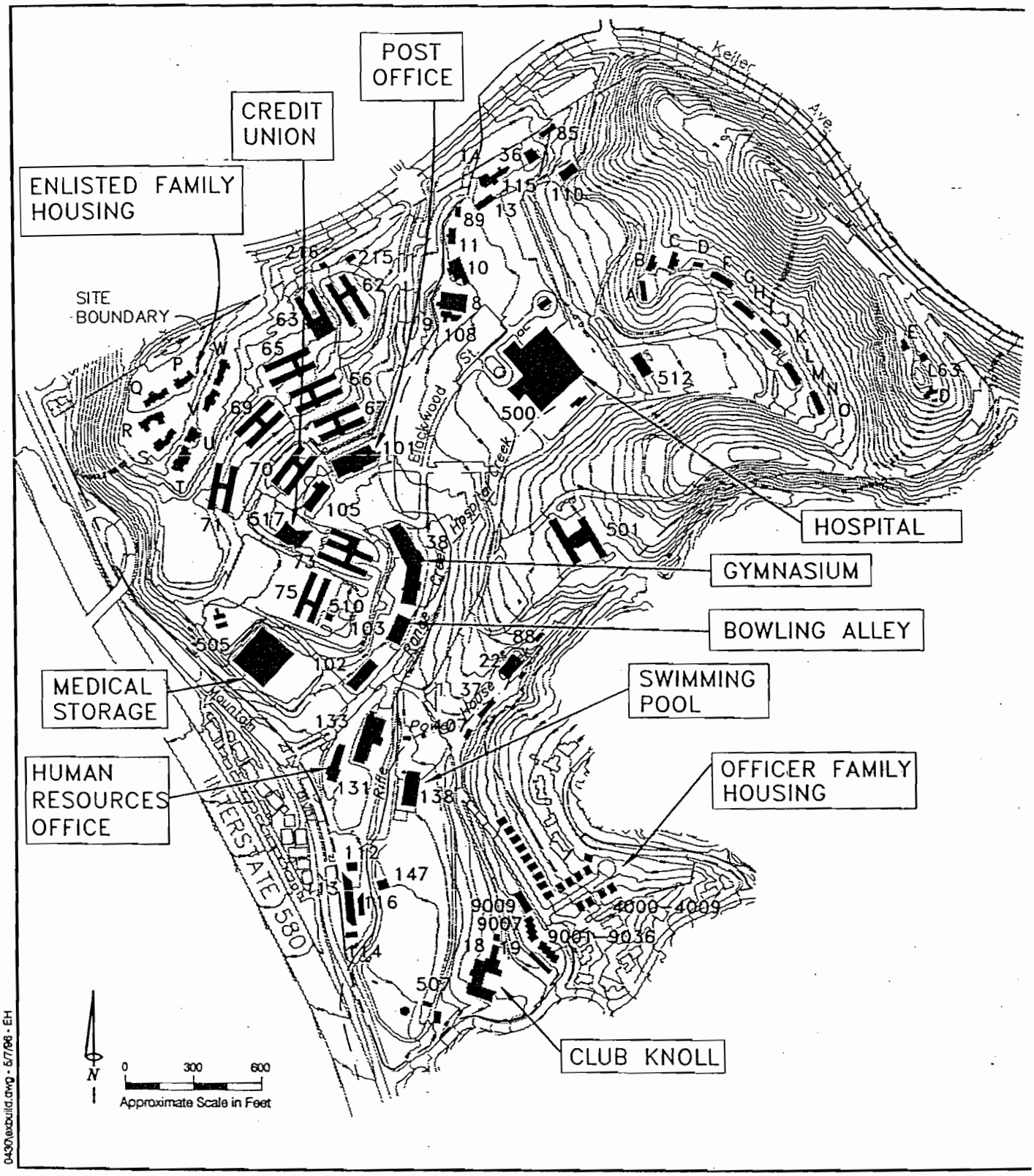
The hospital (Building #500), a nine-story structure commissioned in 1968, is the largest facility on the site, with a floor area of 475,000 square feet. It was used to provide health care services to all eligible active duty, retired, and dependent personnel. The hospital includes the following facilities:

- Emergency care area: eight patient care bed capacity;
- Dialysis unit: six bed capacity;
- Cardiac telemetry unit: 28 bed capacity;
- Medical intensive care unit: 10 bed capacity;
- Surgical intensive care unit: 10 bed capacity;
- Neonatal intensive care unit: 10 bed capacity; and
- Ten operating rooms.

Club Knoll (Building #18), the only remaining original building on the site, was designed by William McCormack and built in the 1920s when the site was a golf and country club. Club Knoll was used for community- and city-sponsored functions.

Most of the housing units on the site were built after 1950. These 50 structures include 82 units of family housing and are grouped into four areas—Junior Officer (Buildings #A-C and #F-O), Enlisted (Buildings P-W), Senior Officer (Buildings #4000-4009 and #9001-9036), and Commanding/ Executive Officer (Buildings E & D).

The site also includes 25 buildings used primarily as offices and storage. Five of those buildings are classified in the Navy inventory as "modern," and the other 20 buildings are informally referred to as "vintage" wooden buildings. There are 24 "miscellaneous" structures. Most of the buildings are in substandard condition and require repair.



The majority of the buildings are concentrated in the northwestern part of the site. The hospital (Building #500) is the largest building on the site.

Existing Buildings

Naval Medical Center Oaklanc

Source: Woodward-Clyde Consultants 1995

Figure 3-1

NMCO has one base tenant. The current lease of Sea West Federal Credit Union (Building #511) runs through 2000. Other tenants have left NMCO in recent years, including the Navy drug screening laboratory and the Navy Exchange.

Recreational/Open Space

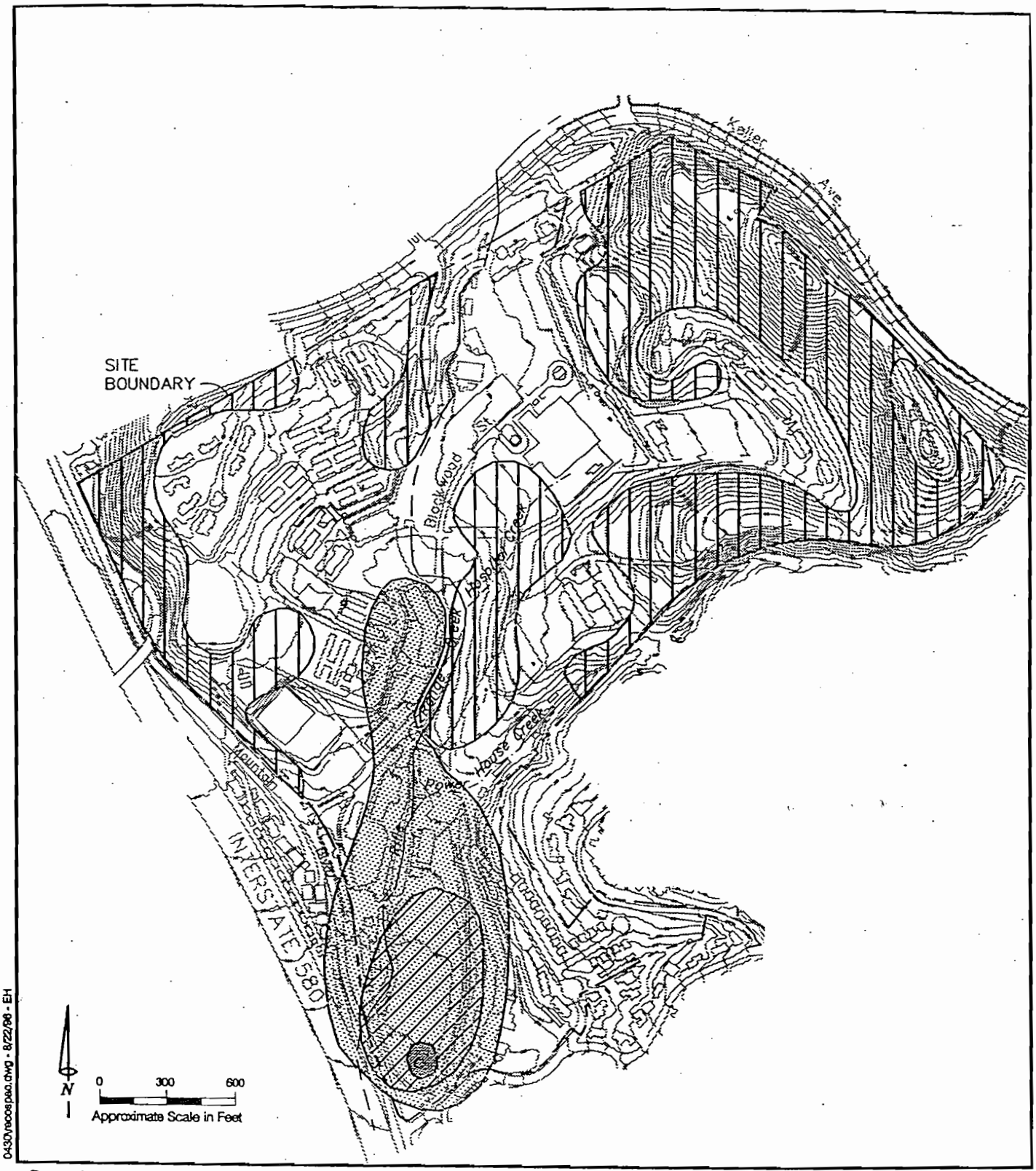
The site's active recreational facilities included an indoor swimming pool (Building #138), amusement center/bowling alley (Building #103), gymnasium (Building #38), auto hobby shop, five tennis courts, two lighted baseball fields, playfields, and a picnic area. These recreational areas were located on the southwestern end of the site on Pool Road. The open space and woodland areas are concentrated on the northeast section of the site (Figure 3-2). The primary users of the active recreational spaces on the site were NMCO employees and their families, although nearby residents were able to gain access to these facilities before closure.

Undeveloped land on the property includes approximately 17 acres of grassland, 24 acres of woodland, and nine acres of scrubland. Rifle Range Creek, Hospital Creek, and Power House Creek remain important physical features of the NMCO site. A riparian area along Rifle Range Creek crosses the central part of the site from northeast to southwest.

3.1.2 Surrounding Land Uses

The land uses surrounding the site are primarily residential and include single family houses, condominiums, townhouse developments, and garden apartments. The site is immediately bordered by the Sequoyah Hills neighborhood on the northeast, the Sequoyah Hill/Oak Knoll residential area and country club on the southeast, Oak Knoll (King Estates) residences on the west, and the Ridgemont Skyline residential development on the north.

Three large parks also are located near the site. Immediately north of the site is the 300-acre Leona Regional Open Space, owned by the East Bay Regional Park District. The boundary of Knowland Park, a 400-acre city-owned park (which includes the Oakland Zoo), is located about 1,200 feet south of the site. Half a mile east of the site, and mostly outside Oakland city limits, is the 5,000-acre Anthony Chabot Regional Park, part of the East Bay Regional Park District. This park includes open space, hiking trails, and a golf course. The City's King Estate Park is only 1,000 feet from the site's Mountain Boulevard entry. The City's Burkhalter Recreational Facility is approximately one mile north on I-580. It is the only facility near the site



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Recreation and open space land uses are generally concentrated on the southern and northern parts of the NMCO site, respectively.

Legend:

- Open Space/Woodlands
- Recreation Zone
- Playing Fields, Tennis Courts, Basketball Courts
- Sheltered Picnic Area

Source: Theresa Hughes & Associates 1995

Recreation and Open Space

Naval Medical Center Oakland

Figure 3-2

with active developed recreational areas, including a lighted softball field, basketball court, two lighted tennis courts, picnic areas, and a playground. Figure 3-3 shows parks near NMCO.

The City of Oakland owns and operates three golf courses within a five-mile radius of the site—Lake Chabot Municipal Golf Course, Montclair Golf Course, and Lew Galbraith Municipal Golf Course. Galbraith Golf Course has been closed and is being used by the Port of Oakland as a repository for dredged material from the estuary. Sequoyah Country Club, a private course, is located adjacent to the site and extends to Knowland Park.

Short strips of retail stores front Golf Links Road, Mountain Boulevard, and Keller Avenue. Activities at the Peralta Oaks Office Park, one mile south of the site, are exclusively government related and consist of the Alameda County District Attorneys Office Family Support Division, East Bay Regional Park District, and the State Compensation Insurance Fund. There are no major industrial uses within the immediate vicinity of the site.

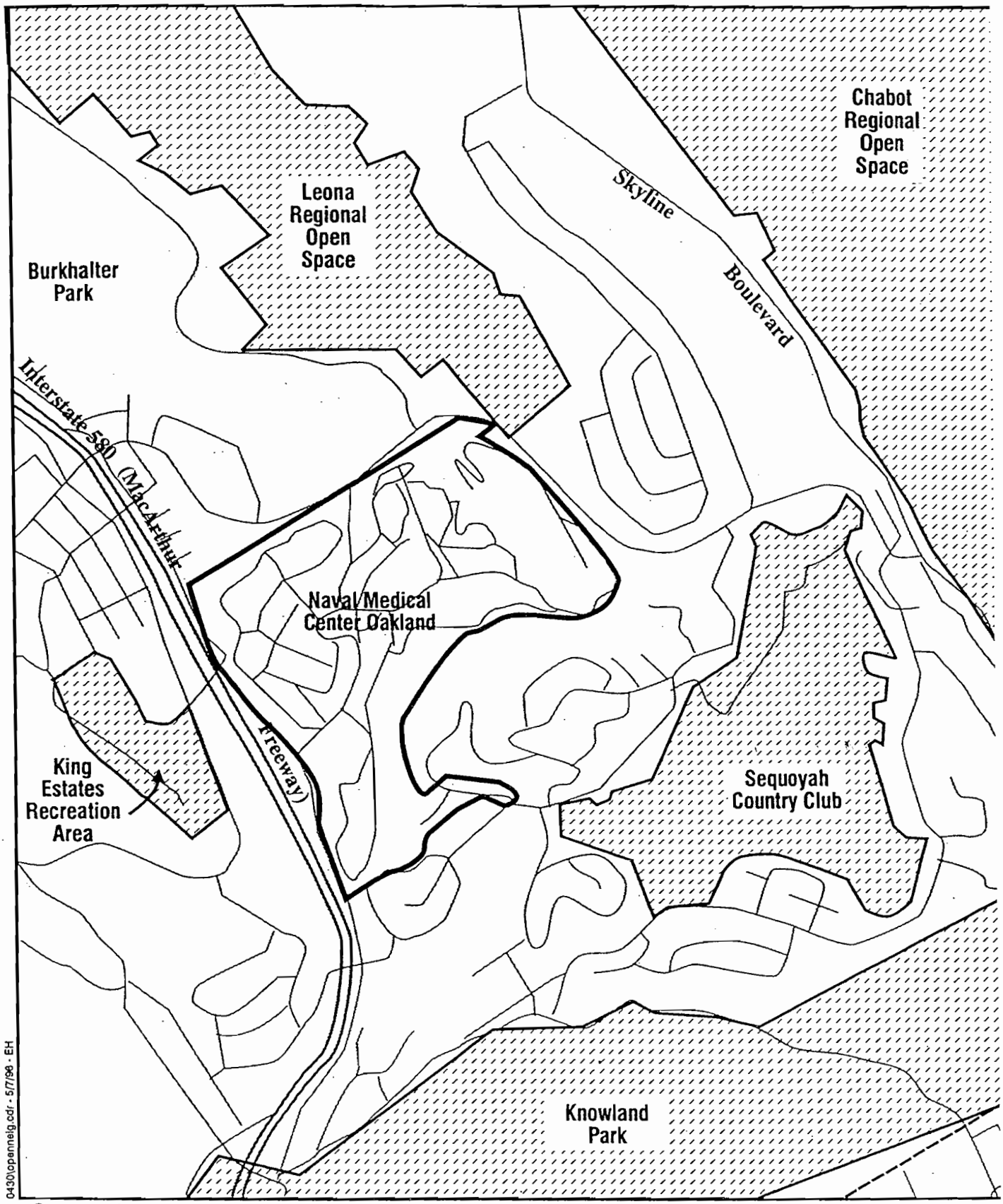
King Estates Junior High School and Howard Elementary School are located within 300 to 600 feet of the site, to the west of I-580, about 500 feet from the site. Grass Valley and Malcolm Elementary schools are located east of I-580 and south of Knowland Park. Skyline High School serves the area surrounding NMCO. Several parochial schools also are located in the area. There are no Oakland Public Library branches near NMCO. Our Savior's Lutheran Church is on Fontaine Street near King Estates Junior High School.

The California Department of Transportation owns the right-of-way along the I-580 corridor adjacent to the NMCO property.

3.1.3 Regulatory Considerations

Land Use Designations and Zoning

The City of Oakland Comprehensive Plan contains several elements that govern the NMCO site. The city is conducting a general plan update; however, until this process is completed, the Oakland Policy Plan (adopted October 1972, amended September 1980) is the current comprehensive statement of the city's general plan policies and goals (Theresa Hughes & Associates 1995). The Oakland Policy Plan expresses the city council's basic intentions and guides its decisions on specific projects and actions. The most relevant policies of the various Oakland Comprehensive Plan elements are described below, together with a discussion of the consistency of the various project alternatives with these policies.



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Open space boundaries and other recreational areas in the immediate vicinity of NMCO.

Source: Theresa Hughes & Associates 1995

Open Space and Parks Near the Medical Center

Naval Medical Center Oakland

Figure 3-3

The Oakland Policy Plan gathers together in a single document all the policies contained in the functional elements of the comprehensive plan, including the land use element (adopted in April 1980) and the open space, conservation, and recreation element (adopted in June 1976).

The comprehensive plan contains an Illustrative Future Land Use Map that shows the general land use pattern that the City expects will best realize the written goals and policies of the comprehensive plan. This map designates the NMCO site as "M," signifying Institutional or Governmental-Medical uses. The surrounding areas are designated primarily as residential, reflecting their existing land uses.

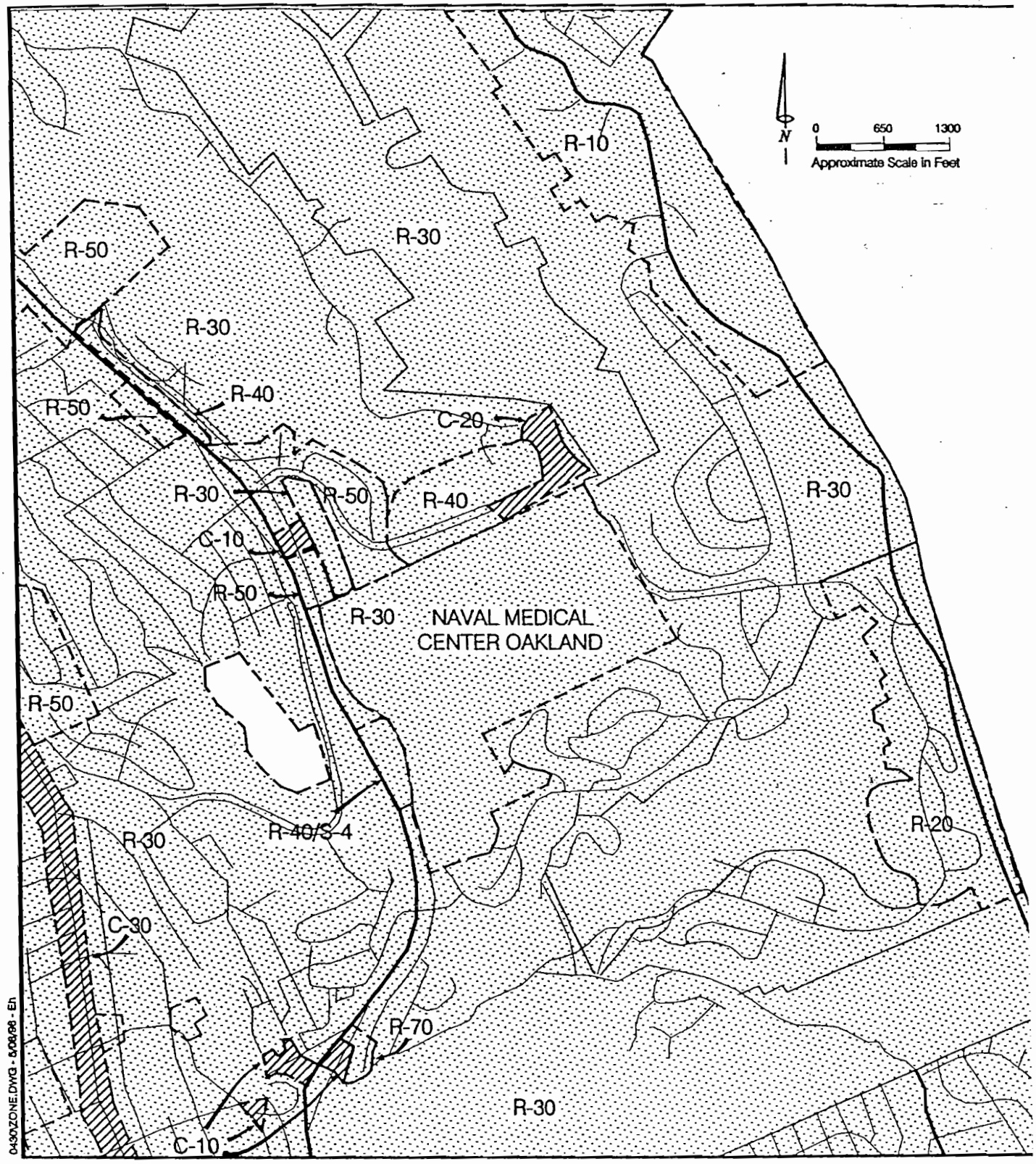
The NMCO site is zoned R-30 Residential (Figure 3-4). The City of Oakland's R-30 zoning allows for a single dwelling unit per lot designation, with minimum lot sizes of 5,000 square feet. Other permitted activities include essential services and limited child care. Conditional use permits may be granted for certain other uses, including community assembly, education, nonassembly cultural, administrative, residential care, plant nursery, crop and animal raising, and mining and quarrying. The underlying R-30 zoning does not recognize the full range of uses currently on the site. After property disposal, other future interim and long-term uses would require discretionary approvals, such as a general plan amendment, rezoning, possible other zoning permits, and subdivisions.

The area contiguous to the site is zoned primarily residential and includes single-family residential, medium density apartment, and low density garden apartments, with other uses approved on a case by case basis (R-20, R-30, R-40, and R-50). At the northeast corner, off the site, the City of Oakland zoning plan shows an area zoned for small-scale commercial uses (C-10). An area across Keller Avenue is zoned for a shopping mall (C-20).

Rezoning for Reuse

Following transfer of federal surplus land to the City of Oakland (or other nonfederal entities), future development of portions of the site would be under city jurisdiction. Oakland's zoning designation for the site (Residential [R-30]) may not accommodate some of the proposed reuse land uses.

To achieve consistency between the selected reuse alternative and city policies it may be necessary to amend the Oakland Comprehensive Plan to include the NMCO site and surrounding uses, prior to approving future land uses. The land use amendments would need to be based on the goals and policies of the selected reuse alternative, while maintaining consistency with the current goals and policies in the Oakland Comprehensive Plan.



NMCO is currently zoned R-30. Surrounding zoning is primarily residential with a small commercial area.

LEGEND:

- Residential
- Commercial
- Unzoned

R-10	Estate
R-20	Low Density
R-30	One-Family
R-40	Garden Apartment
R-50	Medium Density
R-70	High Density
C-10	Local Retail
C-20	Shopping Center
C-30	District Throughfare
S-4	Design Review

Source: City of Oakland 1994b

Zoning

Naval Medical Center Oakland

Figure 3-4

Following the amendment of the Oakland Comprehensive Plan, a specific plan, redevelopment plan, and/or planned development master plan could be developed that would more precisely identify the distribution, location, and extent of future land uses. It also would identify the distribution, location, extent and intensity of the infrastructure required to support the land uses, would establish the development and conservation standards, and would include a program for carrying out reuse.

Consistency with Plans and Policies

Several land use policies apply to NMCO reuse as follows:

Policy on Decision-making. Applicable policies on land use decision making state that "in deciding on major land use issues, the City will seek to consider the full range of direct and indirect economic, social, physical environmental, and public service factors involved, giving special attention to possible impacts on lower income persons, the elderly, or members of minority groups" (Policy 1); and "In considering those land use questions which mostly affect a particular neighborhood or other area, the City will give substantial weight to the opinions of the local citizens" (Policy 2).

Policies Relating to the Natural Setting. Applicable policies relating to the natural setting state that "urban development wherever it occurs should be related sensitively to the natural setting, with the scale and intensity of development in each case bearing a reasonable relationship to the physical characteristics of the site" (Policy 1), and that "In all development and construction in the hills (those areas located generally along and northeast of Mountain Boulevard) 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" (Policy 3). Lastly, Policy 4 states that "Development on slopes of 15 to 30 percent should generally be designed with special attention to controlling runoff and erosion and to preserving the natural topography as much as possible. Cuts and fills and the removal of desirable vegetation should be minimized."

Policy Relating to Circulation and Noise. The applicable policy relating to circulation and noise states that "to the extent compatible with noise levels and other environmental factors, the intensity of development at each point in the city should be related to the degree of accessibility there." (Policy 2).

Policy on Urban Design and Preservation. Policy 4 of this subsection of the land use element states that "every effort should be made to preserve those older buildings, other physical features, sites, and areas which have significant historical, architectural, or other special interest or value."

Policies on Civic and Open Space Uses. With regard to government or institutional land, the most applicable policy (Policy 3) states that "efforts should be made to increase the total acreage of public parks and recreation areas within the city limits, exclusive of facilities at schools, colleges, and universities, to at least 10 acres for each 1,000 of Oakland's population."

Policies on Land Use Regulations, Mixture, and Transition. Policies 1 and 2 respectively state that "the City will employ zoning or other land use regulations to ensure that land uses are compatible with their surroundings and to promote appropriate design and on-site conditions for residents or other users," and that "the City will see that the applicable land use regulations are compatible with particular desired functions and character, and where appropriate provide for an orderly transition of use type or density over time."

The open space, conservation and recreation element of the Oakland Comprehensive Plan, currently being revised, recommends improving trail connections among the area's parks, using the creeks as a trail framework (Theresa Hughes & Associates 1995). Policy 3 states "the creek system should be capitalized on as a positive feature in the physical environment."

The City of Oakland Parks and Recreation Department, with the support of the East Bay Regional Parks District, developed a conceptual plan identifying parts of the NMCO site for parks, open space, and recreation. This plan involves public use of existing recreation facilities and development of some new uses, such as a youth hostel and a conference center. The use of the site for multipurpose trails and for interpretation and education along the riparian area is also proposed. A trail following the Rifle Range Creek would connect Leona Open Space to Knowland Park through the NMCO site.

3.2 SOCIOECONOMICS

This section describes the regional socioeconomic setting. Socioeconomic conditions addressed include employment, population, income, housing, schools, and recreation. The setting presents the social and economic indicators of the region that may be significantly affected by disposal and reuse. Background on environmental justice parameters also is presented.

The projected conditions are described for 1996, the year NMCO closed. Socioeconomic data are available through 1994 and are not expected to differ substantially from 1996 conditions. Where more recent or more reliable data is unavailable, 1990 census data is used.

Alameda County is the region of influence (ROI) for social and economic impacts. This definition was selected because 70 percent of Alameda County residents also work within the county (California Employment Development Department 1994). Thus the county population and economy will be the area primarily affected by the NMCO reuse.

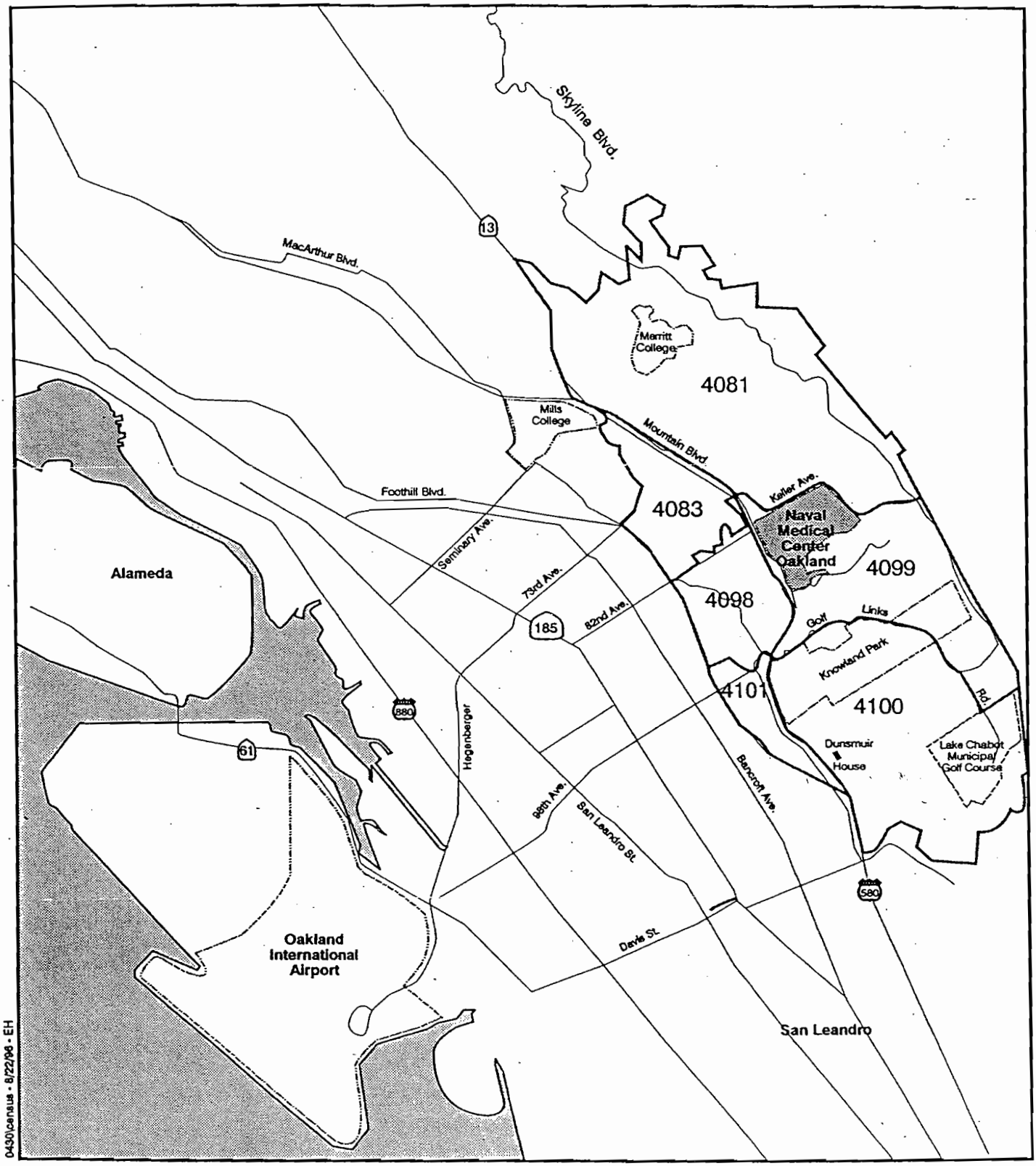
The disposal and subsequent reuse of NMCO is not expected to affect all areas of the ROI equally. Some effects will be felt only within the City of Oakland. City level socioeconomic data is given in those cases.

In addition, socioeconomic data relating to housing and environmental justice issues was included for the Oak Knoll Study Area, which includes census tracts 4081, 4099, 4100, 4083, 4101 and 4098. This geographic region was included in the analysis of neighborhood level impacts because it was designated as the appropriate study area by the Oakland Base Reuse Authority (OBRA) in the Existing Conditions Report, which was prepared in support of the NMCO Reuse Plan, for assessing the opportunities and constraints for retail, residential and commercial uses at the NMCO site (Theresa Hughes & Associates 1994). A map of the Oak Knoll Study Area and the census tracts included within it are presented in Figure 3-5.

3.2.1 Regional Employment

Employment

Immediately prior to closure, NMCO employed 340 civilians. Caretaker employment at the NMCO site is substantially less. Historic employment levels have been as high as 2,718 (Theresa Hughes & Associates 1994).



Housing and environmental justice data are provided for the six census tracts surrounding NMCO (see Table 3-10).

LEGEND:

4083 — 1990 Census Tract Boundary and Number

N

0 3,000 6,000

Approximate Scale in Feet

Census Tracts within the Oak Knoll Study Area

Naval Medical Center Oakland

Figure 3-5

To illustrate employment trends, general employment data for Alameda County and the City of Oakland are given on Table 3-1, for the years 1980 and 1995. Specific employment industry data for Alameda County is given for 1980 and 1995 on Table 3-2 and Figure 3-6.

Table 3-1
1980 and 1995 Labor Force and Employment Data for the ROI
(Amount in Thousands)

Indicators	Alameda County			City of Oakland		
	1980	1995	Percent Change	1980	1995[1]	Percent Change
Labor force	553	657	19%	158	174	10%
Number employed	522	620	19%	143	157	10%
Number unemployed	31	37	21%	15	17	12%
Unemployment rate	6%	6%	<1%	9%	10%	<1%

[1] Labor Force data is extrapolated based on the unemployment rate for the City of Oakland in 1990 and ABAG employment figures for 1995.

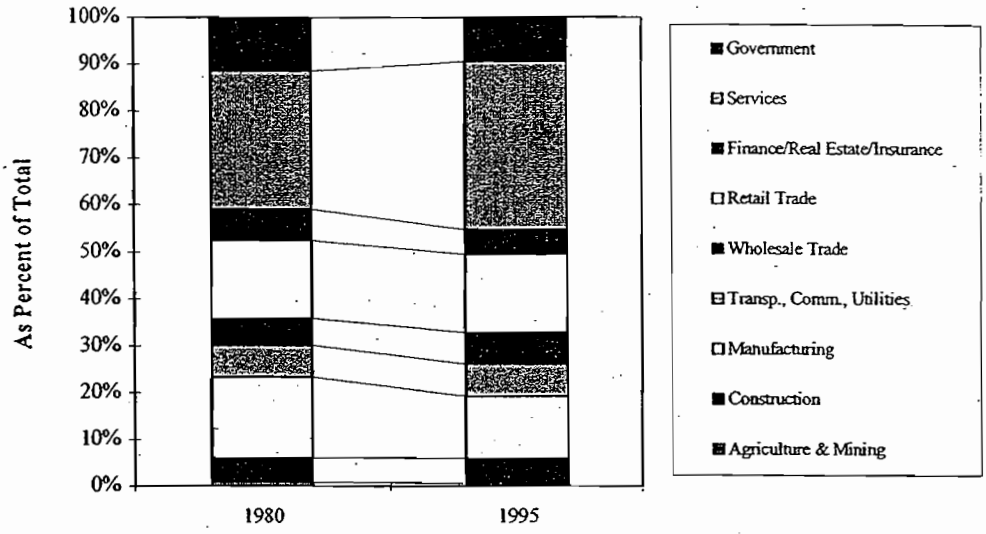
Source: Association of Bay Area Governments 1993; U.S. Department of Commerce 1983; Urban Decisions Systems 1995

Table 3-2
Historical Employment Composition for the ROI

Employment	Alameda County (ROI)				
	1980	1995	1995 Job Composition	Change from 1980-1995	Annual Rate of Change
Agriculture & mining	4,682	3,260	1%	-30%	-2%
Construction	26,114	32,010	5%	23%	1%
Manufacturing	88,895	78,820	13%	-11%	-1%
Transp., comm., utilities	34,916	40,340	7%	16%	1%
Wholesale trade	29,121	39,990	7%	37%	2%
Retail trade	85,192	98,860	17%	16%	1%
Finance/real estate/insurance	34,254	30,900	5%	-10%	-1%
Services	151,731	213,360	36%	41%	2%
Government	58,892	56,200	9%	-5%	<0%
Total all industries	513,797	593,740	100%	16%	1%

Source: Association of Bay Area Governments 1993.

Figure 3-6
Job Composition in Alameda County (ROI) (1980 & 1995)



Source: Association of Bay Area Governments 1993.

In 1995, the City of Oakland expected 157,300 of its estimated 173,800-person labor force to be employed. The unemployment rate in 1995 was estimated to be 10 percent, while unemployment in all of Alameda County (including the City of Oakland) was estimated to be 6 percent.

As indicated by Table 3-2, Alameda County's largest employment industry in 1995 was the service sector (which includes business, repair, personal, entertainment, recreation, health, and educational services), accounting for 36 percent of total employment. The next largest employment industries were manufacturing and retail trade, which accounted for 13 percent and 17 percent of total employment, respectively. The service sector is projected to be the fastest growing employment industry, with a two percent annual growth since late 1980. Wholesale trade has also grown since 1980, with a two percent annual growth rate. Agriculture and mining, manufacturing, finance/real estate/insurance, and government employment all are in decline. Overall, Alameda County has displayed a one percent annual employment growth rate in the past 15 years, gaining 79,943 jobs between 1980 and 1995.

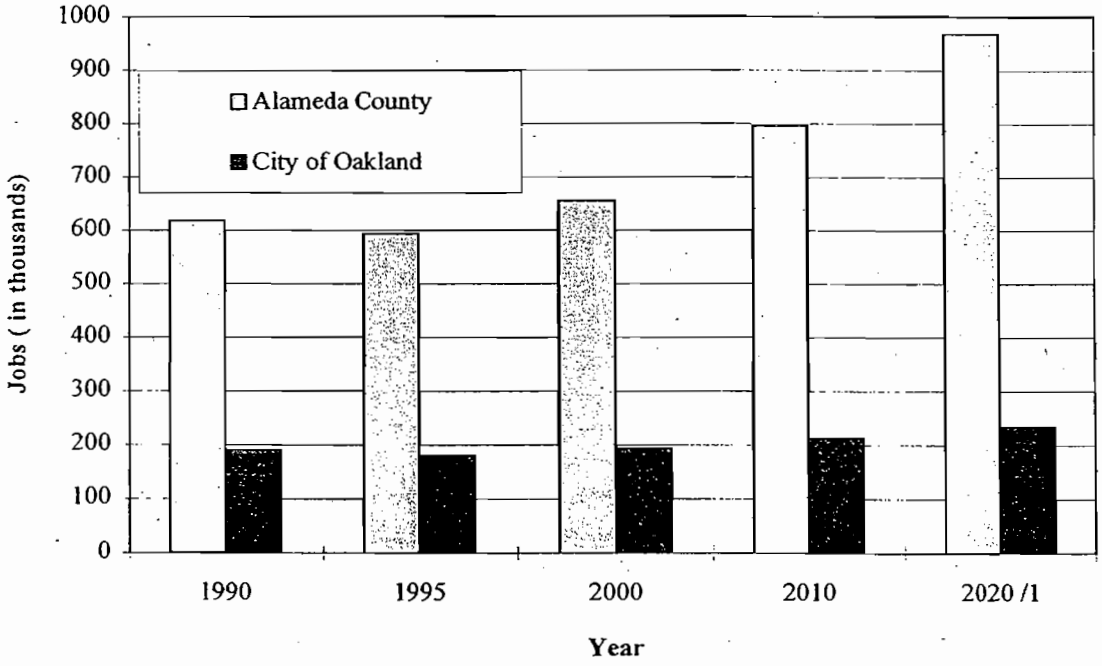
Although Alameda County has been experiencing an employment decrease in the period from 1990 to 1995 (see Table 3-3 and Figure 3-7), it is expected to gain 374,000 jobs by 2020. This represents a 63 percent increase in the job base.

Table 3-3
ROI Employment Projections, 1990-2020
(Amount in Thousands)

Area	1990	1995	2000	2010	2020[1]
Alameda county jobs	617	594	655	796	968
Annual % change from previous period	not avail.	<0%	1%	2%	2%
City of Oakland jobs	191	181	194	213	235
Annual % change from previous period	not avail.	<0%	1%	1%	1%

[1] Estimates based on annual growth rate from 2000 to 2010.
Source: Association of Bay Area Governments 1993.

Figure 3-7
ROI Employment Growth (1990-2020)



[1]Estimate, based on annual growth rate from 2000 to 2010.
Source: Association of Bay Area Governments 1993; ERA.

The City of Oakland has lost 10,000 jobs between 1990 and 1995 but is expected to gain 54,000 jobs by 2020, representing approximately a 30 percent increase from 1995. The City's recovery is expected to be slower than the county as a whole for two major reasons—the continued decline of manufacturing and wholesale jobs in the City of Oakland and the losses of military bases in the cities of Alameda and Oakland. However, between the years 2000 and 2010, the City of Oakland is expected to grow and become more important as a regional transportation hub. Consequently, it is expected to regain some manufacturing and wholesale jobs around 2000 (Association of Bay Area Governments 1993).

Personal Income

The mean household income in 1990 for Alameda County was $48,993. This was projected to decline to $46,000 in 1995, then increase to $74,000 (a two percent annual increase from 1995) by 2020. These figures are expressed in constant 1990 dollars. The mean household income for the City of Oakland in 1990 was lower ($39,533). This figure is also expected to decline to $36,300 in 1995, then steadily increase to $58,000 (a two percent compounded annual increase from 1995) by 2020.

3.2.2 Population and Housing

Population

The City of Oakland's population grew more slowly than the rest of Alameda County, experiencing a 15 percent growth rate from 339,337 in 1980 to 389,600 in 1995. Alameda County experienced a 23 percent growth rate during the same period (see Table 3-4). Between 1995 and 2020, the population of the City of Oakland is expected to increase by 21,000 to about 411,000, or a modest five percent increase (less than one percent annually over that period). Alameda County is also projected to experience a slower growth than the previous fifteen years; however, its growth will exceed that of the City of Oakland, with a projected 19 percent (or about one percent annual) growth in the period of 1995 to 2020 (see Table 3-4).

Housing

In 1995 the housing units for the City of Oakland numbered 153,775. Housing totals for 1990 and 1995 for the ROI are presented in Table 3-5. The city's housing stocks consist primarily of studio and one bedroom units (36 percent of total stocks). Two-bedroom units make up 33 percent of the total stock, and three-bedroom or larger units represent 31 percent of total housing stock (California Department of Finance 1995).

Table 3-4
Historical and Projected Population, 1980-2020
(Amount in Thousands)

Area	1980	1990	1995	2000	2010	2020[1]
Alameda County	1,105	1,277	1,356	1,413	1,547	1,612
Annual % change from previous period	not avail.	2%	1%	1%	<1%	<1%
City of Oakland	339	372	390	394	407	411
Annual % change from previous period	not avail.	1%	1%	<1%	<1%	<1%

[1] Estimates based on annual growth rate from 2000 to 2010.
Source: Association of Bay Area Governments 1993

Table 3-5
Housing Totals in Oakland and Oak Knoll Area

Type of Tenant	City of Oakland				Oak Knoll Area[1]	
	1990		1995		1990	
	Number of Units	As a % of Total	Number of Units	As a % of Total	Number of Units	As a % of Total
Owner-occupied	60,153	39%	143,838	94%	6,476	73%
Renter-occupied	84,368	55%	incl. above	n/a	2,094	24%
Vacant	10,216	7%	9,937	7%	338	4%
Total	154,737	100%	153,775	100%	8,908	100%

[1]The Oak Knoll area refers to census tracts 4081, 4099, and 4100. This is a subcomponent of the study area.
Source: California Department of Finance 1995; City of Oakland 1993a; Theresa Hughes & Associates 1994

For neighborhood level analysis, the Oak Knoll area comprising census tracts 4081, 4099, and 4100, has been identified as the relevant area for housing analysis (Theresa Hughes and Associates 1994). The NMCO is in census tract 4099, with the other two tracts immediately north and south of it. This subcomponent of the study area shares comparable housing and population characteristics and are separated from the other census tracts in the study area by I-580.

Housing units in the Oak Knoll area totaled 8,908 in 1990. Most of these housing structures are single-family units (81 percent). However the largest housing growth in the area from 1980 to 1990 has been in structures with five to nine units (Theresa Hughes & Associates 1994).

Statistics on average size and numbers of households for the City of Oakland and Alameda County are presented in Table 3-6. Between 1980 and 1995 the number of households in the City of Oakland grew from 141,657 to 145,030, a two percent increase. This is compared to a 16 percent increase in Alameda County. The average household size in the City of Oakland in 1995 was estimated to be 2.63 persons per household, an increase of 12 percent since 1980. However, the average household size is not expected to increase further. It is expected to decrease to about 2.60 persons per household by 2010 and 2020.

Table 3-6
Characteristics of Households, 1980-2020

Location	1980	1990	1995	2000	2010	2020[1]
Persons per Household						
City of Oakland	2.34	2.52	2.63	2.61	2.60	2.60
Alameda County	2.53	2.59	2.68	2.65	2.62	2.62
Number of Households						
City of Oakland	141,657	144,521	145,030	147,910	153,050	158,369
Alameda County	426,093	479,518	493,330	520,540	575,970	637,302

[1]Estimates of persons per household based on previous decade's average persons per household.
Number of households estimate based on annual growth rate from 2000 to 2010.
Source: Associations of Bay Area Governments 1993

The forecasted household growth for the City of Oakland from 1995 through 2020 is approximately 13,340 new households, or nine percent increase, in a 25-year period. This reflects the City's slow projected population growth and the continued exodus from urban to suburban areas.

According to the 1990 U.S. Census, the City of Oakland's median housing resale value in 1990 was $177,400, and its median contract rent was $486 a month. In the Oak Knoll study area, the median housing resale value was $268,700.

3.2.3 Schools

The Oakland Unified School District (OUSD) serves the City of Oakland, including all of the Oak Knoll study area. The OUSD administers 90 schools with a total enrollment of 51,594 students in grades kindergarten through 12th (see Table 3-7). According to the OUSD, three schools serve the Oak Knoll study area. They are Howard Elementary, King Estates

Junior High, and Skyline High School. Specific enrollment data are given for these schools in Table 3-8. Although no specific data were available on the capacity or classroom size in each school, according to the OUSD, all schools in the district are at or near enrollment capacity (Long 1995).

Table 3-7
1994 Oakland Unified School District Enrollment

School	Number of Schools	Enrollment
Elementary[1]	57	30,725
Middle and junior high[2]	18	12,360
High school[3]	6	7,744
Other[4]	9	765
Total	90	51,594

[1]Includes elementary schools with grades K-8, K-6, K-5, K-4, and K-3.
[2]Includes middle schools of grades 6-8 and junior high schools of grades 7-9.
[3]Includes high schools grades 7-12, 9-12, and 10-12.
[4]Includes special schools such as technical, artistic, remedial, and retraining schools.
Source: Oakland Unified School District 1994.

Table 3-8
Oak Knoll Study Area Neighborhood School 1994 Enrollment

School	Grades	Enrollment
Howard Elementary School	K-6	342
King Estates Junior High	7-9	575
Skyline High School	10-12	1,869
Total Enrolled Students		2,786

Source: Oakland Unified School District 1995.

3.2.4 Recreation

The East Bay Regional Park District (EBRPD) and the City of Oakland Office of Parks and Recreation (OPR) both offer numerous recreational facilities in the City of Oakland and nearby areas of Alameda County. The OPR manages outdoor playfields and courts, picnic and barbecue areas, open park areas, several golf courses, and some gymnasiums and swimming pools. The EBRPD manages 75,000 acres of parks, including open space, trails, picnic sites, and visitors centers.

Recreation areas in the Oak Knoll area include Anthony Chabot Regional Park, Knowland State Arboretum and Park, Leona Regional Open Space, King Estate Park, Burkhalter Recreational Area, and the Sequoyah Country Club. Knowland Park includes a zoo, and Chabot Regional Park offers a vast open space, hiking trails, and a golf course. King Estate Park and Leona Regional Open Space offer open space. The only park with any recreation facilities is Burkhalter Recreation Area, which offers a lighted softball field, a basketball court, two tennis courts, picnic areas, barbecue pits, a playground, and restrooms.

3.2.5 Environmental Justice

On February 11, 1994, President Clinton issued the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. This order requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is required by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. section 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities."

The City of Oakland and the Oak Knoll study area have been established as the relevant ROI for analyzing environmental justice issues because the nature of the significant impacts associated with disposal and reuse would occur primarily at the local (city) and neighborhood level.

Based on the 1990 U.S. Census, 44 percent of the City of Oakland's population is African American, 32 percent is Caucasian, 15 percent is Asian and Pacific Islander, one percent is Native American, and the remaining eight percent is made up of other groups (see Table 3-9). Of the total city population, persons of Hispanic origin make up 14 percent. This figure is based on the number of persons who classify themselves as Hispanic based on their language, ancestry, and country of origin (i.e., Spain, Mexico, Puerto Rico, Dominican Republic, and other Central and South American countries). Therefore, persons of Hispanic origin may be of any race.

In the Oak Knoll study area the ethnic composition is different in the following respects: 34 percent of the area's population is Caucasian, instead of 32 percent city wide, and 10 percent is Asian or Pacific Islander, instead of 15 percent city wide. African Americans make up 55 percent of the Oak Knoll study area. People of Hispanic origin make up approximately six

percent of the total population, but again this figure is based on those persons who classify themselves as Hispanic and thus can be of any race.

Table 3-9
1990 Ethnic Composition and Poverty Status

Ethnicity	City of Oakland				Oak Knoll Study Area[2]			
	Total population		Persons below poverty level		Total population		Persons below poverty level	
	Number	% of Total	Number	% of Total	Number	% of Total	Number	% of Total
African American	163,335	44%	38,549	56%	12,707	55%	n/a	n/a
Caucasian	120,849	32%	10,603	15%	7,870	34%	n/a	n/a
Asian & Pac. Is.	54,931	15%	12,456	18%	2,196	10%	n/a	n/a
Native American	2,371	1%	490	1%	123	<1%	n/a	n/a
Other	30,756	8%	6,683	10%	48	<1%	n/a	n/a
Total	372,242	100%	68,781	100%	22,944	100%	n/a	n/a
Hispanic[1]	51,711	14%	10,547	15%	1,442	6%	n/a	n/a

[1]Persons of Hispanic origin may be of any race.
[2]The Oak Knoll Study Area refers to census tracts 4081, 4099, 4100, 4083, 4101 and 4098
n/a = not available
Source: City of Oakland 1993a; Urban Decision Systems 1995.

According to 1990 census data, approximately 68,781 of the City of Oakland's residents (19 percent of the population) were living in poverty. The Census Bureau determines poverty status for families and individuals based on 48 threshold variables. These include income, amount spent on food, family size, number of children under 18, and number of family members over 65. The average poverty threshold for a family of four persons was an income of $12,674 or below in 1989 (City of Oakland 1993a).

The majority of people living in the City of Oakland and classified as poor are African Americans (Table 3-9). Of the residents classified as poor, African Americans are disproportionately represented in the City of Oakland (Table 3-9). African Americans make up 44 percent of the city's population, but according to census data, African Americans represent 56 percent of all persons below the poverty level. Other specifically identified groups are disproportionately poor except for Caucasians. Caucasians make up about 32 percent of the city's population, but only 15 percent are classified as poor.

The Oak Knoll study area has a lower proportion (eight percent) of residents who are classified as poor compared to the city as a whole (Table 3-10). Only census tract 4098 (west of I-580) has roughly the same proportion (18 percent) of residents who are classified as poor compared to the city as a whole.

Table 3-10
Oak Knoll Study Area Poverty Status, By Census Tract

Census Tract No.	Total Population	Persons Below Poverty	Percent Below Poverty
4081	5,901	277	5%
4083	4,517	474	11%
4098	3,082	537	18%
4099	4,201	96	3%
4100	2,849	67	3%
4101	2,679	375	14%
Totals	23,229	1,826	(1,826 ÷ 23,229) 8%

Source: City of Oakland 1993a.

3.3 PUBLIC SERVICES

This section describes the police services, fire protection, and emergency medical services at NMCO and within the surrounding area. The region of influence for this section includes NMCO and the City of Oakland. The city limits of Oakland are selected as the region of influence (ROI) because NMCO is located entirely within the City of Oakland, and the City would be responsible for providing services to the area after Navy disposal. The Navy now provides all public services to NMCO. The following description identifies services historically provided at NMCO and those in the surrounding area.

3.3.1 Police Services

Navy Police Services

The Navy provided police services at NMCO and used Building 102 as a police headquarters. Police services included law enforcement, parking enforcement, perimeter security, and building-alarm response. The police service averaged twelve on-duty officers at all times and used five police vehicles. NMCO police officers occasionally assisted with off-site emergencies, such as traffic accidents, on an as-needed basis (Osborn 1995).

Perimeter security at NMCO involved staffing the entrance gate and conducting regular patrols of the area. NMCO is under exclusive federal jurisdiction, and therefore only federal police officers can enforce laws on NMCO until jurisdiction is changed (retroceded) or the property is transferred from federal ownership. Until jurisdiction is changed, Oakland Police Department actions on NMCO are limited to continuing active pursuit of persons from outside the boundaries of NMCO. After jurisdiction changes, the Oakland Police Department can provide all police services.

Oakland Police Department

The City of Oakland Police Department provides police services for the entire City of Oakland including the neighborhoods surrounding NMCO. The police department has an authorized staffing level of 711 sworn officers, 390 support staff, and 76 reserve officers (Bellman 1995).

The police department receives an average of 34,000 emergency calls per month and prioritizes the calls according to a four level classification system. The classification system assigns a higher priority to emergency calls that involve immediate threats to life, health, and property and a lower priority to calls that involve nonimmediate police needs, such as report taking.

Officers are dispatched to the highest priority call and provide service upon arrival at the scene. The department has a goal of responding as fast as possible to all calls received but does not track the actual response time from receipt of an emergency call to the arrival of a police officer. The department does compile historical data to track the average dispatch time for emergency calls. This figure includes the amount of time elapsed between receipt of the emergency call and dispatch of the officer to the call. The figure does not include transit time for the officer. Over 80 percent of the highest priority calls are dispatched within one minute of receiving the call. Table 3-11 shows the classification system and the average dispatch time for calls received under each priority (Vierra 1995).

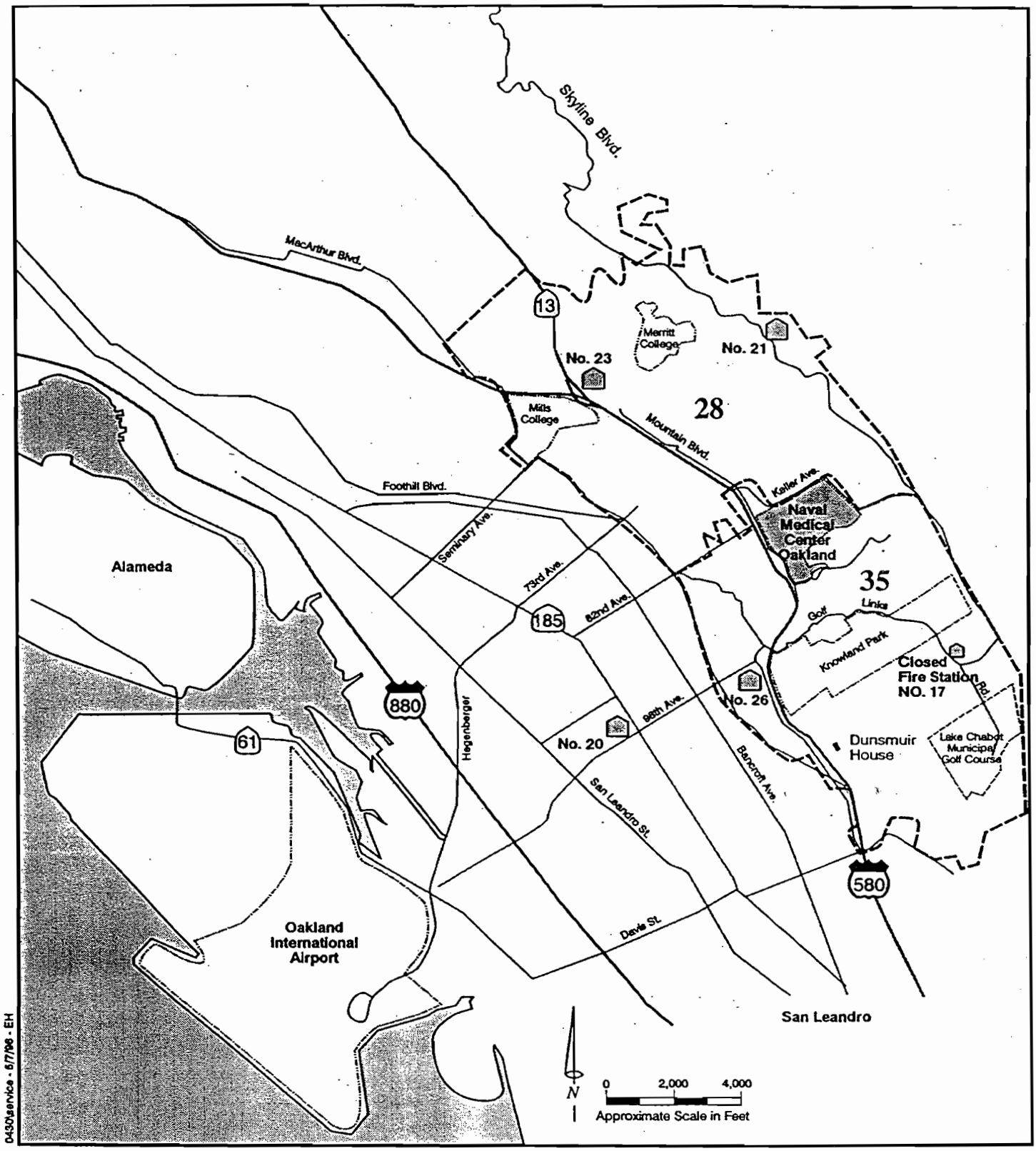
Table 3-11
Emergency Call Priority System and Average Dispatch Times for Oakland Police Department

Priority	Types of Calls	Dispatch Time
A	Serious crimes in progress, such as shootings, stabbings, robberies, and burglar alarms	80% of calls dispatched within one minute
B	Urgent requests for service, such as family fights and loud arguments	70% of calls dispatched within one minute
C	Reporting of completed crimes, such as burglary and vandalism	70% of calls dispatched within one hour
D	Requests for service for items such as neighborhood complaints	Data not available

Source: Vierra 1995.

The City of Oakland Police Department operates from the downtown police station rather than operating smaller substations; however, on-duty officers patrol geographically defined areas. The police department compiles law enforcement statistics based on these geographically-defined beats (Figure 3-8).

NMCO is in Beat 35 and is adjacent to Beat 28. Crime statistics for Beats 28 and 35 for 1993 and 1994, along with city wide crime statistics, are shown on Table 3-12. The most recent year for which complete statistics are available is 1994. Reported criminal offenses for Beats 28 and 35 decreased by 7 and 9



City of Oakland fire and police services are currently provided in close proximity to the NMCO.

Fire Station	Address
No. 26	2660 98th Avenue
No. 20	98th Ave. and E. 14th St.
No. 23	7100 Foothill Blvd.
No. 21	13150 Skyline Boulevard
Closed No. 17	4615 Grass Valley Road

Fire Station

28 Police Beat Boundary

Developed by Tetra Tech

Public Services Serving the Project Area

Naval Medical Center Oakland

Figure 3-8

percent, respectively, from 1993 to 1994, while city wide reported offenses decreased by 9 percent. The number of arrests in Beats 28 and 35 increased by eight and 30 percent, respectively, while arrests for the City of Oakland as a whole decreased by 6 percent.

Table 3-12
Police Beat Statistics for Area Surrounding NMCO

	1993		1994		Percent Change 1993-1994	
	Offenses	Arrests	Offenses	Arrests	Offenses	Arrests
Beat 28	2,102	522	1,952	564	-7%	8%
Beat 35	2,083	504	1,894	655	-9%	30%
Total of Beats 28 and 35	4,185	1,026	3,846	1,219	-8%	19%
City wide totals	80,031	35,033	72,502	33,004	-9%	-6%

Source: City of Oakland 1993b, 1994a.

3.3.2 Fire Services

Navy Fire Services

The Navy also provides fire protection and prevention to NMCO. The Navy NMCO Fire Department uses Building 36 to house two pumpers, a brush rig, and a staff of fire fighters on duty at all times. The Navy will continue to provide adequate services until transfer of the property or retrocession of jurisdiction (Alianza 1995).

Oakland Fire Protection

The City of Oakland Fire Department provides fire protection and rescue services. The fire department's goal is to respond to fires within five minutes (Nero 1995). The City of Oakland Fire Department is budgeted to have 477 full-time fire fighters and 45 support staff.

Fire Station 26 on 98th Avenue is closest to the project site, approximately 1.5 miles away. The station provides first-alarm fire protection services to the project vicinity with an emergency response time to the west and south sides of NMCO of approximately five minutes (Baker 1996). Four fire fighters are always on duty at Station 26, which is equipped with a 1,500-gallon per minute pumper truck and a brush wagon (Nero 1995). Station 21, located at 13150 Skyline Boulevard, would provide service to the north and east sides of NMCO, with an emergency response time of approximately

five minutes. Station 21 is staffed with four fire fighters 24 hours a day (Baker 1996).

Fire Station 20 at 98th Avenue and East 14th Street is approximately two miles from NMCO. This station, with eight fire fighters during each shift, is equipped with one pumper and one ladder truck (Nero 1995). Station 23 at 7100 Foothill Boulevard responds to second alarm calls near NMCO and has the same equipment and staffing levels as Station 26. Station 17 at High Street and MacArthur Boulevard and Station 18 at 50th Avenue and Bancroft Avenue also would respond to a second alarm. The emergency response times from these stations to the area is estimated to range from 15 to 20 minutes.

Station 17 at 4615 Grass Valley Road was closed in the late 1970s due to budget cuts. The City of Oakland Fire Department reopened it in 1996 on a seasonal basis during periods of high fire danger in the East Bay Hills (Nero 1995).

The project area is within the Oakland Fire Prevention and Assessment District established for the hillside areas of Oakland. The district extends from an area approximately surrounded by the northern, southern, and eastern city limits to I-580 and SR-13. Requirements for this district include increased building construction standards (Class A roofing material and one hour sidewalls) and strict vegetation management requirements. The vegetation management regulations are enforced by the Oakland Fire Department Vegetation Management Unit (Baker 1996) and include the following:

- Thirty-foot clearance for vegetation around buildings;
- Vegetation clearance around the perimeter of lots;
- Ten-foot clearance for vegetation next to roadsides;
- Chimneys and stovepipes must have ten-foot clearance for vegetation and must have screened outlets;
- Removal of dead/dying wood from trees;
- Clear roofs of debris; and
- Grass and weed areas must not exceed six inches in height.

For large parcels, the fire department encourages land owners to adopt a long-term vegetation management plan. Such a plan allows landowners to specify a phased compliance process and assures the fire department that on-going vegetation management and fuel reduction measures will continue (Atkission 1996).

3.3.3 Emergency Ambulance Services

The NMCO Fire Department provides emergency medical response for calls at the site while the City of Oakland Fire Department provides emergency response to medical calls in the surrounding areas. For emergency ambulance transportation of patients both on and off NMCO, the American Medical Response Ambulance Company is contracted by the Alameda County Emergency Medical Services District to respond within ten minutes to all 911 medical calls. The ambulance company receives patients from the fire departments and provides emergency transportation to the closest appropriate hospital facility. Hospitals are selected on a case-by-case basis, taking into account the choice of the patient, the severity of the injury, and the estimated distances to hospitals able to treat the patient (Akers 1995). The hospital at NMCO historically operated an emergency room.

3.3.4 Regulatory Considerations

In addition to regulations for the hillside areas of the Oakland Fire Prevention and Assessment District described above, City of Oakland fire protection policies that would apply to the Oak Knoll area state that the City will continue the fire department's fire prevention program, including the inspection of existing buildings and the review of proposed developments to ensure the maximum safety from potential fire hazards (City of Oakland Undated a).

3.4 CULTURAL RESOURCES

This section describes cultural resources on Naval Medical Center Oakland (NMCO), including prehistoric resources, Native American resources, historic resources, and cultural resources associated with World War II and the Cold War. The region of influence for cultural resources is the NMCO property because only cultural resources within the boundary of the property potentially would be affected by disposal and reuse of the property.

3.4.1 Previous Cultural Resources Studies

No formal archeological site survey has been conducted on NMCO. However, an informal walk-over was performed by a professional archeologist in 1990 with the main goal of establishing or verifying the extent of surface disturbances throughout NMCO (US Navy 1990e). Most of NMCO has sustained surface disturbances caused by the grading of the land in the 1920s for the golf course, again in the 1940s for the construction of a temporary hospital during World War II, and in the 1960s for the construction of the existing main hospital building, parking, and landscaping. The exact depth of the grading in the 1920s and the 1940s is unknown. However, given the original terrain of the area, extensive grading must have occurred in the 1920s to create the golf course. In the mid 1960s, approximately eight acres in the central portion of the NMCO were graded for the construction of the permanent main hospital. The grading included cutting slopes up to a depth of 30 feet. Much of the soil in that area now is comprised of fill. In addition, all areas around modern buildings have been graded and/or filled. The only portions of NMCO that have not been graded are very steep slopes where intact cultural deposits are unlikely, and along the creek beds. However, much of the creek beds have been artificially channeled or replaced with culverts.

3.4.2 Prehistoric Resources

Prehistoric resources are physical properties resulting from human activities that predate written records and generally are identified as either isolated finds or sites. Prehistoric sites can include villages, temporary camps, rock shelters, milling stations, lithic scatters, quarries, burials and cremations, rock features and hearths, rock art, and bone scatters.

No surface evidence of prehistoric sites has been observed on NMCO property. There is a low probability of buried prehistoric resources on NMCO. Due to the extensive grading and development of the area over the last 75 years, the presence of intact subsurface prehistoric deposits is unlikely.

3.4.3 Native American Resources

Native American resources are sites, areas, and materials important to Native Americans for religious, spiritual, or traditional uses, such as gathering of plants or materials for food, ceremonies, medicinal, or economic purposes. These resources may include villages, burials and human remains, cremations, rock art, rock features, and spring locations.

The predominant Native American group known to have occupied the San Francisco Bay Area is the Costanoan. Linguistic evidence suggests that the ancestors of the Costanoans moved into the San Francisco and Monterey Bay Area about AD 500. The movement of the Costanoan into the area appears to coincide with the dates of several Late Horizon archeological sites in the San Francisco Bay region (Levy 1978).

The establishment of the Spanish missions in the Bay Area in the 1770s led to the decline of the Costanoan population. New diseases introduced by the Spanish missionaries and loss of the lifestyle of the Costanoan is attributed to the demise of the Costanoan people. In 1835, the numbers of remaining Costanoan further declined with the secularization of the missions, which forced them once again to change their way of life (US Navy 1990e).

With respect to Native American resources, of primary concern are concepts of sacred space that create the potential for land use conflicts. Fundamental to Native American religions is the belief in the sacred character of physical places, such as mountain peaks, springs, and burial sites. Additionally, traditional rituals often prescribe the use of particular native plants, animals, or minerals. Therefore, activities that may affect sacred areas, their accessibility, or the availability of materials used in traditional practices may be of concern.

The Navy has conducted extensive research to identify all collections of prehistoric resources from Navy lands, and no collections were identified from archeological sites on NMCO property. No Native American resources have been identified on NMCO property, and no areas have been used for gathering, collecting, or conducting ceremonies by Native American groups or individuals in the 50-plus years of Navy ownership of the land. There also has been no reference in the literature to any spiritual significance of this area, nor does the Navy have any record of receiving a request to use any of the NMCO property for such purposes.

There is a low probability for buried Native American resources at NMCO. Due to the extensive grading and development of the area in the last 75 years, unencountered subsurface remains are unlikely to be found.

3.4.4 Historic Resources

Historic resources consist of physical properties, structures, or built items that postdate written records. Historic resources can include architectural structures and archeological remains. Historic archeological site types include refuse concentrations, townsites, homesteads, agricultural features, ranching features, and structures, features, or artifacts associated with the early military use of the land.

Historic Archeological Resources

Following the Mission Period (1770-1835), the Bay Area experienced a development of large-scale ranching and farming operations known as ranchos. These ranchos typically included large land holdings by one family or individual. Much of what is now the City of Oakland was part of the rancho of Luis Maria Peralta, granted in 1820. In 1842, Peralta divided his rancho among his four sons, with the area now occupied by the City of Oakland included in portions given to Vicente, Antonio Maria, and Ignacio. The original adobe hacienda of the rancho still exists as an archeological site within the City of Oakland (City of Oakland 1993c). There is no evidence of structural or archeological remains related to the rancho within the present-day NMCO, and there is no evidence of development of the NMCO land prior to the establishment of the Oak Knoll Golf and Country Club in the 1920s.

The town originally known as Oak Knoll was situated southwest of the present day location of the NMCO. This area was first developed in the 1920s and 1930s. During that time, the town of Oak Knoll was advertised as being a convenient distance from the cities of Oakland and San Francisco, and as having access to all the major utilities (gas, electricity, sewers), police, and fire protection. The architecture of the homes included stucco, Spanish, and bungalow styles. The Oak Knoll Golf and Country Club added to the attraction of the area for suburban residents (Theresa Hughes & Associates 1994).

In February 1942, the Navy purchased a portion of the Oak Knoll Golf and Country Club to construct a temporary Navy hospital. This was in response to the needs of the progressing war in the Pacific. Five months later, the hospital was commissioned with 25 redwood barracks and six ward buildings housing 204 patient beds. In 1945, at the climax of the war, the hospital had increased its capacity to 6,000 patients, with a military and civilian staff of about 3,000 people (US Navy 1984; Theresa Hughes & Associates 1994).

The end of the war in the Pacific led to a decline in the number of patients at the hospital. Patient levels increased again during the Korean Conflict to a daily patient average of approximately 2,500. The end of the Korean Conflict brought patient levels down to approximately 600 a day, which continued until the start of the American involvement in the Vietnam Conflict. In 1965, the influx of casualties from Vietnam created a need for increased patient care and morale-building activities, such as recreation. An urgently needed permanent hospital was completed in 1968. When the conflict in Vietnam ended, activities at the hospital again decreased and many of the original buildings constructed during World War II were demolished, and their locations were used for parking. However, several of these older wooden structures were left in place and are still in use for medical and support services (US Navy 1984; Theresa Hughes & Associates 1994).

After the Vietnam Conflict, the orthopedics program at NMCO became increasingly important. In 1973, organizational changes at the hospital led to the consolidation of health care resources for more efficiency, and made medical services at branch clinics more accessible to patients. Throughout the 1980s and 1990s, the NMCO has continued to update and modernize its medical services. Most recently, the NMCO provided medical support during the Gulf War (US Navy 1984; Theresa Hughes & Associates 1994).

No historic archeological sites have been identified on NMCO property. There is a low probability for the presence of buried historic resources, such as privies or cisterns, associated with the early use of the land as a country club or resources associated with the hospital during World War II. Due to the extensive grading and development of the area in the last 50 years, the presence of intact subsurface deposits is unlikely.

Historic Architectural Resources

The predominant historic architectural resource at NMCO is Club Knoll, built in 1927 as the clubhouse for the Oak Knoll Golf and Country Club. It was designed in a Spanish Colonial/Mission Revival architectural style, which was popular for country clubs in the Bay Area in the 1920s (Page & Turnbull 1994).

When the Navy acquired the country club in 1942 for use as a medical center, the clubhouse was the only substantial building on the property. It housed the site's first hospital employees, who were responsible for the construction and administration of the hospital. The clubhouse also served as housing for the commanding officer and several bachelor officers until other buildings were completed near the end of 1942 (Page & Turnbull 1994). The clubhouse continued to serve a variety of functions during and

after the war until the completion of a new hospital in 1968. At that time, the clubhouse became the officers club for the medical center and became known as Club Knoll.

An informal evaluation performed in the early 1990s led the Navy to believe that Club Knoll would qualify for inclusion in the National Register of Historic Places (NRHP) because of its architecture. In 1993, a contract was let for a professional evaluation of the historic and architectural significance of the then "Naval Hospital, Oakland." The contract included the preparation of a National Register Nomination Form for Club Knoll and State Historic Inventory Forms for all the other buildings and structures constructed prior to the end of World War II. The purpose of the contract was to assist the Navy in consultation with the State Historic Preservation Office (SHPO) with respect to the eligibility of these properties for inclusion in the NRHP. After evaluating Club Knoll and conducting an extensive search for the architect who designed the clubhouse, it was determined that the clubhouse would not qualify for inclusion in the NRHP because of its architecture. This is because there are much better examples of the Spanish Colonial/Mission Revival clubhouses built in the Bay Area in the 1920s by well-known architects.

During the contractor's research, an association was found between Club Knoll and Mark Fry, a professional golfer employed by the Oak Knoll Golf and Country Club from 1928 to 1940. Mark Fry had won a number of tournaments on the local circuit and even won a national event the year after the Navy converted the golf course to a hospital. Believing that the marginal nature of Club Knoll's architectural significance, supported by the association with a local sports figure, might qualify the clubhouse for inclusion in the NRHP, the National Register Nomination Form was prepared.

After further consultation with staff of both the US Department of the Interior Keeper of the National Register of Historic Places and the SHPO, the Navy made the determination that Club Knoll would not qualify for the NRHP because, although it had elements of Spanish Colonial/Mission Revival style, it was not a good example of that architectural style and the architecture was not the work of a master. Furthermore, it was determined that the association of Club Knoll with Mark Fry was lacking because Mark Fry's achievements were performed on a now nonexistent golf course and not in the clubhouse (US Navy 1994b). The California SHPO concurred with this determination on May 31, 1994 (California Office of Historic Preservation 1994). The analysis of the National Register significance of Club Knoll has been disputed by the Oak Knoll Heritage Committee, a local community group. The committee has called for the reevaluation of the

building "in light of its significance during World War II" (MacDowell 1995).

Although it has been determined that it does not qualify for national recognition, Club Knoll has been placed on the local Oakland Preservation Study List by the Oakland Landmarks Preservation Advisory Board and has been found eligible to become a City of Oakland landmark due to its historic and architectural significance (Hausrath 1995). Inclusion on the preservation study list subjects the property to a 60-day delay in the issuance of a demolition permit and allows the use of the State Historic Building Code, which can waive certain requirements of the Uniform Building Code. The purpose of the listing was to ensure that future reuse of the land will "recognize the design quality of the structure and the history that it represents" (Hausrath 1995).

3.4.5 World War II and Cold War Era Resources

World War II- and Cold War-era resources are physical properties or structures that have gained significance within the past 50 years due to their association with either World War II or the Cold War. These resources can include ships and submarines, aircraft, battlefields, cemeteries, and structures, such as fortifications, guardhouses, barracks, bunkers, hangars, missile silos, and monuments.

Approximately 110 temporary wooden structures were built between 1942 and 1945 by the Navy for the hospital. Forty-five of these structures remain standing and are still used for medical and support services. However, with the demolition of over 70 of the original buildings and the continued development of the medical center over the last 50 years, the setting of the remaining structures and the integrity of the complex as a whole has been lost. Furthermore, the integrity of the 45 structures has been compromised through extensive improvements made over the last 50 years. All of the buildings contain modern roofs or siding added in the 1960s or 1970s. Therefore, these structures are not considered to be eligible to the NRHP (Page and Turnbull 1994; US Navy 1994b). The California SHPO concurred with these findings in May 1994 (California Office of Historic Preservation 1994). No Cold War resources have been identified at NMCO.

3.4.6 Regulatory Considerations

As a federal agency, the Navy is responsible for compliance with the National Historic Preservation Act (NHPA) of 1966 as amended (16 USC 470). Section 106 of the NHPA and its implementing regulations ("Protection of Historic Properties," 36 Code of Federal Regulations-Part 800), require federal agencies to consider the effects of their actions on

properties listed or eligible for listing on the National Register of Historic Places (NRHP). It also requires that agencies afford the Advisory Council on Historic Preservation an opportunity to comment on actions that will directly or indirectly effect such resources. In addition to the NHPA, the Archeological and Historic Preservation Act of 1974 and cultural resources requirements of DOD and the US Navy (DOD Directive 4710.1 of 21 June 1984, Archeological and Historic Resources Management; Department of the Navy OPNAVINST 5090.1B, Historic and Archeological Resources Protection, 1 November 1994, Chapter 23) require the Navy to consider cultural resources in the planning of its undertakings.

According to Section 7050.5 of the California Health and Safety Code, in the event human remains are discovered during excavation, work must stop immediately and the county coroner must be contacted. Sections 5097.94 and 5097.98 of the California Public Resources Code require consultation with the Native American Heritage Commission, protection of Native American remains, and notification of most likely descendants. SB447 (Chapter 404, Statutes of 1987) also protects Native American remains or associated grave goods. After transfer from federal ownership, the CEQA guidelines applicable to cultural resources would also apply.

3.5 AESTHETICS AND SCENIC RESOURCES

This section addresses the visual quality of the existing landscape. The analysis of these resources must address both the physical features of the landscape (natural and built) and how it is perceived by viewers.

The region of influence for the aesthetic analysis includes the Naval Medical Center Oakland (NMCO) site and surrounding areas within the general viewshed of the NMCO site, (i.e., areas that can be seen from or that have views toward the NMCO). This includes adjacent residential neighborhoods, open space areas of the East Bay Hills (west of the ridge top), the I-580 corridor, and some parts of the greater Bay Area having long distance views toward the East Bay Hills.

This section describes the existing visual conditions of the NMCO and surrounding area in terms of visual character, views and visibility of the project area from sensitive viewpoints, and regulatory considerations. The analysis is based on field documentation and photographic inventory, with reference to the Existing Conditions Report (Theresa Hughes & Associates 1994) and the existing conditions analysis included in the Base Exterior Architecture Plan for NMCO (U.S. Navy 1983).

3.5.1 Visual Character of the Project Area

The visual character of the area is described in the context of the regional landscape character of the San Francisco Bay Area, against which the distinctive landscape features and overall scenic qualities of the area can be measured. For the purpose of this study (in the context of a metropolitan area), higher scenic quality is associated with the following visual conditions:

- Relatively undisturbed natural-appearing landscapes;
- Landscapes where human activity blends harmoniously with remaining elements of the natural landscape; and
- Distinctive natural, architectural, or other design features.

Poorer scenic quality is associated with highly disturbed or degraded landscapes or with builtup areas lacking building maintenance and landscape maintenance or a unified design.

Regional Landscape Character

NMCO is located at the western edge of the East Bay Hills, which form a part of the California coastal ranges. These are steep-sloping ridges that trend northwest to southeast and form the visual backdrop to many of the San Francisco Bay Area's metropolitan communities. The East Bay Hills have a wooded appearance, even where there is residential development, with extensive woodlands and grasslands at the higher elevations and in their more rural eastern areas. Between the East Bay Hills and the San Francisco Bay, gentler slopes are dominated by urban and suburban land uses. The NMCO property lies at the transition between the lower, partly urbanized hills and the heavily urbanized flatlands of Oakland.

The East Bay Hills are an important scenic resource for the entire Bay Area. At a regional level, the bay shore and associated panoramic views to background ridges, city skylines, major bridges, and the bay form important scenic resources.

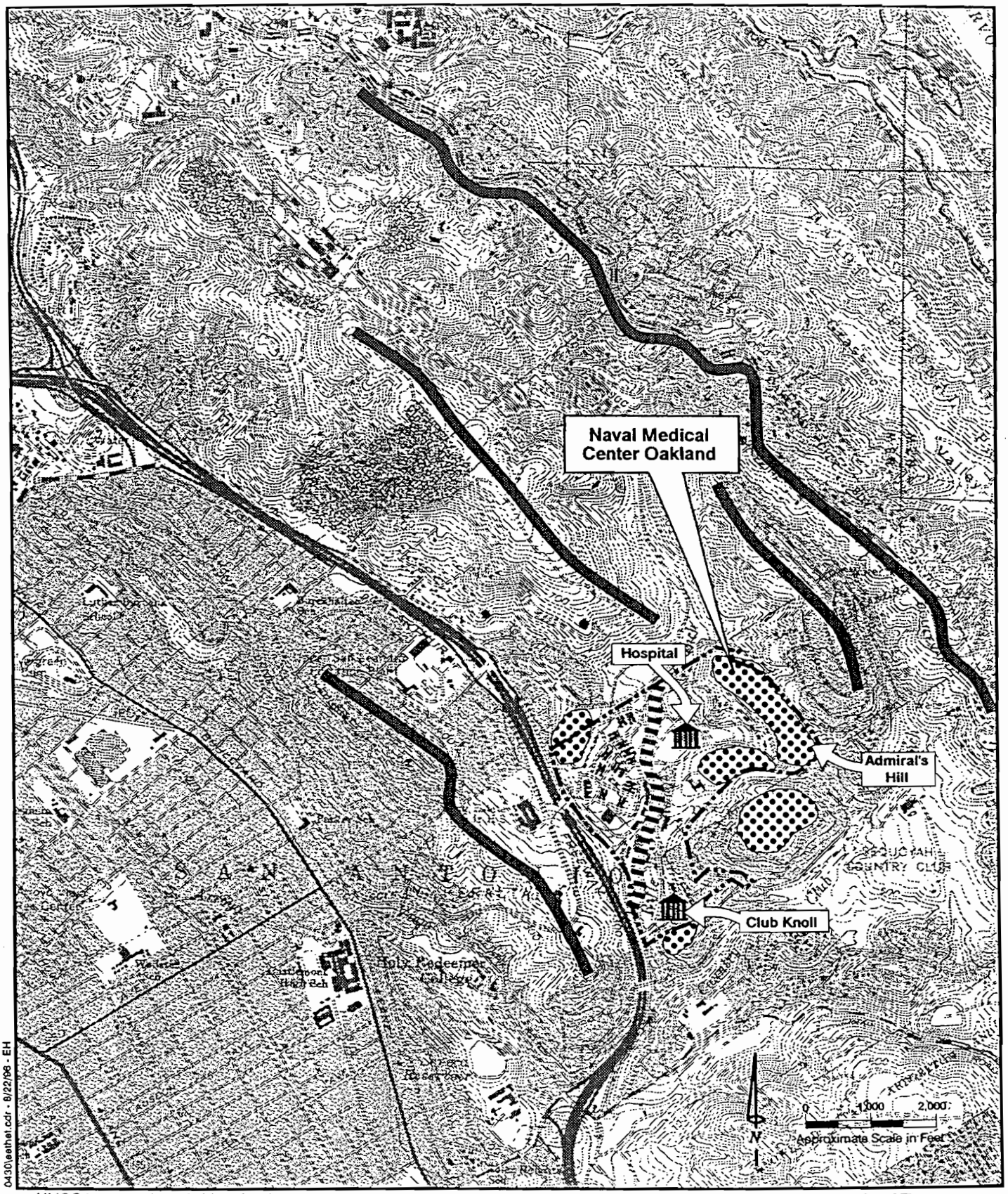
Landscape Features of the Project Site

Figure 3-9 identifies major aesthetic features of the NMCO site and surroundings. Appendix C (under separate cover in Volume II) contains photographs of NMCO and the surrounding area.

The landscape on the NMCO site is dominated by steep hillsides and knolls, woodland and mature landscaped areas, and certain large or distinctive buildings. The latter include the existing hospital building and Club Knoll. The site forms an enclosed "bowl," with the steeper East Bay Hills as backdrop and smaller ridges and knolls on both sides of the valley formed by the Rifle Range Creek watershed. As a result, the site generally is not visible from other locations, except where seen from higher elevations on the surrounding hills. The impression of the site is of a well-landscaped park-like setting that has a moderately high visual quality in the context of an urban setting, although extensive areas of parking and utilitarian buildings dominate views in some areas (U.S. Navy 1983).

Specific landscape components or areas that can be readily identified are as follows:

- Steeply sloping hillsides and knolls border the eastern and southeastern edges of the property (Photo 1, Appendix C). Vegetative cover ranges from open grassland to oak woodland, with prominent plantings of eucalyptus in places. Officer family housing is visible at the toe of the



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NMCO has a moderately high visual quality in the context of an urban setting.

Distinctive architectural features

Prominent knolls surrounding NMCO

Major ridges of East Bay Hills

Existing riparian corridor

Developed by EDAW, Inc. from USGS 7.5' quadrangle, Oakland East, California (1980)

Aesthetic Features in and around the NMCO Site

Naval Medical Center Oakland

Figure 3-9

main east-facing slope, with two dwellings visible at the crest of the ridge;

- The hospital area, located on a gently sloping open area west of Admiral's Hill, is dominated by the mass of the nine-story hospital building (Photo 2, Appendix C). Hospital architecture does not reflect the character of the site in scale, form, or materials. However, it does form a strong landmark for orientation within the NMCO site. It is surrounded by parking areas that present an open view of the hospital building. The visual appearance of this area strongly contrasts with all other landscape features on the site, due to the large scale, rectangular building its gray color, and architectural style. This area contains some of the lower visual qualities on the site but affords attractive panoramic views of the surrounding hills;

- The Rifle Range Creek corridor crosses the site and is most distinctive towards the center and southwest where dense natural and exotic vegetation provides an attractive greenbelt, screening buildings from view (Photo 3, Appendix C). A trail and road system (with bridges crossing the creek) adds to the visual interest of this area;

- The north quadrant is comprised of moderate sloping hillsides with one- and two-story buildings (Photo 4, Appendix C). These include several rows of "vintage" wooden buildings (painted white) with a distinctive visual character. Other buildings in this area include undistinguished one- to three-story multipurpose buildings. An area of enlisted family housing that is not prominent, (being partly screened by mature trees), is located at the top of the hill;

- In the southeast corner of the site, a small tributary valley is formed by an intermittent stream, Powerhouse Creek. This area, which has a wooded appearance, is isolated and hidden from view from the rest of the site by topography and trees;

- The officer family housing area east of Club Knoll has a well-landscaped suburban image;

- The most prominent feature of the Club Knoll area is the mission-style building itself (Photo 5, Appendix C). Situated on a terrace, the building overlooks the southwest portion of the site, and its tower is prominent from several directions. The combination of terra-cotta tiles and white walls is unique within the property and forms a recognizable landmark within a manicured landscaped setting. The enclosed courtyard and porticos of Club Knoll create a visual experience, which is also unique within the NMCO; and

- The main Mountain Boulevard entry area is characterized by the sentry gate and focal views of the Rifle Range Creek corridor towards the interior of the site (Photo 6, Appendix C).

Visual Character of the Surrounding Area

Steep surrounding hillsides have a primary influence on the visual character of the site. These support a variety of residential developments, including view lots on high open ridges, older residential neighborhoods where the houses are nestled among mature oaks and evergreen trees, and conventional suburban development. There is an extensive area of hillside and ridges to the northeast below Skyline Boulevard, with a mosaic of chaparral, trees, and grassland. A lower ridge, parallel to the predominant northwest to southeast trend of the East Bay Hills, encloses the NMCO area on its western flank, in the vicinity of the King Estates. This ridge is characterized by a mix of open grassland and suburban development with trees.

Other open space and landscaped areas provide substantial opportunities to view scenic resources close to NMCO, notably the Leona Regional Open Space valley corridor, the Chabot Regional Open Space area in the hills, the Seqoyah Country Club, and the Knowland State Arboretum and Park. However, none of these landscapes are within the main viewshed of the NMCO, due to terrain and vegetative screening.

The I-580 corridor on the western edge of the site forms a prominent feature, although extensive landscape screening filters the views from the NMCO. Almost one mile to the northwest, the higher west-facing hillsides above I-580 are scarred by the Leona Quarry, with a high rock wall that produces strong visual contrasts visible from viewpoints over 15 miles away, including the San Francisco Bay.

3.5.2 Views and Visibility of the Project Area

The following viewing situations provide key views of the area and have high visual sensitivity, based on professional standards of distance, duration, and typical concern for visual qualities. Visual sensitivity is also one of the concerns raised by local residents during the reuse planning process.

Within the context of an urban area, viewing distance is defined as follows for the purpose of this study:

- Foreground: 0-1/4 mile from the viewer;
- Middleground: 1/4 -2 miles; and
- Background: 2+ miles.

Residential Viewpoints

Ridgemont Skyline single-family homes and the major roadways serving them provide open, panoramic, middleground views of the site towards the bay and southern East Bay Hills (Photo 7, Appendix C). The hospital building is clearly visible from these viewpoints. At the lowest elevations, new housing across Keller Avenue from the northern NMCO entrance has foreground views of the northern edge of the site.

In Sequoyah Heights, the first row of homes along the crest of the ridge above the NMCO overlook the site towards the bay. However, the steep drop in topography and tall trees near the eastern NMCO boundary focus the view on the more distant panorama rather than on the NMCO site. Other houses and the streets in this subdivision have few, if any, views of the site.

The Sequoyah Hills residential area on the southeast boundary of the site has some open views of the hospital building in the foreground and other parts of the northern NMCO property (Photo 8, Appendix C), but many views are screened or filtered by mature oaks or evergreen trees.

Views from the Sequoyah Highlands residential area further to the south are effectively screened from views of the NMCO by topography and vegetation.

Homes in the King Estates residential areas west of the site and along the I-580 corridor have some views toward NMCO, but in general, these do not extend up the Rifle Range Creek valley much beyond the gate area. The exception would be views from the highest points on the King Estates ridge, which can see some of the sloping areas within the NMCO boundary.

There are no views of the site from the rest of the City of Oakland because the views are cut off by the King Estates ridge.

Off-site Public Use Areas

Several public recreational areas (and views) are located near the NMCO facility, as follows:

- Leona Regional Open Space is located in the upper reaches of the Rifle Range Creek valley. Views of the NMCO site are limited to foreground views across Keller Avenue from the south end of the park;

- Anthony Chabot Regional Park extends over several square miles eastward from the main ridgeline to the east of the NMCO but affords

few, if any, views west into the site due to topographic screening by the ridge itself;

- Knowland State Arboretum and Park, which includes the Oakland Zoo, is screened from the NMCO by intervening east-west ridges; and

- King Estates Park has open views of the Rifle Range Creek valley and the NMCO site from across I-580.

In addition, the private Sequoyah Country Club is located close to the NMCO but has few views of the site because of the wooded nature of the area and gentle upper slopes of the knoll block most potential views.

Highway Viewpoints

Most potential site viewers travel along the I-580 corridor. There are some views into the site from I-580, but these are limited to glimpses lasting a few seconds at typical freeway speeds. The views are at right angles to the direction of travel, and extensive screening by vegetation filters views alongside the freeway. Intervening topography also limits views of the east portions of the site.

Mountain Boulevard provides views similar to those described for I-580, except that views are closer, last slightly longer, and there are more direct views of the west edge and gateway to the NMCO. Keller Avenue is the other main arterial in the vicinity, providing access to surrounding residential areas. There are some views into the site near the Keller Avenue gate, which overlooks the hospital area from the northwest.

On-site Views/View Corridors/Entries

The most important view areas on-site, where use is concentrated, include the entry gates, the central corridor along Rifle Ranch Creek, and the vicinity of Club Knoll. Most of these views are not currently open to the public, except at and approaching Club Knoll.

Viewpoints offering attractive vistas and panoramic views of the NMCO and portions of San Francisco Bay include the access roads on Admiral's Hill at the eastern edge of the property and near the northwest corner of the site at the helipad.

3.5.3 Regulatory Considerations

The principal plans and policies governing aesthetic considerations on the NMCO site are contained within the Oakland Comprehensive Plan.

Discussion of certain policies from the land use and open space, conservation, and recreation elements of the plan, addressing effects on the natural setting and open space resources, is provided in the Land Use Section (3.1). This section addresses specific urban design policies contained within the land use element (adopted April 1980), policies contained within the scenic highways element (adopted September 1974), and other applicable regulations.

Land Use Policies on Urban Design and Preservation

The land use element contains general guidance on urban design issues that refer to aesthetic principles. Most notably, general policy number 1 on urban design and preservation states that "The City will pursue a continuing, comprehensive process of urban design to seize opportunities as they occur and direct physical change toward a more efficient, more livable, more beautiful, and more dramatic urban environment."

Scenic Highway Policies

The scenic highways element of the comprehensive plan applies primarily to I-580 (the MacArthur Freeway) in the study area. Interstate 580 in the site vicinity was included in the State Scenic Highways System Master Plan in 1970 by the state legislature, as eligible for official state designation. In 1975, the city adopted protective measures that ensure the quality of this corridor will be maintained, in order to permit official state designation.

Relevant policies applying to I-580 in the context of the NMCO state that "visual intrusions within the scenic corridor should be removed, converted, buffered, or screened from the motorist's view" (Policy 2); "panoramic vistas and interesting views now available to the motorist should not be obliterated by new structures" (Policy 3); and "new construction within the scenic corridor should demonstrate architectural merit and a harmonious relationship with the surrounding landscape" (Policy 4).

Given the NMCO's generally low topography, the only portions of I-580 that could be considered as potentially within the critical viewshed from I-580 would include limited portions of the western NMCO area adjacent to I-580, where views through or between the extensive screening by vegetation are obtained from the freeway, and the higher locations of Admiral's Hill, where visible above the intervening trees.

The scenic highways element and more recent Oakland Policy Plan (adopted in 1980) also show Skyline Boulevard to the east of NMCO as a possible future designation under the scenic route framework for the City. The viewshed from this highway would include some portions of the NMCO

site, although at a distance of approximately half a mile. General Policy 2 states that "all or portions of visually significant traffic ways are eligible for future designation as scenic routes and for the protective restrictions that may be appropriate thereto."

Land Use Regulations

The general provisions of the planning code (zoning regulations), adopted in August 1965 and revised through April 1994, contain some provisions relevant to aesthetics. The current zoning for the NMCO site is R-30 Residential, which limits building heights in general to 30 feet, establishes some limits on height and design of signs, and requires buffering with respect to screening of parking, loading and storage areas, and control of artificial illumination.

3.6 BIOLOGICAL RESOURCES

This section describes biological resources at and near the Naval Medical Center Oakland (NMCO). Biological resources include vegetation communities, wildlife populations, sensitive species, and sensitive habitats at the site and in the surrounding areas. The region of influence (ROI) for biological resources includes the NMCO and surrounding native habitats within a half-mile radius. These off-site resources may indicate the potential for sensitive species and habitats to exist on the site.

3.6.1 Methods

Biological resource data for NMCO was assembled from the California Natural Diversity Data Base (California Department of Fish and Game 1995a). Information also was collected from a letter of concern from the U.S. Fish and Wildlife Service (USFWS) (USFWS 1994c), a report of existing conditions at the facility (Theresa Hughes & Associates 1994), the Master Plan and Natural Resource Management Plan for the facility (U.S. Navy 1984; U.S. Navy 1990d), and the National Wetlands Inventory Map for the facility (National Wetlands Inventory 1985).

A botanist and a wildlife biologist conducted a four-day biological survey of the NMCO site in late April and early May 1995 (U.S. Navy 1995c). The Sensitive Species Survey report is in Appendix B, under separate cover in Volume II. This survey included searching for rare plants or suitable habitat for these plants, and for sensitive wildlife species or suitable habitat. All habitat types on the facility were surveyed to determine the potential for sensitive species. Areas of native habitat were surveyed more intensively than nonnative habitats because rare plants and sensitive animal species are more likely to inhabit these areas. Surveys for birds using the riparian (stream corridor) area were conducted in an area along Rifle Range Creek and its tributaries in the southwestern part of the site. Additional surveys for the Alameda whipsnake (*Masticophis lateralis euryxanthus*) also were completed from April through mid-July, 1996. The results of these surveys are discussed later in this chapter.

An arboricultural inspector from the City of Oakland and a plant ecologist (Navy consultant) conducted a tree study on April 11, 1996 (see Volume II, Appendix E) to estimate trees protected under the City of Oakland Tree Ordinance (Article 6, Section 7-6). To provide a representative sample of trees at NMCO three plots were randomly chosen in each of six vegetation communities: oak woodland, eucalyptus woodland, pine woodland, mixed woodland, riparian, and landscaped areas. Two vegetation communities, northern coastal scrub and grassland, were not included because these communities had few or no trees at NMCO.

3.6.2 Vegetation Communities

NMCO sustains five major vegetation communities, including grasslands, northern coastal scrub, woodlands, riparian corridors, and landscaped/ developed areas (Figure 3-10).

Grasslands

Grasslands cover approximately 17 acres of NMCO, primarily in the northeastern part of the facility. These grasslands support a mixture of native species, such as purple needlegrass (*Nassella pulchra*) and silver bush lupines (*Lupinus albifrons*), and nonnative species, such as slender wild oat (*Avena barbata*) and barley (*Hordeum* sp.).

Northern Coastal Scrub

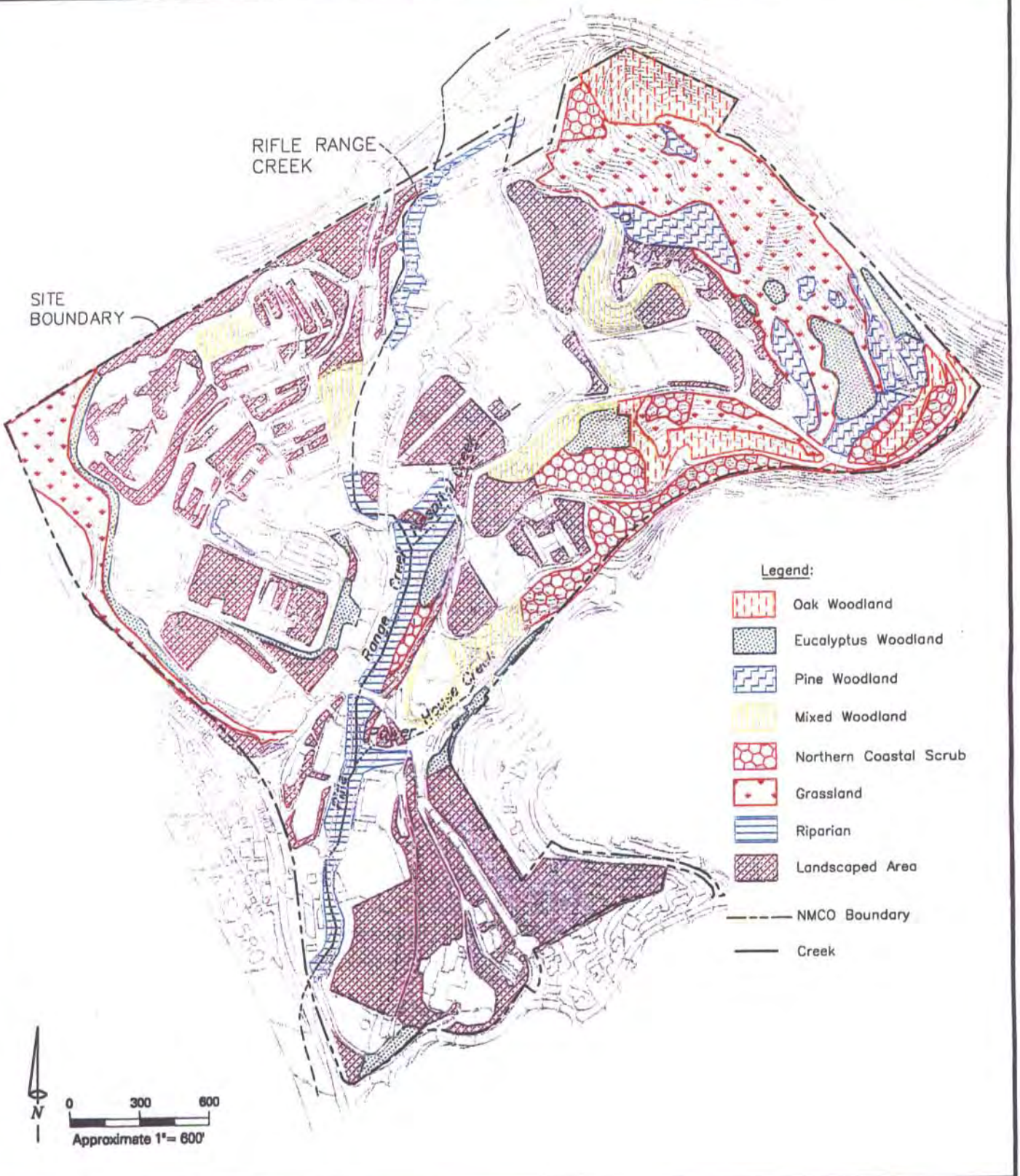
Northern coastal scrub covers almost ten acres on the eastern portion of NMCO. This community is dominated by nonnative broom (*Genista* sp.), toyon (*Heteromeles arbutifolia*), coyote brush (*Baccharis pilularis*), and coastal sage (*Artemesia californica*).

Woodlands

Woodland communities at NMCO are relatively undisturbed and cover about 24 acres. These areas include coast live oak woodland, knobcone pine woodland, mixed woodland, and eucalyptus woodland.

Coast live oak woodland is dominated by coast live oak (*Quercus agrifolia*) and covers approximately seven acres in the northeastern part of NMCO. Common understory species in this community at NMCO include poison oak (*Toxicodendron diversilobum*) and nonnative grasses. Based on the tree study, this community has about 1,980 coast live oaks and 120 California bays that would be protected under the City of Oakland Tree Ordinance.

Knobcone pine woodland is dominated by knobcone pine (*Pinus attenuata*) and covers approximately six acres of the northeastern area of NMCO. The understory in this community at NMCO is dominated by nonnative grasses. Based on the tree study, the pine woodland has about 680 Monterey pines and 95 other pine trees and 45 coast live oaks that may be protected under the City of Oakland Tree Ordinance.



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NMCO supports native woodlands, scrub, grasslands, and a riparian corridor surrounding Rifle Range Creek.

Vegetation Communities

Naval Medical Center Oakland

Figure 3-10

Source: Theresa Hughes & Associates 1995.

Mixed native/nonnative woodlands at NMCO are located on approximately four acres in the northeastern portion of the facility and are composed mostly of native tree species, including California bay (*Umbellularia californica*), coast live oak, white alder (*Alnus rhombifolia*), Monterey pine (*Pinus radiata*), and knobcone pine, integrated with the nonnative blue gum (*Eucalyptus globulus*). Based on the tree study, the mixed woodland has about 65 Monterey pines and 35 other pines, 60 Deodora cedars, 100 acacias (*Acacia* sp.), 30 Lombardi poplars (*Populars nigra* var. *italica*), 30 coast live oaks, six black locusts, and six California bays that may be protected under the City of Oakland Tree Ordinance.

Eucalyptus woodlands cover about seven acres in patches throughout NMCO and are dominated by blue gum. Common understory species in this community include nonnative grasses, broom (*Genista monspessulana*), and goose grass (*Galium aparine*).

Riparian Corridors

The riparian corridor surrounding and including Rifle Range Creek and its small tributaries is the only sensitive habitat at the facility and is discussed below. Based on the tree study (Volume II, Appendix E), the riparian corridor of seven acres is dominated by coast live oaks and white alders (Alnus rhombifolia) with an estimated 275 trees of each and about 240 willow (Salix sp.) that would be protected under the City of Oakland Tree Ordinance. Other species in the riparian corridor of Rifle Range Creek include about 70 elderberries (*Sambucus mexicanus*), 60 elms (*Ulnus* sp.) 40 California bays, and about 10 each of blackwood acacia (*Acacia melanoxylon*) and white birch (*Betula pendula*) that would be protected under the City of Oakland Tree Ordinance.

Landscaped/Developed Areas

Other areas of NMCO are vegetated with ornamental species and other nonnative species in landscaped lawns and parks totaling about 40 acres. Landscaping tree species include eucalyptus (*Eucalyptus* sp.) and cypress (*Cupressus* sp.). The southern part of the facility is dominated by grass recreation fields. Based on the tree study, the landscaped areas include about 605 Monterey pines, 415 Deodora cedars, 410 acacias, and 30 coast live oaks that may be protected under the City of Oakland Tree Ordinance. The remaining acreage at NMCO is developed with buildings and roadways and contains no vegetation.

3.6.3 Wildlife

Wildlife on the site is typical of that found in disturbed urban areas of the region and includes invertebrates, amphibians, reptiles, birds, and mammals. Volume II, Appendix B (Sensitive Species Survey) includes a list of animal species compiled from the 1995 survey and other recent surveys. No surveys have been conducted at NMCO for invertebrate species.

Amphibian species are likely to inhabit the riparian corridor and Rifle Range Creek. The 1995 survey detected larvae of the Pacific chorus frog (*Hyla regallia*). Other amphibian species that may inhabit the facility include the western toad (*Bufo boreas*) and arboreal salamander (*Aneides lububris*).

The western fence lizard (*Sceloperus occidentalis*) was the only reptile species observed during the 1995 survey. Other reptiles that are likely to inhabit the facility include the racer (*Coluber constrictor*) and western rattlesnake (*Crotalus viridis*). These reptiles are likely to be found in the grassland and shrub areas of NMCO.

Bird species detected during the 1995 survey include raptors, such as the Cooper's hawk (*Accipiter cooperi*), turkey vulture (*Cathartes aura*), and red-tailed hawk (*Buteo jamaicensis*); songbirds, such as the plain titmouse (*Parus inornatus*) and common bushtit (*Psaltriparus minimus*); and introduced species, such as the house sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*). Many other bird species may inhabit the facility. The riparian corridor is an important habitat, providing nesting and foraging opportunities for a wide variety of bird species.

Mammals detected during these surveys include domestic cats and dogs, coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), California ground squirrels (*Spermophilus beecheyi*), black-tailed hares (*Lepus californicus*), and mule deer (*Odocoileus hemionus*). Other mammals likely to inhabit NMCO include the raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and deer mouse (*Peromyscus maniculatus*). These mammal species are likely to be found throughout all of the habitats on the site (U.S. Navy 1990d).

3.6.4 Sensitive Species

Sensitive species include those that are listed by the USFWS or by the California Department of Fish and Game (CDFG) as endangered, threatened, proposed for endangered or threatened status, or candidate species for endangered or threatened status. Also included as sensitive species are those listed by the California Native Plant Society and species of special concern to the CDFG. Table 3-13 lists endangered and threatened species that were determined to exist in the region of influence. Species

proposed for endangered or threatened listing and candidate species are included in this list because these species may be listed prior to the completion of this environmental impact statement/environmental impact report (EIS/EIR). Table 3-14 also lists other sensitive species (federal species of concern and California species of special concern) that were determined through preliminary research to exist in the region of influence for NMCO. As of February 28, 1996 when the USFWS published an updated list of candidate species in the Federal Register, Category 1 species are considered candidates, Category 2 and Category 3 species designations are discontinued. The following discussion focuses on the possibility for those species listed on Table 3-13 and Table 3-14 to exist at NMCO, as determined by existing habitat and the 1995 survey (U.S. Navy 1995c).

Table 3-13
Endangered, Threatened, and Candidate Species in the Vicinity of NMCO[1]

Common Name	Scientific Name	Federal Status	State Status	CNPS[2] Status	Habitat at NMCO?
Plants					
pallid manzanita	*Arctostaphylos pallida*	PT	E	1B	N
Presidio clarkia	*Clarkia franciscana*	E	E	1B	N
Invertebrates					
bay checkerspot butterfly	*Euphrydryas editha bayensis*	T	none	none	N
Fish					
tidewater goby	*Eucyclogobius newberryi*	E	CSC	none	N
Amphibians					
California tiger salamander	*Ambystoma californiense*	C	CSC	none	N
California red-legged frog	*Rana aurora draytonii*	PE	CSC	none	N
Reptiles					
Alameda whipsnake	*Masticophis lateralis euryxanthus*	PE	T	none	Y

[1] The vicinity of NMCO is defined in this study as the area contained within the Oakland East, Las Trampas, and San Leandro 7.5 minute U.S. Geological Survey quadrangle maps.
[2] CNPS = California Native Plant Society.

Notes:

Federal Status	State Status	CNPS Status	Habitat at NMCO?
E = Endangered	E = Endangered	1B = Rare and endangered in California and elsewhere	Y = Yes
T = Threatened	T = Threatened		N = No
PE = Proposed endangered	CSC = California species of special concern		
PT = Proposed threatened			
C = Candidate			

Sources: California Department of Fish and Game 1994a; 1994b; 1994c; 1995a; 1995b and U.S. Fish and Wildlife Service 1993a; 1993b; 1994a; 1994b

Table 3-14
Other Sensitive Species in the Vicinity of NMCO[1]

Common Name	Scientific Name	Federal Status	State Status	CNPS Status	Habitat at NMCO?
Plants					
alkali milk-vetch	*Astragalus tener* var. *tener*	none	none	1B	N
Oakland star-tulip	*Calochortus umbellatus*	none	none	4	Y
Point Reyes bird's-beak	*Cordylanthus maritimus* ssp. *palustris*	SC	none	1B	N
Diablo rock-rose	*Helianthella castanea*	SC	none	1B	N
fragrant fritillary	*Fritillaria liliacea*	SC	none	1B	N
Congdon's tarplant	*Hemizonia parryi* ssp. *congdonii*	R	none	1B	N
most beautiful jewelflower	*Streptanthus albidus* ssp. *peramoenus*	R	none	1B	N
Invertebrates					
*	*Helminthoglypta nickliniana bridgesi*	SC	none	none	N
California brackishwater snail	*Tryonia imitator*	SC	none	none	N
Amphibians					
foothill yellow-legged frog	*Rana boylii*	SC	CSC	none	Y
Reptiles					
northwestern pond turtle	*Clemmys marmorata marmorata*	SC	CSC	none	N
southwestern pond turtle	*Clemmys marmorata pallida*	SC	CSC	none	N
Birds					
sharp-shinned hawk (nesting)	*Accipiter striatus*	none	CSC	none	Y
Cooper's hawk (nesting)	*Accipiter cooperi*	none	CSC	none	Y
golden eagle (nesting/wintering)	*Aquila chryseatos*	none	CSC	none	Y
northern harrier (nesting)	*Circus cyaneus*	none	CSC	none	Y
black-shouldered kite (nesting)	*Elanus caeruleus*	none	CSC	none	Y
osprey (nesting)	*Pandion haliaetus*	none	CSC	none	Y
short-eared owl (nesting)	*Asio flammeus*	none	CSC	none	Y
long-eared owl (nesting)	*Asio otus*	none	CSC	none	Y
burrowing owl (burrow sites)	*Athene cunicularia*	SC	CSC	none	Y
yellow warbler (nesting)	*Dendroica petechia brewsteri*	none	CSC	none	Y
tricolored blackbird	*Agelius tricolor*	SC	CSC	none	N
loggerhead shrike	*Lanius ludovicianus*	none	CSC	none	Y
Alameda song sparrow	*Melospiza melodia pusillula*	SC	CSC	none	Y
Mammals					
greater western mastiff bat	*Eumops perotis californicus*	SC	CSC	none	Y
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectans*	SC	CSC	none	Y
Pacific western big-eared bat	*Plecotus townsendii townsendii*	SC	CSC	none	Y

[1] The vicinity of NMCO is defined in this study as the area contained within the Oakland East, Las Trampas, and San Leandro 7.5 minute U.S. Geological Survey quadrangle maps.

Notes: * no common name is available for this species

Federal Status
R = Taxa for which available information does not support issuance of a proposed listing (formerly C1)
SC = Species of concern (formerly C2)

State Status
CSC = California species of special concern

CNPS Status
1B = Plants rare, threatened, or endangered in California and elsewhere
4 = Plants of limited distribution

Habitat at NMCO?
Y = Yes
N = No

Sources: California Department of Fish and Game 1994a; 1994b; 1994c; 1995a; 1995b and U.S. Fish and Wildlife Service 1993a; 1993b; 1994a; 1994b; 1994c

Plants

Two endangered or threatened plants and seven other sensitive plant species were identified as having the potential to exist on the site. Each is presented in the survey report in Appendix B (Volume II) along with a discussion of the likelihood for its presence on-site. In accordance with policy of the Sacramento field office of the USFWS, Category 2 species are included in Table 3-14 as species of concern (Knight 1996). The Sensitive Species Survey in Appendix B was written prior to Federal Register publication and includes the previous designations as a comparison for changes.

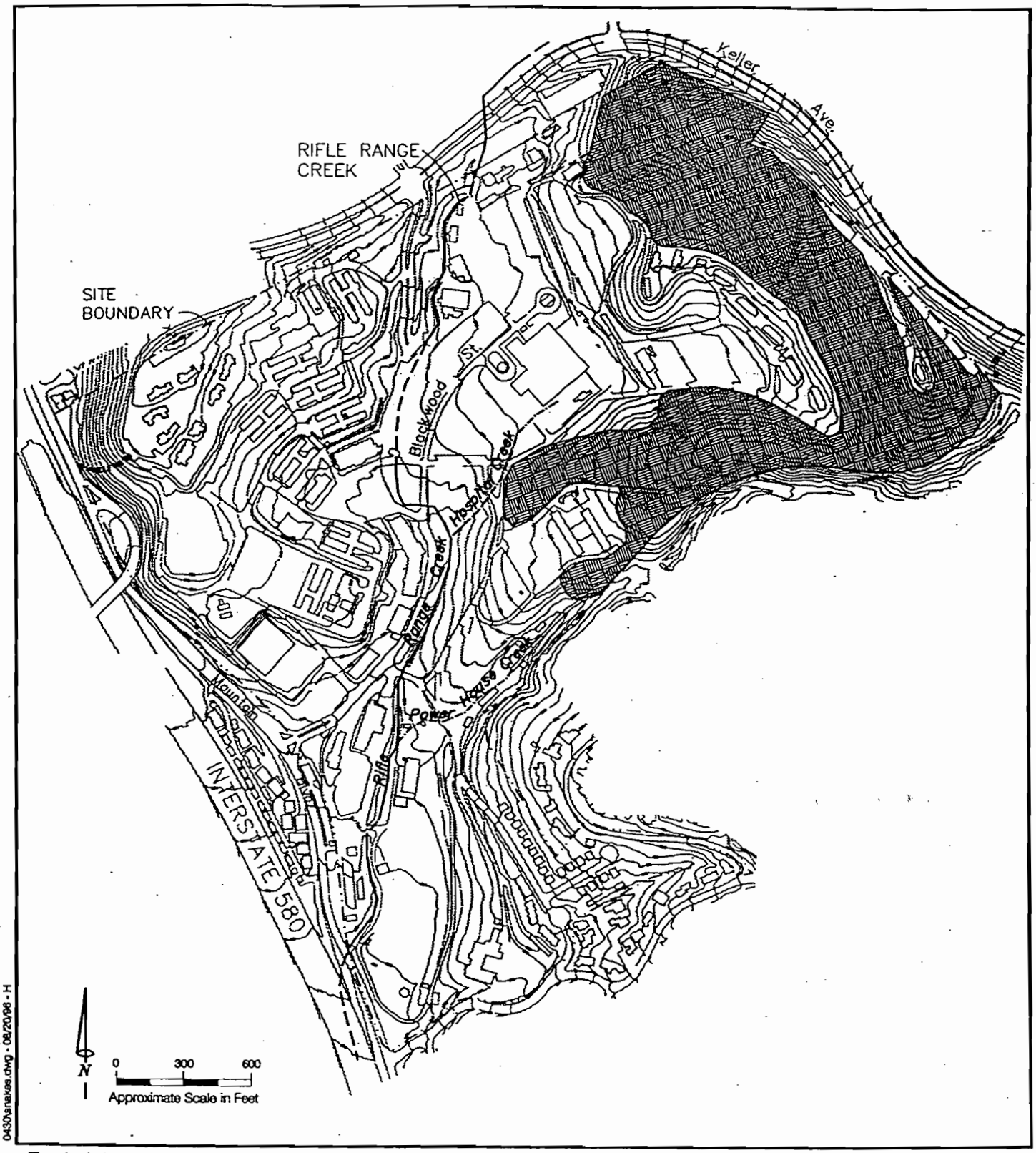
One sensitive plant (Table 3-14) was determined to exist on the site, and none of the other are likely to inhabit NMCO because suitable habitat is not present on the site. The Oakland star-tulip (*Calochortus umbellatus*), a California Native Plant Society List 4 species not previously recorded at the facility, was detected during the 1995 survey.

Animals

Five endangered, threatened, and candidate animal species were identified in the 1995 as potentially existing on the facility. Each is presented in the survey report in Appendix B (Volume II) along with a discussion of the likelihood for its presence on-site. The Alameda whipsnake (proposed endangered) was the only endangered or threatened animal species that could have inhabited the site based on available habitat.

The Alameda whipsnake (*Masticophis lateralis euryxanthus*) inhabits south-facing stands of northern coastal shrub dominated by sage (*Salvia* sp.); chaparral areas dominated by chemise (*Adenostema fasciculatum*), manzanita (*Arctostaphylos* sp.), and poison oak; or grasslands within adjacent northern coastal scrub. This species primarily feeds on western fence lizards. The closest known location of this species, recorded in 1990, is less than five miles northeast of the site (California Department of Fish and Game 1995a). Subsequent surveying for the Alameda whipsnake (Figure 3-11) confirmed, according to surveying methods approved by the California Department of Fish and Game, that no whipsnakes were present. Appendix F (Volume II) summarizes the results of that survey. Due to the small amount of habitat present, the isolation of that habitat by surrounding development, and the fact that no Alameda whipsnakes were captured or observed during the survey, no Alameda whipsnakes are likely to occur at NMCO.

Twenty-one other sensitive species (Table 3-14) were determined to have the potential to exist on the facility. Of these, the foothill yellow-legged frog(*Rana boylii*) may exist in the riparian areas. The sharp-shinned hawk



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The shaded area was officially surveyed for Alameda Whipsnake in April-July, 1996. None were found.

Legend:

Area Surveyed for Alameda Whipsnake Habitat Potential

Creek

Developed by Tetra Tech

Area Surveyed for the Alameda Whipsnake

Naval Medical Center Oakland

Figure 3-11

(*Accipiter striatus*), golden eagle (*Aquila chryseatos*), northern harrier (*Circus cyaneus*), black-shouldered kite (*Elanus caeruleus*), and loggerhead shrike (*Lanius ludovicianus*) may use the native habitats on the facility for foraging and nesting. Additionally, field surveys detected the presence of the Cooper's hawk (*Accipiter cooperi*) and yellow warbler (*Dendroica petechia brewsteri*) in the riparian areas surrounding Rifle Range Creek and its tributaries. A burrowing owl (*Athene cunicularia*) was observed near the grasslands in the eastern part of the site. These species had not been recorded previously at the site.

3.6.5 Sensitive Habitats

Riparian corridors and streambeds are important resources to most wildlife species, providing water, cover, nesting habitat, and foraging habitat. Rifle Range Creek is generally a perennial creek that becomes intermittent during times of drought. Water was present in the creek at the time of the early spring 1995 survey. Water depth ranged from approximately six inches to three feet and flowed at a fairly rapid pace along most of the creek corridor on the facility. Large sections of the creek pass through culverts under streets and parking lots.

The riparian corridor surrounding Rifle Range Creek and the small tributaries encompasses approximately seven acres. The vegetation in this area is dominated by white alder, willows (*Salix* sp.), California blackberry (*Rubus ursinus*), Lombardy poplar (*Populas nigra*), coast live oak, poison oak, and horsetail (*Equisetum* sp.).

The National Wetlands Inventory Map for the area depicts Rifle Range Creek as a seasonally flooded scrub-shrub wetland (National Wetlands Inventory 1985). No other wetlands are shown within the region of influence.

3.6.6 Applicable Regulations

Federal Endangered Species Act

Federal law directs that all federal agencies and departments use their authority to preserve endangered and threatened species under the guidance of the Endangered Species Act (16 USC 1531 et seq).

The federal Endangered Species Act requires that the USFWS issue a permit prior to actions that would result in the killing, harming, or harassing of a federally-listed endangered or threatened species. This permit process is directed under Section 7 of the Endangered Species Act for actions in which a federal agency is involved and in a similar process under Section 10a of the

Endangered Species Act for state and local agencies, as well as for individuals. Federal agencies are required to consult with the USFWS (or National Marine Fisheries Service for some species) prior to undertaking actions that may affect endangered species. A federal agency is required to obtain a biological opinion from the USFWS on whether its actions may jeopardize the continued existence of any threatened or endangered species. The biological opinion is normally issued after the USFWS reviews the draft environmental document. Federal agencies are prohibited from enacting activities that would jeopardize the continued existence of these species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 U.S.C. §§ 703-712) prohibits the taking of individuals, nests, or eggs of a migratory bird species without permits. Migratory birds pass through NMCO during the spring and fall, and some songbirds nest at NMCO.

Clean Water Act

The U.S. Army Corps of Engineers regulates impacts to wetlands under Section 404 of the Clean Water Act (33 U.S.C. §§ 1251-1387) . Wetlands are considered important to the public interest in that they perform significant biological functions, such as providing nesting, breeding, foraging, and spawning habitat for a wide variety of resident and migratory animal species (Corps of Engineers Regulatory Program Regulations, 33 CFR 320.4). Projects that include potential dredge or fill impacts to wetlands must be reviewed by the U.S. Army Corps of Engineers and Environmental Protection Agency under the Clean Water Act.

California Endangered Species Act

California provides procedures similar to the federal Endangered Species Act for nonfederal projects under the California Endangered Species Act, California Fish and Game Code (§ 2090 et seq.). For example, the CDFG can adopt a federal biological opinion as a state biological opinion under California Fish and Game Code Section 2095. Upon disposal of NMCO out of federal ownership it would be subject to these state regulations.

CDFG Wetlands Policies

The CDFG has the authority to reach an agreement with an individual proposing to affect intermittent or permanent streams and other wetlands pursuant to Section 1603 of the California Fish and Game Code. The CDFG generally evaluates the information gathered during preparation of the environmental assessment document and attempts to satisfy its concerns

during the CEQA process. In accordance with its policy of no net loss of wetlands habitat, the CDFG encourages completion of a streambed alteration agreement, which includes a mitigation program for impacts to all wetlands, regardless of acreage.

City of Oakland Tree Ordinance (Article 6, Section 7-6)

This City of Oakland Tree Ordinance ordinance defines those trees that are protected by the city and that require a permit for removal. Protected trees include coast live oaks in diameter at 4.5 feet above ground level larger than four inches and other trees larger than nine inches, except Monterey pines and eucalyptus. Monterey pines are protected on city property if more than five trees per acre are proposed to be removed. Eucalyptus trees are not protected.

Appendix E (Volume II) is a tree study that was conducted to estimate trees protected under this ordinance at NMCO. The results of this study are also recorded under the discussion of applicable vegetation communities (Section 3.6.2). The numbers of protected trees presented in the results section are estimates based on samples taken in the field. They do not represent the exact numbers or variety of species that are found at NMCO. When a precise site plan for development of the area is presented to the City, a tree removal permit would have to obtained for any protected trees that are to be removed. The applicant would have to conduct a survey of which trees would be removed and their diameter at breast height (dbh) and all other requirements of the ordinance. Tree removal can occur to ensure public health and safety, to take advantage of views, as discussed in the Oakland View Protection Ordinance, or for acceptable landscaping or forestry management reasons.

3.7 WATER RESOURCES

This section describes water resources at Naval Medical Center Oakland (NMCO). The region of influence (ROI) considered for water resources includes the NMCO property. Under this definition, any off-property impacts that may occur are considered to be indirect or cumulative impacts. Water resources include permanent and ephemeral surface water bodies and ground water. This section describes the occurrence, quantity, and quality of water resources, and the regulations that apply to the management of water resources. It provides the basis for discussion of impacts associated with water resources.

3.7.1 Surface Water

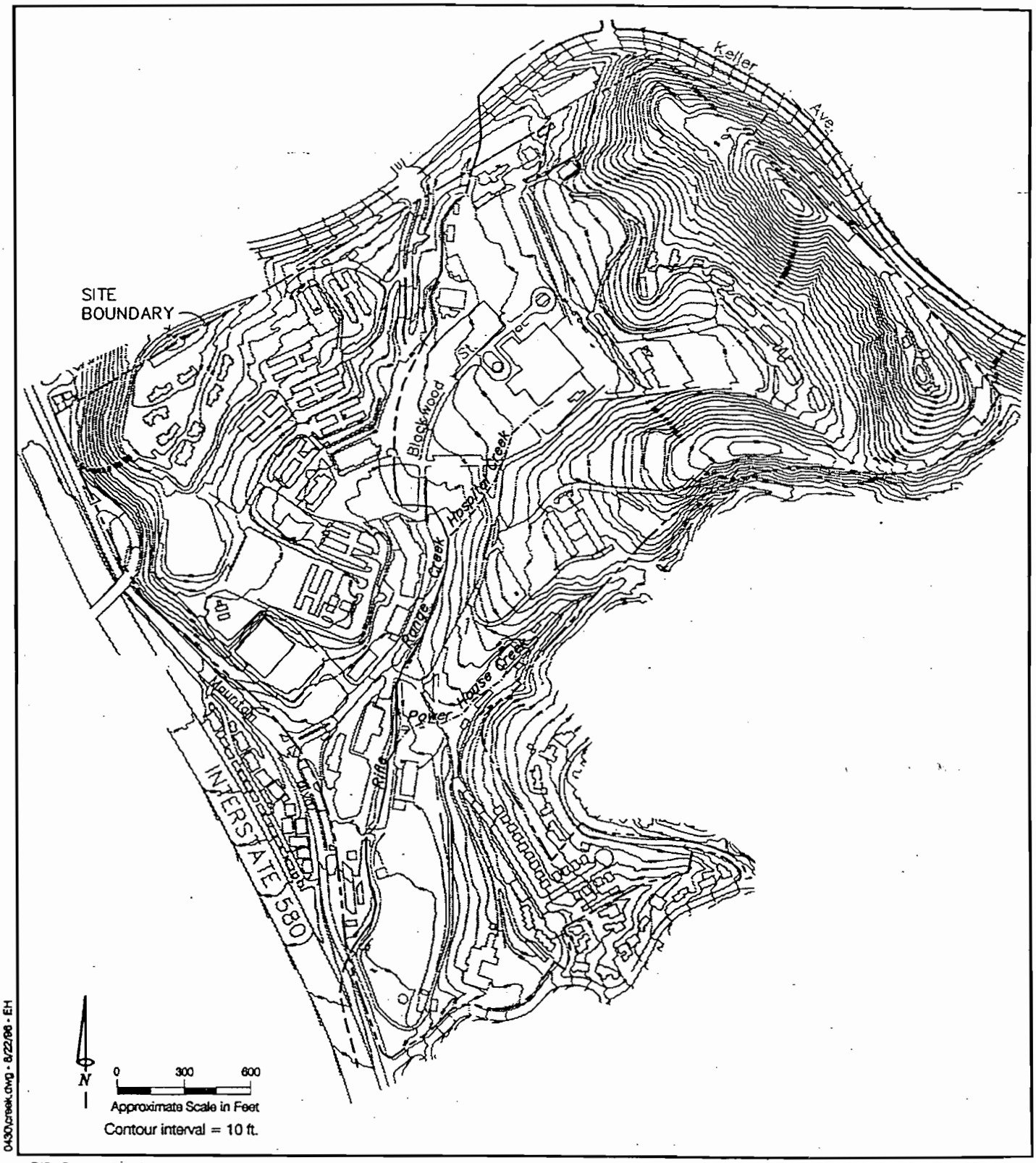
Surface Water Features

The primary surface water feature on NMCO is Rifle Range Creek, a tributary of Arroyo Viejo. Rifle Range Creek starts near Skyline Boulevard, about 1.5 miles north of NMCO, and drains a roughly 850-acre watershed, containing the Leona Regional Open Space, before entering the NMCO property near the north gate on Keller Avenue. It is ephemeral upstream of the installation, becoming perennial on NMCO. It drains all but a small portion of the northwest corner of NMCO. It merges near the center of the installation with two intermittent tributaries, Hospital Creek and Power House Creek, that drain the east side of NMCO. These streams are shown on Figure 3-12. Rifle Range Creek exits NMCO near the main entrance and flows along the southwest boundary of NMCO before joining Country Club Creek about 1,000 feet south of the installation. The combined stream is called Arroyo Viejo. Arroyo Viejo crosses I-580 at Golf Links Road and flows briefly northwest along the lineament of the Hayward Fault before turning southwest toward San Leandro Bay near Castlemont High School. It ultimately drains to the bay near the Oakland Coliseum.

The area near NMCO receives an average of about 18 inches of rainfall annually, most of which falls between October and April. Resulting runoff flows either directly into the natural drainage or is directed to the stormwater system. It is then discharged to Rifle Range Creek.

Surface Water Quality

There is little available data regarding surface water quality. Storm water runoff from portions of NMCO can become contaminated through washing of contaminants (mostly oil and grease) from roadways and parking lots.



Rifle Range Creek runs north to south through NMCO with two small intermittent tributaries, Hospital Creek and Powerhouse Creek, to the east.

Legend:

- Creek
- Intermittent Tributaries
- Underground Streams

Source: Theresa Hughes & Associates 1995

Surface Water

Naval Medical Center Oakland

Figure 3-12

Typically, the maximum contamination of runoff is associated with the first storms of the rainy season. The Alameda County Public Works Department has sampled water in Rifle Range Creek for selected inorganic water quality parameters in 1980 and 1986 (Godfrey 1995). The water samples were not analyzed for organic compounds. In all of the samples collected, the pH was approximately neutral to slightly basic, indicating that the water was not noteably impacted by sulfide minerals in the Leona rhyolite. None of the other water quality indicators exceeded state or federal secondary drinking water quality standards.

3.7.2 Ground Water

Ground water is defined as water found in soil or rock formations. Ground water basins are soil or geologic features within which stored ground water is interconnected and functions as a hydrologic unit. The term aquifer refers to a water-bearing permeable geologic unit that is capable of yielding important amounts of water to wells. What constitutes an important amount of water depends on the context. Less permeable water-bearing units are termed aquitards, if ground water moves through them very slowly, or aquicludes, if they present a barrier to ground water flow.

NMCO lies within the East Bay Plain subbasin of the Santa Clara Valley basin (San Francisco Regional Water Quality Control Board 1986). The following information is compiled from geotechnical reports made at selected locations on the NMCO property. It indicates that the ground water table at NMCO is highly variable, with levels ranging from less than 10 feet to over 40 feet below the surface.

In 1957, Woodward-Clyde Consultants (Oak Knoll Affiliates 1957) performed a field investigation of the site of the proposed hospital building (Building #500). Eight deep borings to depths between 30 and 95 feet and 35 shallow borings to depths of up to 15 feet were drilled within an area of about 20 acres surrounding the proposed hospital site. Water levels in four of the borings near the west end of the proposed hospital were observed in the range of 13 to 17 feet below the ground surface (bgs), while water levels in two borings at the east end of the building were 28 and 43 feet bgs.

In 1974, during construction of the foundation for a new mechanical and electrical building near the east end of the hospital building, ground water levels were observed at depths of 5 to 15 feet bgs. Four dewatering wells were installed and pumped to remove ground water during excavation of the foundation. The combined sustainable yield from the wells was estimated to be 50 gallons per minute (gpm) by Woodward-Clyde Consultants (1975).

A 1975 report (U.S. Navy 1975) concluded that ground water was at depths below the limit of excavation for the mechanical and electrical building. Two springs were observed in the hillside southeast and upslope of the construction site. Surface flow was observed in the drainage swale north of San Leandro Street.

In 1983, four deep geotechnical exploration borings were drilled to depths of 75 to 102 feet below ground surface (bgs) in preparation for construction of buttresses for seismic retrofit of the hospital building (Degenkolb Engineers 1984). The water level in the borings near the southwest buttress was observed at 38 feet bgs; that in the northeast boring was at 10 feet bgs; and the water level in the southeast boring was at 8 feet bgs. No water level was recorded in the northwest boring.

There are two domestic water wells on the base (Rogers 1995). One of the wells is considered to be active and is located in structure #125, directly across Blackwood Street from Exchange Building #38. This well is more than 200 feet deep and is equipped with a submersible pump that was installed approximately six years ago. Although the yield of the well is not known, it was probably considerable since the well was used in the past to irrigate lawns and soccer fields. The second well is capped. It is located adjacent to Building #13, the Public Works Center paint shop. No information was available concerning the construction of this well, but it is thought to be similar to the active well. The wells may have been constructed in the 1950s (Faris 1995). No geologic logs are known to be available for these wells.

3.7.3 Water Supply and Demand

In the past, NMCO has relied for some of its irrigation requirements on the two ground water wells described in Section 3.7.2. All water currently used on the site is supplied by East Bay Municipal Utility District (Douchand 1995).

3.7.4 Flood Hazards

No floodplains have been identified by the Federal Emergency Management Agency within the NMCO boundary (Federal Emergency Management Agency 1982). However, Rifle Range Creek has reportedly been observed to overflow its banks in some low-lying areas for periods lasting a few hours during heavy rains (U.S. Navy 1990d).

According to the Alameda County Public Works Department, which has responsibility for flood control in the area, the storm water conveyances downstream of NMCO are not capable of handling a 25-year storm event or

larger (Saleh 1995). Upgrading the system to enlarge culverts or channels will be costly. Flooding occurs downstream of the NMCO property, both in the reach of Rifle Range Creek above Arroyo Viejo and in Arroyo Viejo below the confluence of Rifle Range Creek and Country Club Creek, because the watersheds upstream provide relatively little storage capacity.

3.7.5 Regulatory Considerations

Federal

Water quality in surface water bodies, including Rifle Range Creek, is subject to the Federal Clean Water Act. As part of that act, the National Pollution Discharge Elimination System program was developed to control and reduce pollutants to water bodies from point and nonpoint discharges from both industrial and stormwater sources. In the Bay Area, the program is implemented by the San Francisco Bay Regional Water Quality Control Board (RWQCB), a state agency.

State of California

Pursuant to Section 319 of the Clean Water Act, the state has the lead role in identifying and controlling nonpoint sources of pollution. The RWQCB implements the National Pollution Discharge Elimination System program through the issuance of permits for construction and industrial discharges. A notice of intent to join the state's general permit must be filed with the State Water Resources Control Board prior to the commencement of construction. The general permit requires dischargers associated with construction activities to eliminate nonstormwater discharges to stormwater systems and other waters of the state; to develop and implement a stormwater pollution prevention plan; and to perform monitoring of discharges to stormwater systems. The stormwater pollution prevention plan must include best management practices for source reduction and treatment of the discharge, if necessary. Best management practices may include sediment fences, contouring, and construction of retention ponds.

The RWQCB also regulates water quality in accordance with state laws and policies identified in the San Francisco Basin Plan. The basin plan identifies beneficial uses of surface and ground waters, wetlands, and marshes and sets forth water quality objectives to protect the beneficial uses. Beneficial uses of the inland surface waters at NMCO have not been designated by the RWQCB. Existing beneficial uses include ground water recharge and wildlife habitat. The related water quality objectives specify that the presence or concentration of constituents, including floating, suspended, or settleable materials, oil and grease, biostimulatory substances, sediment,

bacterial and toxic substances, among others, shall not cause a nuisance or adversely affect beneficial uses.

Section 24400 (e) of the California Health and Safety Code, administered by the California Department of Water Resources, requires that permanently inactive wells be destroyed in accordance with appropriate standards. A permanently inactive well is a well that has not been used for one year, unless the owner demonstrates an intent for future use of the well. The owner must maintain the well so that the quality of water in the well or ground water encountered by the well is not impaired, the well is not a safety hazard, and it can be easily identified as a well.

City of Oakland

The City of Oakland Storm Water Management and Discharge Control Ordinance (Ordinance 11590, June 1, 1993) prohibits nonstormwater discharges or increases in flow that would result in or contribute to a violation of the state of California general nonpoint source National Pollution Discharge Elimination System permit for stormwater and requires that best management practices be implemented to prevent nonstormwater discharges to waters of the state. The ordinance requires a permit to perform certain types of work in or near a stream.

In addition to the state nonpoint stormwater permit requirements, site grading activities are covered by City of Oakland Ordinance 10312 (January 18, 1983) and supplemental ordinance 10446 (March 13, 1984). Ordinance 10312 addresses grading and excavation activities on greater than 20 percent slopes or where more than five cubic yards of soil are disturbed. Ordinance 10446 applies to any activity that disturbs existing soil. Both ordinances require that interim and permanent measures be taken to control erosion and prevent sedimentation.

3.8 GEOLOGY AND SOILS

This section discusses the geologic setting of Naval Medical Center Oakland (NMCO). Seismicity and slope stability are discussed in detail because they represent potential geologic hazards to reuse and development of NMCO. The region of influence (ROI) for soils and geologic resources includes lands within the property boundaries of NMCO, adjacent contiguous land, the underlying geologic formations, and regional faults. Regional geologic features are discussed because some geologic conditions and processes may occur outside the NMCO boundaries but may impact NMCO.

3.8.1 Regional and Site Geology

Physiography

NMCO is located within California's central Coast Ranges. The dominant geological processes that have shaped the landscape in the vicinity of NMCO are uplift of the East Bay Hills and right-lateral strike-slip faulting associated with the Hayward Fault and other active faults of the San Andreas Fault system. The terrain in the vicinity of NMCO includes linear ridges and valleys and stream channels that are offset where they cross faults. Relative relief (difference between highest and lowest points) on the NMCO property is about 440 feet, with elevations ranging between about 240 feet on the Rifle Range Branch of Arroyo Viejo near the McArthur Freeway to about 680 feet at the summit of Admiral's Hill on the northeast corner of NMCO.

Regional Geology

Bay Area geology is dominated by the San Andreas Fault system, which includes the San Andreas Fault, the San Gregorio Fault, the Hayward Fault, the Calaveras Fault, and others that have been active for about 30 million years (Wallace 1990).

East of the Hayward Fault, the Franciscan marine cherts, sandstone, and volcanic rock are overlain by the Coast Range ophiolite. The ophiolite is overlain in turn by continental sedimentary rocks of the Great Valley sequence (Irwin 1990).

The oldest formation in the Great Valley sequence is the Knoxville formation, which consists of sandstone, shale, and conglomerate. These sediments are about 140 years old and may have been deposited at about the same time as sediments found in the Franciscan assemblage (Page 1966). Knoxville formation rocks are exposed in the watershed of the Country Club Branch of Arroyo Viejo south of NMCO (Radbruch 1969). Strata

belonging to the Great Valley sequence, upturned by folding, are exposed in the hills east of NMCO. The Leona rhyolite, which rests directly on Franciscan rocks at NMCO, is a volcanic rock with a composition similar to granite. It is currently thought to be at least 125 million years old but may be older (Jones et. al. 1991). Leona rhyolite is quarried as a construction material and has been mined for its pyrite.

Overlying the Great Valley sequence are consolidated Tertiary sedimentary and volcanic rocks (less than 65 million years old). There are no Tertiary rocks in the immediate vicinity of NMCO.

Unconsolidated sediments, less than about two million years old, cover most of the East Bay Plain and extend into stream channels at the base of the foothills. In the East Bay Hills, the unconsolidated materials consist primarily of younger erosional materials recently deposited at the bases of the hillslopes.

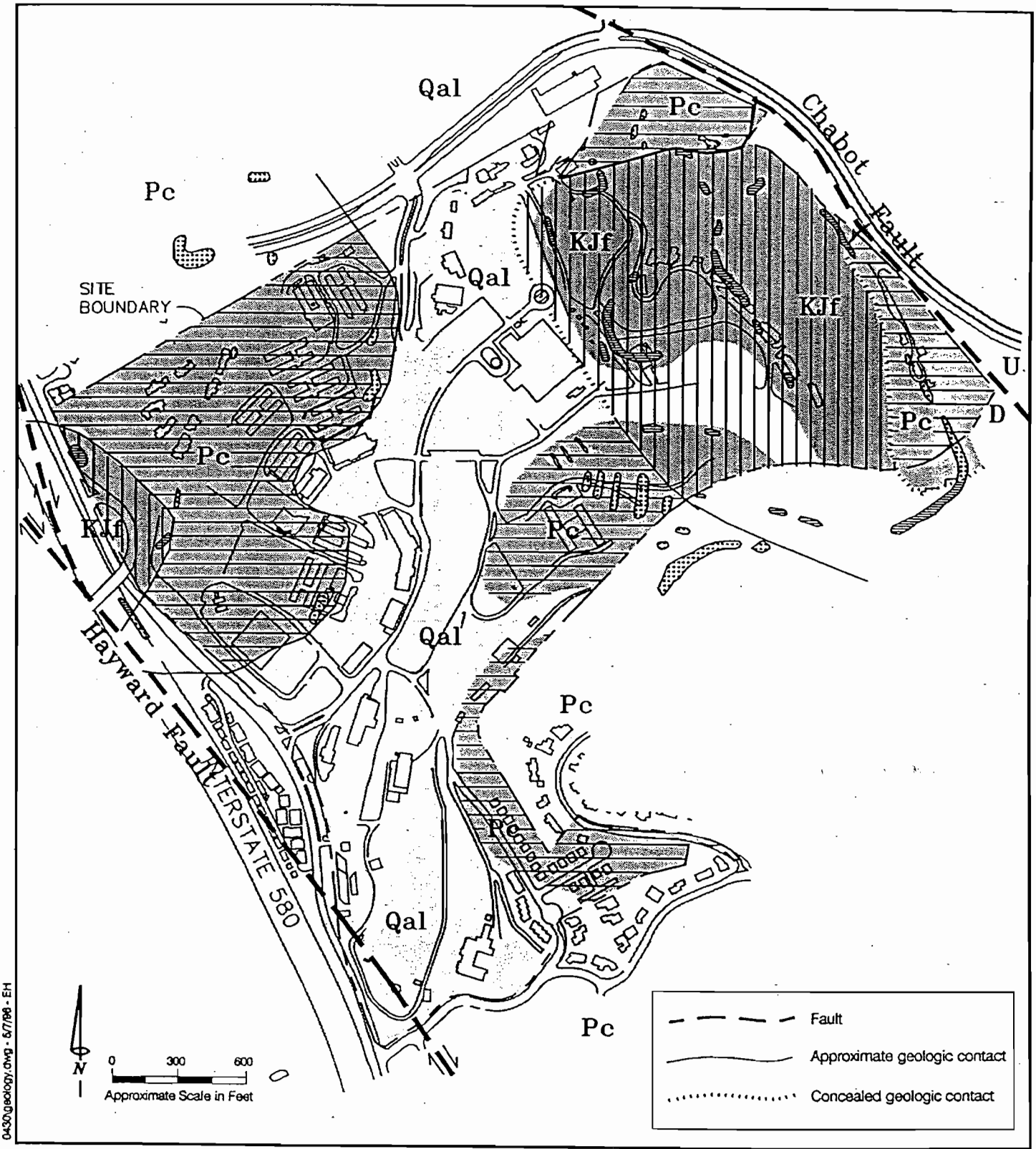
Site Geology

Figure 3-13 shows the surface geology at NMCO. NMCO is bounded on the west by an inactive trace of the Hayward Fault and on the east by the inactive trace of the Chabot Fault. Most of the bedrock exposed on the NMCO property is Leona rhyolite, which overlies rocks belonging to the Franciscan assemblage. Franciscan assemblage rocks are exposed on Admiral's Hill in the eastern portion of NMCO and beneath the heliport at the west side of NMCO.

The center of NMCO is underlain by Quaternary alluvium and colluvium. These are geologically young deposits resulting from erosion of the surrounding hills during the past 1.8 million years. Based on borings drilled throughout NMCO, the unconsolidated deposits range from a few feet thick on the margins to greater than 100 feet thick beneath the hospital building.

3.8.2 Regional Seismicity

NMCO lies within the regional San Andreas Fault system. In the San Francisco Bay Area, the San Andreas Fault system stretches across a zone approximately 44 miles wide, consisting of mostly right-lateral strike-slip faults (Wallace 1990). (The two sides of a strike-slip fault slip past each other in the direction of the trace of the fault, without much relative vertical displacement. Strike-slip faults are called right-lateral if, to a person standing on one side of the fault and facing the other, the opposite side would appear to be moving to the right.) The principal active faults in the San Andreas



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The Hayward Fault borders NMCO. Site geology is dominated by quaternary alluvium, residual soil, outcrops, and associated rock types.

LEGEND:

- Qal — Qauternary alluvium of undetermined thickness
- Pc — Residual soil believed to be underlain by Pliocene Rhyolite
- KJf — Residual soil believed to be underlain by Greenstone of Franciscan Age
- Outcrop-Pliocene Rhyolite
- Outcrop-Franciscan Greenstone and associated rock types

Sources: URS, Blume Assoc. 1974

Site Geology

Naval Medical Center Oakland

Figure 3-13

Fault system include the San Andreas, San Gregorio, Hayward, Rogers Creek, West Napa, Calaveras, Concord, and Green Valley Faults (Jenning 1994; Bortugno 1982). These faults are shown on Figure 3-14.

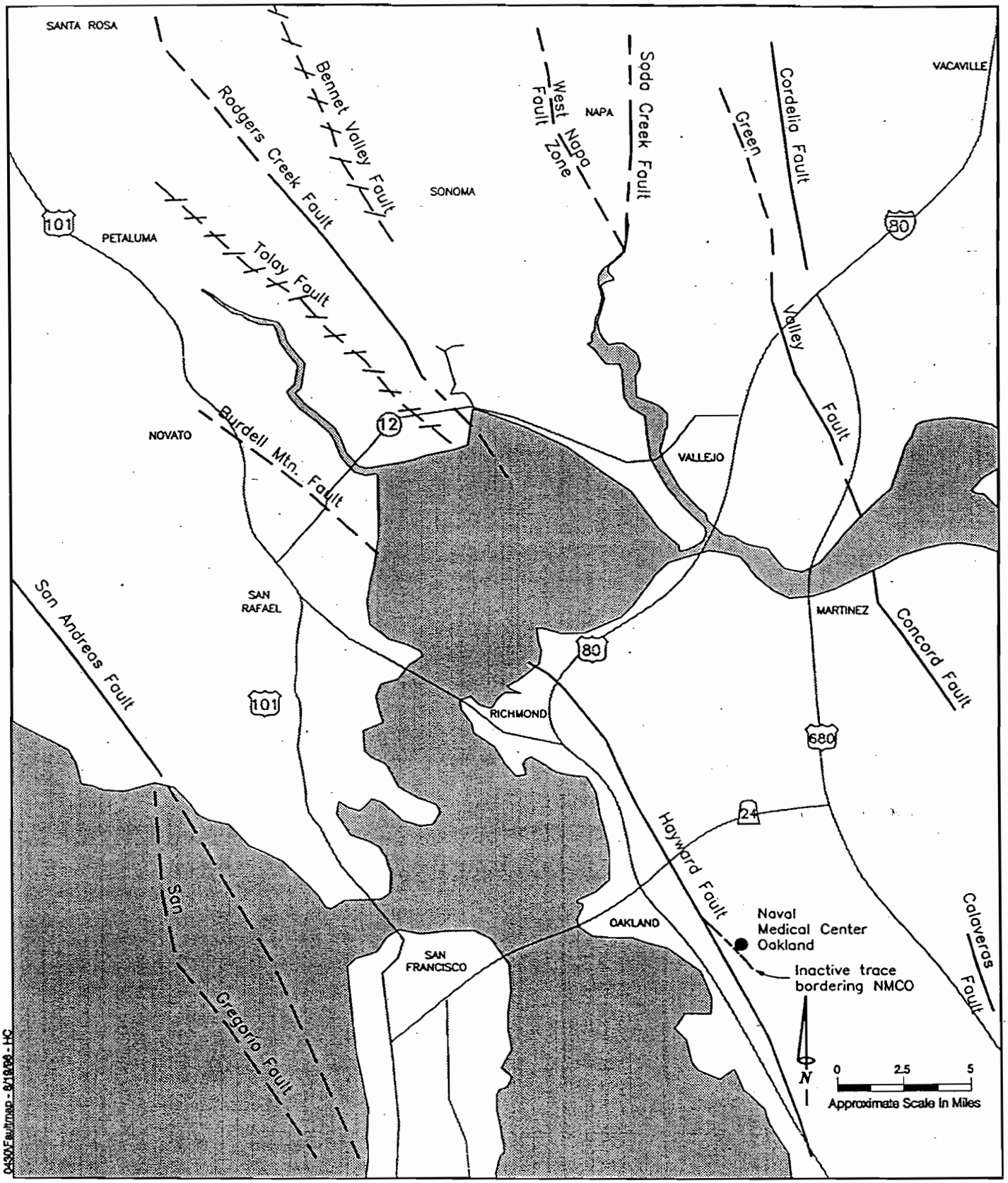
An active fault is defined by the California Division of Mines and Geology (Hart 1992) as a fault that has "had surface displacement within Holocene time (about the last 11,000 years)." In general, it is believed that future earthquakes are more likely to occur on recently active faults than on faults that have not been recently active. In California, special restrictions apply to construction within "fault-rupture hazard zones," defined by the Division of Mines and Geology under the Alquist-Priolo Special Studies Zones Act of 1972, to prevent developments and structures for human occupancy across the trace of active faults. As a rule, fault-rupture hazard zones are positioned about 500 feet away from major active faults and about 200 to 300 feet away from well-defined minor faults (Hart 1992).

The last major earthquake along the Hayward fault was in 1868. It is estimated that the recurrence interval for an earthquake of that size is about 130 ± 60 years (Lienkaemper and Borchardt 1992).

Earthquake magnitude (expressed in the Richter scale) is a measure of the amount of energy released at the origin of an earthquake within the earth's crust. Each integer increase in magnitude represents a ten-fold increase in energy. The potential magnitude of an earthquake is thought to increase with the length of the fault. Therefore, the largest earthquakes are expected to occur on long faults, such as the San Andreas, Hayward, and Rogers Creek Faults.

Incorporating data from the Loma Prieta earthquake of October 17, 1989, the Working Group on California Earthquake Probabilities estimates the probability of one or more large earthquakes (magnitude 7.0 or greater) on the San Andreas, Hayward, or Rogers Creek Faults during the next 30 years at 67 percent (Working Group on California Earthquake Probabilities 1990). Since the probability of earthquakes on other active faults was not included in this estimate, the 67 percent probability is considered to be a minimum probability for damaging earthquakes in the Bay Area. The Working Group on California Earthquake Probabilities estimated the probability of a magnitude 7.0 or greater earthquake on the northern segment of the Hayward Fault at 28 percent in the next 30 years.

Earthquake intensity is an expression of the amount of ground shaking during an earthquake. The Mercali intensity scale is based on observations such as the degree of damage to structures. Intensity depends on factors such as the distance from the origin of the earthquake, and the nature of the



NMCO lies within the regional San Andreas Fault system. The principal active faults closest to NMCO include the Hayward Concord and Calaveras faults.

LEGEND:

- Active Fault. Fault has evidence of surface displacement within the last 11,000 years.
- Active Fault concealed.
- Potentially Active Fault. Fault has evidence of surface displacement within the last 2 million years.
- Potentially Active Fault concealed.

Source: Bortugno 1982

Major Regional Faults

Naval Medical Center Oakland

Figure 3-14

geologic materials at the location where the earthquake is felt. Generally, bedrock shakes the least, and loose saturated materials shake more violently because seismic waves are amplified by these materials.

Damage to structures depends not only on the intensity and duration of an earthquake but also on how the structure is built and the direction of travel of seismic waves relative to the orientation of the structure. The proximity of NMCO to major earthquake faults means that seismic energy will be little attenuated (lessened) should an earthquake occur on a segment of one of the active faults near NMCO.

3.8.3 Local Seismicity

Active Faults

No active faults have been identified on the NMCO property. An inactive trace borders the NMCO site (Figure 3-13). The nearest active trace of the Hayward Fault is located approximately 1.5 miles west of the property. The Chabot Fault, along the eastern boundary of the property, is considered to be inactive (Radbruch 1969). Although a report by Woodward, Clyde, Sherard & Associates (1966) suggested the possibility that a trace of the Hayward Fault located along the western boundary of NMCO might be active, further evaluation has not revealed evidence of recent activity (Engeo 1979), and the California Division of Mines and Geology (Smith 1980) has removed this trace from its list of active faults.

Earthquake Magnitudes and Intensity of Ground Shaking

A recent report prepared by the Association of Bay Area Governments (Association of Bay Area Governments 1995; Perkins and Boatwright 1995), indicates that the amplification of seismic waves in geologic materials at NMCO would range from low on hillslopes underlain by bedrock, to high at locations underlain by thick alluvial sediments. The report by the Association of Bay Area Governments (1995) shows that the most damaging earthquake at NMCO would be one originating on the northern portion of the Hayward Fault. The intensity of ground shaking at NMCO, in response to an earthquake of magnitude 7.1 on the northern portion of the Hayward Fault, would range from extreme (Mercali intensity X) to moderate (Mercali intensity VIII), depending on the underlying geologic materials. The highest intensities would be felt in the alluvial sediments along the south boundary of NMCO adjacent to Mountain Boulevard and in the center of the NMCO site in the vicinity of the hospital.

A study by URS/Blume & Associates (U.S. Navy 1977) to design a seismic retrofit of the hospital building provides the only site-specific estimate

performed to date of the magnitude of ground shaking at NMCO due to a large earthquake. They calculated ground accelerations expected at the hospital based on maximum credible earthquake (MCE) magnitudes on major regional faults and for a smaller "design" earthquake. Using MCE magnitudes of 8.3, 7.3, and 7.0 on the Richter scale for the San Andreas, Hayward, and Calaveras Faults, respectively, they calculated the resulting ground accelerations by several different methods. The resulting average ground accelerations for all of the methods for each MCE were 0.59g, 0.54g, and 0.42g, respectively, for the San Andreas, Hayward, and Calaveras Faults. (Note that one "g" equals the acceleration of gravity.)

They then calculated the peak ground acceleration for an earthquake with a 10 percent probability of exceedence in 25 years. This smaller earthquake was used as a basis for designing a seismic retrofit to the hospital structure. The objective of the design was to prevent collapse of the hospital building but not necessarily to keep it functioning in the design earthquake (U.S. Navy 1977). The peak acceleration calculated for the smaller design earthquake was 0.29g. The accelerations calculated in the study attempted to account for the amplification of seismic waves in the unconsolidated deposits underlying the hospital.

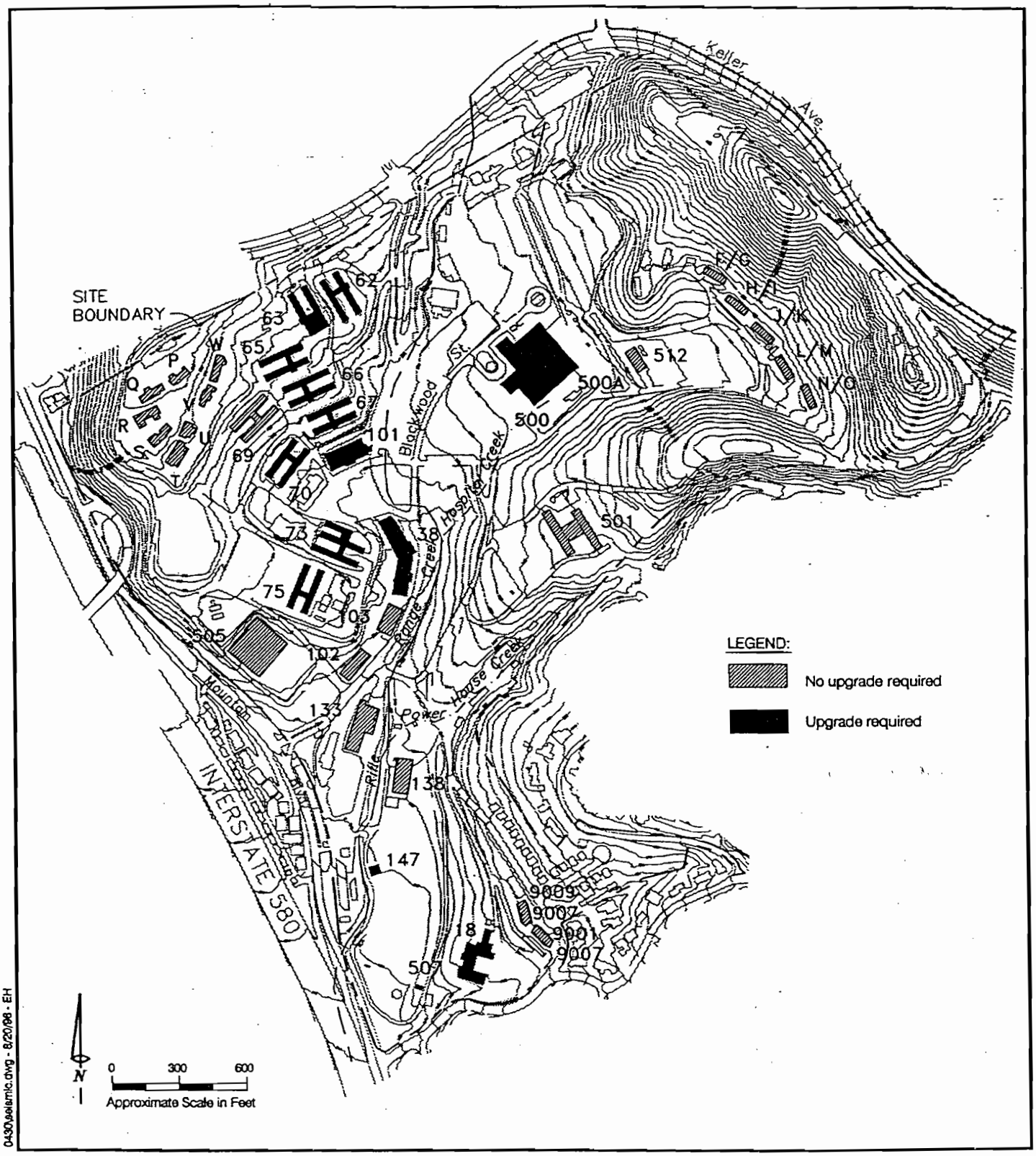
Liquefaction Potential

In a letter report entitled "Geologic Hazards Evaluation, Oak Knoll Naval Medical Center" (Woodward-Clyde Consultants 1995), the principal seismic hazard identified for NMCO was ground shaking. It was concluded that liquefaction potential at NMCO is low due to the presence of cohesive clay-rich soils.

Seismic Studies of Existing Structures

In a recent study prepared for the City of Oakland (Degenkolb Engineers 1995), the hospital building and 35 other buildings were evaluated to determine their life-safety performance during seismic shaking using the methodology recommended by the Federal Emergency Management Administration (FEMA 1995). The buildings were selected for evaluation by the City of Oakland based on prioritization for potential reuse. Figure 3-15 shows the locations and status of the buildings that were evaluated.

The evaluation of the hospital building assumed that it would be subjected to a lateral load 0.137g, in accordance with static evaluation criteria for nonessential structures in the 1994 Uniform Building Code (UBC, International Conference of Building Officials 1994). (Based on data in the



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Fourteen of the 38 structures evaluated for seismic life/safety requirements would require strengthening prior to reuse.

Buildings Evaluated for Seismic Upgrade to Meet Life/Safety Requirements

Naval Medical Center Oakland

Source: Woodward-Clyde 1995

Figure 3-15

URS/Blume & Associates [1977] study, a ground acceleration of 0.137g corresponds to an earthquake with approximately a 45 percent probability of exceedence for a 25-year return period). The hospital building is currently capable of meeting a life-safety standard under a lateral load of 0.095g (Degenkolb Engineers 1995). The hospital building would require major structural reinforcement to meet life-safety criteria for a lateral load of 0.137g. Even at that standard, there would be a 45 percent chance of an earthquake with a ground acceleration exceeding this level in less than 25 years. This standard is far below the UBC standard of 0.4g for this area. Seismic retrofit would be required to reduce life-safety hazards in Building #18, Building #38, the "H-shaped" buildings (except Building #69, which was seismically upgraded in 1993), Building #101, Building #147, and Building #507 (Degenkolb Engineers 1995).

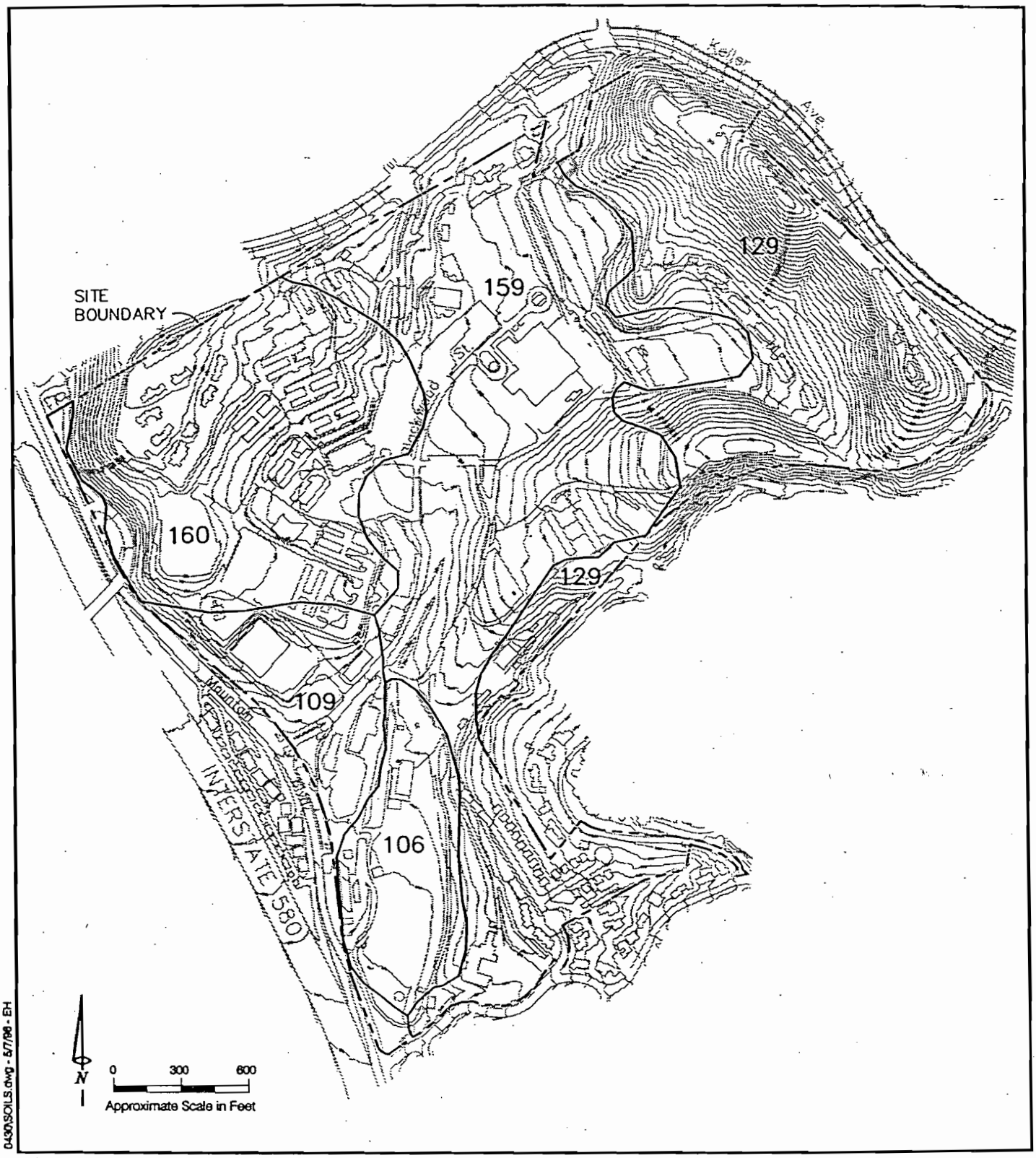
3.8.4 Soils

Soils at NMCO consist mainly of shallow Millsholm loam on steep slopes in combination with Los Osos clay loam and disturbed soils (Xerorthents). Two other soil types also occur on lowlands—Botella loam and Climara clay. Six variations of these soils have been mapped by the U.S. Soil Conservation Service at NMCO (Welch 1981). Figure 3-16 shows the distribution of these soils, and Table 3-15 lists some of the main properties of each soil. Many of the site soils have severe limitations for development due to high shrink-swell potential, steep slopes, low strength, and shallow depth to bedrock.

3.8.5 Slope Stability

Slope stability is related to a combination of factors, including rainfall, geology, steepness of slope, slope orientation, vegetation cover, seismicity, and development. Slope stability concerns include catastrophic slope failure from landslides, debris flows, and debris avalanches, as well as gradual processes, such as creep, earthflow, or erosion. Catastrophic slope failure in susceptible areas may be triggered by seismic events, rainfall, undercutting of slopes by construction activities, and overloading of unstable deposits.

Admiral's Hill has west-facing slopes of up to 50 percent, with steeper slopes facing Admiral's Hill south of San Leandro Street. Thirty percent slopes have been used as the upper bound for development potential in formulating reuse alternatives. Figure 3-17 shows the distribution of slopes greater than 30 percent and locations of existing landslide deposits, based on evaluation of aerial photographs (Theresa Hughes & Associates 1995; Nilsen 1975). One landslide was identified by Nilsen (1975) on a west-facing slope below the ridge crest at the northern corner of NMCO. If accurately identified, this slide apparently developed on a greater than 50 percent slope underlain by Leona rhyolite.



Soils at NMCO include thin silt loams formed on moderate to steep upland slopes, and thicker loams and clay soils in lowlands.

LEGEND:

Soil Unit Boundary

106	Botella Loam, 0-2 percent slopes
109	Climara Clay, 30-50 percent slopes
129	Millsholm Silt Loam, 50-75 percent slopes
159	Xerorthents - Millsholm, 30-50 percent slopes
160	Xerorthents - Millsholm, 50-70 percent slopes

Source: Welch 1981

Site Soil Types

Naval Medical Center Oakland

Figure 3-16

Table 3-15
Properties of Soils at NMCO

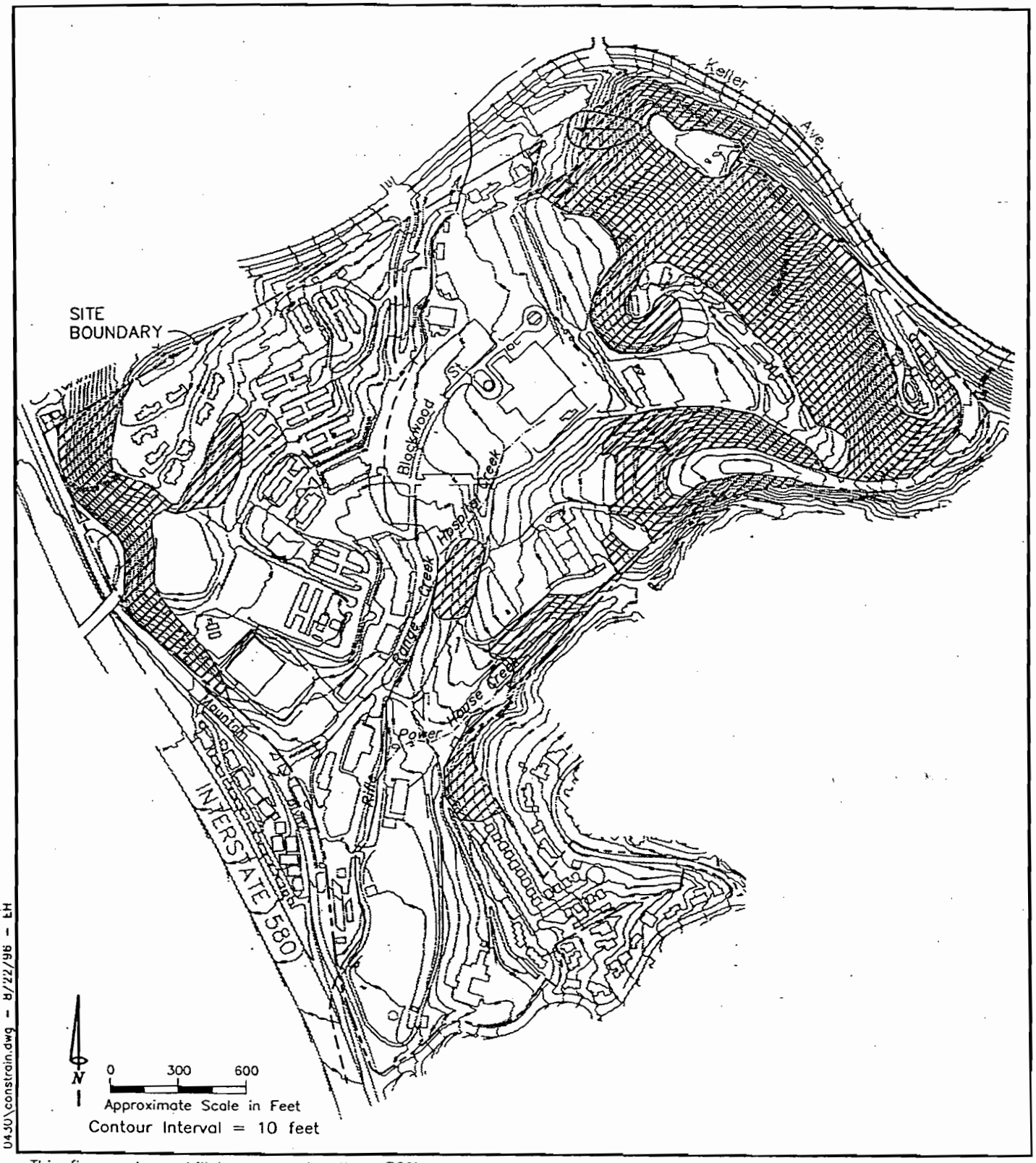
Symbol Used on Map	Soil Name	Depth	Shrink/ Swell Potential	Limitations for Dwelling Site Development	Limitations for Small Commercial Buildings	Limitations for Local Roads and Streets
106	Botella loam, 0-2 percent slopes	60+ inches	Moderate	Moderate: shrink-swell, low strength	Moderate: shrink-swell, low strength	Severe: low strength
109	Climara clay, 30-50 percent slopes	<40 inches	High	Severe: slope, shrink-swell, low strength	Severe: slope, depth to rock, shrink-swell	Severe: slope, shrink-swell, low strength
129	Milsholm silt loam, 50-75 percent slopes	<20 inches	Low	Severe: slope, depth to rock	Severe: slope, depth to rock	Severe: depth to rock, slope
159	Xerorthents-Millsholm complex 30-50 percent slopes	<20 inches	Low	Severe: slope, depth to rock	Severe: slope, depth to rock	Severe: depth to rock, slope
160	Xerorthents-Millsholm complex 50-70 percent slopes	<20 inches	Low	Severe: slope, depth to rock	Severe: slope, depth to rock	Severe: depth to rock, slope

Source: Welch 1981

In a report prepared for a creek repair project (Degenkolb 1984), soil conditions were explored at ten locations at approximately 100-foot intervals along the channel of the Rifle Range branch between Keller Avenue and Crowley Street. The objective of the project was to minimize erosion. The report described the deposits in the creek channel as interbedded clays, sands, and gravels, with moderate to low strength. The report noted evidence of slumping of the stream bank near Building #8 and suggested that creek banks should be kept as low as possible to prevent further slumping.

The Natural Resource Management Plan for NMCO (U.S. Navy 1990d) also states that bank erosion has occurred on the southern bank of Rifle Range Creek where it exits the grounds. This area is underlain by Botella soils, which are very deep, loamy, and easily eroded.

On the basis of an evaluation of aerial photographs of NMCO taken in 1959, Woodward-Clyde Consultants (1995) identified several small slumps near the northwest corner of NMCO and near the north boundary. They concluded that although these slumps do not appear to present an immediate



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This figure shows hillslopes greater than 30% and former landslide deposits with direction of downslope movement.

Legend:

- NMCO Property Boundary
- Landslide deposit
- Slope > 30%

Sources: Nielsen 1975; Theresa Hughes & Associates 1995

Hillslopes and Existing Landslide Deposits

Naval Medical Center Oakland

Figure 3-17

threat to any structures, the possibility of slope instability on steep slopes on either side of Rifle Range Creek should be considered in planning for future development.

3.8.6 Mineral Resources

Although pyrite has been mined in deposits of Leona rhyolite in the vicinity of NMCO, pyrite is no longer an economic mineral resource in the area (Bailey and Harden 1975). The Leona rhyolite is also used as a low-cost building material. No other mineral resources have been identified in vicinity of NMCO.

3.8.7 Regulatory Considerations

State of California

The California Code of Regulations (CCR), Title 24, Part 2, also known as the California Building Code (CBC), contains the enforceable state building standards. Earthquake design requirements are contained in Chapter 16, Division III, and other selected portions of the CBC. The 1995 edition of the CBC incorporates by reference the 1994 edition of the Uniform Building Code (UBC) (International Conference of Building Officials 1994), with the applicable California amendments. A more stringent set of standards applies to construction of public schools and medical facilities. These regulations are promulgated by the Division of the State Architect/Structural Safety Section, and the Office of Statewide Health Planning and Development. The provisions of the 1995 edition of the CBC became effective on December 28, 1995 (180 days after the date of publication, July 1, 1995). The California Building Standards Commission is responsible for coordinating all building standards in California. The City of Oakland Department of Public Works is responsible for enforcing these standards within the city.

NMCO is located within seismic zone 4, as defined in the CBC. UBC seismic standards represent minimum requirements for new construction within zone 4. Zone 4 is a region in which the effective peak ground acceleration assumed in design calculations is 0.4g. In areas in which effective peak ground accelerations are likely to be greater than 0.4g, the minimum UBC requirements may not be adequate. The UBC defines two alternative methods for calculating design seismic forces—a static procedure and a dynamic procedure. The dynamic procedure must be used in designing certain structures, such as those that have an irregular shape or exceed certain height limitations.

Under the Alquist-Priolo Earthquake Fault Zoning Act, the California Division of Mines and Geology has delineated seismic zones that are deemed to be "sufficiently active and well-defined as to constitute a potential hazard to structures from surface faulting or fault creep." The state geologist is also required to review continually new geologic and seismic data and to revise the earthquake fault zones or to delineate new zones based on new information. No active faults have been identified within the property boundary of NMCO. The nearest delineated active fault zone is the Hayward Fault, located approximately 1.5 miles west of NMCO.

City of Oakland

A grading permit is required by City of Oakland Ordinance 10312 (January 18, 1983) for grading and excavation activities where the existing or resulting slope will exceed 20 percent or where more than five cubic yards of soil are to be disturbed. The grading permit application requires a site map and grading plan, including a drainage plan and a soils report prepared by a registered civil engineer, when required by the director of public works. The grading plan must include mitigation measures to prevent structural damage that may be caused by expansive soils.

3.9 TRAFFIC AND CIRCULATION

This section discusses existing (preclosure) traffic and circulation conditions that may be affected by future projects at or near Naval Medical Center Oakland (NMCO). The region of influence (ROI) for traffic analysis includes regional and local access routes and the street system of the NMCO property. NMCO is located in a highly urbanized area served by an extensive network of freeway and arterial roadways and bus transit lines.

Traffic counts used as the basis for this study were collected in 1994 and 1995 and were adjusted for the impacts analysis to represent conditions of the site at closure. Traffic patterns are stable in this area; therefore, the traffic counts collected for this study are considered to be representative of preclosure traffic conditions in 1996.

Level of Service Methodology

Level of service (LOS) was analyzed at study area intersections for the AM and PM peak hours, using the methodologies described in the 1994 Highway Capacity Manual (Transportation Research Board 1994). The LOS for signalized and unsignalized intersections is defined in terms of delay, which is a measure of driver discomfort, frustration, and lost travel time.

Delay is a complex measure and is dependent upon a number of variables, including the number of vehicles in traffic. For signalized intersections, delay is also dependent on the quality of signal progression, the signal cycle length, and the "green" ratio for each approach or lane group. For intersections with one or two stop signs, delay is dependent on the number of gaps available in the uncontrolled traffic stream.

See Table 3-16 for the LOS criteria expressed in terms of average stopped delay.

3.9.1 Regional and Local Access Routes

Regional and local access routes are shown in Figure 3-18 and Figure 3-19, respectively. Regional access routes consist of freeways; local access routes consist of arterial, collector, and local roadways.

Regional Vehicular Access Routes

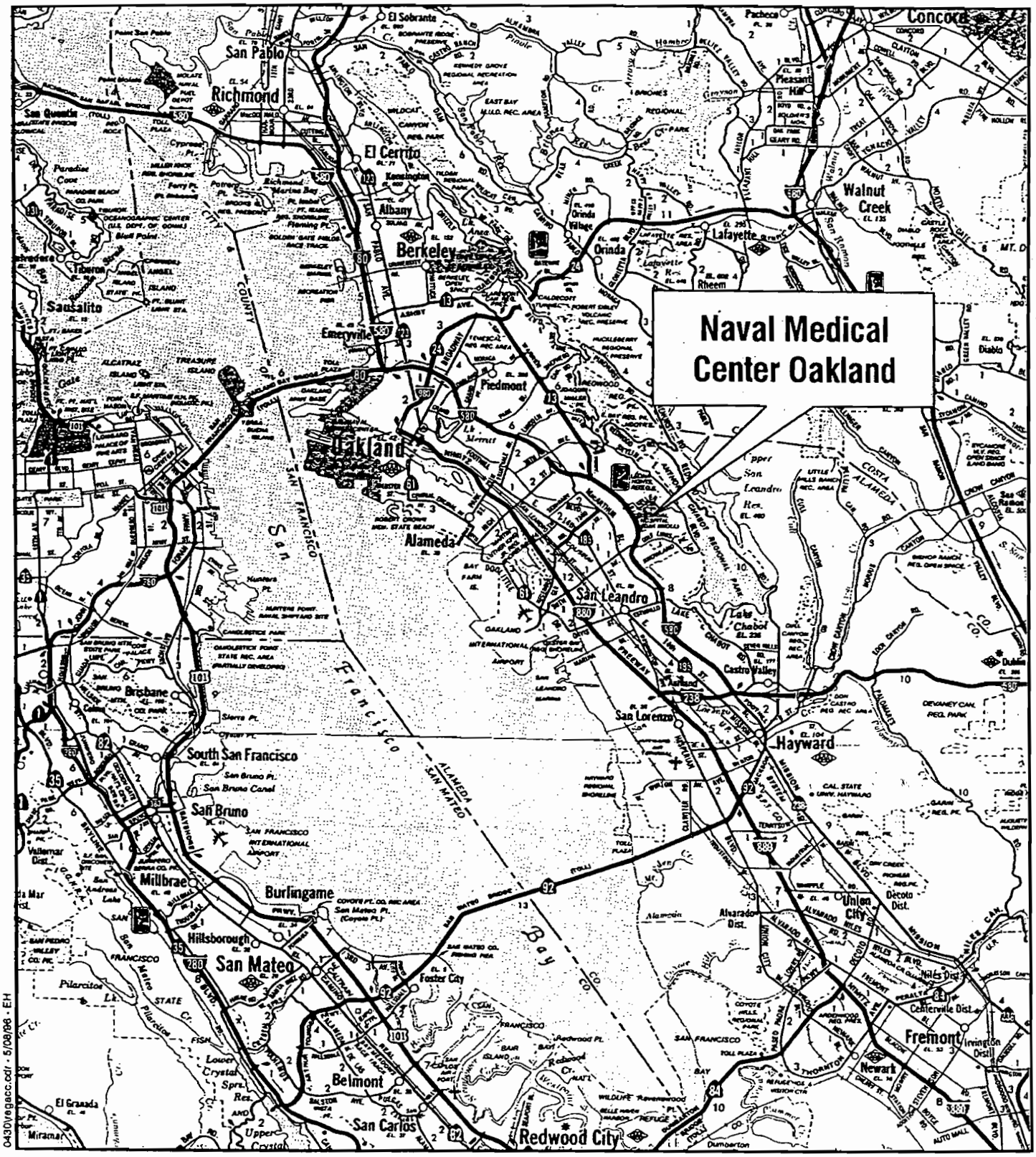
The City of Oakland is part of the urbanized area surrounding San Francisco Bay. The regional highway transportation system serving this area includes I-580 and State Route 13 in close proximity to NMCO and other regional roadways, such as I-880 and State Route 24.

Table 3-16
Traffic Level of Service Definitions
for Signalized and Unsignalized Intersections

LOS	Description	Delay Per Vehicle	
		Signalized Intersections	Unsignalized Intersections
A	Operations with very low delay. This level of service occurs at signalized intersections when progression is extremely favorable and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	Up to 5 seconds (sec.)	Up to 5 sec.
B	At signalized intersections, this level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	>5 to 15 sec.	>5 to 10 sec.
C	At signalized intersections, higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is considerable at this level, though many still pass through the intersection without stopping.	>15 to 25 sec.	>10 to 20 sec.
D	At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	>25 to 40 sec.	>20 to 30 sec.
E	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.	>40 to 60 sec.	>30 to 45 sec.
F	This level, considered to be unacceptable to most drivers, often occurs with oversaturation; that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.0, with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	>60 sec.	>45 sec.

Source: Transportation Research Board 1994.

NMCO is located just east of Interstate 580 (I-580), about 1.3 miles south of its junction of State Route 13 (SR-13). Major freeway access to the site is via the Keller Avenue and Golf Links interchanges, off I-580. Both interchanges provide full access to and from the freeway, although the access is indirect in some cases. The northbound I-580 off-ramp at Keller Avenue connects



Access to NMCO is provided by most regional highways via Interstate 580.

Regional Access

Naval Medical Center Oakland

Figure 3-18

Source: Map copyrighted 1993 by the California State Automobile Association. Reproduced by permission.

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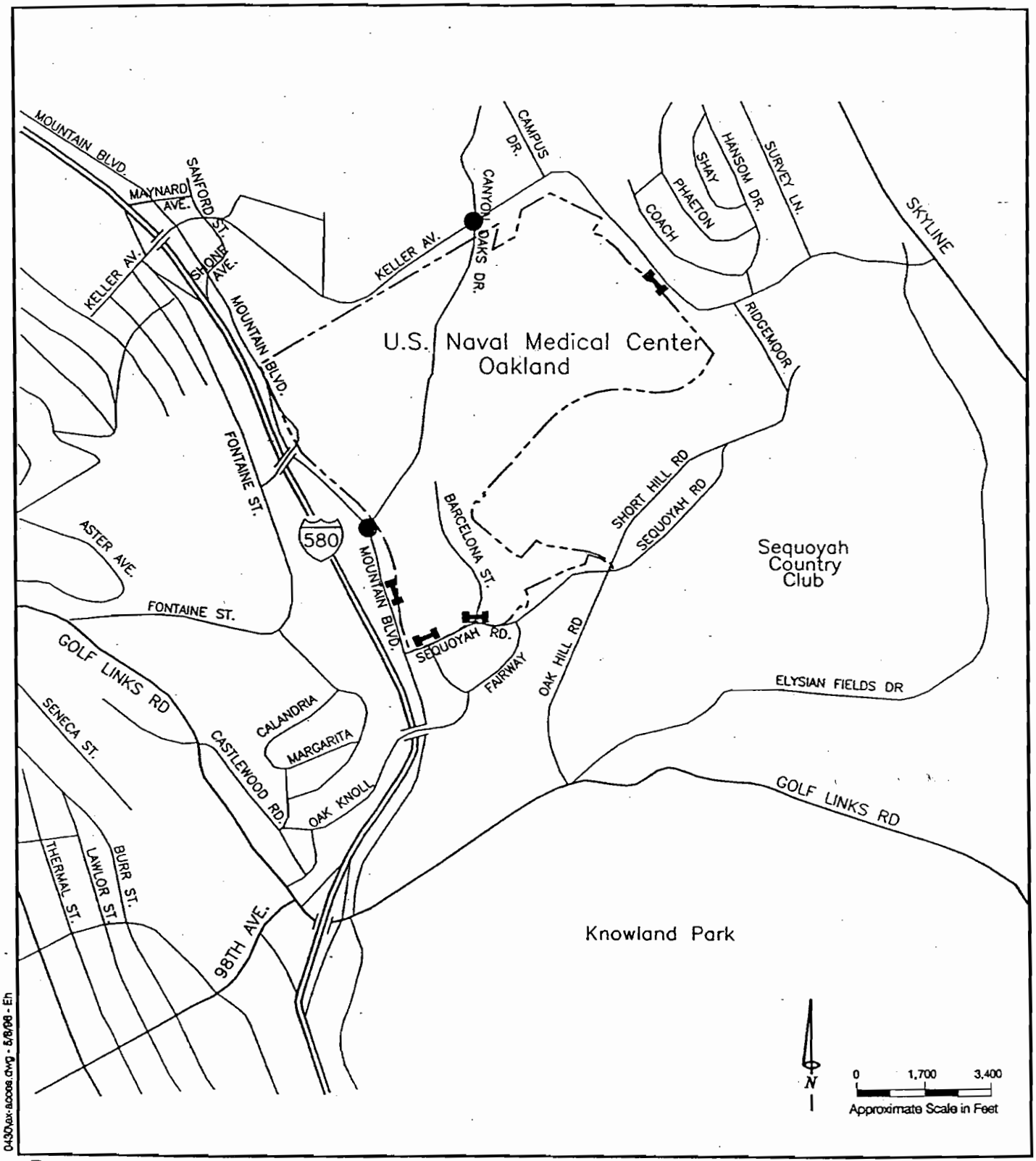


There are two major access points to NMCO on Keller Avenue and Mountain Boulevard.

LEGEND:

- Major Access Points
- Closed Gates

Local Access

Naval Medical Center Oakland

Source: Theresa Hughes & Associates 1994

Figure 3-19

southbound I-580 on-ramp at Keller Avenue is served via Fontaine Street, directly to Mountain Boulevard directly across from Shone Avenue. The approximately 150 feet south of Keller Avenue. The southbound I-580 on-ramp at Golf Links Road is served via 98th Avenue.

I-580 carries about 143,000 vehicles per day, including approximately 13,600 vehicles during the peak hours, in the NMCO vicinity (California Department of Transportation 1994). The most congestion on I-580 occurs in the section near Grand Avenue, about six miles west of the NMCO area, during the peak periods (Dowling Associates observations, September 1995). State Route 13 carries about 44,000 vehicles per day north of I-580 and generally operates at acceptable levels.

Local Vehicular Access Routes

Local access is provided to NMCO via Keller Avenue, Mountain Boulevard, and Golf Links Road. The NMCO site has two primary access locations. The main access point is located off Mountain Boulevard, and the secondary access point is located off Keller Avenue, opposite Canyon Oaks Drive. The Keller Avenue access is open during the peak periods only. There are four other access points that have been closed off and are not currently used, as indicated on Figure 3-19.

Mountain Boulevard generally runs north to south, parallel to I-580. North of Sequoyah Road, Mountain Boulevard is designated as a local road; south of Sequoyah Road, Mountain Boulevard is a collector road. Mountain Boulevard links Keller Avenue and Golf Links Road, ramp access to and from I-580, and provides access to adjacent properties. Mountain Boulevard generally has one lane in each direction. Two sections of Mountain Boulevard have two lanes in the northbound direction and one lane in the southbound direction—from the Fontaine Overpass to just south of Shone Avenue/I-580 northbound off-ramp and from the Shone Avenue/I-580 northbound off-ramp to the Maynard Avenue/I-580 northbound on-ramp. The posted speed on Mountain Boulevard is 25 miles per hour (mph).

Keller Avenue is an east-west arterial roadway, with two lanes in each direction and a center landscaped median divider. Keller Avenue provides an east-west linkage to the I-580 interchange ramps. Keller avenue has a relatively steep grade east of Mountain Boulevard. The posted speed on Keller Avenue is 35 mph.

Golf Links Road is an east-west arterial roadway, with one lane in each direction. It provides an east-west linkage to the I-580 interchange ramps and to the Bay Area Rapid Transit (BART) Coliseum Station via 98th Avenue or 73rd Avenue/Hegenberger Road.

3.9.2 Preclosure Traffic Conditions

City streets providing direct access to the NMCO property are Mountain Boulevard and Keller Avenue. Secondary access is provided by Golf Links Road and 98th Avenue. In an urban setting, the street network level of service is controlled by that of its major intersections. The following 12 intersections, identified as having the greatest potential for traffic impacts, were selected for study:

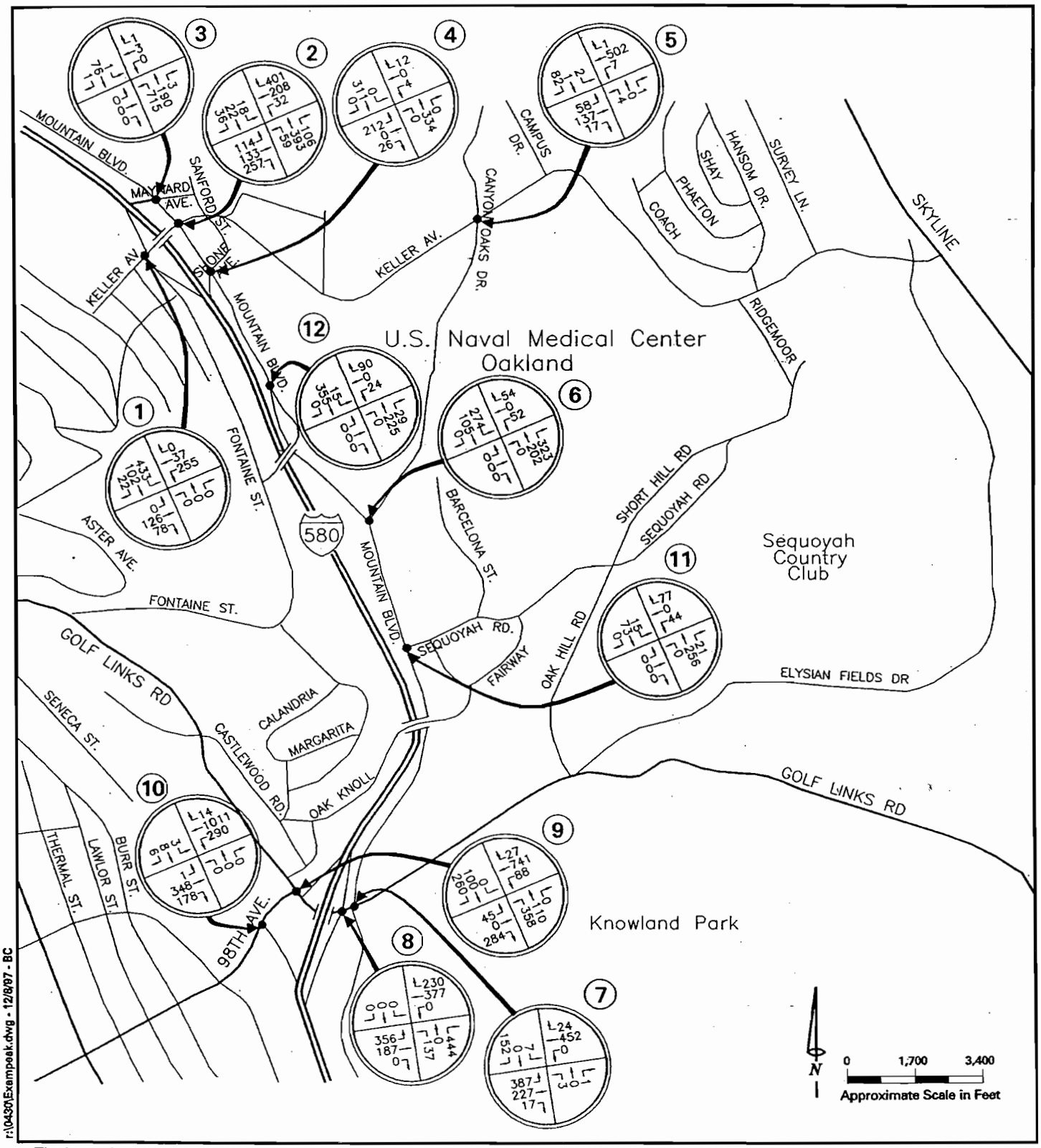
1. Keller Avenue/I-580 southbound off-ramp;
2. Keller Avenue/Mountain Boulevard;
3. Mountain Boulevard/I-580 northbound on-ramp;
4. Mountain Boulevard/I-580 northbound off-ramp;
5. Keller Avenue/Canyon Oaks Drive (back entrance);
6. Mountain Boulevard/main entrance;
7. Mountain Boulevard/Golf Links Road;
8. Golf Links Road/I-580 northbound ramps;
9. Golf Links Road/98th Avenue;
10. 98th Avenue/I-580 southbound on-ramp;
11. Mountain Boulevard/Sequoyah Road; and
12. Mountain Boulevard/Fontaine Overpass.

Preclosure traffic turning movement counts were conducted at the study intersections, as shown in Figure 3-20 and Figure 3-21. All of these intersections are controlled by stop signs, some with one-way or two-way stop control and others with all-way stop control.

The traffic patterns in the area are dominated by commuter traffic, which moves predominately toward I-580 during the AM peak hour and from I-580 to the surrounding residential areas during the PM peak hour.

Level of Service

The level of service (LOS) of an intersection is a measure of its ability to satisfy travel demand and is defined by the average number of seconds of delay per vehicle. LOS ranges from A, representing no undue delays, to F, representing very high levels of congestion and delay. LOS A through LOS C indicates that the intersection is operating efficiently. Delay begins to become more noticeable at LOS D. LOS E represents substantial congestion, and LOS F is characterized by stop-and-go traffic with long-term delays. The City of Oakland has established a level of service goal of LOS D or better.



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The inset circle diagrams indicate the number of vehicles making each type of turning movement, as indicated by the direction of the arrows, during the evening commute hour.

Legend:

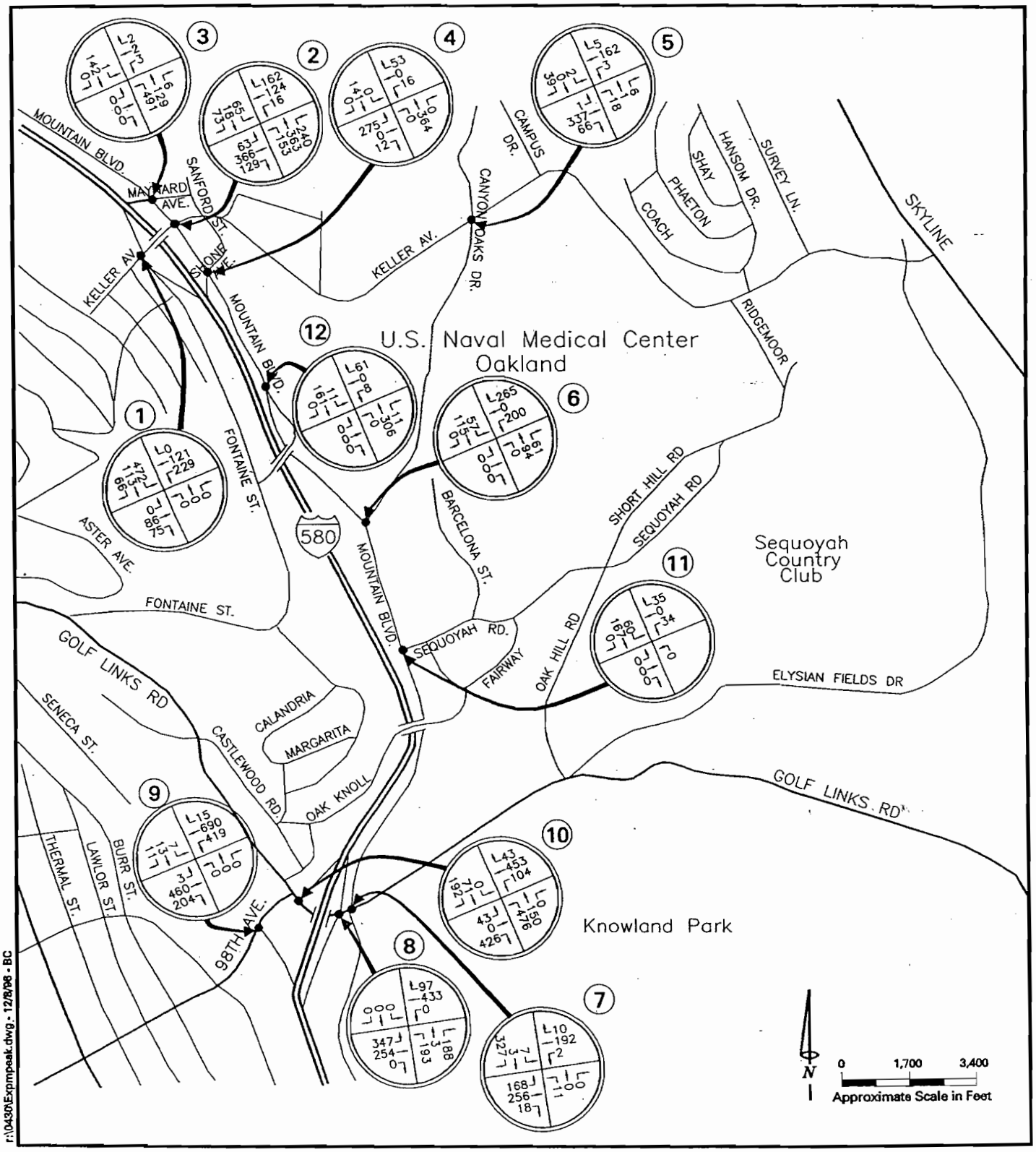
(1) The numbered circles adjacent to each inset circle correspond to the numbered intersections in the "Existing Traffic Conditions" section.

Preclosure AM Peak Hour Traffic Volumes

Naval Medical Center Oakland

Developed by Korve Engineering, Inc. & Dowling Associates 1995

Figure 3-20



The inset circle diagrams indicate the number of vehicles making each type of turning movement, as indicated by the direction of the arrows, during the evening commute hour.

Legend:

(1) The numbered circles adjacent to each inset circle correspond to the numbered intersections in the "Existing Traffic Conditions" section.

Preclosure PM Peak Hour Traffic Volumes

Naval Medical Center Oakland

Developed by Korve Engineering, Inc. & Dowling Associates 1995

Figure 3-21

LOS analyses were performed at the study area intersections during the AM and PM peak hours. Both peak hours were considered important because different intersection approaches are in high demand during the two peak periods. Traffic operations at the study area intersections are summarized in Table 3-17.

Preclosure levels of service below the City of Oakland's standard (LOS D) are shown at the following intersections:

- Keller Avenue/I-580 southbound off-ramp—delay per vehicle is high for all approaches to this all-way stop controlled intersection;
- Keller Avenue/Mountain Boulevard—delay is high for the westbound approach during the morning peak period and for the eastbound and northbound approaches during the evening peak period;
- Mountain Boulevard/Golf Links Road—delay per vehicle is high for the northbound approach (serving the Knowland Park Zoo) during the morning peak hour even though only four vehicles were counted on the approach during this time;
- Golf Links Road/I-580 northbound ramps—delay is high for the northbound approach from the I-580 off-ramp, which is controlled by a stop sign;
- Golf Links Road/98th Avenue/I-580 southbound off-ramp—all approaches, except the northbound approach, exhibit high delays; and
- 98th Avenue/I-580 southbound on-ramp—the high delay for the eastbound approach during the morning peak hour is for traffic exiting the service station at this intersection.

Signal Warrant Analysis

A study of traffic signal warrants was conducted to determine if a need for traffic signals currently exists at any of the study area intersections. The signal warrant analysis was performed for the intersections that had unacceptable levels of service during the AM or PM peak hours. The analysis was based on the Caltrans peak hour traffic volume warrant—Warrant No. 11 (California Department of Transportation 1993).

The following intersections were found to meet the peak hour warrant (a signal is warranted) during both peak hours:

- Keller Avenue/I-580 southbound off-ramp;
- Keller Avenue/Mountain Boulevard;
- Golf Links Road/I-580 northbound ramps; and
- Golf Links Road/98th Avenue/I-580 southbound off-ramp.

Table 3-17
Preclosure Intersection Operations

Intersection	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller/I-580 southbound off-ramp					
southbound	Stop sign	F	67	F	76
eastbound	Stop sign	F	High	F	High
westbound	Stop sign	E	36	D	20
2. Keller/Mountain Blvd.					
northbound	Stop sign	C	16	E	38
southbound	Stop sign	A	2	A	3
eastbound	Stop sign	C	19	F	54
westbound	Stop sign	E	32	B	5
3. Mountain Blvd./I-580 northbound on-ramp					
northbound left	None	A	4	A	3
southbound left	None	A	2	A	2
westbound	Stop sign	D	23	C	13
4. Mountain Blvd./I-580 northbound off-ramp					
eastbound	Stop sign	C	18	D	20
westbound	Stop sign	B	5	B	5
5. Keller/Canyon Oaks (Back Entr.)					
northbound	Stop sign	C	10	B	6
southbound	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2
westbound left	None	A	2	A	3
6. Mountain Blvd./main entrance					
southbound left	None	B	5	A	2
westbound	Stop sign	C	12	B	9
7. Mountain Blvd./Golf Links					
northbound	Stop sign	E	35	C	19
southbound	Stop sign	B	7	B	5
eastbound	None	B	6	A	3
westbound	Stop sign	B	9	B	7
8. Golf Links/I-580 northbound ramps					
northbound	Stop sign	F	High	F	High
eastbound left	None	B	7	B	6
9. Golf Links/98th Ave.					
northbound	Stop sign	A	1	A	1
southbound	Stop sign	F	60	D	26
eastbound	Stop sign	F	High	F	High
westbound	Stop sign	D	29	F	55
10. 98th Ave./I-580 southbound on-ramp					
northbound left	None	B	6	A	4
southbound left	None	B	5	C	10
eastbound (driveway)	Stop	F	9	B	6
11. Mountain Blvd./Sequoyah Rd.					
southbound left	None	A	2	A	2
westbound	Stop sign	B	5	A	4
12. Mountain Blvd./Fontaine Overpass					
southbound left	None	A	2	A	3
westbound	Stop sign	B	8	B	6

[1] Delay in seconds.
Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).
Source: Dowling Associates 1995.

Installation of traffic signals would be an appropriate solution to improve the low levels of service that currently exist at these intersections.

3.9.3 Naval Medical Center Circulation System

The NMCO has an extensive roadway system, as shown in Figure 3-22. The internal roadways are discussed below.

Blackwood Street. This road functions as a spine of the site, linking the main gate with the NMCO hospital, as well as other major roads within the site. Blackwood Street terminates with a small loop in front of the hospital. It is generally a two-lane road, and parking is prohibited on both sides of the roadway. There are several pedestrian crosswalks painted at major pedestrian crossings.

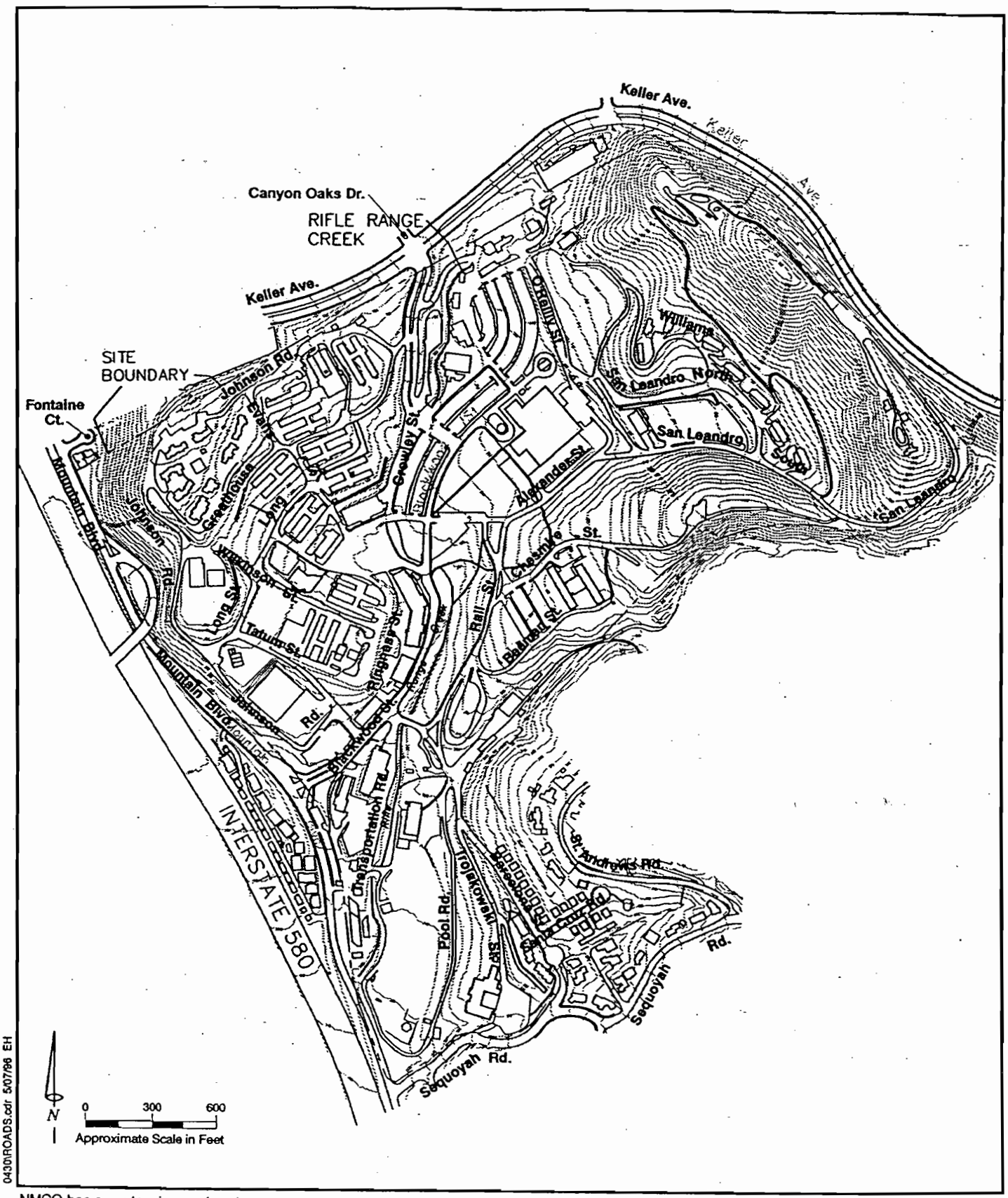
Trojakowski Street. This road provides access to the residential area on the east side of the site, to the fleet and maintenance area, to Club Knoll, and to the recreational areas (tennis courts and swimming pool) located in the southern portion of the site. Trojakowski Street functions as a two-lane collector road.

Alexander Street. This road provides access to the south side of the site. It is a short street that splits to San Leandro Street, which provides access to the uplands and the captain's residence. The other segment is Rail Street, which provides access to the hospital and connections to Trojakowski Street.

Evans Street. This road provides access to the north side of the site. Evans Street connects with Alexander Street at Blackwood Street. It is a narrow two-lane road with steep grades at several locations. There are numerous minor street connections and parking lot accesses off Evans Street.

Crowley Street. This road provides access to the Keller Avenue gate from Blackwood Street. In the vicinity of the Keller Avenue gate, Crowley Street has four travel lanes, two in each direction. Similar to Blackwood Street, there are three pedestrian crosswalks painted at major pedestrian crossings, with no traffic control devices to alert motorists to the crosswalks.

Internal circulation is inhibited by nonstandard roadway geometry and a lack of adequately defined sense of direction and hierarchy. It has been recommended that the circulation system be upgraded, concentrating on the principal arterial thoroughfare and collector network (U.S. Navy 1984).



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NMCO has an extensive road system providing access to most areas of the property.

Legend:

---- NMCO Boundary

Sources: Theresa Hughes & Associates 1995

Existing Roads

Naval Medical Center Oakland

Figure 3-22

3.9.4 Naval Medical Center Trip Generation

Under preclosure conditions, NMCO generated about 8,660 vehicle trips daily, of which more than 95 percent (e.g. 8,248) are through the Mountain Boulevard gate. Table 3-18 shows the total daily traffic volumes at the two gates.

Table 3-18
Preclosure Naval Medical Center Daily Traffic Counts

Gate Location	Inbound Traffic	Outbound Traffic	Total Traffic
Mountain Boulevard	4,259	3,989	8,248
Keller Avenue	211	201	412
Total	4,470	4,190	8,660

Source: Theresa Hughes & Associates 1994.

Note: Daily traffic volumes of preclosure activities in the air quality and traffic impacts sections (sections 4.9 and 4.10) of this EIS/EIR are lower because a different methodology (Radian 1997) was used based on annual values rather than traffic counts. The Radian (1997) numbers provide a more conservative comparison of preclosure air emissions to subsequent reuse and are consistent with BAAQMD methodology.

Peak hour traffic at the gates is shown in Figure 3-20 and Figure 3-21.

3.9.5 Existing Parking Facilities

An inventory of on-site parking lot locations and spaces is provided in Table 3-19. All parking lots are paved and are in relatively good condition.

3.9.6 Transit System

Alameda County Transit (AC Transit) provides bus transportation throughout the East Bay metropolitan area with service to NMCO via Lines 56, 46, and "NV."

Line 56 gives direct service to the NMCO hospital main entrance at least every 25 minutes during the day and at slightly longer intervals during the evening.

Line 46 does not circulate on-site but has stops outside the main gate. Both Line 46 and Line 56 connect with the BART station near the Oakland-Alameda County Coliseum. Oakland International Airport, approximately seven miles west of the hospital, also can be reached via transit connections at the Coliseum BART Station.

Table 3-19
Inventory of Existing On-site Parking, NMCO

Description	Total
Between San Leandro North and San Leandro South, east of the hospital	207
Adjacent to hospital, north of Alexander Street	59
Adjacent to hospital, west of O'Reilly Street	32
Between Blackwood and Crowley Streets, north of the hospital	607
West of Crowley Street, at shopping area	73
West of Blackwood Street, at Buildings #38 and #103	31
Between Johnson Road and Tatum Street, near the receiving area for Building #505.	62
West of Transportation Road, near Buildings #131 and #133	30
Adjacent to tennis court	20
Adjacent to Building #138	10
Adjacent to Building #133	17
East of Blackwood Road and South of Alexander Street	72
Between Chesmire Street and Beeman Street, near Building #501	135
At Club Knoll	76
TOTAL	1,431

Source: U.S. Navy 1984.

Line NV provides service once a day. One NV bus departs from Golf Links Road at Shetland at 7:04 AM for a 30 to 45 minute trip to the Transbay Terminal in downtown San Francisco; it departs from the Transbay Terminal in San Francisco at 5:15 PM and arrives at Keller Avenue and Mountain Boulevard at about 5:42 PM.

There are a number of transit shelters at NMCO, several of which need repair work. The shelter located on Blackwood Street at Evans Street is generally in good condition.

Using data provided by AC Transit staff and procedures for analysis suggested by AC Transit staff, an analysis of AM and PM peak period ridership was performed on three transit routes directly serving NMCO (Route 46 and 46A, Route 56 and 56A, and Route NV). As shown in Table 3-20, existing transit ridership was developed from ridership surveys conducted by AC Transit

Table 3-20
Existing Transit Ridership During Peak Periods

	AM Peak Period					PM Peak Period				
	46	46A	56	56A	NV	46	46A	56	56A	NV
Survey Begin Time	5:35	5:50	4:55	6:35	na	3:05	3:03	3:04	3:45	na
Survey End Time	9:10	9:29	9:25	9:07	na	7:42	7:12	7:29	6:08	na
Duration of Survey	3:35	3:39	4:30	2:32	na	4:37	4:09	4:25	2:23	na
Ridership	157	86	338	17	16	239	106	429	19	13
Number of Buses	18	8	36	5	1	22	9	32	2	1
Riders per Bus	8.72	10.75	9.39	3.40	16.00	10.86	11.78	13.41	9.50	13.00
Bus Capacity	35	35	35	35	42	35	35	35	35	42
Average Load/Capacity	0.25	0.31	0.27	0.10	0.38	0.31	0.34	0.38	0.27	0.31

Notes:
1. Survey and bus capacity data were provided by Tina Konvalinka and Paul Bignardi, AC Transit, on 12/20/96.
2. Number of buses on each route were taken from December 1, 1996, AC Transit Schedules.

Hourly ridership and route capacities were calculated from the peak period data as shown in Table 3-21. Route 56A was excluded from the calculations because the route does not directly pass the NMCO site. Exclusion of Route 56A yields conservative results because the load factor is lower on that route than on the routes that directly serve the site.

Table 3-21
Total Existing Transit Ridership and Route Capacity

	AM Peak Period						PM Peak Period					
	46	46A	56	56A	NV	Total	46	46A	56	56A	NV	Total
Total Ridership	157	86	338		16	597	239	106	429		13	787
Total Capacity	630	280	1,260		42	2,212	770	315	1,120		42	2,247
Average Hourly Ridership	44	24	75		16	159	52	26	97		13	188
Average Hourly Capacity	176	77	280		42	575	167	76	254		42	539

Note: Route 56A was not included in the calculations because it does not serve NMCO directly.

3.9.7 Bicycle and Pedestrian System

There are extensive internal pedestrian pathways on the project site; however, sidewalks along roadways are almost nonexistent except at selected segments on Blackwood Street. Pedestrians must walk in the street with general vehicular traffic, creating potential pedestrian and vehicular conflicts. There are several pedestrian crosswalks painted at major pedestrian crossings on Blackwood Street and Crowley Street. There are no traffic control devices to alert motorists to those crosswalks. There are no bicycle lanes on roadways within NMCO.

3.9.8 Aviation System

A helipad was located on NMCO at the northwest corner of the site near Johnson Road. This helipad is used for transportation of patients in need of emergency care and for the official business of the U.S. Navy.

The helicopter flight path immediately adjacent to the southern boundary of the pad encumbers a fan-shaped "clear zone," extending 400 feet from the pad boundary. The clear zone requires that no development occur within the confines of this area and permits no vehicular or pedestrian travel through this area during actual helicopter arrival and departure.

Commercial air travel is available off-site at the Metropolitan Oakland International Airport, San Francisco International Airport, and San Jose International Airport, listed in order of proximity to the site.

3.9.9 Transportation Plans and Regulations

U.S. Department of Transportation

The Federal Highway Administration is the agency of the Department of Transportation responsible for the federally-funded roadway system, including the interstate highway network and portions of the primary state highway network. Federal Highway Administration funding is provided through the Intermodal Surface Transportation Efficiency Act of 1991. This act's legislation can be used to fund local transportation improvement projects, such as projects to improve the efficiency of existing roadways, traffic signal coordination, bikeways, and transit system upgrades.

California Department of Transportation

Caltrans is responsible for the planning, design, construction, and maintenance of all state highways. Caltrans jurisdictional interest would extend to improvements to roadways at the I-580 interchange ramps. Any federally funded transportation improvements would be subject to review by Caltrans staff and the California Transportation Commission.

Metropolitan Transportation Commission

The Metropolitan Transportation Commission is the regional organization responsible for prioritizing transportation projects in a Regional Transportation Improvement Program for federal and state funding. The process is based on evaluating each project for need, feasibility, and adherence to the Intermodal Surface Transportation Efficiency Act policies and congestion management program. The congestion management

program requires that each jurisdiction identify existing and future transportation facilities that will operate below an acceptable service level and provide mitigation where future growth degrades that service level.

Alameda County Congestion Management Agency (CMA)

The Alameda County Congestion Management Agency (CMA) is responsible for ensuring local government conformance with the congestion management plan, a seven-year program aimed at reducing traffic congestion. The CMA has review responsibility for proposed development projects that are expected to generate 100 more PM peak hour trips than otherwise would occur. The CMA reviews the adequacy of CEQA analyses and measures proposed to mitigate impacts. The CMA maintains a county-wide transportation model and has approval authority for the use of any local or subarea transportation models. The Oakland City Council adopted Resolution #69475 on November 10, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County CMP. An analysis based on the CMA transportation model of year 2000 and year 2010 peak hour conditions was conducted for all of the reuse alternatives, and is summarized in Appendix G.

The analysis of traffic impacts was based on the year 2000 and year 2010 Alameda County CMA transportation model. The model incorporates a representation of land use and demographic characteristics of the nine-county Bay Area, which allows it to produce travel demand forecasts that incorporate influences of regional travel demand on transportation facilities in Alameda County. The CMA model has been structured to provide forecasting detail that addresses the evaluation needs of both countywide and corridor-specific transportation strategies.

The CMA model was used as the basis for the study of traffic and circulation impacts because the assumptions in the model have been refined and agreed to on a regional basis. The land use assumptions contained in the year 2000 and year 2010 CMA model were developed by the Association of Bay Area Governments (ABAG) with input from local member jurisdictions on planned development.

City of Oakland

The City of Oakland has begun construction for the 98th Avenue Unit III project. This off-site project consists of widening and restriping 98th Avenue and Golf Links Road from two to four lanes. The project limits begin at the intersection of 98th Avenue/MacArthur Boulevard and ends at Golf Links road/I-580 northbound ramps. Also, this project includes the installation of new traffic signals at the following intersections:

- 98th Avenue/Golf Links road/I-580 southbound off-ramp;
- Golf Links road/I-580 northbound ramps;
- 98th Avenue/Lawlor Street; and
- 98th Avenue/Stearns Avenue.

The City of Oakland has placed a heavy truck (over 4.5 tons) restriction on I-580 between Grand Avenue and 106th Avenue. Truck traffic to and from the site must use local arterial streets, such as Keller Avenue, Mountain Boulevard, Golf Links Road, and 98th Avenue.

3.10 AIR QUALITY

This section identifies existing (preclosure) air quality conditions in the vicinity of the Naval Medical Center Oakland (NMCO) site and in the region. The region of influence (ROI) for air quality issues varies according to the type of air pollution being discussed. Pollutants that are directly emitted (such as carbon monoxide and some particulate matter) have a localized ROI generally restricted to areas in the immediate vicinity of the emission source. Pollutants produced by chemical reactions in the atmosphere (such as ozone and secondary particulate matter) have an ROI that includes the entire San Francisco Bay Area.

3.10.1 Climate and Meteorology

The San Francisco Bay Area experiences a mediterranean-type climate characterized by mild temperature conditions. Weather data monitored at Oakland International Airport and the National Weather Service in Oakland are representative of conditions at NMCO. Daily temperature variations are typically 40 to 60°F during the winter and 55 to 75°F during the summer. Annual precipitation averages about 18 inches per year, with most precipitation occurring from October through April. Poor visibility is most likely to occur during late fall and winter.

Prevailing winds are from the west or northwest in all months, but the strongest winds are sometimes from the south. Average wind speeds are 7 to 10 mph during the winter and 12 to 14 mph during the summer. Strong winds (wind speeds above 20 mph) are recorded 4 to 10 percent of the time during winter months and 18 to 27 percent of the time during summer months.

3.10.2 Ambient Air Quality Standards

Both the State of California and the federal government have established ambient air quality standards for several different pollutants (Table 3-22). Pollutants covered by federal or state ambient air quality standards are often referred to as criteria pollutants. As indicated in Table 3-22, ambient standards for some criteria pollutants have been set for both short and long time periods. Most ambient air quality standards have been set to protect public health. State ambient air quality standards for some pollutants are based on other considerations (such as protection of crops, protection of materials, or avoidance of nuisance conditions). Current air quality standards for particulate matter are based on the inhalable component of suspended particulate matter (PM_{10}).

Table 3-22
Ambient Air Quality Standards Applicable in California

Pollutant	Symbol	Averaging Time	Standard, as parts per million by volume		Standard, as micrograms per cubic meter		Violation Criteria	
			California	National	California	National	California	National
Ozone	O_3	1 Hour	0.09	0.12	180	235	If exceeded	If exceeded on more than 3 days in 3 years
Carbon Monoxide	CO	8 Hours	9.0	9	10,000	10,000	If exceeded	If exceeded more than 1 day per year
Inhalable Particulate Matter	PM_{10}	Annual Geometric Mean	—	—	30	—	If exceeded	If exceeded
		Annual Arithmetic Mean	—	—	—	50		
		24 Hours	—	—	50	150	If exceeded	If exceeded more than 1 day per year
Nitrogen Dioxide	NO_2	Annual Average	—	0.053	—	100		If exceeded
		1 Hour	0.25	—	470	—	If exceeded	
Sulfur Dioxide	SO_2	Annual Average	—	0.03	—	80		If exceeded
		24 Hours	0.04	0.14	105	365	If exceeded	If exceeded more than 1 day per year
		1 Hour	0.25	—	655	—	If exceeded	
Lead Particles	Pb	Calendar Quarter	—	—	—	1.5		If exceeded more than 1 day per year
		30 Days	—	—	1.5	—	If equalled or exceeded	
Sulfate Particles	SO_4	24 Hours	—	—	25	—	If equalled or exceeded	No federal standards
Hydrogen Sulfide	H_2S	1 Hour	0.03	—	42	—	If equalled or exceeded	No federal standards
Vinyl Chloride	C_2H_3Cl	24 Hours	0.010	—	26	—	If equalled or exceeded	No federal standards

Notes: All standards are based on measurements at 25 degrees C and 1 atmosphere pressure.
Decimal places shown for standards reflect the rounding precision used for evaluating compliance.
National standards shown are the primary (health effects) standards.

Source: California Air Resources Board 1993a.

Areas that meet ambient air quality standards are classified as attainment areas, while areas that violate ambient air quality standards are designated as nonattainment areas. The San Francisco Bay Area's designation for the federal ozone standard was changed in 1995 from nonattainment to attainment, but EPA is currently reconsidering this designation (EPA 1997). Urbanized portions of the Bay Area are technically designated as nonattainment areas for the federal carbon monoxide standard, but a request

for redesignation as an attainment area is being reviewed by EPA. The Bay Area is currently unclassified for the federal PM_{10} standard. The Bay Area is designated as a nonattainment area for the state ozone and PM_{10} standards, and as an attainment area for the state carbon monoxide standard.

3.10.3 Existing Air Quality Conditions

Ozone, carbon monoxide, and particulate matter are the major pollutants of concern in the San Francisco Bay Area, and are monitored at a number of locations. The monitoring stations closest to NMCO are located on Alice Street near Jack London Square, and at the county hospital in San Leandro. The Alice Street monitoring station measures ozone and carbon monoxide levels. The San Leandro monitoring station measures ozone and inhalable particulate matter (PM_{10}). Table 3-23 summarizes recent monitoring data for ozone, carbon monoxide, and PM_{10}.

Table 3-23
Summary of Recent Air Quality Monitoring Data for the Oakland Area

Monitoring Station	Air Quality Indicator	1990	1991	1992	1993	1994	1995
	OZONE						
Oakland - Alice Street	Peak 1-hour value (ppm)	0.06	0.06	0.08	0.11	0.06	0.11
	Days above federal standard	0	0	0	0	0	0
	Days above state standard	0	0	0	1	0	1
San Leandro - County Hospital	Peak 1-hour value (ppm)	0.07	0.12	0.11	0.12	0.09	0.15
	Days above federal standard	0	0	0	0	0	3
	Days above state standard	0	2	2	3	0	6
	CARBON MONOXIDE						
Oakland - Alice Street	Peak 1-hour value (ppm)	8.0	9.0	7.0	7.0	7.0	5.0
	Peak 8-hour value (ppm)	6.1	6.8	4.6	4.9	5.5	3.9
	Days above federal standard	0	0	0	0	0	0
	Days above state standard	0	0	0	0	0	0
	INHALABLE PARTICULATE MATTER, PM_{10}						
San Leandro - County Hospital	Peak 24-hour value (?g/m³)	123	99	56	51	62	47
	Annual geometric mean (?g/m³)	29.3	27.6	22.7	18.1	18.7	16.9
	Annual arithmetic mean (?g/m³)	34.5	32.4	24.9	20.8	21.1	19.5
	Number of 24-hour samples	26	60	61	61	61	61
	% of samples above federal standard	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	% of samples above state standard	15.4%	16.7%	3.3%	1.6%	1.6%	0.0%

Notes: ppm = parts per million by volume.
$\mu g/m^3$ = micrograms per cubic meter.
Federal 1-hour ozone standard is 0.12 ppm; state 1-hour ozone standard is 0.09 ppm.
Federal 1-hour carbon monoxide standard is 35 ppm; state 1-hour carbon monoxide standard is 20 ppm.
Federal 8-hour carbon monoxide standard is 9 ppm; state 8-hour carbon monoxide standard is 9.0 ppm.
Federal PM_{10} standards: 50 ($\mu g/m^3$), annual arithmetic mean; 150 ($\mu g/m^3$), 24-hour average.
State PM_{10} standards: 30 ($\mu g/m^3$), annual geometric mean; 50 ($\mu g/m^3$), 24-hour average.
Source: California Air Resources Board 1996.

As indicated by Table 3-23, federal and state standards for carbon monoxide have not been violated in recent years. Violations of the federal ozone standard were infrequent in the Bay Area during the early 1990s, although the more stringent state standards were occasionally exceeded. Maximum ozone concentrations and the number of violations of federal and state ozone standards increased throughout the Bay Area in 1995. The federal air quality standards for PM_{10} standard have not been exceeded in recent years. However, the more stringent state PM_{10} standards have been exceeded at the San Leandro monitoring station a few times each year.

3.10.4 Air Quality Planning

Federal Requirements

The federal Clean Air Act (42 USC 1857, as amended) requires each state to develop, adopt, and implement a state implementation plan (SIP) to achieve, maintain, and enforce federal air quality standards throughout the state. These plans must be submitted to and approved by U.S. Environmental Protection Agency. In California, the state implementation plan consists of separate elements for different regions of the state. State implementation plan elements are generally developed on a pollutant-by-pollutant basis whenever one or more air quality standards are being violated.

Local councils of governments and air pollution control districts have had the primary responsibility for developing and adopting the regional elements of the California SIP. In the San Francisco Bay Area, SIP document preparation has been a coordinated effort involving three regional agencies; the Bay Area Air Quality Management District, Association of Bay Area Governments, and the Metropolitan Transportation Commission.

The federal Clean Air Act also imposes deadlines for achieving the federal ambient air quality standards. These deadlines vary according to the severity of existing air quality problems. The San Francisco Bay Area was recently reclassified from a moderate nonattainment area to a maintenance area for the federal ozone standard. The urbanized portions of the San Francisco Bay Area are categorized as moderate nonattainment areas for the federal carbon monoxide standards. The Bay Area currently is not classified for the federal PM_{10} standard.

The Bay Area Air Quality Management District believes that the San Francisco Bay Area has achieved the federal CO and PM_{10} standards and has requested redesignation to an attainment status. Final action on the CO redesignation request is expected within the next year. A formal designation of the San Francisco Bay Area as being in attainment of the federal PM_{10} standard also is expected to occur within the next year.

State Requirements

The California Clean Air Act of 1988 requires air pollution control districts and air quality management districts to develop air quality management plans for meeting state ambient air quality standards for ozone, carbon monoxide, sulfur dioxide (SO_2) and nitrogen dioxide (NO_2). The state Air Resources Board is responsible for developing a plan for meeting state PM_{10} standards.

The California Clean Air Act does not set specific deadlines for achieving state air quality standards. Instead, attainment is required "as expeditiously as practicable," with various mandated emission control program requirements based on the nonattainment classification for ozone and CO. The entire San Francisco Bay Area is classified as a moderate nonattainment area for the state ozone standard and as a nonattainment area for the state PM_{10} standard. The entire San Francisco Bay Area is classified as an attainment area for state CO standards.

3.10.5 Regulatory Considerations

Air pollution control programs were established in California prior to the enactment of federal requirements. Responsibility for air quality management programs in California is divided between the Air Resources Board as the primary state air quality management agency and air pollution control districts as the primary local air quality management agencies. Federal Clean Air Act legislation in the 1970s resulted in a gradual merger of local and federal air quality programs, particularly industrial-source air quality permit programs.

The roles and responsibilities of both Air Resources Board and local air pollution control districts have been expanded by the California Clean Air Act of 1988. Local air pollution control districts also have been given added responsibility and authority to adopt transportation control measure programs and emission reduction programs for indirect and areawide emission sources.

Air Quality Permits

Many types of industrial and commercial facilities require air quality permits for their equipment and operations. The Bay Area Air Quality Management District has the primary air quality permit authority throughout the San Francisco Bay Area. Permit authority is derived from a combination of state and federal legislation and can be categorized into construction or installation authorizations for individual pieces of equipment and permits for continued operation of equipment and facilities.

In general, federally-required air quality permit programs have been integrated into the preexisting state and local permit program. This results in a two-step permit process—an initial authority to construct permit and a subsequent permit to operate.

Federal Clean Air Act Conformity Process

Section 176(c) of the Clean Air Act requires federal agencies to ensure that their actions are consistent with the Clean Air Act and with federally-enforceable air quality management plans. The U.S. Environmental Protection Agency has promulgated separate rules that establish conformity analysis procedures for transportation-related actions and for other federal agency actions.

A formal conformity determination is required for federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants exceed specified thresholds. The federal nonattainment and maintenance pollutants subject to conformity analyses in the San Francisco Bay Area include ozone precursors (reactive organic compounds and nitrogen oxides) and carbon monoxide. Applicable threshold levels for federal actions in the San Francisco Bay Area are 100 tons per year of reactive organic compounds, 100 tons per year of nitrogen oxides, and 100 tons per year of carbon monoxide.

Several categories of federal agency actions are identified in the general conformity rule as actions that would be expected to result in emissions below the threshold level, including transfers of ownership, interests, and titles in land, facilities, real property, or personal property to other public agencies or to private parties. Lease arrangements, however, may be subject to the requirements of the conformity rule (depending on the extent to which lease terms allow the Navy to control the activities of the lessee).

NMCO is one of five Bay Area Navy facilities that are closing. The Navy is preparing reports to document the stationary and mobile source emission reductions that are occurring as a result of facility closures. The final report for NMCO (Radian 1997) estimates that NMCO generated 1,153,000 vehicle trips and 17,977,000 vehicle miles of travel during the 1992 preclosure baseline year. If NMCO had continued operating at the 1992 level of activity, facility-related vehicle emissions in the year 2001 would have been approximately 14 tons per year of reactive organic compounds, 14 tons per year of nitrogen oxides, 111 tons per year of carbon monoxide, 4.5 tons per year of PM_{10}[1] and 0.2 ton per year of sulfur oxides.

[1] This calculation of PM_{10} does not include resuspended roadway dust.

These mobile source emissions will be held by the Navy in reserve and made available for use for future conformity determinations according Navy policy. Future uses may include transfer to satisfy conformity offset requirements at another DOD facility within the BAAQMD, such as Travis Air Force Base, use by another federal agency for conformity purposes, or reuse of NMCO where a federal approval is necessary subject to a conformity determination.

3.11 NOISE

Sound travels through the air as waves of air pressure fluctuations caused by vibration. In general, sound waves travel away from the noise source as an expanding spherical surface. The energy contained in a sound wave consequently is spread over an increasing area as it travels away from the source. This results in a decrease in loudness at greater distances from the noise source.

Sound level meters measure the actual air pressure fluctuations caused by sound waves, with separate measurements made for different sound frequency ranges. These measurements are reported using a logarithmic decibel (dB) scale. Decibel scales indicate the relative intensity of sound levels; a 10 dB increase is generally perceived as a doubling of loudness.

Most sounds consist of a broad range of sound frequencies. Because the human ear is not equally sensitive to all frequencies, different frequency weighting schemes have been used to develop composite decibel scales that approximate the way the human ear responds to noise levels. The "A-weighted" decibel scale (dBA) is the most widely used for this purpose. The A-weighted scale reduces the measured pressure level for low frequency sounds while increasing the measured pressure level for some high frequency sounds to appropriately account for human responses to noise.

Varying noise levels are often described in terms of the equivalent constant decibel level. Equivalent noise levels (Leq) are used to develop single-value descriptions of average noise exposure over various periods. Such average noise exposure ratings often include additional weighting factors for potential annoyance due to time of day or other considerations. The Leq data used for these average noise exposure descriptors are generally based on A-weighted sound level measurements.

Average noise exposure over a 24-hour period are often presented as a community noise equivalent level (CNEL). CNEL values are calculated from hourly equivalent noise level values, with a 5-dB annoyance penalty added to the evening (7 PM to 10 PM) equivalent noise level values and a 10-dB penalty added to the nighttime (10 PM to 7 AM) equivalent noise level values.

The region of influence (ROI) for noise impacts is usually determined on a site-specific basis. For the NMCO site, the ROI includes the site, and nearby areas that are affected primarily by roadway noise. Adjacent roadways and intersections are included in the ROI to the extent that they have the potential to cause conflicts with land use. It can generally be considered, for the NMCO site, to include about a one-half mile radius around the site, but may vary

slightly based on how sound travels locally. Background traffic noise levels are the prime component of the noise ROI as background noise. Other noise sources that could be considered background noise are much quieter than traffic and intersections.

3.11.1 Existing Noise Conditions

The noise element of the Oakland Comprehensive Plan identifies highway traffic and airport flight operations as the noise sources of greatest concern in the City of Oakland. Railroad operations and industrial facilities are also important noise sources in some portions of the city. The MacArthur Freeway (I-580) is the dominant noise source in the vicinity of the Naval Medical Center Oakland (NMCO) site. Noise levels along the western side of the NMCO site are exposed to CNEL levels of 65-70 decibels. Over most of the NMCO site, CNEL levels are below 65 decibels.

3.11.2 Noise Level Guidelines

Various federal, state, and local agencies have developed guidelines for evaluating land use compatibility under different noise level ranges.

Federal Agency Guidelines

The federal Noise Control Act of 1972 (PL 92-574; 86 Stat. 1234) established a requirement that all federal agencies must comply with applicable federal, state, interstate, and local noise control regulations. Federal agencies also were directed to administer their programs in a manner that promotes an environment free from noise that jeopardizes public health or welfare.

The Department of Defense evaluates the acceptability of noise levels at military installations according to three noise level zones:

- CNEL levels below 65 dB (Zone 1);
- CNEL levels of 65-75 dB (Zone 2); and
- CNEL levels above 75 dB (Zone 3).

All land uses are considered compatible with Zone 1 noise levels. Educational and residential land uses generally are not compatible with Zone 2 noise levels unless special acoustic treatments and designs are used to ensure acceptable interior noise levels. Residential and educational land uses are not compatible with Zone 3 noise levels. Industrial and manufacturing land uses may be acceptable in Zone 3 areas if special building designs and other measures are implemented. Existing noise levels at NMCO represent Zone 1 conditions.

State Agency Guidelines

The California Department of Housing and Community Development has adopted noise insulation performance standards for new hotels, motels, and dwellings other than detached single-family structures. These standards require that hotels, motels, and multiple-unit dwellings be constructed so that outdoor noise sources will not cause interior noise levels to exceed an annual average CNEL value of 45 decibels with the windows closed.

The California Department of Health Services (1987) has published guidelines for the noise element of local general plans. These guidelines include a noise level/land use compatibility chart that categorizes various outdoor CNEL ranges into as many as four compatibility categories (normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable), depending on land use.

The state noise element guidelines chart identifies normally acceptable noise levels for low density residential uses as CNEL values below 60 decibels. The normally acceptable range for high density residential uses is identified as CNEL values below 65 decibels. For educational and medical facilities, CNEL values of 60 to 70 decibels are identified as conditionally acceptable. For office and commercial land uses, CNEL values of 67.5 to 77.5 decibels are categorized as conditionally acceptable.

Noise Element of the Oakland General Plan

The noise element of the Oakland Comprehensive Plan contains a general policy to prevent or reduce exposure to excessive or annoying noise. Policy recommendations in the noise element urge a serious consideration of noise impacts in the planning and design of new or expanded roadways, with incorporation of noise mitigation such as depressed roadways and noise barriers, where feasible.

Other transportation policy recommendations include roadway designs that discourage through traffic on local streets and neighborhood designs that encourage pedestrian and bicycle use.

Land use policy recommendations include using buffer areas (including off-street parking, greenbelts, or general commercial areas) to protect residential areas from activities that produce excessive noise, odors, or traffic.

3.12 UTILITIES

This section presents an overview of the utilities at the Naval Medical Center Oakland (NMCO) property, including the water distribution, wastewater, storm drainage, electrical, natural gas, telephone, and solid waste management systems. Information was obtained from the August 1996 NMCO Reuse Plan, from the 1994 Existing Conditions Report by Theresa Hughes & Associates, and through personal communication with employees of NMCO, Engineering Field Activity (EFA) West, City of Oakland, Navy Public Works Center San Francisco Bay (Public Works Center), and utility providers. The region of influence (ROI) used in this analysis is the geographic extent to which the utility system or provider requires adequate facilities and equipment to serve the 183-acre NMCO property.

Potable water is provided to NMCO by the East Bay Municipal Utility District (EBMUD), with appropriate easements. The City of Oakland provides sanitary sewer treatment services. Electrical power and natural gas are provided by Pacific Gas and Electric Company (PG&E). Telephone systems and service are provided by Pacific Bell. Solid waste disposal was provided by a private contractor to the Public Works Center. The Public Works Center owned and operated most of the utility systems within the NMCO property, including electrical, natural gas, water distribution, and wastewater collection systems. Exceptions are portions of the natural gas system, owned by PG&E, and two sanitary sewer mains, owned by the City of Oakland. Volume II, Appendix D provides detailed engineering drawings of utility systems at NMCO, including the potable and fire protection water, storm sewer, sanitary sewer, street lighting, natural gas, steam and condensate, and electrical power systems.

3.12.1 Water Distribution System

An underground pipe system supplies water for domestic, industrial, irrigation, and fire protection purposes.

One major and two minor EBMUD systems provide water to the site. These systems are connected to a Navy-owned water distribution network. The major system is a combined potable and fire protection system. This system obtains water from three separate metered connections located at Keller Avenue from the north, Mountain Boulevard from the west, and Sequoyah Road from the south. The overall system is capable of delivering 3,600 gallons per minute of water to the site. The water distribution system within the site is owned by the Navy. The system consists of 4-inch, 6-inch and 8-inch diameter cast iron and asbestos cement piping. The cast iron piping system was constructed in 1942, and the asbestos cement system was constructed in 1968 and the 1970s. The Navy-owned water system was examined in a 1985 Bechtel study that recommended a phased system-wide

replacement by 1994 (U.S. Navy 1985). Special Project R24-85 provided several of the line replacements recommended in the Bechtel study. The upper floors of the hospital lack adequate water pressure to meet fire protection requirements. The officers quarters' potable water pressure also is inadequate.

3.12.2 Sanitary Sewer System

Sewage is collected through a gravity system of 6-inch, 8-inch, 10-inch, and 12-inch diameter vitrified clay and polyvinyl chloride pipes. The storm sewer system is independent of the sanitary sewer collection network. The sanitary sewer system is connected to the Oakland sewer system at Mountain Boulevard. In addition to this system, two 12-inch Oakland mains traverse the project site. There are some minor connections to these two systems. The 1985 utility assessment recommended a major system upgrade, which was completed in 1988. This upgrade involved slip lining all 6-inch, 8-inch, and 10-inch sewer lines.

3.12.3 Storm Drainage

The surface water collection system in the NMCO property consists of gutters, catch basins, and underground pipes that convey the runoff to the creek running through the project site. The collection system at the site provides adequate capacity for the NMCO property

3.12.4 Electrical System

Electricity is provided by PG&E. The primary 12.5 kilovolt system is connected to the PG&E system at Mountain Boulevard, near the south gate, and terminates at the main switch. Two other feeders carry the power from the main substation to the distribution transformers. A secondary loop serves the west and north portion of the project site. Most of the electrical network is overhead, except for short underground sections.

The Public Works Center sold the power to the individual power users on the site. A computerized power allocation system is used. It models each customer's use in combination with the available meters. This allocation system determines compensation rates based on prorating the data collected by the meters and the type of use by individual customers.

Existing electrical capacity is adequate for the present use at the site, except for the hospital. It is standard practice to provide power to a large hospital from two different substations, but the hospital is supplied by only one substation. According to a 1983 "order-of-magnitude" estimate, installation of the second power source from a different substation and its related work would cost about $1.8 million (Theresa Hughes & Associates 1995).

Based on a PG&E preliminary study, many of the poles and crossarms are deteriorated and require replacement. A portion of the distribution system is underground. The underground manholes are 24 inches in diameter, which does not meet the PG&E standard of 36-inch diameter manholes. The overall distribution system does not have sufficient meters to monitor individual structures and service users at the present time.

3.12.5 Natural Gas

PG&E is the supplier of natural gas through three main pipeline systems. Two of these systems are owned by the Public Works Center and the third by PG&E. All systems were originally constructed with steel pipes. The Public Works Center system was constructed in 1969. It consists primarily of 3-inch, 2.5-inch, and 0.25-inch diameter pipes. The major portion of the distribution system uses polyethylene lines. The 1969 upgrades included a new 10-inch main to supply the new steam plant in Building #512 (boiler room for the hospital) with laterals to Building #501 (bachelor enlisted barracks) and Building #8 (medical building) and a new 6-inch main to the northeastern area of the facility. The PG&E lines are over 40 years old. Gas pressure is regulated throughout the distribution system. The existing system does not have metering of individual structures.

3.12.6 Telephone System

Pacific Bell provides telephone service to the NMCO property. A switchboard and new cables and conduits were installed in January 1989 with the capacity of serving 5,000 telephone lines. These facilities are expandable to 10,000 lines. Most of the telephone wires are overhead. The distribution network is adequate and wires are in good condition. The system is consistent with government regulations and specifications but is not compatible with commercial use. Upgrading the switch that services the site is not cost-effective. However, under civilian reuse, the switch could be bypassed and new users could be delegated charges compatible with market rates for establishing new service.

3.12.7 Solid Waste Management

Removal of solid waste is provided on a daily basis by a private contractor under contract to the Public Works Center. Approximately 100 tons of general solid waste and trash per week were generated at NMCO. Final disposal of the wastes occurred at the Altamont Landfill near Livermore (following an intermediate transfer at the San Leandro Transfer Station). The NMCO recycling program currently provides for collection of commingled wastes, such as paper, plastics, glass, and metals, for subsequent pickup by a private recycling contractor.

Municipal Landfill Capacity

Municipal solid waste collection and disposal in Alameda County is a local government responsibility. Waste Management, Inc., of Alameda County (WMAC) is the largest collector in Alameda County and holds responsibility for waste collection for the NMCO site (Alameda County Waste Management Authority 1995). WMAC provides collection services for residential, commercial, and industrial customers, as well as public facilities (parks and public buildings). It provides regularly scheduled annual or semiannual residential cleanups in most communities. WMAC accepts direct-haul waste by the public and small commercial haulers at the Davis Street Transfer Station and the Tri-City landfill. Minor amounts of direct haul is also accepted at the Altamont Landfill site. WMAC has an agreement to provide services to the City of Oakland through 2006 (Alameda County Waste Management Authority 1995).

Altamont Landfill is located at 10840 Altamont Pass Road in unincorporated Alameda County (Alameda County Waste Management Authority 1995), on a 1,528-acre site, of which 230 acres are permitted for landfilling. It is owned and operated by WMAC. In 1990, the landfill was designated as Class III and was allowed to accept primarily municipal solid wastes. However, design changes, including the addition of an artificial liner, were made in 1993 in order to meet federal Subtitle D pollution control requirements. In 1994, the landfill was redesignated a Class II facility, thereby allowing the disposal of both municipal solid wastes and designated wastes, including asbestos and lead-based paints (Bonini 1996) that may be some of the waste generated during NMCO hospital demolition (Alameda County Waste Management Authority 1995). The Altamont Landfill currently accepts waste from the cities of Albany, Emeryville, Piedmont, Oakland, Alameda, San Leandro, Castro Valley, Hayward, Dublin, and the Oro Loma Sanitary District.

The maximum permitted quantity of waste that can be accepted by the Altamont Landfill is 11,500 tons per day. Actual loadings currently are averaging about 6,000 tons per day of municipal solid waste, of which 3,300 tons per day are generated in Alameda County. At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was 19 million tons. At the 1994 rate of fill, the facility would reach capacity in 2006 (Alameda County Waste Management Authority 1995).

The California Integrated Waste Management Board (CIWMB), an agency of the California Environmental Protection Agency (Cal/EPA), is responsible for policies and regulation of solid waste management in the state. Under AB 939, counties are mandated to reduce solid waste going to landfills by 25 percent by 1995 and 50 percent by 2000. A county's projected waste stream

and its specific plan for reducing it are contained in a document called the Source Reduction and Recycling Element, which compiles data and strategies from all jurisdictions to develop a composite goal for the two target years.

3.12.8 Potable Water Supply

Historic consumptive water use at NMCO ranged from about 5 to 9 million gallons per month (Rogers 1997). Average annual consumptive water use was about 7.5 million gallons per month, or about 90 million gallons per year (Rogers 1997).

3.12.9 Regulatory Considerations

Each utility is subject to different local, state, or federal regulations. These may be in the form of municipal codes, permitting requirements, state legislation, or federal agency requirements.

3.13 HAZARDOUS MATERIALS AND WASTE

This section reviews existing conditions relating to hazardous materials and hazardous waste at the Naval Medical Center Oakland (NMCO) site. Before closure, NMCO had operated as a military installation since 1942. Activities have included hospital operations, medical education, vehicle and building maintenance, and auto fueling operations. Fuels, lubricants, paints, solvents, and other chemicals have been used throughout much of the history of the facility. The age of most buildings also creates a potential for the presence of lead-based paints and asbestos-containing materials (ACM).

Management of hazardous materials is regulated by federal, state, and local laws and regulations. The environmental department at EFA West is responsible for implementing current compliance programs.

The hazardous materials and waste information provided in this section reflects the most current data available. Information in this section is based primarily on survey data from the NMCO Base Realignment and Closure Cleanup Plan (BCP) (U.S. Navy 1995b), Final Environmental Baseline Survey (EBS) (U.S. Navy 1994c), the Final EBS Site Assessment and Field Sampling and Analysis Plan (U.S. Navy 1995b), and the BCP Environmental Plan (the "Business Plan") (U.S. Navy 1996).

The Community Environmental Response Facilitation Act (CERFA) requires a process and schedule for identification of uncontaminated sites. The final NMCO base-wide environmental baseline survey, published in December 1994 and developed in cooperation with the regulatory community, identified 18 of 63 parcels (102 acres) as CERFA-clean parcels. The remaining 45 parcels (81 acres) were identified as areas that require additional evaluation. The Navy determined that the remaining 45 parcels are suitable for transfer. Detailed information on all the parcels can be found in the NMCO environmental baseline survey.

Region of Influence

The region of influence (ROI) relative to hazardous materials and waste is the NMCO site and any surrounding area that may have been affected by hazardous materials or hazardous wastes originating at NMCO or from which hazardous materials or wastes could migrate onto NMCO.

3.13.1 Hazardous Materials Management

Under the requirements of the Base Realignment and Closure (BRAC) process, a BCP was prepared in January 1994 and was revised in March 1996. The BCP documents the environmental condition of each parcel of land at

NMCO. It will be finalized to provide the final status of environmental restoration and associated compliance programs. NMCO completed a base-wide EBS in December 1994 and the Final EBS Site Assessment and Field Sampling and Analysis Plan in June 1995. The EBS is an assessment and summary of all known and suspected areas where hazardous materials or petroleum products have been handled, stored, disposed of, or released within the boundaries of NMCO and adjacent areas. It identifies CERFA-clean properties at NMCO. For each parcel that is identified as unsuitable for immediate transfer, the BRAC cleanup plan describes the action needed (obtaining additional information, investigation, or remediation) prior to transfer. The Final EBS Site Assessment and Field Sampling and Analysis Plan provides a plan and schedule for investigation of the identified hazardous materials areas.

Hazardous materials not required for caretaker maintenance activities have been collected from all designated storage areas and transferred to the Defense Reutilization and Marketing Office, or returned to vendors or to the Naval Supply System. The amount of hazardous materials collected at closure was minimal. Materials not redistributed or sold were disposed of off-site in accordance with the requirements of the federal Resource Conservation and Recovery Act (RCRA) (42 USC 6921).

Small quantities of hazardous materials will continue to be used at NMCO during the caretaker period. These materials will consist predominantly of detergents and pesticides used for general maintenance activities.

3.13.2 Hazardous Waste Management

NMCO is subject to both federal and state regulations on generation, storage, and disposal of hazardous wastes. The facility is listed in the March 1992 RCRA database as a Class II hazardous waste generator. It had an "extremely hazardous substance" permit for generation of state-defined extremely hazardous wastes, and a California Environmental Protection Agency (Cal/EPA) tiered permit for hazardous waste treatment for silver recovery. NMCO is not a treatment, storage, and disposal facility. Hazardous wastes generated at the facility have been handled under guidelines outlined in the NMCO Hazardous Waste Management Plan (U.S. Navy 1987a), which incorporates local, state, and federal regulations. The plan identifies wastes generated by NMCO and specifies appropriate procedures and processes to manage the waste, including reduction, recycling, and manifest procedures. Infectious and nuclear medical wastes are not included in the Hazardous Waste Management Plan and have been managed under separate programs for infection control and for nuclear medical materials and wastes.

The Navy has prepared several annual reports on hazardous waste and environmental compliance at NMCO. Wastes generated on-site have included waste oil, fuel, antifreeze, solvents, refrigerants, and trace amounts of mercury (U.S. Navy 1995a). The various hazardous waste annual reports and other studies of NMCO show the amounts of hazardous wastes generated. The 1993 hazardous waste annual report shows that the facility disposed of 3,229 pounds of hazardous waste per month and 67.2 pounds of extremely hazardous waste per month (U.S. Navy 1993). This amount represented a considerable increase over previous annual quantities reported. The increased quantities of hazardous wastes disposed of from NMCO in 1993-1995 were primarily due to draw-down activities and base cleanup activities in response to BRAC requirements. These included return of surplus hazardous materials, some of which cannot be reused and were therefore classified as hazardous wastes. The 1993-1995 hazardous waste disposal quantities represented one-time cleanup actions rather than an increase in operations that generate hazardous wastes (Zarah 1996). The majority of hazardous wastes historically were generated by the operations of the hospital and the Navy drug screening laboratory. The drug laboratory ceased operations at NMCO in December 1994.

A 1992 environmental compliance evaluation shows that NMCO had 20 satellite accumulation locations (U.S. Navy 1995a). Up to 20 gallons of waste could be accumulated at each of those locations. The number of satellite accumulation locations started decreasing in 1992 as base activities have diminished (Douchand 1995). When the 20-gallon limit is reached at a satellite accumulation location, the wastes are transferred to the main accumulation point in Building #521. Waste storage in Building #521 is allowed without permit requirements for up to 90 days before removal from the site is required.

Healthcare related activities also generated biohazardous and nuclear medical wastes. At full operation, NMCO was a large-quantity generator of infectious and pathological wastes. It disposed of approximately 11,700 pounds of infectious and pathological wastes per month in 1991. Nuclear medical wastes and biohazardous wastes are discussed in greater detail in Section 3.13.9 of this report. The facility had a medical waste management plan in compliance with the California Medical Waste Management Act. Hazardous wastes generated in the hospital's wards and laboratories were collected daily and stored in a secured trailer located behind the main hospital building. A licensed medical waste hauler removed the waste from the site twice weekly for incineration off-site (Douchand 1995).

NMCO hazardous waste, excluding nuclear medical and mixed wastes, was collected from all designated areas, transferred to the Defense Reutilization and Marketing Office, and disposed of off-site in accordance with RCRA

requirements. Nuclear medical and mixed waste was handled separately in accordance with applicable requirements. These wastes also were removed for off-site disposal.

3.13.3 Installation Restoration Program

Military installations were required under CERCLA to conduct site audits, beginning in 1987. This audit process, which is independent of BRAC, included identification of Installation Restoration Program sites. No Installation Restoration Program sites were identified at NMCO (U.S. Navy 1995a).

3.13.4 Asbestos

Asbestos-containing material (ACM) remediation is regulated by the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration, and the state of California. Asbestos fiber emissions into the ambient air are regulated in accordance with Section 112 of the Clean Air Act, which established the National Emissions Standards for Hazardous Air Pollutants, with accompanying regulations addressing the demolition or renovation of buildings with ACM. The Toxic Substances Control Act (15 U.S.C. § 260) and the Asbestos Hazardous Emergency Response Act provide the regulatory basis for handling ACM in school buildings. The Asbestos Hazardous Emergency Response Act and Occupational Safety and Health Administration regulations cover worker protection for employees who work around or remediate asbestos-containing materials.

Renovation or demolition of buildings with ACM has the potential to release asbestos fibers into the air. Asbestos fibers could be released due to disturbance or damage of various building materials, such as pipe and boiler insulation, acoustical ceilings, sprayed-on fireproofing, and other materials used for soundproofing or insulation. Only friable ACMs, such as those listed above, are considered a health risk. Nonfriable ACMs, such as transite piping, shingles, or floor tile, are not considered a health risk unless they are mechanically abraded in such a way as to produce dust.

A facility-wide survey for asbestos-containing materials was required prior to base disposal. Department of Defense (DOD) policy is that property with ACM will not be disposed of through the BRAC process unless it has been determined that the ACM does not pose a threat to human health at the time of transfer and that the property complies with applicable statutes and regulations regarding ACM.

Some asbestos sampling was performed by the Public Works Center in 1990. Friable ACM was found in all five of the buildings sampled; it was subsequently removed (U.S. Navy 1995a). A comprehensive asbestos survey was performed in 1994. Friable, accessible, and damaged asbestos was removed or encapsulated in all buildings in 1994 and 1995 with the exception of Building #22 (the old boiler house). Friable, accessible, and damaged asbestos in Building #22 was removed by PWC. Nonfriable asbestos was left in place. No further comprehensive surveys are planned because all detected friable asbestos has been removed (Zarah 1996). However, additional confirmation sampling may be performed if Navy closure or caretaker activities could expose previously undetected friable asbestos, or to determine the asbestos content of materials previously assumed to contain asbestos. Any friable damaged, and accessible asbestos will be removed by the Navy prior to transfer.

Asbestos pipe insulation (lagging) reportedly existed on the vaulted underground steam piping and the old boilers that formerly served the hospital complex (U.S. Navy 1995b). Asbestos was removed from the abandoned steam lines in exposed areas in 1995. Asbestos in the buried portions of the lines was left in place. The vaults were filled with sand (Zarah 1996).

3.13.5 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are found in trace amounts in chlorinated hydrocarbon fluids used in electrical equipment, primarily in transformers and capacitors, because they are electrically nonconductive and stable at high temperatures. PCBs also have been identified in light fixtures, ballasts, certain machine shop equipment, and some solid materials.

The disposal of these compounds is regulated under the Toxic Substances Control Act (15 U.S.C. § 260), which banned the manufacture and distribution of PCBs except for use in enclosed systems. By definition, PCB equipment contains concentrations of 500 parts per million (ppm) or more, whereas PCB-contaminated equipment contains concentrations greater than 50 ppm but less than 500 ppm. The EPA, under the Toxic Substances Control Act, regulates the removal and disposal of all sources of PCBs containing 50 ppm or more. Primary federal regulations for controlling existing PCBs are found in 40 CFR Part 761. California regulations are more stringent than their federal equivalents and are found in California Code of Regulations Title 22. Within California, a waste fluid containing 5 ppm PCBs or more is regulated as hazardous.

All Navy shore activities that generate, treat, store, and dispose of PCBs must inventory or validate all PCBs and PCB items annually in accordance

with Navy procedures and applicable federal and state regulations. The California Department of Toxic Substances Control regulates PCBs as a non-RCRA hazardous waste. Naval Operations Instruction (OPNAVINST) 5090.1B specifies elimination by October 1998 of all transformers containing 500 ppm or more PCBs and elimination by October 2003 of all transformers containing 50 ppm or more PCBs (U.S. Navy 1994d). The presence of PCB-contaminated transformers or other known electrical equipment will be disclosed in findings of suitability to lease or transfer prior to property lease or transfer, as appropriate.

The Public Works Center conducted a survey and sampling program for buildings, sites, and industrial equipment at NMCO in the early 1980s. Because of the sensitive nature of the NMCO installations, the Public Works Center removed all PCB transformers at NMCO before 1985 (U.S. Navy 1990b). According to the BCP, the Public Works Center conducted a comprehensive survey of transformers and capacitors in 1994. No PCBs were found at concentrations subject to regulation.

3.13.6 Storage Tanks and Oil/Water Separators

Underground storage tanks (USTs) and aboveground storage tanks (ASTs) were used to store hazardous substances and petroleum products at several locations at NMCO. Oil/water separators are often below ground and can create environmental issues similar to USTs. No oil/water separators have been identified at NMCO, and they are therefore not included in this discussion.

Underground Storage Tanks

USTs are subject to federal regulations of the Resource Conservation and Recovery Act (40 CFR § 280), as mandated by the Hazardous and Solid Waste Amendments of 1984. The state of California has adopted regulations under Title 23, Division 3, Chapter 16 of the California Code of Regulations. California regulations are more stringent than the federal regulations and require secondary containment on both the tank and piping systems installed after January 1, 1984. The Alameda County Health Care Agency administers the state regulations for USTs at NMCO. USTs are tracked by using an approved monitoring plan as specified by the Public Works Center. All USTs have been removed with the exception of two tanks that were closed in place in the 1970s (Building 22).

The location, contents, size, ownership, and status of USTs are summarized in Table 3-24. UST locations are identified in Figure 3-23.

Table 3-24
Underground Storage Tank (UST) Inventory

Tank Number/ Owner	Site Parcel No.	Location	Year Installed	Capacity (Gal.)	Substance Stored	Comments	Future Actions
141A NMCO	159	Building #144 transportation area	1985	10,000	Unleaded gasoline	Removed	None
141B NMCO	159	Building #144 transportation area	1985	6,000	Diesel fuel	Removed	None
500A NMCO	137	Building #500	1968	5,000	Diesel fuel	Removed	None
505A NMCO	132	Building #505	1981	500	Diesel fuel	Removed	None
512A The Public Works Center	139	Building #512	1988	20,000	Diesel fuel	Removed	None
L63D	115	Commanding officer's residence (removed 1994)	Unknown	750	Diesel fuel	Removed	None
L63E	115	Executive Officer's residence (removed 1994)	Unknown	750	Diesel fuel	Removed	None
111A	159	Building #117 (removed 1991)	1940s	8,000	Petroleum hydrocarbon, exact nature unknown	Removed	None
510A	108	Building #510 NEX[1] gas station (removed 1991)	1981	10,000	Unleaded gasoline	Removed	None

[1] NEX: Navy Exchange

Table 3-24
Underground Storage Tank (UST) Inventory *(continued)*

Tank Number/ Owner	Site Parcel No.	Location	Year Installed	Capacity (Gal.)	Substance Stored	Comments	Future Actions
510B	108	Building #510 NEX gas station (removed 1991)	1981	10,000	Leaded gasoline	Removed	None
510C	108	Building #510 NEX gas station (removed 1991)	1981	10,000	Unleaded gasoline	Removed	None
510D	108	Building #510 NEX gas station (removed 1991)	1981	550	Waste oil	Removed	None
214A	151	Building #214 former NEX gas station (removed 1986)	1952	6,000	Unleaded gasoline	Removed	None
214B	151	Building #214 former NEX gas station (removed 1986)	1952	6,000	Leaded gasoline	Removed	None
214C	151	Building #214 former NEX gas station (removed 1986)	1952	8,000	Unleaded gasoline	Removed	None
214D	151	Building #214 former NEX gas station (removed 1986)	1952	Unknown	Unknown petroleum products	Removed	None
Building #12 1	110	Building #12 1	1940s	Unknown	Petroleum products	No UST found upon excavation.	None

Table 3-24
Underground Storage Tank (UST) Inventory *(continued)*

Tank Number/ Owner	Site Parcel No.	Location	Year Installed	Capacity (Gal.)	Substance Stored	Comments	Future Actions
Building #12 2	110	Building #12	1940s	Unknown	Petroleum products	No UST found upon excavation.	None
Building #22 1	154	Building #22	Unknown	Unknown	Petroleum products	Tank closed in place in the 1970s.	None
Building #22 2	154	Building #22	Unknown	Unknown	Petroleum products	Tank closed in place in the 1970s.	None

Source: U.S. Navy 1996 (BRAC Cleanup Plan).

Aboveground Storage Tanks

Aboveground storage tanks (ASTs) are regulated under California Health and Safety Code, Division 20, Section 6.7, the Uniform Fire Code, and National Fire Protection Association regulations. The regulatory mechanism guiding cleanup and prevention of spills is Senate Bill 1050 of January 1990. Regulatory control is by the Regional Water Quality Control Board. There is one inactive AST at NMCO. Five ASTs were removed. No potential contamination problems in connection with the operation of these tanks have been reported.

The location, contents, size, ownership, and status of ASTs at NMCO are shown in Table 3-25. AST locations are shown on Figure 3-23.

Table 3-25
Aboveground Storage Tank (AST) Inventory

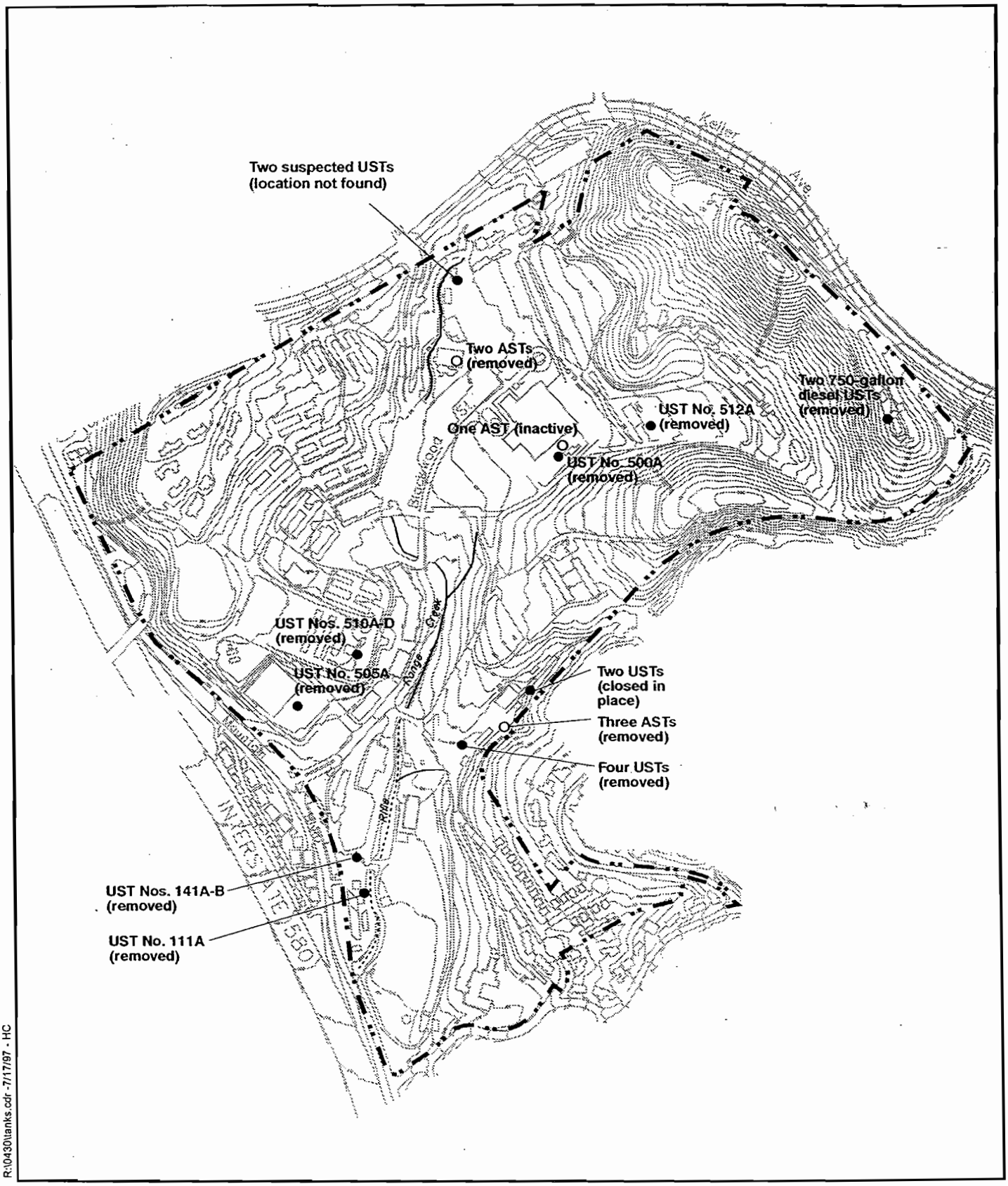
Location	Sizes (gal)/Contents	Status
Building #108	300/diesel fuel	Removed
Building #108	300/diesel fuel	Removed
Building #22	10,000/diesel fuel	Removed in 1994
Building #22	10,000/diesel fuel	Removed in 1994
Building #22		Removed
Building #500	500/diesel fuel	Inactive

Source: U.S. Navy 1995a.

Following closure of the base and during caretaker activities, little use of existing storage tanks would occur.

3.13.7 Pesticides

The registration and use of pesticides are regulated under the Federal Insecticide Fungicide and Rodenticide Act of 1972, as amended (7 USC 136 et seq.). Pesticide management activities are subject to federal regulations contained in 40 CFR 162, 165, 166, 170, and 171, and California regulations contained in CCR Title 3, Chapter 4. Pest control at NMCO was managed and performed by the Public Works Center personnel. The Public Works Center operated under a written pest control plan in accordance with DOD regulations for pesticide use (Williams 1995).



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Legend:

- Underground Storage Tank Location
- Aboveground Storage Tank Location
- Site Boundary

Underground and Aboveground Storage Tanks

Naval Medical Center Oakland

Figure 3-23

Source: U.S. Navy 1995a

3.13.8 Lead Based Paint

Lead was a major ingredient in paint used throughout the country for many years. In 1978, the maximum lead content was reduced to 0.06 percent of newly applied dry film of paint. Lead and lead-containing products, including paint, radiological shielding, and battery parts, have been used during construction, repair, and maintenance since NMCO began operations in 1942.

All residential properties on the site that will be transferred must comply with the federal Residential Lead-Based Paint Hazard Reduction Act of 1992. Any housing constructed before 1960 must be inspected for lead-based paint hazards. Any such hazards must be abated prior to transfer out of federal ownership. Housing constructed between 1960 and 1978 must be inspected and the inspection results must be disclosed to prospective purchasers, although abatement is not required.

The Navy Public Works Center, Norfolk, performed a lead-based paint survey at NMCO's residential buildings in 1995. Residential areas were surveyed for lead in paint, dust, and soil (U.S. Navy 1995b). The survey included the Officers Quarters (Williams) housing, built in 1943-1944; the Johnson Circle housing, built in 1969; the Barcelona/Santa Cruz family housing, built in 1974; the Duplex Officers' Quarters, built in 1956; and the playgrounds, built between 1956 and 1974.

The survey results indicated that lead-based paint is present throughout the residential areas. A lead dust hazard was identified in one unit in the Duplex Officers Quarters; all other lead dust samples were below the action level as defined by the federal Department of Housing and Urban Development. Lead was found in soil at concentrations above the Department of Housing and Urban Development action level of 400 parts per million in the Officers Quarters (Williams), Barcelona/Santa Cruz housing, and Duplex Officers Quarters areas. No soil samples contained lead concentrations greater than 5,000 parts per million, the level at which abatement would be required.

The Navy is pursuing abatement measures in the soils around housing in the Barcelona/Santa Cruz housing.

3.13.9 Medical Materials and Waste

Medical materials and waste generated at NMCO include nuclear medical materials and wastes and biological waste. NMCO has Navy permits for use and storage of materials which have been used for nuclear medicine, x-rays, and laboratory analysis in connection with medical treatment and drug

screening operations at the facility. NMCO's Medical/Biological Waste Program is regulated under CCR, Title 22, Article 13.

Nuclear medical materials have been used in the drug screening laboratory (Building #65), the main hospital (Building #500), and the "radiation safety" area in Building #75 (U.S. Navy 1995a). Nuclear medical materials have been stored in Buildings #17 and #107.

Low-level nuclear medical wastes generated during site operations are stored in Building #17. The wastes are stored in 55-gallon drums and are removed from the site for disposal by Adco Nuclear Services. Nuclear medical wastes generated during site operations were formerly stored in Building #107, which has been released from its classification as a nuclear medical "decay in storage" site by the Navy and has been approved for decommissioning (U.S. Navy 1995a). Nuclear medical waste also was stored in Buildings #85 and #110 (U.S. Navy 1995a).

The hospital complex at NMCO has provided inpatient and outpatient consultation and general clinical services. The Navy drug screening laboratory, which operated on-site until December 1994, was the Navy's major west coast drug screening analysis facility. These facilities have been the only recent generators of medical or biological wastes at NMCO. Wastes have included laboratory reagents, x-ray film developing and fixing solutions, solid wastes (such as wound dressings), and empty or out-of-date pharmaceutical containers. These materials have been placed in marked bags or containers at the point of generation and transferred to the housekeeping department for storage each day. Browning Ferris Industries collected and disposed of these wastes twice weekly. Proper disposal was further assured by a dedicated storage facility and formal staff training on blood-borne pathogens.

At the time of base closure, the medical clinical operations were closed and no wastes were generated, stored, or disposed of.

3.13.10 Radon

Radon is a colorless and odorless gas that is produced by decay of naturally-occurring uranium to radium. Radium is found in high concentrations in rocks containing uranium, granite, shale, phosphate, and pitchblende. Atmospheric radon is diluted to insignificant concentrations. Radon that is present in soil, however, can enter a building through small spaces and openings, accumulating in enclosed areas, such as basements. The cancer risk caused by exposure, through the inhalation of radon, is a topic of concern.

The amount of radon is measured in picocuries per liter of air (pCi/L). The average indoor level is estimated to be 1.3 pCi/l and about 0.4 pCi/L of radon is usually found in the outside air. There are no laws that require testing and remediation for radon, but the EPA has made recommendations for both residential housing and schools. The EPA-recommended action level for radon is 4 pCi/l.

Radon testing was performed in Building #62A in 1993. Radon monitors were placed in 23 rooms throughout the building. Analysis found that no radon concentrations exceeded 4.0 pCi/l; the highest concentration was less than 0.5 pCi/l (U.S. Navy 1995a).

DOD policy regarding radon on BRAC properties is to ensure that any available and relevant radon assessment data pertaining to the BRAC property will be included in property transfer documents (U.S. Navy 1995a). No further radon assessments are planned.

3.13.11 Regulatory Considerations

The following is a brief discussion of the major federal laws and regulations that apply to hazardous materials and waste at NMCO.

Community Environmental Response Facilitation Act (CERFA). Congress amended the Comprehensive Environmental Response, Cleanup, and Liability Act (CERCLA) in 1992 through the passage of CERFA. The purpose of CERFA is to expedite the identification of uncontaminated real property, within closing federal facilities, which offers the greatest opportunity for reuse and redevelopment. Uncontaminated, or CERFA-eligible, property is defined as any real property on which no hazardous substances and no petroleum products were stored for one year or more or were known to have been released or disposed.

Identification of uncontaminated properties at NMCO is the responsibility of the Navy. The EPA is the regulatory authority for enforcement of CERCLA, including the CERFA amendments. However, the EPA has joined with Cal/EPA in the implementation of CERFA for Department of Defense (DOD) facilities in California. Cal/EPA serves as the lead agency for closures of military bases, including NMCO, not listed in the National Priorities List (NPL). Cal/EPA generally follows EPA guidance for CERCLA sites.

For properties that cannot qualify as CERFA-eligible, the CERFA law specifies that the deed for the transfer of subject property shall include a covenant warranting that all remediation necessary to protect human health and the environment with respect to any hazardous substance remaining on

the property has been taken prior to the date of transfer, and that any response action or corrective action found to be necessary after the date of transfer shall be conducted by the United States.

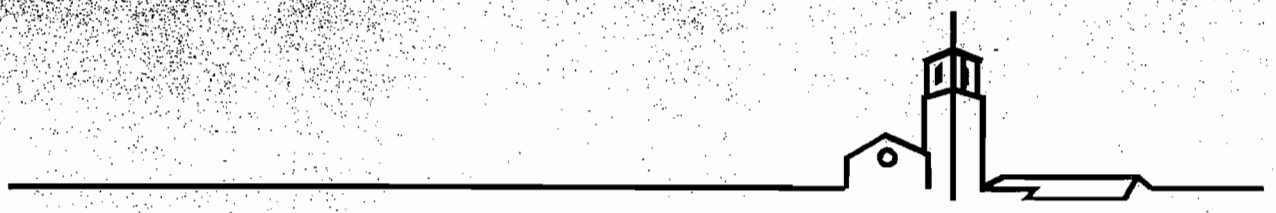
Properties that contain or potentially contain contamination cannot be transferred prior to environmental remediation. However, the DOD has established a policy for lease of these properties. The DOD with regulatory participation can develop a site-specific baseline survey and a finding of suitability to lease or transfer for the property. The finding of suitability to lease may include specific land use restrictions to protect human health and the environment and to ensure government access for final investigations and remediation. A finding of suitability to transfer may only be issued for clean properties and does not include land use restrictions.

Resource Conservation and Recovery Act. In response to the need to more closely regulate the ongoing handling, storage, transportation, and disposal of hazardous wastes, the U.S. Congress passed the Resource Conservation and Recovery Act of 1976, which presents the federal regulations for the operation of hazardous waste storage, treatment, and disposal sites. The State of California implemented the requirements of the Resource Conservation and Recovery Act under interim authorization from the federal government through enforcement of the California Hazardous Waste Control Law, which provides regulations that equal or exceed the federal standards for hazardous waste management. Final authorization for the state to implement the Resource Conservation and Recovery Act was given in 1993. The responsible agency for enforcement of the Resource Conservation and Recovery Act and the California Hazardous Waste Control Law is Cal/EPA, Department of Toxic Substances Control.

Comprehensive Environmental Response, Compensation, and Liability Act. Originally passed in 1980, CERCLA created national policies and procedures to identify and remediate sites previously contaminated by the release of hazardous substances. CERCLA formalized the process for identification of sites and the prioritization for the cleanup of sites through the National Contingency Plan, which contains criteria for the evaluation of sites that provide the basis for the preliminary assessment and site inspection. The evaluation that results in a priority ranking of the site that determines whether it should be placed on the National Priorities List. Facilities placed on the list are commonly referred to as "Superfund" sites. NMCO has been evaluated under this process and has not been placed on the National Priorities List.

The Application of Radon Reduction Methods (EPA 1988) summarizes the EPA-recommended action level of 4 pCi/L and guidance for action by recommending that:

- For radon concentrations greater than 200 pCi/L, action be initiated within a few weeks;
- For radon concentrations in the range of 20 to 200 pCi/L, action be initiated within several months;
- For radon concentrations in the range of 4 to 20 pCi/L, action be initiated within a few years (the higher the radon level the more urgent the need for action); and
- For radon concentrations less than 4 pCi/L, no action is specifically recommended. However, many individuals may elect to further reduce radon concentrations in the range of 1 to 4 pCi/L.



4.0 ENVIRONMENTAL CONSEQUENCES

4. ENVIRONMENTAL CONSEQUENCES

This chapter describes the potential environmental consequences associated with the disposal of federal surplus land and reuse of Naval Medical Center Oakland (NMCO). These consequences are called environmental effects or environmental impacts. These two terms are used interchangeably in this chapter and throughout the rest of this environmental impact statement/environmental impact report (EIS/EIR).

The four reuse alternatives described in Chapter 2 including the Maximum Capacity Alternative, the Mixed Use Village Alternative, the Single Use Campus Alternative, and the Residential Alternative, are evaluated for environmental impacts that could result from their implementation. The No Action Alternative is also evaluated for environmental impacts that could result from it's implementation. The Maximum Capacity Alternative is also the preferred alternative and includes the NMCO Reuse Plan, adopted by the Oakland Base Reuse Authority (OBRA) on June 10, 1996 and published in August 1996 (OBRA 1996).

Environmental effects, or impacts, are identified for the same issue areas, and in the same order, as presented in Chapter 3, including land use, socioeconomics, public services, cultural resources, aesthetic and scenic resources, biological resources, water resources, geology and soils, traffic and circulation, air quality, noise, utilities, and hazardous materials and waste.

For purposes of the Navy NEPA analysis, direct environmental consequences or impacts are those associated with Navy disposal of surplus property and the No Action Alternative. Indirect impacts are associated with community reuse of Navy surplus property. The Navy's roles and responsibilities for disclosing indirect reuse-related environmental impacts is to address reasonably foreseeable impacts. However, property reuse will occur after it is conveyed from federal ownership and in support of local reuse actions. Implementation of mitigation measures for reuse environmental impacts is a local responsibility and not the responsibility of the Navy.

After their identification, environmental impacts may be classified in one of four different levels. The first level is "significant and not mitigable." This means that the impact exceeds some threshold of significance (thresholds of significance are presented as "significance criteria."), and that the impact can not be mitigated (i.e. avoided or reduced to a less adverse effect). The only impacts identified in this EIS/EIR that meet that classification are air quality impacts associated with traffic-related ozone precursor and PM_{10} emissions.

Beyond these impacts, the most adverse impacts identified in this report are classified as "significant and mitigable." This means that although the impact exceeds some threshold of significance, it can be mitigated through full implementation of mitigation measures (i.e. actions that serve to avoid or reduce the impact). There are two other levels of impacts used in this report. They are "nonsignificant," which means that the impact does not exceed some threshold of significance, and is therefore "nonsignificant" when compared to such thresholds, and "none," which is the same as "no impact," when compared to significance thresholds and criteria.

For every issue area evaluated in this EIS/EIR, impacts of disposal and of each alternative, including the No Action Alternative, are projected to the year 2020. The year 2020 was chosen as when the final reuse plan would be fully implemented. It is anticipated that all aspects of the final reuse plan would be in place by 2020. Complete implementation of each alternative is assumed in the analysis of impacts.

The impacts discussion for each issue area (i.e. land use, socioeconomics, etc.) begins with an introduction of the issue area, and the general scope (i.e. range) of subtopics considered in the impacts analysis. Some of the issue area introductions include additional explanations intended to give the reader more information regarding the context or development of the analysis. For example, the socioeconomics analysis (Section 4.2) explains that two levels of geographic detail are used–regional, and neighborhood–in order to appropriately identify impacts that are relevant to one or the other levels of detail. The aesthetics and scenic resources impacts analysis (Section 4.5) provides an introduction to the visual components of the project–for each alternative–to better place the reader in the proper frame of reference for considering visual impacts. The biological resources analysis (Section 4.6) includes a discussion of planning processes that are needed for biological resources and for the ongoing protection of important species and their habitat. Both the socioeconomics (4.2) and the traffic and circulation (4.9) sections also include discussions of their respective methodologies that are used for identifying impacts.

The region of influence (ROI) applicable to the specific issue area either precedes or follows these introductions as appropriate to best present such information to the reader. The next section includes the criteria used to determine whether an impact would be significant. These "significance criteria" contain the thresholds of significance for each specific issue area.

Significance criteria are followed immediately by a table that summarizes impact determinations for that particular issue area. The table includes four separate circular symbols corresponding to the four levels of impacts, and

relates the type of impact to some subtopic within the issue area (i.e. impacts to schools is one subtopic within the socioeconomic issue area).

The text that follows the summary tables provides the reasoning for identifying impacts of disposal and of each of the alternatives, including the No Action Alternative. Impacts are identified first for disposal, and then for each of the four reuse alternatives, followed by the No Action Alternative. Of the reuse alternatives, impacts for the preferred, or Maximum Capacity Alternative are presented first, followed, in order, by impacts identified for the Mixed Use Village Alternative, the Single Use Campus Alternative, and the Residential Alternative. There are two density-related options for the Residential Alternative, as explained in Chapter 2.

Mitigation measures are identified for each impact determined to be significant. Significant impacts and mitigation measures are numbered when there is more than one impact per topic. Nonsignificant impacts (including those that are beneficial) are discussed separately from the significant impacts and are not numbered. Activities that can reduce the adverse nature of some nonsignificant impacts are sometimes recommended to the extent that they serve to provide additional information to the public and decisionmakers. Beneficial impacts also are mentioned for this same informational purpose. Unless otherwise indicated in the impacts discussion, Navy participation in meeting mitigation costs is not anticipated.

In some sections, another section titled "Applicable Laws, Regulations, and Standards" has been included. Some potential effects of one or more of the development alternatives can be avoided, or minimized by compliance with applicable federal, state, and local laws (e.g. Clean Water Act) and/or regulations, or by compliance with accepted professional standards (e.g. for the construction of buildings according to accepted health and safety standards, etc.). Such effects and the corresponding laws, regulations, and standards are discussed in these sections in order to differentiate them from conventional National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) impacts.

For purposes of the Navy's NEPA analysis, environmental impacts associated with implementation of the reuse alternatives are considered indirect environmental impacts. The Navy's role and responsibilities for disclosing indirect reuse-related environmental impacts is to address reasonably foreseeable impacts. However, property reuse will occur after it is transferred from federal ownership and in support of local reuse actions. Implementation of mitigation measures for reuse environmental impacts is a local responsibility and not the responsibility of the Navy.

The City of Oakland intends to use this program EIS/EIR for all project approvals required to implement the reuse plan. Such approvals may include, but are not limited to general plan amendments, rezoning, zoning permits, specific plans or other specific area plans, redevelopment plan, development agreements, subdivision applications, tree removal permits and grading permits. Subsequent project-level environmental review may be required under the California Environmental Quality Act for as yet unforeseen developments and impacts that may not have been adequately covered by this document.

4.1 LAND USE

This section analyzes land use impacts potentially resulting from disposal, the proposed reuse alternatives, and the No Action Alternative. Impacts to on-site and surrounding land uses are evaluated and compared to existing land use conditions. The region of influence for land use analysis includes the NMCO site, surrounding residential neighborhoods, commercial and retail development, and other areas that could be directly or indirectly affected by proposed land uses.

4.1.1 Significance Criteria

The proposed development alternatives would cause a significant impact on land use if: their implementation would conflict with established residential, recreational, educational, or other uses in the project area, (i.e. by disrupting or dividing the established physical land use configurations, or introducing incompatible land uses). The consistency of the proposed reuse alternatives with the goals and policies of the City of Oakland's Comprehensive Plan has been considered when evaluating their land use impacts. To ensure consistency between the selected alternative and the city's plans and policies, current land use designations and regulations would need to be revised to incorporate the selected development plan for the site, as described in Section 3.1. Adoption of one of these reuse alternatives as part of reuse plan adoption and accompanying amendments to the Comprehensive Plan and zoning would establish such goals and policies for the NMCO site. Thus, consistency of proposed reuse alternatives with existing City of Oakland land use goals and policies is not a criterion for impact significance. Table 4-1 summarizes land use impact determinations that follow.

4.1.2 Navy Disposal

No Impacts

Disposal, as a transfer of title, in and of itself not an environmentally disruptive action, would not impact land use because no major change to on-site land uses would occur as part of disposal.

4.1.3 Maximum Capacity Alternative

Nonsignificant Impacts

No significant land use impacts would result from implementation of the preferred, or Maximum Capacity Alternative, because no disruption of existing surrounding land uses would occur. No substantially incompatible land uses would be introduced, and proposed land uses would not have the

potential to disrupt or divide the established physical land use configurations.

Table 4-1
Summary of Land Use Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Conflicts with existing residential uses	○	○	◐	◑	◐	○
Conflicts with public access policies	○	○	◐	◐	◐	◐
Conflicts with surrounding land uses	○	○	○	◐	◐	○
Conflicts with other existing uses	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

The introduction of mixed use development of residential, corporate office, retail, recreation (including the nine-hole golf course) and open space is generally compatible with the prevailing residential character of the surrounding land uses. The majority of the area (96 acres) is devoted to housing and the executive golf course. These uses would be similar to nearby uses in the Sequoyah Country Club area. There may be some minor, and very localized land use conflicts due to changes in levels of human activity on the site. Specifically, greater public access, and the introduction of new retail uses near housing on Keller Avenue may cause such conflicts; however, similar uses and public open space occur in the immediate vicinity already, so this impact is not considered significant. The configuration of the Maximum Capacity Alternative reflects considerable attention (throughout the Oakland Base Reuse Authority (OBRA) planning process for the NMCO site) to maximizing the compatibility of adjoining land uses, in compliance with OBRA objectives and procedures to conform to City of Oakland goals and policies as far as possible. The minor conflicts that remain are considered nonsignificant in view of this conformance and because they do not substantially disrupt surrounding land uses.

The increase in access to public recreation and open space represents a slight beneficial effect by increasing the amount of recreational facilities available to the greater community composed both of surrounding landowners and

the City at large. This greater access is consistent with the city's existing open space, conservation, and recreation policies. The expansion of the open space network along the Rifle Range Creek corridor establishes a key beneficial pedestrian link between the I-580 corridor and the Leona Regional Open Space trail system.

4.1.4 Mixed Use Village Alternative

Significant Impacts

Impact 1: Significant and mitigable land use impacts would result from conflicts with existing residential uses due to the development of a research and development facility, particularly a biotechnology tenant. Such uses would require increased security and related restrictions to access not normally encountered in predominantly residential neighborhoods. Depending upon the nature of the biotechnology activities, certain safety measures would be required to ensure isolation of laboratory areas and potentially hazardous materials from the general population (see Section 4.13 for more information regarding applicable laws, regulations, and standards that provide such protections for all development alternatives). These measures may include buffer zones, high security measures, and other isolation mechanisms that could be inconsistent with a relatively small site encircled by a residential neighborhood.

Mitigation 1: The impacts of a research and development facility would be mitigable to a level that is nonsignificant by limiting all biotechnology operations conducted on-site to those with a low level of risk consistent with surrounding neighborhoods, as determined by the city's public health department. If implemented, this alternative, and specifically the biotech operations would require subsequent approvals to ensure that risk levels to surrounding neighborhoods were appropriately addressed and reduced.

Nonsignificant Impacts

Public Access. Restrictions on public access to the site may be required by the campus development. If such restrictions affect considerable portions of the site, this would not be consistent city policies advocating increased access to open space and recreation. However, since public access is presently limited, and since policy consistency is not a criterion for impact significance, access restrictions are considered nonsignificant.

Land Use Conflicts. The development of mixed residential, office, recreation, social services and housing, open space, and community retail uses at the western end of the site may introduce some minor land use conflicts due to changes in levels and types of human activity on the site. However, none of

these uses are incompatible with a residential neighborhood, and no disruption of existing land uses would occur. The retention of 86 acres of open space would be consistent with city policies protecting the natural setting, as would the expansion of the open space network along the Rifle Range Creek corridor.

4.1.5 Single Use Campus Alternative

Nonsignificant Impacts

No significant land use impacts would result from implementation of the Single Use Campus Alternative, because no disruption of existing surrounding land uses would occur, and no major incompatible land uses would be introduced.

Public Access. Restrictions on public access to the site may be required by the campus development. If such restrictions affect considerable portions of the site, this would not be consistent with city policies on increasing access to open space and recreation. However, since public access is presently limited, and since policy consistency is not a criterion for impact significance, access restrictions are considered nonsignificant.

Land Use Conflicts. There may be some minor land use conflicts due to changes in levels of human activity on the site, and due to the introduction of a small neighborhood retail area near existing housing on Keller Avenue. However, these minor conflicts that remain are considered nonsignificant because they do not substantially disrupt surrounding land uses.

The majority of the area (101 acres) is devoted to open space, which is consistent with city policies protecting the natural setting, and which to some extent buffer changes in land use within the NMCO site from adjacent residential uses. The expansion of the open space network along the Rifle Range Creek corridor also represents a beneficial impact, due to the potential for linkage of the I-580 corridor with the Leona Regional Open Space trail system.

4.1.6 Residential Alternative

Nonsignificant Impacts

No significant land use impacts would result from the implementation of the Residential Alternative, because no disruption of existing surrounding land uses would occur, and no major incompatible land uses would be introduced.

Public Access. Minor changes in levels of human activity and minor localized conflicts arising from increases in public access are considered nonsignificant, because such changes and increased access would not disrupt or divide the physical land use configurations.

The increase in access to public recreation and open space represents a slightly beneficial impact to the community at large by increasing the amount of recreational facilities available to it. This is consistent with the city's existing open space, conservation, and recreation policies. The retention of 46 acres of open space is consistent with city policies relating to conservation of the natural setting. The expansion of the open space network along the Rifle Range Creek corridor also represents a beneficial impact, due to the potential for linkage of the I-580 corridor with the Leona Regional Open Space trail system.

No Impacts

Land Use Conflicts. The single family housing, neighborhood retail, active recreation, and open space uses of this alternative would be similar to, and compatible with surrounding land uses. No adverse impacts would occur due to this compatibility.

4.1.7 No Action Alternative

No Impacts

No land use impacts would result from the No Action Alternative, because no disruption of existing surrounding land uses would occur; and no incompatible land uses would be introduced.

The continuing maintenance of existing facilities under caretaker status in the No Action Alternative would result in no adverse impacts since there would be no new impacts on surrounding residential land uses or on-site recreational uses. This alternative would have none of the benefits of the reuse alternatives in terms of increasing the area of park and recreation facilities open to the public, or maximizing the potential of the creek corridor for open space networks.

4.2 SOCIOECONOMICS

This section analyzes socioeconomic impacts resulting from the four development alternatives and the No Action Alternative. The socioeconomic analysis addresses the impacts on jobs, income, population, housing, schools, and recreation that would result from the disposal and implementation of the development alternatives at the NMCO site. Alameda County is the region of influence (ROI) for social and economic impacts. This definition was selected because 70 percent of Alameda County residents also work within the county (California Employment Development Department 1994). Thus the county population and economy will be the area primarily affected by the NMCO site development alternative.

Environmental Justice issues are discussed separately in Section 5.6 of this report.

Neighborhood Level of Analysis for Environmental Justice

For environmental justice issues (which are discussed in detail in Section 5.6), the regional analysis is supplemented by a discussion of the specific characterization of the Oak Knoll Study Area, since the impact of the development alternatives would be felt most strongly by neighboring areas. The Oak Knoll Study Area, which is made up of census tracts 4081, 4099, 4100, 4083, 4101 and 4098, was included in the neighborhood level analysis because it was designated in the Existing Conditions Report (Theresa Hughes and Associates 1994), which was prepared in support of the NMCO Reuse Plan as the appropriate study area for assessing the opportunities and constraints for various land uses at the NMCO site (see Section 3.2 for map of the Oak Knoll Study Area). This analysis is consistent with that reasoning.

To determine the impact of disposal and the development alternatives on the regional economy, the increase in economic activity between 1996 and 2020 that could occur under each reuse alternative is evaluated. Year 2020 projections of future jobs, income, population, and households have been developed using the Association of Bay Area Governments (ABAG) document titled "Projections '94."

The impact of each alternative is first evaluated according to the estimated number of jobs generated, because the level and type of job generation affects the other socioeconomic conditions in a region. Employment created from the alternative being analyzed would result in more jobs at the regional level, since people that would be hired to work at such jobs can reasonably be assumed to live in the region. Jobs create income for spending, spending

supports local businesses, creates additional jobs, and generates more income. When job opportunities exist, new residents move in, adding to the regional population. New households mean additional demand for housing construction and additional revenues and demand for local government services.

Note that a difference exists between employment created within an area and employment created for the residents of an area. Although jobs will be created in Oakland, Oakland residents would not necessarily get most of the jobs created at the NMCO site. The type of uses which would ultimately locate at the NMCO site would determine the type of qualifications and experience required of employees. Some uses, such as research and technology, may attract people from the larger San Francisco Bay Area while retail jobs may attract more local residents. This attraction pattern is common for such facilities regardless of where they may locate.

The impact analysis quantifies only those long-term jobs that would be directly generated by the alternatives on site. Indirect jobs would also be generated but are not likely to be contained within the City of Oakland or Alameda County. For this reason, indirect jobs are not likely to have significant impacts on the region of influence, and are not analyzed.

4.2.1 Significance Criteria

The significance of socioeconomic impacts is relative to the economic characteristics of the geographic area and the time period being evaluated. For this analysis, all four reuse alternatives are compared to the closed NMCO facility (see Table 4-2). In evaluating the relative impact of one alternative over another, the more numerous the jobs generated, the more beneficial the impact. Regional changes in population and housing are considered neither beneficial nor adverse impacts. These changes reflect the normal range of fluctuations in population and housing. Population and housing can change in response to several changes in the regional economy. For example, large scale residential projects can attract construction workers in a rapidly growing area, or the entry of a large firm into a city can attract workers at all levels of skill and education. Depending on these trends, both regionally and locally, people move to respond to job opportunities.

Population and housing in a given area can result in beneficial or adverse impacts to the extent that such changes would be expected to result in environmental and socioeconomic effects. However, increasing population in and of itself is not an environmental effect. For example, additional housing may be deemed positive by the children of long-time residents who would like to stay in the area. However, for landlords who would like to

Table 4-2
Summary of Land Uses and Employment Generation by Alternative

Land Uses	Unit of Measure	Alternatives				
		Maximum Capacity	Mixed Use Village	Single Use Campus	Residential	No Action
Neighborhood Retail	sq ft	-	65,000	22,000	39,000	-
Educational campus[1]	sq ft	-	-	762,000	-	-
Cultural/meeting facilities	sq ft	-	59,000	-	-	-
Research & development	sq ft	-	261,000	-	-	-
Mixed use[2]	sq ft	500,000	300,000	-	-	-
Housing	units	584	90	(see note 2)	357 or 600	-
Executive golf course	acres	54	-	-	-	-
Active recreation	sq ft	44,000	44,000	44,000	44,000	-
Open space	acres	32	86	101	46	-
Total Acres[3]	**acres**	**183**	**183**	**183**	**183**	**183**
Total Built Area	**sq ft**	**544,000**	**729,000**	**828,000**	**83,000**	**529,200**
Total Housing Units	**units**	**584**	**90**	**-**	**357 or 600**	**-**
Total Employment		**717**	**1,140**	**1,150**	**170 or 190**	**8 (estimated)**

[1] The Single Use Campus Alternative is not limited to educational facilities. Conference center/hotel facility and institutional headquarters are also being considered.
[2] The Single Use Campus Alternative would include student/guest facility housing but no estimates regarding number of units developed.
[3] See Tables 2-2 (its footnote number 2), 2-3, 2-4, and 2-5 for estimates of areas to be set aside for unbuildable slopes and roads.

Source: Theresa Hughes & Associates 1995; Thomas 1996.

maximize rental prices, additional housing may be perceived as having a negative impact on rental prices and landlords' real estate investments.

In addition, increases in population and housing would be constrained by local planning regulations. In other words, there would only be as much housing built in the area as the General Plan allows. However, population and housing growth could lead to secondary impacts that may be adverse, such as the potential traffic and infrastructure cost improvements that growth may induce.

With respect to recreation and schools, impacts that lead to additional recreational facilities are considered beneficial. Classroom overcrowding constitutes a significant impact on the environment only if the overcrowding results in physical changes to the environment (such as new school construction). Minor changes in annual operating budgets and cash flows (fiscal impacts) are not considered to be environmental impacts and are therefore not discussed in this section.

Note that under the discussion for each alternative, the level of impact (e.g. significant, nonsignificant, no impact, beneficial) is stated in the first paragraph. The following paragraphs explain why or how a specific conclusion was reached.

Table 4-3 summarizes the impacts on jobs and income, population and housing, schools, and recreational opportunities.

Table 4-3
Summary Of Socioeconomic Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Schools (K-12)	○	○	◑	◑	◑	◑
Population and housing	○	○	○	○	○	○
Employment and income	○	○	○	○	○	○
Recreation	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Non significant
○ = None

4.2.2 Navy Disposal

No Impacts

No significant impacts would result from Navy disposal of the NMCO properties since disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

Schools (K-12). Federal disposal would have no impact on student enrollments since it would not involve construction of housing.

Population and Housing. Disposal would not involve construction of housing, it would have no impact on housing demand or population levels.

Regional Economy— Employment and Income. Federal disposal would create minimal additional employment in Alameda County and therefore would have no effect on jobs and regional personal income levels.

Recreation. Federal disposal would result in no change to existing recreation opportunities.

4.2.3 Maximum Capacity Alternative

Significant Impacts

The Maximum Capacity Alternative may have significant and mitigable impacts on schools. All other socioeconomic parameters included in this analysis will not be significantly affected.

Schools (K-12)

Impact 1: A significant and mitigable impact may result from overcrowding in the Oakland Unified School District (OUSD). The Maximum Capacity Alternative would generate 261 students by 2020, assuming full build-out (Table 4-4). This increase would represent less than one percent of the total 1994 Oakland Unified School District (OUSD) enrollment. Since the OUSD has not included the students generated from this alternative in their facilities planning, and since most schools in the OUSD are at or near capacity, the Maximum Capacity Alternative may result in overcrowding, which may, in turn, lead to new school construction.

Table 4-4
Impact on School District Enrollments

	Alternatives				
	Maximum Capacity	Mixed-Use Village	Single-Use Campus[4]	Residential Option 1	Residential Option 2
No. of new households due to employment[1]	134	214	216	32	36
No. of households due to family housing units	584	90	0	357	600
Gain in households due to alternative	718	304	216	389	636
Impact on the Oakland Unified School District[2,3]	261	110	79	141	231
Total 1994 OUSD enrollment	51,594	51,594	51,594	51,594	51,594
Percent of total 1994 School District enrollment	<1%	<1%	<1%	<1%	<1%
Impact on schools in the Oak Knoll Study Area[2,3]	213	33	0	130	218
Total 1994 Oak Knoll Study Area enrollment	2,786	2,786	2,786	2,786	2,786
Percent of total 1994 School District enrollment	8%	1%	0%	5%	8%

[1] Assume that 75 percent of the jobs would attract new residents in the ROI (Alameda County and City of Oakland). Oakland is assumed to receive a quarter of the new households.

[2] Estimates based on 0.364 students per household (OUSD 1996). Only the housing units proposed at the NMCO site are included in the analysis of impact to the Oak Knoll CTA. Number could be higher if jobs induce additional housing construction in the area.

3 The estimated impact on OUSD by grade groupings is as follows:

Estimated Impact on OUSD by Grade Groupings:	OUSD Yield Factor	Maximum Capacity	Mixed-Use Village	Single Use Campus	Option 1	Option 2
Grades K-6	0.230	165	70	50	89	146
Grades 7-8	0.054	39	16	12	21	34
Grades 9-12	0.080	57	24	17	31	51
Total students	0.364	261	110	79	141	231

[4] The Single Use Campus Alternative would include student and/or guest facility housing but no estimates regarding number of units were developed.

Source: OUSD 1996; Economics Research Associates

The housing units proposed on the NMCO site under this alternative would generate approximately 213 students in the three schools that serve the Oak Knoll area. This increase would represent eight percent of the total 1994 enrollments in the Oak Knoll Study Area schools and may be a significant and mitigable impact if it results in new school construction.

Mitigation 1: Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

No Impacts

Population and Housing. In the year 2020, under the Maximum Capacity Alternative, the population of Oakland and the ROI would increase by 3,006 persons (Table 4-5).

Population and housing growth is considered neither adverse nor beneficial in and of itself because growth can be perceived either way, depending upon the point of view of the people being considered. For example, prospective home buyers and renters would benefit from additional housing units in the market while landlords might consider additional housing detrimental to their income and property values.

However, population and housing growth could lead to secondary impacts that may be adverse, such as the potential traffic and infrastructure cost improvements that growth may induce growth.

Table 4-5
Analysis of Population Impacts in Oakland and the ROI

Population Impact	Alternatives				
	Maximum Capacity	Mixed Use Village	Single Use Campus[5]	Residential Option 1 357 D.U.	Residential Option 2 600 D.U.
Jobs in the ROI due to alternative	717	1,140	1,150	170	190
Alternative employees who may be new ROI residents[1]	538	855	863	128	143
Workers' dependents[2]	903	1,436	1,449	214	239
Gain in population due to jobs	1,441	2,291	2,312	342	382
Number of housing units	584	90	(see note 5)	357	600
Gain in population due to family housing units	1,565	241	(see note 5)	957	1,608
Total change in population due to Alternative	**3,006**	**2,532**	**2,312**	**1,299**	**1,990**
Population Impact in Oakland					
Projected population growth in the City of Oakland between 1995 & 2020	21,000	21,000	21,000	21,000	21,000
Percentage population change due to alternative as percent of population growth in the City of Oakland[3]	14%	12%	11%	6%	10%
Population Impact in Alameda County					
Projected population growth in Alameda County between 1995 and 2020	143,972	143,972	143,972	143,972	143,972
Percentage population change due to alternative as percent of population growth in Alameda County[4]	2%	2%	2%	1%	1%

[1] Assumes that 75 percent of jobs would attract new residents in the ROI (Alameda County and City of Oakland).
[2] Average household size for the ROI in 1995 is 2.68 persons per household (employee = 1, dependents = 1.68).
[3] Estimates would be lower if more jobs go to existing City of Oakland residents or residents of other cities instead of attracting new residents into the City of Oakland.
[4] Estimates would be lower if more jobs go to existing Alameda County residents or residents of other counties instead of attracting new residents into Alameda County.
[5] The Single Use Campus Alternative would include student or guest facility housing but no estimates regarding number of units developed.
Source: Association of Bay Area Governments 1995; Economics Research Associates.

Increases in population would come primarily from people attracted to live within the ROI because of jobs created as a result of the alternative. Any increase in population would be accommodated by projected or planned increases in housing supply and would stimulate a corresponding level of new housing construction in the ROI (Alameda County).

Since it is difficult to project the number of future employees on the NMCO site who will be new residents in the ROI, it is assumed, based on our professional judgement, that 75 percent of all future employees would

be attracted to the ROI for analysis purposes. This assumption implies that the remaining jobs would go to people already living in Alameda County or people living outside Alameda County who are willing to commute to the NMCO site to work.

The 75 percent assumption allows for conservatively analyzing the impact of potentially large population growth in the area. In other words, the 75 percent assumption is probably on the high side but for purposes of estimating environmental impacts, it is better to err on the side that might lead to the identification of adverse impacts (versus erring on the low side) so that mitigation measures can be formulated.

Based on the 75 percent assumption, the ROI would add 1,441 new residents (based on the ROI average of 2.68 persons per household) from jobs created. In addition, the housing units planned on the NMCO site would accommodate another 1,565 residents, for a total of 3,006 new residents in the ROI. When compared to the projected 2020 population, the increase in population as a result of this alternative is quite small, representing a two percent increase to the total ROI population (Table 4-5).

Assuming that 3,006 new residents in the ROI were to live in the City of Oakland, the increase in population due to this alternative would represent approximately 14 percent of the projected population growth in the city between 1995 and 2020.

Regional Economy - Employment and Income. Implementation of the Maximum Capacity Alternative would develop employment-generating land uses creating an estimated 717 jobs in the ROI by 2020 (Table 4-6), a beneficial impact.

Projected job growth for this alternative would increase the 2020 employment projections by less than two percent in Oakland (Table 4-6). The overall increase in job growth in the ROI would be less than one percent. Because regional personal income is closely tied to the change in the number of jobs, it would be affected similarly. That is, regional personal income, which refers to the sum of wages, salaries, and proprietors' income, would increase as regional employment increases. This would be a beneficial impact.

Recreation. Beneficial impacts would result from increased public access to recreational facilities. Under this alternative, 44,000 square feet of active recreation area would be open to the public. An additional 32 acres are designated for open space.

4.2.4 Mixed Use Village Alternative

Significant Impacts

The Mixed Use Village Alternative may have significant and mitigable impacts on schools. All other socioeconomic parameters included in this analysis will not be significantly affected.

Table 4-6
Analysis of Job Impacts in Oakland and the ROI

Job Impact	Alternatives			
	Maximum Capacity	Mixed Use Village	Single Use Campus	Residential
Jobs generated by the alternative [1]	717	1,140	1,150	170-190
Job Impact in Oakland				
Projected job growth in Oakland between 1995 & 2020	54,000	54,000	54,000	54,000
Percentage change in jobs due to the alternative as percent of job growth in Oakland	<2%	2%	2%	<1%
Job Impact in Alameda County				
Projected job growth in Alameda County between 1995 & 2020	257,000	257,000	257,000	257,000
Percentage change in jobs due to the alternative as percent of job growth in Alameda County	<1%	<1%	<1%	<1%

[1] Jobs generated was based on the total jobs presented on Table 4-5 for each alternative.

Source: Association of Bay Area Governments 1995; Economics Research Associates.

Schools (K-12)

Impact 1: A significant and mitigable impact may result from overcrowding in the OUSD. The Mixed Use Village Alternative would generate approximately 110 students by 2020, assuming full build-out (Table 4-4). This increase would represent less than one percent of the total 1994 OUSD enrollment. Since the OUSD has not included the students generated from this alternative in their facilities planning and since most schools in the OUSD are at or near capacity, the Mixed Use Village Alternative could result in overcrowding, which may, in turn, lead to new school construction.

The housing units proposed on the NMCO site under this alternative would generate approximately 33 students in the three schools that serve the Oak

Knoll area. This increase would represent one percent of the total 1994 enrollments in the Oak Knoll Study Area schools and may be a significant and mitigable impact if it results in new school construction.

Mitigation 1: Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

No Impacts

Population and Housing. In the year 2020, under the Mixed Use Village Alternative, the population in the City of Oakland and the ROI would increase by 2,532 persons (Table 4-5). The population and housing impacts are neither beneficial nor adverse in and of themselves and are the natural consequences of fluctuations in the employment level in the region; that is people follow jobs. Therefore, jobs attract people to move into an area.

Population and housing growth is considered neither adverse nor beneficial in and of itself because growth can be perceived either way, depending upon the point of view of the people being considered. For example, prospective home buyers and renters would benefit from additional housing units in the market while landlords might consider additional housing detrimental to their income and property values.

However, population and housing growth could lead to secondary impacts that may be adverse, such as the potential traffic and infrastructure cost improvements that growth may induce.

Increases in population would come primarily from people attracted to live within the ROI because of jobs created as a result of this alternative. Any increase in population would be accommodated by projected or planned increases in housing supply and would stimulate a corresponding level of new housing construction in the ROI (Alameda County).

Since it is difficult to project the number of future employees on the NMCO site who will be new residents in the ROI, it is assumed that 75 percent of all future employees would be attracted to the ROI for analysis purposes. This assumption implies that the remaining jobs would go to people already residing in Alameda County or people residing outside Alameda County who are willing to commute to the NMCO site to work.

The 75 percent assumption allows for conservatively analyzing the impact of potentially large population growth in the area. In other words, the 75 percent assumption is probably on the high side but for purposes of estimating environmental impacts, it is better to err on the side that might lead to adverse impacts so that mitigation measures could be formulated, particularly for the secondary impacts of growth.

Based on the 75 percent assumption, the ROI would add 2,291 new residents (based on the ROI average of 2.68 persons per household) from jobs created at the NMCO site. In addition, the housing units planned on the NMCO site would accommodate another 241 residents, for a total of 2,532 new residents in the ROI. When compared to the projected year 2020 population, the increase in population as a result of this alternative is small, representing a two percent increase to the total ROI population (Table 4-5).

Assuming that all the new residents (2,532 persons) in the ROI were to live in the City of Oakland, the increase in population due to this alternative would represent approximately 12 percent of the projected population growth in the city between 1995 and 2020. This level of impact is neither adverse nor beneficial as previously explained.

Regional Economy - Employment and Income. Implementation of the Mixed Use Village Alternative would develop employment-generating land uses creating an estimated 1,140 jobs in the ROI by 2020 (Table 4-6). This would be a beneficial impact.

Projected job growth under this alternative would increase the 2020 employment projections by two percent in the City of Oakland (Table 4-6). The overall increase in job growth in the ROI would be less than one percent. Because regional personal income is closely tied to the change in the number of jobs, it would be affected similarly. As regional employment

increases, regional personal income, which is the sum of wages, salaries and proprietors' income, would also increase.

Recreation. Impacts would be beneficial under the Mixed Use Alternative. Like the Maximum Capacity Alternative, 44,000 square feet of active recreation area would be open to the public. An additional 86 acres are designated for open space.

4.2.5 Single Use Campus Alternative

Significant Impacts

The Single Use Campus Alternative may have significant and mitigable impacts on schools. All other socioeconomic parameters included in this analysis will not be significantly affected.

Schools (K-12)

Impact 1: A significant and mitigable impact may result from overcrowding in the OUSD. The Single Use Campus Alternative would generate approximately 79 students by 2020, assuming full build-out (Table 4-4). This increase would represent less than one percent of the total 1994 OUSD enrollment. Since the OUSD has not included the students generated from this alternative in their facilities planning, and since most schools in the OUSD are at or near capacity, the Single Use Campus Alternative could result in overcrowding, which may, in turn, lead to new school construction.

The Single Use Campus Alternative does not propose housing units other than student/guest facilities that would temporarily accommodate guests or students using the on site educational campus. Since the alternative would therefore propose no housing to support full time residents of the area, it would have no impact on schools in the Oak Knoll Study Area (indicated as generating zero (0) students on Table 4-4).

Mitigation 1: Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in

property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

No Impacts

Population and Housing. In the year 2020, under the Single Use Campus Alternative, the population in the City of Oakland and the ROI would increase by 2,312 persons (Table 4-5). The population and housing impacts are neither beneficial nor adverse in and of themselves and are the natural consequences of fluctuations in the employment level in the region; that is people follow jobs. Therefore, jobs attract people to move into an area.

Population and housing growth is considered neither adverse nor beneficial in and of itself because growth can be perceived either way, depending upon the point of view of the people being considered. For example, prospective home buyers and renters would benefit from additional housing units in the market while landlords might consider additional housing detrimental to their income and property values.

However, population and housing growth could lead to secondary impacts that may be adverse, such as the potential traffic and infrastructure cost improvements that growth may induce.

Increases in population would come primarily from people attracted to live within the ROI because of jobs created as a result of the alternative. Any increase in population would be accommodated by projected or planned increases in housing supply and would stimulate a corresponding level of new housing construction in the ROI (Alameda County).

Since it is difficult to project the number of future employees on the NMCO site who will be new residents in the ROI, it is assumed that 75 percent of all future employees would be attracted to the ROI for analysis purposes. This assumption implies that the remaining jobs would go to people already residing in Alameda County or people residing outside Alameda County who are willing to commute to the NMCO site to work.

The 75 percent assumption allows for conservatively analyzing the impact of potentially large population growth in the area. In other words, the 75 percent assumption is probably on the high side but for purposes of estimating environmental impacts, it is better to err on the side that might lead to adverse impacts so that mitigation measures could be formulated, particularly for the secondary impacts of growth.

Based on the 75 percent assumption, the ROI would add 2,312 new residents (based on the ROI average of 2.68 persons per household) from jobs created at the NMCO site. There are no housing units planned on the NMCO site under this alternative.

When compared to the projected 2020 population, the increase in population as a result of this alternative is quite small, representing a two percent increase to the total ROI population (Table 4-5).

Assuming that all the new residents (2,312 persons) in the ROI were to live in the City of Oakland, the increase in population due to this alternative would represent approximately 11 percent of the projected population growth in the city between 1995 and 2020. This level of impact is neither adverse nor beneficial as previously explained.

Regional Economy - Employment and Income Implementation of the Single Use Campus Alternative would develop employment-generating land uses, creating an estimated 1,150 jobs in the ROI by 2020 (Table 4-6). This would be a beneficial impact.

Projected job growth under this alternative would increase the 2020 employment projections by two percent in the city (Table 4-6). The overall increase in job growth in the ROI would be less than one percent. Because regional personal income is closely tied to the change in the number of jobs, it would be affected similarly. As regional employment increases, regional personal income, which is the sum of wages, salaries and proprietors income, would also increase.

Recreation. Impacts would be beneficial under the Single Use Campus Alternative. Like the Maximum Capacity Alternative, 44,000 square feet of active recreation area would be open to the public. An additional 101 acres are designated for open space.

4.2.6 Residential Alternative

Significant Impacts

The Residential Alternative may have significant and mitigable impacts on schools. All other socioeconomic parameters included in this analysis will not be significantly affected.

Schools (K-12)

Impact 1: A significant and mitigable impact may result from overcrowding in the OUSD. The Residential Alternative would generate approximately 141 to 231 students by the year 2020, assuming full build-out (Table 4-4). This increase would represent less than one percent for both Option 1 and Option 2 of the total 1994 OUSD enrollment. Impact on schools in the Oak Knoll CTA area ranges from 130 to 218 students, or five to eight percent of the area's schools. Since the OUSD has not included the students generated from this alternative in their facilities planning, and since most schools in the OUSD are at or near capacity, the Single Use Campus Alternative could result in overcrowding, which may, in turn, lead to new school construction.

The housing units proposed on the NMCO site under this alternative would generate approximately 130 (Option 1) or 218 (Option 2) students in the three schools that serve the Oak Knoll Study Area. These increases would represent either five percent (Option 1) or nine percent (Option 2) of the total 1994 enrollments in the Oak Knoll Study Area, and would be a significant and mitigable impact if it results in new school construction.

Mitigation 1: Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or

annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

No Impacts

Population and Housing. In the year 2020, under the Residential Alternative, the population in the City of Oakland and the ROI would increase by 1,299 (Option 1) to 1,990 (Option 2) persons. The population and housing impacts are neither beneficial nor adverse in and of themselves and are the natural consequences of fluctuations in the employment level in the region; that is people follow jobs. Therefore, jobs attract people to move into an area.

Population and housing growth is considered neither adverse nor beneficial in and of itself because growth can be perceived either way, depending upon the point of view of the people being considered. For example, prospective home buyers and renters would benefit from additional housing units in the market while landlords might consider additional housing detrimental to their income and property values.

However, population and housing growth could lead to secondary impacts that may be adverse, such as the potential traffic and infrastructure cost improvements that growth may induce.

Increases in population would come primarily from people attracted to live within the ROI because of jobs created as a result of this alternative. Any increase in population would be accommodated by projected or planned increases in housing supply and would stimulate a corresponding level of new housing construction in the ROI (Alameda County).

Since it is difficult to project the number of future employees on the NMCO site who will be new residents in the ROI, it is assumed that 75 percent of all future employees would be attracted to the ROI for analysis purposes. This assumption implies that the remaining jobs would go to people already residing in Alameda County or people residing outside Alameda County who are willing to commute to the NMCO site to work.

The 75 percent assumption allows for conservatively analyzing the impact of potentially large population growth in the area. In other words, the 75 percent assumption is probably on the high side but for purposes of estimating environmental impacts, it is better to err on the side that might lead to adverse impacts so that mitigation measures could be formulated, particularly for the secondary impacts of growth.

Based on the 75 percent assumption, the ROI would add 342 (Option 1) to 382 (Option 2) new residents (based on the ROI average of 2.68 persons per household) from jobs created at the NMCO site. In addition, approximately 357 (Option 1) to 600 (Option 2) housing units are proposed for the NMCO site under this alternative, which would add another 957 (Option 1) to 1,608 (Option 2) residents for a total of 1,299 to 1,990 new residents in the ROI. When compared to the projected 2020 population, the increase in population as a result of this alternative is quite small, representing a one percent increase for both Option 1 and Option 2 to the total ROI population (Table 4-5).

Assuming that all new residents (1,299 to 1,990 persons) in the ROI were to live in the City of Oakland, the increase in population due to this alternative would represent approximately six to 10 percent of the projected population growth in the city between 1995 and 2020.

Regional Economy - Employment and Income. Implementation of the Residential Alternative would develop employment-generating land uses, creating an estimated 170 to 190 jobs in the ROI by 2020 (Table 4-6). This would be a beneficial impact.

Projected job growth with this alternative would increase the 2020 employment projections by less than one percent in the city (Table 4-6). The overall increase in job growth in the ROI would be less than one percent. Because regional personal income is closely tied to the change in the number of jobs, it would be affected similarly. As regional employment increases, regional personal income, which is the sum of wages, salaries and proprietors' income, would also increase.

Recreation. Impacts would be beneficial under the Residential Alternative. Like the Maximum Capacity Alternative, 44,000 square feet of active recreation area would be open to the public. An additional 46 acres are designated for open space.

4.2.7 No Action Alternative

No Impacts

Under caretaker status, there would be minimal employment associated with maintenance. As previously explained under the significance criteria, all the alternatives are being compared to a closed NMCO facility. The No Action Alternative would essentially represent a closed NMCO facility. Only maintenance of the buildings and facilities are planned, and no new construction would occur. Therefore, no additional housing, population, or

employment would be generated and no impacts on any of the socioeconomic parameters discussed in this section would occur.

Schools (K-12). The No Action Alternative would not involve re-occupation of housing units and would not generate jobs on site. Therefore no population growth is expected. The school district would not be affected.

Population and Housing The No Action Alternative would not create additional housing or employment and therefore would have no impact on housing or population.

Regional Economy - Employment and Income. The No Action Alternative would not create additional employment in the ROI compared to a closed NMCO facility. Therefore, this alternative would have no impact.

Recreation. The recreational facilities would remain off limits to the public under the No Action Alternative. This would represent no change compared to a closed NMCO facility.

4.3 PUBLIC SERVICES

This section analyzes impacts to public services. Public services include police, fire, and emergency ambulance services. The region of influence (ROI) for this section includes the City of Oakland, selected because the city will almost certainly be the provider of municipal services following disposal by the Navy. Because the development alternatives would have varying impacts during different states of implementation, impacts are evaluated for the planning, construction, and buildout of each alternative.

4.3.1 Significance Criteria

A project may have a significant impact on public services if it would result in hazardous conditions, emergency response times exceeding city goals; a need for additional facilities, or substantially increased staffing levels. A summary of impacts and their significance is provided in Table 4-7.

Table 4-7
Summary of Public Services Impacts and Significance

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Increased demand for City of Oakland police services.	○	○	◑	◑	◑	◑
Increased demand for City of Oakland fire protection services.	○	○	⊕	⊕	⊕	⊕
Increased demand for emergency medical services.	○	○	⊕	⊕	⊕	⊕

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
⊕ = Nonsignificant
○ = None

4.3.2 Navy Disposal

No Impacts

No impacts to public services would result from the Navy disposing of NMCO because disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

4.3.3 Maximum Capacity Alternative

Significant Impacts

Impact 1: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant because the City of Oakland Police Department has determined that the mix of residential, retail, recreation/golf course and open space areas would require one new full-time police officer working 40 hours per week in Beat 35 to adequately respond and provide coverage at the Naval Medical Center Oakland (NMCO). This determination is based on current crime levels in surrounding areas and a site-specific analysis of the alternative (McMahon 1995). The addition of one City of Oakland police officer represents an increase of less than one percent in the number of sworn officers.

The project would not create hazardous conditions, the need for additional police facilities, or emergency response times exceeding current levels (Hare 1995).

Mitigation 1: The impact of increased demand for one additional police officer could be mitigated by the City of Oakland utilizing general fund money to pay for the new officer. In the event that the general fund is insufficient to pay for the increased demand, an alternative method would be for the site developer, in consultation with the City of Oakland, to explore methods of providing for an additional officer.

Nonsignificant Impacts

Police Protection

The Police Department has indicated that hillside construction zones have historically experienced high crime levels and that a large construction site such as the NMCO site could result in increased demand for police services (Hare 1995). Impacts to police services during planning and construction of this alternative would be minimal because it is assumed that public access to the site would not be allowed until areas are secure and safe for public access. Reduced access would serve to reduce crime levels and the associated need for additional police services during construction.

Fire Protection

No significant impacts to fire protection services would occur under this alternative because the project would not create hazardous conditions, the need for additional fire protection facilities, or emergency response times

exceeding current levels (Baker 1995). Nonsignificant impacts caused by minimal increases on the demand for City of Oakland fire protection services are described below.

Fire services during construction. Impacts to fire protection services would be nonsignificant because the Oakland Fire Department has determined that adequate services to meet the increased demand resulting from this alternative could be provided by existing personnel operating from existing fire stations. These services would primarily be provided by Oakland Fire Station numbers 26 and 21, each of which has the capability to respond to the site within the five minute goal established by the fire department (Baker 1995).

Emergency Ambulance Services. No significant impacts to emergency ambulance services would result from this alternative because the project would not create hazardous conditions, the need for additional ambulance facilities, or emergency response times exceeding current levels (Akers 1995). This alternative would result in increased demand for ambulance services at NMCO. The impact is nonsignificant because the Alameda County Emergency Services District has determined that, based on the proposed development, the increased demand could be met by the current level of service and would not require additional ambulance units (Akers 1995).

Applicable Laws, Regulations, and Standards

Potentially hazardous conditions could result from the need for emergency site access and the need for fire prevention regulations for new construction and vegetation management. Approval of specific development projects at the site would require compliance with the construction and vegetation management regulations for the Oakland Fire Prevention and Protection District and would require Oakland Fire Department approval of emergency access routes on the northeast hillside areas of NMCO. This approval process would assure that hazardous conditions resulting from new development are minimized prior to implementation of the new development.

4.3.4 Mixed Use Village Alternative

Significant Impacts

Impact 1: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant and mitigable because the City of Oakland Police Department has determined that the mix of residential, retail, and open space areas would require one new full-time

police officer working 40 hours per week in Beat 35 to adequately respond and provide coverage at the NMCO. This determination is based on current crime levels in surrounding areas and a site-specific analysis of the alternative (McMahon 1995). The addition of one City of Oakland police officer represents an increase of less than one percent in the number of sworn officers.

The project would not create hazardous conditions, the need for additional police facilities, or emergency response times exceeding current levels (Hare 1995).

Mitigation 1: The impact of increased demand for one additional police officer could be mitigated by the City of Oakland utilizing general fund money to pay for the new officer. In the event that the general fund is insufficient to pay for the increased demand, an alternative method would be for the site developer, in consultation with the City of Oakland, to explore methods of providing for an additional officer.

Nonsignificant Impacts

Police services during construction. Less than significant impacts due to increased demand for police services would occur during the planning and construction of this alternative. The Police Department has indicated that hillside construction zones have historically experienced high crime levels and that a large construction site such as the NMCO could result in increased demand for police services (Hare 1995). This impact would be less than significant during this period because it is assumed that public access to the site would not be allowed until areas are secure and safe public for access.

Fire Protection. No significant impacts to fire protection services would occur under this alternative because the project would not create hazardous conditions, the need for additional fire protection facilities, or emergency response times exceeding current levels (Baker 1995). As identified for the Maximum Capacity Alternative, nonsignificant impacts due to increased demand for fire protection services would result from this alternative. The impact would be nonsignificant because the fire department has determined that adequate services to meet the increased demand resulting from this alternative could be provided by existing personnel operating from the existing fire stations. Adequate services could be provided by Oakland Fire Station numbers 26 and 21, each of which has the capability to respond to the site within the five minute goal established by the fire department (Baker 1995).

Emergency Ambulance Services. No significant impacts to emergency ambulance services would result from this alternative because the project

would not create hazardous conditions, the need for additional ambulance facilities, or emergency response times exceeding current levels (Akers 1995). As described under the Maximum Capacity Alternative, buildout of this alternative would result in a minimal demand increase to emergency medical services, and this demand increase would constitute a nonsignificant impact.

Applicable Laws, Regulations, and Standards

Potentially hazardous conditions could result from the need for emergency site access and the need for fire prevention regulations for new construction and vegetation management. Approval of specific development projects at the site would require compliance with the construction and vegetation management regulations for the Oakland Fire Prevention and Protection District and would require Oakland Fire Department approval of emergency access routes on the northeast hillside areas of NMCO. This approval process would assure that hazardous conditions resulting from new development are minimized prior to implementation of the new development.

4.3.5 Single Use Campus Alternative

Significant Impacts

Impact 1: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. The impact at the time of buildout of this alternative would be significant and mitigable because the City of Oakland Police Department has determined that the mix of educational campus, retail, and open space areas would require one new full-time police officer to adequately respond and provide coverage at the NMCO. This determination is based on current crime levels in surrounding areas and a site-specific analysis of the alternative (McMahon 1995). The addition of one City of Oakland police officer represents an increase of less than one percent in the number of sworn officers.

The project would not create hazardous conditions, the need for additional police facilities, or emergency response times exceeding current levels (Hare 1995).

Mitigation 1: The impact of increased demand for one additional police officer could be mitigated by the City of Oakland utilizing general fund money to pay for the new officer. In the event that the general fund is insufficient to pay for the increased demand, an alternative method would be for the site developer, in consultation with the City of Oakland, to explore methods of providing for an additional officer. It is foreseeable that private security guards would be used for the type of development described under

this alternative. This would serve to lessen the impacts to new service demands on the Oakland Police Department.

Nonsignificant Impacts

Fire Protection. No significant impacts to fire protection services would occur under this alternative because the project would not create hazardous conditions, the need for additional fire protection facilities, or emergency response times exceeding current levels (Baker 1995). As under the Maximum Capacity Alternative, less than significant impacts due to increased demand for fire protection services would result from this alternative. The impact would be less than significant because the fire department has determined that adequate services to meet the increased demand resulting from this alternative could be provided by existing personnel operating from the existing fire stations. Adequate services could be provided by Oakland Fire Station numbers 26 and 21, each of which has the capability to respond to the site within the five minute goal established by the fire department (Baker 1995).

Emergency Ambulance Services. No significant impacts to emergency ambulance services would result from this alternative because the project would not create hazardous conditions, the need for additional ambulance facilities, or emergency response times exceeding current levels (Akers 1995). As described under the Maximum Capacity Alternative, buildout of this alternative would result in a minimal demand increase to emergency medical services. This demand increase would not constitute a significant impact.

Applicable Laws, Regulations, and Standards

Potentially hazardous conditions could result from the need for emergency site access and the need for fire prevention regulations for new construction and vegetation management. Approval of specific development projects at the site would require compliance with the construction and vegetation management regulations for the Oakland Fire Prevention and Protection District and would require Oakland Fire Department approval of emergency access routes on the northeast hillside areas of NMCO. This approval process would assure that hazardous conditions resulting from new development are minimized prior to implementation of the new development.

4.3.6 Residential Alternative

Significant Impacts

Impact 1: A significant and mitigable impact would result from an increase in demand for City of Oakland police services. Buildout of this alternative would require one new police officer (McMahon 1995). Although Option 2, with 600 residential units, would generate more demand than Option 1, with 357 units, both options would require one additional officer. The addition of one City of Oakland police officer represents an increase of less than one percent in the number of sworn officers.

The project would not create hazardous conditions, the need for additional police facilities, or emergency response times exceeding current levels (Hare 1995).

Mitigation 1: The impact of increased demand for one additional police officer could be mitigated by the City of Oakland utilizing general fund money to pay for the new officer. In the event that the general fund is insufficient to pay for the increased demand, an alternative method would be for the site developer, in consultation with the City of Oakland, to explore methods of providing for an additional officer.

Nonsignificant Impacts

Nonsignificant impacts due to increased demand for police services would also occur during the planning and construction of this alternative. The Police Department has indicated that hillside construction zones have historically experienced high crime levels and that a large construction site such as the NMCO could result in increased demand for police services (Hare 1995). This impact would be nonsignificant during this period because it is assumed that public access to the site would not be allowed until areas are secure and safe for public access.

Fire Protection. No significant impacts to fire protection services would occur under this alternative because the project would not create hazardous conditions, the need for additional fire protection facilities, or emergency response times exceeding current levels (Baker 1995). As under the Maximum Capacity Alternative, nonsignificant impacts due to increased demand for fire protection services would result from this alternative. The impact would be nonsignificant because the fire department has determined that adequate services to meet the increased demand resulting from this alternative could be provided by existing personnel operating from the existing fire stations. Adequate services could be provided by Oakland Fire Station numbers 26 and 21, each of which has the capability to respond to

the site within the five minute goal established by the fire department (Baker 1995).

Emergency Ambulance Services. No significant impacts to emergency ambulance services would result from this alternative because the project would not create hazardous conditions, the need for additional ambulance facilities, or emergency response times exceeding current levels (Akers 1995). As described under the Maximum Capacity Alternative, buildout of this alternative would result in a minimal demand increase to emergency medical services, and this demand increase would not constitute a significant impact.

Applicable Laws, Regulations, and Standards

Potentially hazardous conditions could result from the need for emergency site access and the need for fire prevention regulations for new construction and vegetation management. Approval of specific development projects at the site would require compliance with the construction and vegetation management regulations for the Oakland Fire Prevention and Protection District and would require Oakland Fire Department approval of emergency access routes on the northeast hillside areas of NMCO. This approval process would assure that hazardous conditions resulting from new development are minimized prior to implementation of the new development.

4.3.7 No Action Alternative

No Impacts

Under the No Action Alternative, the Navy would continue to have responsibility for NMCO public services and would provide adequate police, fire, and emergency services to support caretaker activities at the site unless jurisdiction is changed (retroceded). Until jurisdiction is changed, Oakland Police Department actions on NMCO are limited to continuing active pursuit of persons from outside the boundaries of NMCO. Public services other than police may be provided by Navy personnel or may be contracted to qualified public or private providers. However, unless jurisdiction is changed, police services may only be provided by federal officers.

The Navy will provide one fire engine company at the NMCO site until jurisdiction is retroceded. That company will consist of one pumper truck with a four-person compliment. The extent of fire protection and prevention services may also include:

- Fire inspection of leased and nonleased buildings;
- Inspection of fixed fire protection features and first aid appliances (fire extinguishers);
- Issuing of hot work permits for welding and cutting torch operations;
- Coordination with the Public Works Center San Francisco Bay for the maintenance of firefighting water supply systems, fixed protective systems (e.g., sprinklers, alarm systems), and minor repair and maintenance of fixed systems by fire personnel;
- Training briefings for prospective tenants and occupants on the reporting of fires and other emergencies, the use of extinguishers, and alarm activation;
- Servicing of fire extinguishers; and
- Monitoring of an alarm/dispatch center.

Vegetation will be controlled during caretaker and reuse operations to the extent necessary as required by all applicable laws and regulations. These operations would include fire breaks and weed control.

4.4 CULTURAL RESOURCES

This section analyzes impacts from disposal and reuse to cultural resources. The region of influence for cultural resources is Naval Medical Center Oakland (NMCO) property, because only cultural resources within the boundary of the property would potentially be affected by disposal and reuse of the property. Table 4-8 provides a summary of impact determinations made in this section for Navy disposal and implementation of the reuse alternatives.

Table 4-8
Summary of Cultural Resources Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Archeological resources	○	○	○	○	○	○
Architectural resources	○	○	○	○	○	○
Native American resources	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◴ = Not significant
○ = None

4.4.1 Significance Criteria

Impacts to cultural resources have been assessed using the following criteria of significance. Impacts to cultural resources listed on or eligible for the National Register of Historic Places (NRHP) are considered significant. Impacts to buildings, structures, or archeological sites which do not qualify for inclusion in the NRHP are not considered to be significant impacts to cultural resources.

Prehistoric, Historic, World War II and Cold War Era Resources

Impact assessments focus mainly on those properties likely to be eligible for the National Register of Historic Places (NRHP). The NRHP eligibility (i.e., importance) of prehistoric and historic sites is evaluated according to criteria contained in US Department of Interior regulations (Code of Federal Regulations 1987d, 36 CFR § 60.4). The quality of significance is present in districts, sites, buildings, structures, and objects that possess integrity and that:

- Are associated with events that have made a significant contribution to the broad patterns of history;

- Are associated with the lives of persons significant in history;

- Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of an acknowledged master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

- Have yielded, or may be likely to yield, information important in prehistory (i.e. before written records, or about the 1600's) or history (after written records).

The evaluation of resources with regard to these criteria is accomplished through consultation with the State Historic Preservation Office and Advisory Council on Historic Preservation in accordance with the National Historic Preservation Act (NHPA).

Criteria for impacts to cultural resources are based on §800.9 of the NHPA (Criteria of Effect and Adverse Effect). Potential impacts to cultural resources are considered significant if the proposed development alternative diminishes the integrity or alters the characteristics of the NRHP-eligible property.

Native American Resources

Impact significance criteria for Native American resources focuses on the importance of the individual resource type, the proximity, or nearness, of impact areas to the resource type, if present, and the likely duration, or length of time, that impacts to Native American resources could occur.

Impacts on Native American resources would be considered significant if professional judgment indicates that either of the following conditions could occur as a result of the proposed development alternative:

- Implementation of the alternative has the potential to affect sites important for their position in the Native American physical universe or belief system; or

- Implementation of the alternative has the possibility to reduce access to traditional Native American use areas or sacred sites.

4.4.2 Navy Disposal

No Impacts

The Navy property disposal will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities.

4.4.3 Maximum Capacity Alternative

No Impacts

Implementation of the Maximum Capacity Alternative will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.

4.4.4 Mixed Use Village Alternative

No Impacts

Implementation of the Mixed Use Village Alternative will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.

4.4.5 Single Use Campus Alternative

No Impacts

Implementation of the Single Use Campus Alternative will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.

4.4.6 Residential Alternative

No Impacts

Implementation of the Residential Alternative will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Future owners will be advised at the time of transfer regarding applicable regulations should previously unknown subsurface cultural resources be discovered during reuse activities. Although not eligible for the NRHP, Club Knoll is proposed for preservation and reuse by the public under this alternative.

4.4.7 No Action Alternative

No Impacts

Implementation of the No Action Alternative will have no impact on cultural resources listed on or eligible for the NRHP because no such resources are present at NMCO. Club Knoll would receive sufficient maintenance in caretaker status so it would not be subject to deterioration.

4.5 AESTHETICS AND SCENIC RESOURCES

This section describes impacts to aesthetics and scenic resources. The analysis focuses on impacts due to implementation of the reuse alternatives, which are compared to existing visual resources. The region of influence for this analysis includes the Naval Medical Center Oakland (NMCO) site and surrounding areas within the general viewshed of the NMCO site, (i.e., areas that can be seen from, or that have views toward the NMCO). This includes adjacent residential neighborhoods, open space areas of the East Bay Hills (west of the ridge top), the I-580 corridor, and some parts of the greater Bay Area having long-distance views toward the East Bay Hills.

4.5.1 Significance Criteria

Impacts to visual resources were qualitatively evaluated by assessing the potential degree of visual contrast that proposed modifications under each of the alternatives would create with the existing landscape character, in terms of scale, form, line, color, and texture. The analysis addresses visual contrast as seen from viewpoints within the visual/aesthetic region of influence (limited to within five miles of NMCO). An impact is considered significant if it would noticeably increase visual contrast and reduce scenic quality, as seen from any foreground or middleground viewpoint with a high level of sensitivity. Temporary visual effects (defined as lasting one year or less, such as construction effects) are not considered to be significant. Only visual effects that would last beyond construction are considered significant.

A general analysis of visual components and resulting potential visual contrasts of each alternative can be provided at this time. Where necessary, assumptions on the visual character of the project components have been provided for individual alternatives.

Effects on visual contrast and scenic quality are described in terms of impacts on natural landscape features and open space (e.g., hillsides and ridges, creek corridors, and mature landscaped areas) and impacts on the built environment (e.g., hospital area, Club Knoll, and other NMCO facilities and associated paved areas). These impacts can be either adverse (reduction in scenic quality) or beneficial (enhancement of existing scenic qualities).

In addition, significant impacts can arise from changes in the public's availability of opportunities to view scenic resources. A summary of impacts and their significance is provided in Table 4-9.

Table 4-9
Summary of Aesthetics and Scenic Resources Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No-Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative (Options 1 and 2)
Visual effect on natural landscapes and open space.	○	○	◑	◴	◴	◴
Preservation and enhancement of the Rifle Range Creek corridor	○	○	◴	◴	◴	◴
Demolition of the hospital building and redevelopment of surrounding areas in the north quadrant	○	○	◴	◴	◴	◴
Demolition and redevelopment of the west quadrant	○	○	◴	◴	◴	◴
Preservation of Club Knoll and surroundings	○	○	○	○	○	○
Development of mixed uses/retail at Mountain Boulevard/Keller	○	○	○	◴	◴	○
Changes in viewing opportunities	○	○	○	○	◴	◴
Consistency with plan and policies	○	○	○	○	○	○
Light and glare	○	○	○	○	○	○

LEGEND:

Level of Impact
● = Significant and not mitigable
◑ = Significant and mitigable
◴ = Non significant
○ = None

4.5.2 Navy Disposal

No Impacts

Because disposal would not entail any changes to the physical environment, the disposal action would not affect visual resources. Disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

4.5.3 Maximum Capacity Alternative

Significant Impacts

This alternative would potentially introduce significant and mitigable adverse impacts to aesthetic resources with respect to views from new housing in the Admiral's Hill area. No other significant impacts would result to aesthetic resources.

Visual Components of this Alternative. The principal aspects of the Maximum Capacity Alternative that would affect aesthetic and scenic resources include the following:

- Retention of some of the steeper hillsides and knolls in their existing condition, but with construction of 16 ridgetop homes on Admiral's Hill;
- Retention, enhancement, and extension (by approximately 1,200 feet) of the Rifle Range Creek corridor through the site, with substantial removal and revegetation of paved areas (approximately 360,000 square feet);
- Demolition of the hospital building and redevelopment of the area with residential buildings with heights of one- to three-stories, and new landscaping;
- Retention of the Club Knoll area in its existing condition;
- Integration of a golf course with residential development in the northwest quadrant of the site;
- Mixed use development at the Mountain Boulevard gateway, with the assumption that some of the existing trees that screen the site from Mountain Boulevard would be retained; and
- Demolition and redevelopment of the west quadrant with predominantly one- to three-story buildings, with loss of some existing trees, and some retail development along the Keller Avenue frontage.

Impact 1: A significant and mitigable impact would result from visual contrasts due to the introduction of new structures and grading on the crest and northern end of Admiral's Hill, together with potential loss of trees at the northern end. These would be seen in views from NMCO use areas, Keller Avenue, and existing residences to the north, east, and south within foreground and middleground viewing distances. Admiral's Hill forms a prominent scenic feature in the immediate area, and visual contrasts could be augmented by "skylining" of houses (appearance of houses along ridge of hills) in some closer views from the NMCO site.

Mitigation 1: The impact is mitigable to a level that is less than significant through careful siting and design of new construction and minimizing losses of mature trees at the northern end of the hill. Contour grading should be used to minimize cuts and fills. Building design should avoid blank walls, flat roofs, and simple geometric forms which would increase the apparent

scale and contrast of the structures. Buildings on steep slopes should be stepped down to avoid massive (3+) story facades. Design controls on building color, material reflectivity, and fencing should be established to reduce visual contrasts. Landscaping that is consistent with the more natural appearing vegetation on the surrounding hills should be developed to provide some screening and shade for new buildings. It is recommended that a site survey and detailed visual analysis be prepared prior to final design approval in order to identify the appropriate number, location, and design theme of ridgetop buildings, consistent with retaining scenic quality.

Nonsignificant Impacts

Some nonsignificant adverse impacts would result from the loss of "vintage" buildings and mature landscaping in some areas. Beneficial effects are also likely, due to the enhancement of the riparian corridor, removal of existing parking and utilitarian buildings, and provision of public access affording new viewing opportunities, especially those that would result from the integration of the executive golf course.

Preservation and enhancement of the Rifle Range Creek corridor. The development of a landscaped open space area along the restored creek through the center of the project would have a beneficial effect, as seen from on-site and from adjacent elevated residential areas (e.g., Sequoyah Hills and Ridgemont). It is assumed that the landscaping would restore native vegetation along the creek (outside the 50-foot restricted access buffer), with integration to the more formal landscaping of the developed areas on both sides. There would be no adverse visual impacts. A landscape/creek restoration plan should be prepared to ensure that landscape enhancement opportunities are realized, that the design is consistent with the overall NMCO landscape theme and access restrictions recommended along the Rifle Range Creek corridor for biological resources (see Section 4.6.3 of this EIS/EIR).

Demolition of the hospital building and redevelopment of Surrounding Areas in the North Quadrant. Demolition of the hospital building and redevelopment of single family, clustered, and townhouse dwellings in the north quadrant would enhance existing parking lots and open up views on site. Removal of the most dominant and largest scale structure on the site would generally enhance views from on- and off-site to the backdrop of the hills. This would have a beneficial effect on visual quality of the site and surrounding area. The integration of an executive 9-hole golf course may improve the scenic quality of some hillslopes while being consistent with the existing open space landscape form.

Demolition and redevelopment of the west quadrant. The redevelopment of mixed uses in this area would have some beneficial effects on visual, or scenic quality due to the removal of some asphalt parking areas and utilitarian buildings. However, the loss of mature landscape trees and construction of new buildings would lead to adverse but nonsignificant impacts, particularly in views from residences at higher elevations in the Sequoyah Hills/Oak Knoll area. The development of commercial neighborhood retail buildings, parking, and signage would introduce a new visual character to a short area of frontage along Keller Avenue, visible from the residential development across the street. While different from the existing undeveloped character of the site in that location, it is assumed to be compatible in architectural design and landscape treatment with the nearby existing residential and proposed mixed use development. Depending upon the design, some minor view blockage towards the hills to the east could be experienced for drivers along Keller Avenue eastbound, for a distance of approximately 1,000 feet. This is not considered a significant impact on sensitive viewpoints because the level of visual contrast of its high level of compatibility with surrounding structure design landscape treatment with the nearby existing residential and proposed mixed use development.

No Impacts

Preservation of Club Knoll and Surroundings. The retention of these landscape features would lead to no impacts.

Development of mixed uses at Mountain Boulevard. The development of new buildings, associated signs, and parking in this area would increase development density at the entry to the site. However, the retention of existing vegetation as a buffer and a more unified design theme for new construction would lead to a negligible change in scenic quality overall, or no impacts. The integration of the golf course would further soften visual impacts by providing a relatively relaxed backdrop to immediate visual impacts and reducing even further any adverse scenic quality aspects of these developments.

Changes in viewing opportunities. The provision of public access to new viewing locations with some panoramic views of high visual interest represents a beneficial impact. The principal locations that could potentially offer these views to the public include Admiral's Hill and the helipad area. In addition, views from the expanded trail system would increase viewing opportunities.

Light and Glare. Evaluation of potential light and glare problems requires detailed lighting system design plans. These plans are seldom developed prior to the drafting of detailed construction design plans. Since detailed

design plans are not available, this EIS/EIR does not provide such an analysis. None of the land uses can be readily identified as capable of causing significant light and glare problems. Any land uses that propose to use high intensity outdoor lighting should be reviewed by the City of Oakland prior to issuance of building permits to ensure proper design and shielding of outdoor lighting. Particular attention should be given to nighttime recreational activities often requiring such lighting, including but not limited to ball fields, the golf course driving range, or similar uses.

Consistency with Plans and Policies

While the housing on Admiral's Hill may be visible from scenic highways (I-580 and Skyline Boulevard), the middleground viewing distance and limited duration of motorists' views would not result in an appearance that is inharmonious with the surrounding landscape in accordance with city policy 4, described in Section 3.5). It is assumed that new development and signage would be consistent with applicable zoning regulations. Consequently, no conflicts with City of Oakland policies on aesthetics have been identified.

4.5.4 Mixed Use Village Alternative

Nonsignificant Impacts

This alternative would not introduce significant adverse effects to visual resources. The retention of Admiral's Hill in its existing aesthetic and scenic condition as open space would lead to reduced visual impacts as compared with the Maximum Capacity Alternative. However, the Mixed Use Village Alternative provides less dramatic public viewing opportunities due to access restrictions at Admiral's Hill.

Visual Components of this Alternative. This alternative would retain the prominent hillsides in their existing open condition. Similarly, the area and buildings at Club Knoll would be retained. Principal aspects of the visual appearance of this alternative include the following:

- Retention and enhancement/extension of the creek corridor through the site by approximately 1,200 feet, with an adjacent small open area at the edge of the west quadrant created by demolition of existing structures and paved surfaces. There would be slightly more removal and revegetation/landscaping of previously paved areas (approximately 480,000 square feet) than with the Maximum Capacity Alternative;

- Demolition of the hospital building with redevelopment of the area around it as a research and development biotech facility, with unified

architectural treatment, an assumed height of one to two stories, and new landscaping;

- Retail development at the Mountain Boulevard gateway, with the assumption that many of the existing trees that screen the site from Mountain Boulevard would be removed; and

- Demolition and mixed use redevelopment of the west quadrant, with predominantly one- to three-story buildings; it is assumed that some of the existing trees on the site would remain.

Some nonsignificant adverse impacts would result from loss of "vintage" buildings and mature landscaping in some areas due to reduction in scenic quality. Beneficial effects are likely because of enhancement to the riparian corridor, removal of existing parking and utilitarian buildings, and provision of limited public access affording some new scenic quality as viewing opportunities in the western half of the site.

Preservation and enhancement of the Rifle Range Creek corridor. The development of open space along the restored creek would have a beneficial effect on site scenic quality, with retention of the natural landscape. A landscape/creek restoration plan should be prepared to ensure that landscape enhancement opportunities are realized and that the design is consistent with the overall NMCO landscape theme and access restrictions recommended along the Rifle Range Creek corridor for biological resources (see Section 4.6.4 of this EIS/EIR).

Demolition of the hospital building and redevelopment of surrounding areas in the north quadrant. Demolition of the hospital building and redevelopment of a research and development facility in the north quadrant would enhance existing parking lots and open up views on-site. Removal of the most dominant and largest structure on the site would generally enhance views from on- and off-site to the backdrop of the hills. This would have a beneficial effect on visual quality of the site and surrounding area.

Development of retail at Mountain Boulevard. The development of buildings and associated signs and parking in this area would increase development density at the entry area. The main difference between this alternative and the Maximum Capacity Alternative is in the loss of the tree belt along Mountain Boulevard and the more extensive retail frontage in this alternative. The visual effect would be adverse but nonsignificant. New landscape planting and architectural treatment consistent with an NMCO landscape plan would reduce visual impacts to scenic quality.

Demolition and redevelopment of the west quadrant. The redevelopment of mixed uses in this area would have some beneficial effects on visual quality due to the removal of some asphalt parking areas and utilitarian buildings. However, the loss of mature landscape trees and construction of new buildings would lead to adverse but nonsignificant impacts, particularly with respect to the scenic quality of views from residences at higher elevations in the Sequoyah Hills/Oak Knoll area. The adversity of these impacts to local scenic quality could be further reduced by retaining mature specimen trees where possible, and by applying appropriate architectural and landscape design consistent with the overall NMCO landscape character. In the commercial areas in particular, sign and architectural controls are recommended to ensure that the new development fits with the surrounding land uses and prevailing design themes so that the objectives of developers and merchants do not introduce adverse visual impacts that could increase visual contrast or reduce scenic quality to surrounding homeowners.

No Impacts

Preservation of Club Knoll and Surroundings. The retention of these landscape features would lead to no impacts.

Changes in viewing opportunities. Limited public access to new viewing locations would be provided. The principal location that could offer these views to the public would be the expanded trail system. The limitations on public access to the eastern half of the site, due to the nature of the biotech facility, could remove some of the more dramatic viewing opportunities from this alternative. Since these views are not currently available to the public, no adverse impact would result and no mitigations are required.

Light and Glare. Evaluation of potential light and glare problems requires detailed lighting system design plans. These plans are seldom developed prior to the drafting of detailed construction design plans. Since detailed design plans are not available, this EIS/EIR does not provide such an analysis. None of the land uses can be readily identified as capable of causing significant light and glare problems. Any land uses that propose to use high intensity outdoor lighting should be reviewed by the City of Oakland prior to issuance of building permits to ensure proper design and shielding of outdoor lighting. Particular attention should be given to nighttime recreational activities often requiring such lighting, including but not limited to ball fields, the golf course driving range, or similar uses.

Consistency with Plans and Policies

No conflicts with existing policies on aesthetics have been identified.

4.5.5 Single Use Campus Alternative

Nonsignificant Impacts

The Single Use Campus Alternative would introduce no significant adverse aesthetic or scenic effects. The retention of Admiral's Hill as open space would lead to reduced visual impacts as compared with the Maximum Capacity Alternative. The increase in landscaped open space and public viewing opportunities throughout the site would lead to more beneficial impacts than the Mixed Use Village Alternative.

Visual Components of this Alternative. This alternative retains the prominent hillsides in their existing open condition, and retains Club Knoll. Principal aspects of the visual appearance of this alternative include the following:

- Retention and enhancement/extension of the creek corridor through the site by approximately 1,200 feet created by demolition of existing structures and paved surfaces. There would be somewhat more removal and revegetation/landscaping of previously paved areas in the creek corridor (approximately 480,000 square feet) than with the Maximum Capacity Alternative;

- Demolition of the hospital building with redevelopment of the area around it as classrooms, laboratories, and conference facilities with unified architectural treatment, an assumed height of one to two stories, and new landscaping;

- Combinations of student, administration, and related buildings and recreation areas at the Mountain Boulevard gateway. A strip of open space would be left between the buildings and the road, and retention of the existing trees. This strip would partly screen the site from Mountain Boulevard;

- Location of a small neighborhood retail development west of the Keller Avenue entry, requiring some regrading and removal of existing vegetation; and

- Demolition and partial redevelopment of the west quadrant with student/guest facilities and administration buildings, assumed to be predominantly one to three stories high; and a large central area of the lower slopes would be returned to open space, with many existing trees remaining.

Some nonsignificant adverse impacts would result from loss of "vintage" buildings and mature landscaping in some areas. Some beneficial effects are

likely due to the enhancement of the riparian corridor and open space in the west quadrant, demolition of the hospital building, and provision of public access, affording increased viewing opportunities. Improved appearance of several areas is expected where existing parking and utilitarian buildings are removed and replaced with landscaping.

Preservation and enhancement of the Rifle Range Creek corridor. The development of a landscaped open space along the restored creek would have a beneficial effect, as described for the Mixed Use Village Alternative. A landscape/creek restoration plan should be prepared to ensure that landscape enhancement opportunities are realized and that the design is consistent with the overall NMCO landscape theme and access restrictions recommended along the Rifle Range Creek corridor for biological resources (see Section 4.6.5 of this EIS/EIR).

Demolition of the hospital building and redevelopment of surrounding areas in the north quadrant. Demolition of the hospital building and redevelopment of an educational/corporate campus would enhance existing parking lots and would open up views on-site. Removal of the most dominant and largest structure on the site would generally enhance views from on- and off-site to the backdrop of the hills. This would have a beneficial effect on visual quality of the site and surrounding area.

Redevelopment at the entry from Mountain Boulevard. The development of buildings north of the entry and demolition south of it, with a landscaped buffer on the north side, would increase visual quality and consistency with the more natural image of much of the rest of the open space areas.

Retail development near the Keller Avenue entry. The development of commercial neighborhood retail buildings, parking, and signage would introduce a new visual character to a short area of frontage along Keller Avenue, visible from the residential development across the street. While different from the existing undeveloped character of the site in that location, it is assumed to be compatible in architectural design and landscape treatment with the nearby existing residential and proposed campus development. Depending upon the design, some minor view blockage towards the hills to the east could be experienced for drivers along Keller Avenue eastbound, for a distance of approximately 1,000 feet. This is considered a nonsignificant impact on sensitive viewpoints because it does not reduce scenic quality substantially.

Demolition and redevelopment of the west quadrant. The reduction and redevelopment of structures and large increases in open space in this area would have a beneficial effect on visual quality. Assuming that architectural design and massing of new structures is consistent with the character of the

rest of the site, the overall appearance of this area would improve, particularly for views from elevated residences in the adjacent Sequoyah Hills/Oak Knoll area.

Changes in viewing opportunities. The provision of public access to new viewing locations with some panoramic views of high visual interest represents a beneficial impact. This assumes that public access would be granted to the principal locations potentially offering these views to the public (e.g., Admiral's Hill, the area of the helipad, and the trail system).

No Impacts

Preservation of Club Knoll and Surroundings. The retention of these landscape features would lead to no impacts.

Light and Glare. Evaluation of potential light and glare problems requires detailed lighting system design plans. These plans are seldom developed prior to the drafting of detailed construction design plans. Since detailed design plans are not available, this EIS/EIR does not provide such an analysis. None of the land uses can be readily identified as capable of causing significant light and glare problems. Any land uses that propose to use high intensity outdoor lighting should be reviewed by the City of Oakland prior to issuance of building permits to ensure proper design and shielding of outdoor lighting. Particular attention should be given to nighttime recreational activities often requiring such lighting, including but not limited to ball fields, the golf course driving range, or similar uses.

Consistency with Plans and Policies

No conflicts with existing policies or standards on aesthetics have been identified.

4.5.6 Residential Alternative

Nonsignificant Impacts

The Residential Alternative would not introduce significant adverse effects on aesthetic or scenic resources. This alternative is similar in overall effect to the Maximum Capacity Alternative, except without the adverse impacts of development on Admiral's Hill. The Residential Alternative provides less open space and fewer beneficial visual effects than either the Mixed Use Village or Single Use Campus Alternatives.

The alternative contains two options, with residential development of 357 and 600 units, respectively. These would have noticeable differences in density but no major difference in overall scenic quality or visual impact.

Visual Components of this Alternative. This alternative retains the prominent hillsides in their existing open condition and Club Knoll. Principal aspects of the visual appearance of the Residential Alternative (Option 1 - 357 units) include the following:

- Retention, enhancement, and extension by approximately 1,200 feet of the creek corridor through the site, with substantial removal and revegetation of paved areas (approximately 360,000 square feet), forming a relatively narrow corridor through most of the site;

- Demolition of the hospital building and redevelopment of the area with residential buildings with heights of one to two stories (single family homes) and new landscaping;

- Retail development at the Mountain Boulevard gateway, with the assumption that many of the existing trees that screen the site from Mountain Boulevard would be removed; and

- Demolition of existing structures and redevelopment of the west quadrant with predominantly one- to two-story residences, with loss of many existing trees.

Option 2 (600 units) is assumed to occupy the same geographic footprint as Option 1 but with increased density of residential development in the north and west quadrants. This amounts to smaller lots for primarily single family dwellings. Building heights in these areas are assumed to range from one to three stories.

Option 1

Some less than significant adverse impacts would result from loss of "vintage" buildings and mature landscaping in some areas. Beneficial effects are also likely due to the enhancement of the riparian corridor, removal of existing hospital building, parking, and utilitarian buildings, and provision of public access affording new viewing opportunities.

Preservation and enhancement of the Rifle Range Creek corridor. The development of a landscaped open space area along the restored creek through the center of the project would have a beneficial effect, as seen from on-site and from adjacent elevated residential areas (e.g., Sequoyah Hills and Ridgemont) by improving scenic quality. It is assumed that the landscaping

would restore native vegetation along the creek, with integration to the more formal landscaping of the developed areas on both sides. There would be no adverse visual impacts. A landscape/creek restoration plan should be prepared to ensure that landscape enhancement opportunities are realized and that the design is consistent with the overall NMCO landscape theme and access restrictions recommended along the Rifle Range Creek corridor for biological resources (see Section 4.6.6 of this EIS/EIR).

Demolition of the hospital building and redevelopment of surrounding areas in the north quadrant. Demolition of the hospital building and redevelopment of residential dwellings in the north quadrant would enhance existing parking lots and would open up views on-site. Removal of the most dominant and largest structure on the site would generally enhance views from on- and off-site to the backdrop of the hills. This would have a beneficial effect on visual quality of the site and surrounding area.

Development of neighborhood retail at Mountain Boulevard. The development of buildings and associated signs and parking in this area would increase development density at the entry area, although not to the extent of the community retail development proposed for the Mixed Use Village Alternative. As with the Mixed Use Village Alternative, the loss of the tree belt along Mountain Boulevard is likely. The visual effect would be adverse but nonsignificant since no sensitive views of higher scenic quality are affected. Mitigation measures could include retention of existing trees along the Mountain Boulevard frontage where possible. If substantial numbers of trees were removed, mitigation by new landscape planting and increased attention to architectural treatment would be required.

Demolition and redevelopment of the west quadrant. The residential development and associated landscaping in this area would have a beneficial effect on visual quality due to the removal of some asphalt parking areas and utilitarian buildings. However, the loss of mature landscape trees and construction of new buildings would lead to adverse but nonsignificant impacts, particularly in views from residences at higher elevations in the Sequoyah Hills/Oak Knoll area.

Changes in viewing opportunities. The provision of public access to new viewing locations with some panoramic views of high visual interest and quality represents a beneficial impact. The principal locations that could potentially offer these views to the public include Admiral's Hill and the helipad area. In addition, views from the expanded trail system would increase viewing opportunities.

Option 2

Some less than significant adverse impacts would result from loss of "vintage" buildings and mature landscaping in some areas. Beneficial effects are also likely due to the enhancement of the riparian corridor, removal of existing hospital building, parking, and utilitarian buildings, and provision of public access affording new viewing opportunities.

Visual impacts for this option in the north and west quadrants would be slightly greater than those of Option 1. The potentially increased height of residential development would have negligible effects on view blockage or scenic quality in views from sensitive off-site viewpoints. Within the NMCO site itself, the higher density of residential development would be noticeably different from Option 1, with reduced visibility of the East Bay Hills and surrounding landforms where screened by housing and garden landscaping as this matures. The higher density would also reduce the opportunities to preserve mature trees. However, the resulting visual contrast effects would not be significant because they would be offset by the beneficial effects to the same visual resources through removal of the hospital and creek restoration. The higher densities would still be consistent with the appearance of the surrounding neighborhood.

No Impacts

Preservation of Club Knoll and Surroundings. The retention of these landscape features would lead to no impacts.

Light and Glare. Evaluation of potential light and glare problems requires detailed lighting system design plans. These plans are seldom developed prior to the drafting of detailed construction design plans. Since detailed design plans are not available, this EIS/EIR does not provide such an analysis. None of the land uses can be readily identified as capable of causing significant light and glare problems. Any land uses that propose to use high intensity outdoor lighting should be reviewed by the City of Oakland prior to issuance of building permits to ensure proper design and shielding of outdoor lighting. Particular attention should be given to nighttime recreational activities often requiring such lighting, including but not limited to ball fields, the golf course driving range, or similar uses.

Consistency with Plans and Policies

No conflicts with existing policies on aesthetics have been identified for either option.

4.5.7 No Action Alternative

No Impacts

Preservation of Club Knoll and Surroundings. The retention of these landscape features would lead to no impacts.

There would not be any impacts on visual resources. The No Action (caretaker) Alternative would maintain the site in a condition similar to that which exists today. Some landscape maintenance will continue, including mowing of lawns, tending of the existing gardens and landscaping, maintenance of recreational facilities, and necessary tree removal and landscape cleanup. The visual quality of the NMCO site will be retained. It is assumed that public access would be restricted in the same manner as it is currently.

4.6 BIOLOGICAL RESOURCES

This section analyzes potential impacts on biological resources. The region of influence for biological resources impacts includes the Naval Medical Center Oakland (NMCO) site and surrounding native habitats within a half-mile radius. Much of the existing native habitat at NMCO would be retained under all alternatives.

4.6.1 Significance Criteria

The determination of significant impacts to biological resources includes direct and indirect impacts. Direct impacts are those in which activities reduce or remove a biological resource, such as the results of construction or grading. Indirect impacts could occur when the activity causes other actions that affect biological resources. For example, if more people lived on NMCO and used the riparian (stream corridor) areas for recreation, then indirect impacts to these areas could result from heavier pedestrian use. Indirect impacts may also occur from the introduction of runoff materials into sensitive habitats.

Endangered and Threatened Species

Significance criteria used to measure impacts to biological resources are derived from the legal requirements to protect sensitive species and habitats and from the extent to which that resource elicits concern among natural resource management agencies or scientific authorities. Impacts to biological resources are considered significant if development alternatives result in the loss of any endangered or threatened species (including species proposed for listing), their habitat, migration corridors, or breeding areas. Alternatives resulting in the loss of a substantial number of individuals of any plant or animal species (sensitive or nonsensitive species) that could reduce abundance or diversity of that species beyond normal variability are also considered significant.

Impacts to smaller numbers of other sensitive species that have lesser protections from the U.S. Fish and Wildlife Service and California Department of Fish and Game, such as candidate species with no other protection, California species of special concern, and those on the California Native Plant Society lists would be considered adverse but not significant.

Sensitive Habitats

Significant impacts could result from the measurable degradation of sensitive habitats, including wetlands, other legally protected sensitive habitats, and habitats that could support species listed or proposed for listing under the

federal or state Endangered Species Acts. Substantial disruptions of the Rifle Range Creek corridor would be considered significant impacts and could require project specific mitigation measures. Most native habitat on the facility outside of the Rifle Range Creek riparian area is on slopes of greater than 30 percent that would not be substantially developed under any of the development alternatives.

The NMCO site is within the geographical range of the Alameda whipsnake and is a physically suitable habitat for the whipsnake. The Alameda whipsnake has been found in a variety of chapparal and scrub communities, including chamise chapparal, which is found on the NMCO site.

Due to the small amount of habitat present, the isolation of that habitat by surrounding development, and the fact that no Alameda whipsnakes were captured or observed during the survey, no Alameda whipsnakes are likely to occur at NMCO. Appendix F summarizes the results of that survey.

Nonsensitive Species and Habitats

Populations of plants and animals and the diversity of species within communities fluctuate naturally. Impacts to nonsensitive vegetation and wildlife species and communities at NMCO would not be considered significant unless an action could substantially disturb the ecosystem beyond the normal variability of the species or community. Removal of trees protected under the City of Oakland Tree Ordinance would result in a significant but mitigable impact.

Table 4-10 summarizes impacts to biological resources from the federal disposal of the property, the development alternatives, and the No Action Alternative.

4.6.2 Navy Disposal

No Impacts

The disposal of the NMCO property out of federal ownership would not result in any impacts to sensitive or nonsensitive habitats. It is a transfer of title out of federal ownership and no physical impacts would occur as a result of the transfer. The Navy would no longer own the property, but applicable laws, regulations, and standards would continue to provide their required habitat protections. Nonsensitive species have no legal protection, except under the City of Oakland Tree Ordinance, and also would not be affected by Navy disposal of the property. To meet the requirements of Executive Order 11990, (Protection of Wetlands) the Navy will include a

notification in the property deed that wetlands occur on the property in the riparian (streamside) area.

Table 4-10
Summary of Biological Resources Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Sensitive species	○	○	○	○	○	○
Sensitive habitat	○	○	◑	◑	◑	◑
Nonsensitive species and habitats	○	○	◑ [a]	◑ [a]	◑ [a]	◑ [a]

a = CEQA purposes only.

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

4.6.3 Maximum Capacity Alternative

Significant Impacts

Impact 1: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation. These impacts would be considered as significant and mitigable through the degradation that would result to sensitive habitats.

Mitigation 1: Avoid the removal of native vegetation within the riparian corridor during demolition, earth moving, construction, habitat restoration, and trail-building activities. Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor. Locate all staging areas in already disturbed sites. A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range

Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone. This plan, to be prepared by the project applicant prior to construction, should specify all activities necessary to restore the drainage with minimal erosion, and should be supervised by restoration specialists. If some vegetation removal is required, project developers should confer with the City of Oakland and the California Department of Fish and Game regarding the type of vegetation to be removed, the extent of removal, and corresponding revegetation mitigation requirements.

Impact 2: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected.

Mitigation 2: When a more specific site plan for development (i.e. grading) of the area is presented to the City, a tree removal permit would have to be obtained for any protected trees that are to be removed. The applicant would have to conduct a site-specific survey of which trees would be removed and comply with all other requirements of the ordinance.

Nonsignificant Impacts

No significant impacts are expected to occur from the potential removal of nonsensitive species and habitat on the facility, except for trees protected under the City of Oakland Tree Ordinance. Several of the areas on the facility are densely developed or paved and do not support significant biological resources. Landscaped areas are dominated by nonnative plants that do not provide significant habitat for native wildlife. Nonsensitive species use this remaining habitat only minimally. Much of this habitat is nonnative vegetation, and therefore does not provide the higher food, cover, and nesting values associated with riparian habitats or habitats important for candidate species. The potential removal of such habitat represents a nonsignificant impact in that such removal of nonnative vegetation will not substantially degrade the use of the site by native plant and animal species beyond the ranges of normal variability of use associated with nonsensitive species.

4.6.4 Mixed Use Village Alternative

Significant Impacts

Impact 1: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of

the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation. These impacts would be considered as significant and mitigable through the degradation that would result to sensitive habitats.

Mitigation 1: Avoid the removal of native vegetation in the riparian corridor during demolition, earth moving, construction, habitat restoration, and trail-building activities. Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor. Locate all staging areas in already disturbed sites. A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone. This plan, to be prepared by the project applicant prior to construction, should specify all activities necessary to restore the drainage with minimal erosion, and should be supervised by restoration specialists. If some vegetation removal is required, project developers should confer with the City of Oakland and the California Department of Fish and Game regarding the type of vegetation to be removed, the extent of removal, and corresponding revegetation mitigation requirements.

Impact 2: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected.

Mitigation 2: When a more specific site plan for development (i.e. grading) of the area is presented to the City, a tree removal permit would have to be obtained for any protected trees that are to be removed. The applicant would have to conduct a site-specific survey of which trees would be removed and comply with all other requirements of the ordinance.

Nonsignificant Impacts

No significant impacts are expected to occur from the potential removal of nonsensitive species and habitat on the facility, except for trees protected under the City of Oakland Tree Ordinance. Several of the areas on the

facility are densely developed or paved and do not support significant biological resources. Landscaped areas are dominated by nonnative plants that do not provide significant habitat for native wildlife. Nonsensitive species use this remaining habitat only minimally. Much of this habitat is nonnative vegetation, and therefore does not provide the higher food, cover, and nesting values associated with riparian habitats or habitats important for candidate species. The potential removal of such habitat represents a nonsignificant impact in that such removal of nonnative vegetation will not substantially degrade the use of the site by native plant and animal species beyond the ranges of normal variability of use associated with nonsensitive species.

4.6.5 Single Use Campus Alternative

Significant Impacts

Impact 1: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation. These impacts would be considered as significant and mitigable through the degradation that would result to sensitive habitats.

Mitigation 1: Avoid the removal of native vegetation in the riparian corridor during demolition, earth moving, construction, habitat restoration, and trail-building activities. Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor. Locate all staging areas in already disturbed sites. A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone. This plan, to be prepared by the project applicant prior to construction, should specify all activities necessary to restore the drainage with minimal erosion, and should be supervised by restoration specialists. If some vegetation removal is required, project developers should confer with the City of Oakland and the California Department of Fish and Game regarding the type of vegetation to be removed, the extent of removal, and corresponding revegetation mitigation requirements. Subsequent tree removal permits and related surveys may be

required consistent with the City of Oakland Tree Ordinance (Article 6, Section 7-6).

Impact 2: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected.

Mitigation 2: When a more specific site plan for development (i.e. grading) of the area is presented to the City, a tree removal permit would have to be obtained for any protected trees that are to be removed. The applicant would have to conduct a site-specific survey of which trees would be removed and comply with all other requirements of the ordinance.

Nonsignificant Impacts

No significant impacts are expected to occur from the potential removal of nonsensitive species and habitat on the facility, except for trees protected under the City of Oakland Tree Ordinance. Several of the areas on the facility are densely developed or paved and do not support significant biological resources. Landscaped areas are dominated by nonnative plants that do not provide significant habitat for native wildlife. Nonsensitive species use this remaining habitat only minimally. Much of this habitat is nonnative vegetation, and therefore does not provide the higher food, cover, and nesting values associated with riparian habitats or habitats important for candidate species. The potential removal of such habitat represents a nonsignificant impact in that such removal of nonnative vegetation will not substantially degrade the use of the site by native plant and animal species beyond the ranges of normal variability of use associated with nonsensitive species.

4.6.6 Residential Alternative

Significant Impacts

Impact 1: Significant and mitigable impacts could occur if the proposed greenbelt along Rifle Range Creek is not maintained for the entire length of the creek on site. The removal of native vegetation surrounding Rifle Range Creek and its tributaries, including oaks and other native trees, shrubs, and ground cover, would adversely impact the riparian corridor. Direct reuse impacts could occur from the removal of vegetation. Indirect reuse impacts could occur from increased erosion and sedimentation in the creek and its tributaries, adjacent demolition or construction activities, including grading, cutting, filling, and other earth moving that may be needed to accommodate

the implementation of this alternative. Impacts also could occur if habitat restoration activities or the building of trails were to adversely affect native vegetation. These impacts would be considered as significant and mitigable through the degradation that would result to sensitive habitats.

Mitigation 1: Avoid the removal of native vegetation in the riparian corridor during demolition, earth moving, construction, habitat restoration, and trail-building activities. Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor. Locate all staging areas in already disturbed sites. A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone. This plan, to be prepared by the project applicant prior to construction, should specify all activities necessary to restore the drainage with minimal erosion, and should be supervised by restoration specialists. If some vegetation removal is required, project developers should confer with the City of Oakland and the California Department of Fish and Game regarding the type of vegetation to be removed, the extent of removal, and corresponding revegetation mitigation requirements.

Impact 2: A significant and mitigable impact, for CEQA purposes only, would result from removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance. Mitigation planning requires more specific site grading and development plans in order to account for the number of trees that could be affected.

Mitigation 2: When a more specific site plan for development (i.e. grading) of the area is presented to the City, a tree removal permit would have to be obtained for any protected trees that are to be removed. The applicant would have to conduct a site-specific survey of which trees would be removed and comply with all other requirements of the ordinance.

Nonsignificant Impacts

No significant impacts are expected to occur from the potential removal of nonsensitive species and habitat on the facility, except for trees protected under the City of Oakland Tree Ordinance. Several of the areas on the facility, except for trees protected under the City of Oakland Tree Ordinance. Landscaped areas are dominated by nonnative plants that do not provide significant habitat for native wildlife. Nonsensitive species use this remaining habitat only minimally. Much of this habitat is nonnative vegetation, and therefore does not provide the higher food, cover, and nesting values associated with riparian habitats or habitats important for candidate species. The potential removal of such habitat represents a

nonsignificant impact in that such removal of nonnative vegetation will not substantially degrade the use of the site by native plant and animal species beyond the ranges of normal variability of use associated with nonsensitive species.

4.6.7 No Action Alternative

No Impacts

Under the No Action Alternative, no change would occur to the existing biological resources as described in Section 3.6. Therefore, no impacts would occur to biological resources under this alternative.

Vegetation will be controlled during caretaker and reuse operations to the extent necessary as required by all applicable laws and regulations. These operations would include fire breaks and weed control.

4.6.8 Applicable Laws, Regulations, and Standards

The following is a summary of applicable laws, regulations, and standards that would continue for biological resources once NMCO is transferred out of federal ownership.

The Navy used the Draft EIS/EIR as a biological assessment for purposes of completing federal Endangered Species Act, Section 7 conferences and consultations with the U.S. Fish and Wildlife Service.

Endangered and Threatened Species

A survey for the Alameda whipsnake, a state threatened species proposed for federal endangered status, confirmed that this species did not inhabit the NMCO site.

Riparian Corridor (Rifle Range Creek)

Portions of streamside (riparian) habitat along Rifle Range Creek and its tributaries on NMCO would likely be considered wetlands for purposes of jurisdiction under the Clean Water Act. Should any adverse impacts to wetland areas be anticipated under any of the development alternatives, a formal wetlands delineation would need to be conducted as a basis for assessing impacts to wetlands. Notification of the U.S. Army Corps of Engineers and California Department of Fish and Game would be required, and the need for any permits or mitigation would be determined. Depending on the extent of impacts, the U.S. Army Corps of Engineers and/or California Department of Fish and Game could require the

development of detailed wetlands and sensitive species mitigation plans prior to the issuance of any permits. Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers must issue a permit for any action proposing to fill wetlands. The establishment of a 50-foot wide restricted access buffer zone to protect the Rifle Range Creek riparian corridor, consistent with mitigation recommendations for each of the reuse alternatives, would address much of the concerns related to these regulations.

To the fullest extent legally required, the proposed 50-foot wide restricted access corridor for Rifle Range Creek may be expanded, as necessary, to account for the protection of wetlands and important upland drainage areas, as such areas may be affected by subsequent development proposals. Although no upland drainage areas have been identified, subsequent development proposals will need to address this issue if legally required to do so.

Nonsensitive Species and Habitats

The Oakland area contains a variety of plant and animal resources. Urban development can have major impacts on vegetation and wildlife - partly through direct removal of habitat, and also through secondary impacts to habitat associated with soil and water contamination. Nine City of Oakland policies that are relevant to the implementation of any of the development alternatives include the following:

- Under the Oakland Tree Ordinance, protected trees require a permit to be removed. Protected trees include coast live oak larger than four inches and all other trees larger than nine inches in diameter at 4.5 feet above the ground, except Monterey pine and eucalyptus. A permit is also required for the removal of more than five Monterey pines per acre;

- Efforts should be made to perpetuate the full range of plant types and plant communities, and therefore also wildlife variety found in the Oakland area;

- Special attention should be given to the protection of rare and endangered species;

- Where new development occurs, examples of native vegetation should be retained and, where feasible, large sections should be left undisturbed for ecological, educational, and aesthetic benefit. Where appropriate, the development should incorporate a diversity of suitable new plant materials to provide food and shelter for wildlife;

- As much as feasible, wooded tracts of open land should be preserved, with only careful inroads for development allowed;

- The removal of large live trees, wherever they occur, should be avoided for desirable species of trees;

- Extensive tree planting programs should take place in most residential and commercial areas;

- Wildlife and natural vegetation should be protected from the indiscriminate use of dangerous pesticides and herbicides, especially in areas where topography and wind can facilitate the spread of these substances and promote the accidental poisoning of plants and animals; and

- Wherever practicable, landscaping should include the use of native plant species.

4.7 WATER RESOURCES

This section analyzes impacts to water resources. The region of influence considered for water resources includes the Naval Medical Center Oakland (NMCO) property. Under this definition, any off-property impacts that may occur are considered to be indirect or cumulative impacts. Water resources include permanent and ephemeral surface water bodies and ground water.

4.7.1 Significance Criteria

A project may have a significant impact on water resources if it causes substantial flooding or erosion, adversely affects the quality of any significant water body, such as stream, lake, or bay, exposes people to reasonably foreseeable hydrologic hazards, such as flooding, or adversely affects surface or ground water quality or quantity. The 100-year recurrence interval for floodplains is used as the significance criterion for flood impacts. Applicable federal and state water quality laws, regulations, and standards are cited as appropriate. It is assumed that compliance with those laws will be conditions of approval for any of the reuse alternatives. Downstream or other impacts outside the NMCO boundary are considered in the context of cumulative or indirect impacts. Table 4-11 summarizes the impacts and their significance.

Table 4-11
Summary of Water Resources Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Substantial flooding, erosion, or degradation of water quality	○	○	◐	◐	◐	◐
Local flooding	○	○	◐	◐	◐	◐
Contaminant spills	○	○	◐	◐	◐	◐
Surface water quality	○	○	◐	◐	◐	◐

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

4.7.2 Navy Disposal

No Impacts

Disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action. No water resources impacts will result from this transfer of title.

Applicable Laws, Regulations, and Standards

Ground Water. Depending on how they are constructed and their current condition, the former domestic wells at NMCO may represent an existing or potential conduit for poor quality surface water to enter ground water. According to California Department of Water Resources requirements (California Water Code Section 13751), a well owner must properly abandon wells that are no longer functioning or that have been taken out of service. Alternatively, after an evaluation of their condition and suitability for future use, the existing wells might be reconditioned and placed in service as a potential supplemental water supply, such as for irrigation or fire suppression.

4.7.3 Maximum Capacity Alternative

Nonsignificant Impacts

No significant water resources impacts would result from implementation of the Maximum Capacity Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur. Potentially adverse impacts to surface or ground water quality or quantity can be avoided by compliance with applicable laws, regulations, and standards discussed below. Such compliances are assumed to be conditions for approval of this alternative.

Local Flooding. The Maximum Capacity Alternative would result in a reduction in the paved area within the riparian corridor and in several other areas of NMCO compared to the existing conditions. This would probably help to reduce peak storm discharges to Rifle Range Creek because a portion of the incident stormwater would have an opportunity to percolate below the ground surface before reaching the stream.

An accurate estimate of paved areas with each alternative is not available, and is beyond the scope of this program level document. A net decrease in paved surface area is expected with alternatives that allow for increased open

space. The difference in paved surface area under different alternatives is illustrated by Figures 2-5, 2-6, 2-7, and 2-8, showing proposed uses of the site. The increased unpaved surface area may increase storm water retention time on the site, thus potentially reducing peak flows downstream of the site. However, Alameda County runoff volume estimates indicated that the net effect would not be significant enough to increase capacities of additional downstream flood mitigation measures already planned by Alameda County (Saleh 1995). This is because the contribution to downstream flood flows from the watershed in which the NMCO site is located is relatively small compared to contributions of adjacent watersheds.

It is assumed that storm water collection systems for proposed development areas would continue to direct storm water from these areas to the streams. A reduction in peak storm flows in streams would have a beneficial impact downstream (see discussion of cumulative impacts in Chapter 5), but the impact to NMCO would not be significant because none of NMCO is currently within the 100-year floodplain.

Contaminant spills. Construction equipment and operations may result in petroleum hydrocarbon spills and other accidental emissions of pollutants that could enter and contaminate streams. This impact is considered nonsignificant because spill control measures would be addressed in the construction Storm Water Pollution Prevention Plan (SWPPP).

Surface Water Quality. The application of fertilizers, and pesticides and herbicides, needed for establishing and maintaining a golf course could potentially generate periodically high levels of chemicals in runoff that could adversely impact surface water quality if the runoff entered stormwater discharge. Golf courses are not specifically covered by the non-point source NPDES permit requirement. This is not expected to result in a significant adverse impact under modern pesticide and fertilizer management practices, which include minimizing pesticide/herbicide use and limiting applications to the dry season, when the least stormwater runoff occurs. In addition, golf course planning, including operations and maintenance activities involving the use of herbicides, pesticides, fertilizers, or other potentially toxic chemicals capable of entering Rifle Range Creek or its tributaries will be subject to the terms of the SWPPP's prepared for the site. Applicable state and federal laws, regulations, and standards intended to control the volume and timing of nonpoint source pollutants also will apply, including the requirement that certified Pest Control Advisor supervise the formulation of all chemical application rates.

Grading, demolition, and construction of new buildings would result in soil disturbance and increased erosion potential. These impacts would be significant if the eroded sediments were allowed to be carried into Rifle

Range Creek or its tributaries. Along with the potential for significant impacts to water quality because of particulate loading, increased sediment deposition could occur in the channels of creeks on the NMCO property or further downstream, potentially affecting stream capacity.

Applicable Laws, Regulations, and Standards

In order to avoid potential project contributions to the deterioration of stormwater runoff quality in the City of Oakland, the project shall include the preparation and implementation of an adequate SWPPP consistent with National Pollution Discharge Elimination System and Regional Water Quality Control Board requirements. A Construction SWPPP shall be submitted for review and approval by the Regional Water Quality Control Board before the start of construction. Prior to the issuance of grading permits for the project, a letter from the Regional Water Control Board showing approval of the SWPPP is to be submitted to the director of city planning. Requirements in the Construction SWPPP shall be implemented prior to the issuance of building permits for the project.

Activities at certain types of commercial facilities that could be developed under this alternative may have the potential for generating non-point source pollutants that could impact stormwater runoff. Such facilities also would be required to prepare Industrial SWPPPs.

4.7.4 Mixed Use Village Alternative

Nonsignificant Impacts

No significant water resources impacts would result from implementation of the Mixed Use Village Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur. Potentially adverse impacts to surface or ground water quality or quantity can be avoided by compliance with applicable laws, regulations, and standards discussed below. Such compliances are assumed to be conditions for approval of this alternative.

Local Flooding. The Mixed Use Village would result in a slight increase in the paved area within the riparian corridor and in several other areas of NMCO compared to the Maximum Capacity Alternative, but still less than existing conditions. This would probably help to reduce peak storm discharges to Rifle Range Creek because a portion of the incident stormwater would have an opportunity to percolate below the ground surface before reaching the stream.

An accurate estimate of paved areas with each alternative is not available, and is beyond the scope of this program level document. A net decrease in paved surface area is expected with alternatives that allow for increased open space. The difference in paved surface area under different alternatives is illustrated by Figures 2-5, 2-6, 2-7, and 2-8, showing proposed uses of the site. The increased unpaved surface area may increase storm water retention time on the site, thus potentially reducing peak flows downstream of the site. However, Alameda County runoff volume estimates indicated that the net effect would not be significant enough to increase capacities of additional downstream flood mitigation measures already planned by Alameda County (Saleh 1995). This is because the contribution to downstream flood flows from the watershed in which the NMCO site is located is relatively small compared to contributions of adjacent watersheds.

It is assumed that storm water collection systems for proposed development areas would continue to direct storm water from these areas to the streams. A reduction in peak storm flows in streams would have a beneficial impact downstream (see discussion of cumulative impacts in Chapter 5), but the impact to NMCO would not be significant because none of NMCO is currently within the 100-year floodplain.

Contaminant spills. Construction equipment and operations may result in petroleum hydrocarbon spills and other accidental emissions of pollutants that could enter and contaminate streams. This impact is considered nonsignificant because spill control measures would be addressed in the construction SWPPP. The potential for spills of industrial chemicals would be greater than under the Maximum Capacity Alternative because the Mixed Use Village Alternative features a research and development/biotech facility where industrial chemicals may be used.

Surface Water Quality. Grading, demolition, and construction of new buildings would result in soil disturbance and increased erosion potential. These impacts would be significant if the eroded sediments were allowed to be carried into Rifle Range Creek or its tributaries. Along with the potential for significant impacts to water quality because of particulate loading, increased sediment deposition could occur in the channels of creeks on the NMCO property or further downstream, potentially affecting stream capacity.

Applicable Laws, Regulations, and Standards

In order to avoid potential project contributions to the deterioration of stormwater runoff quality in the City of Oakland, the project shall include the preparation and implementation of an adequate Storm Water Pollution

Prevention Plan (SWPPP) consistent with National Pollution Discharge Elimination System and Regional Water Quality Control Board requirements. The SWPPP shall be submitted for review and approval by the Regional Water Quality Control Board before the start of construction. Prior to the issuance of grading permits for the project, a letter from the Regional Water Control Board showing approval of the SWPPP is to be submitted to the director of city planning. Requirements in the SWPPP shall be implemented prior to the issuance of building permits for the project.

4.7.5 Single Use Campus Alternative

Nonsignificant Impacts

No significant water resources impacts would result from implementation of the Single Use Campus Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or exposure of people to reasonably foreseeable hydrologic hazards, such as flooding would occur. Potentially adverse impacts to surface or ground water quality or quantity can be avoided by compliance with applicable laws, regulations, and standards discussed below. Such compliances are assumed to be conditions for approval of this alternative.

Local Flooding. The Single Use Campus Alternative would result in more paved area than the Maximum Capacity Alternative, but a net overall reduction in the paved area within the riparian corridor and in several other areas of NMCO compared to the existing conditions. This would probably help to reduce peak storm discharges to Rifle Range Creek because a portion of the incident stormwater would have an opportunity to percolate below the ground surface before reaching the stream.

An accurate estimate of paved areas with each alternative is not available, and is beyond the scope of this program level document. A net decrease in paved surface area is expected with alternatives that allow for increased open space. The difference in paved surface area under different alternatives is illustrated by Figures 2-5, 2-6, 2-7, and 2-8, showing proposed uses of the site. The increased unpaved surface area may increase storm water retention time on the site, thus potentially reducing peak flows downstream of the site. However, Alameda County runoff volume estimates indicated that the net effect would not be significant enough to increase capacities of additional downstream flood mitigation measures already planned by Alameda County (Saleh 1995). This is because the contribution to downstream flood flows from the watershed in which the NMCO site is located is relatively small compared to contributions of adjacent watersheds.

It is assumed that storm water collection systems for proposed development areas would continue to direct storm water from these areas to the streams. A reduction in peak storm flows in streams would have a beneficial impact downstream (see discussion of cumulative impacts in Chapter 5), but the impact to NMCO would not be significant because none of NMCO is currently within the 100-year floodplain.

Contaminant spills. Construction equipment and operations may result in petroleum hydrocarbon spills and other accidental emissions of pollutants that could enter and contaminate streams. This impact is considered nonsignificant because spill control measures would be addressed in the construction SWPPP's.

Surface Water Quality. Grading, demolition, and construction of new buildings would result in soil disturbance and increased erosion potential. These impacts would be significant if the eroded sediments were allowed to be carried into Rifle Range Creek or its tributaries. Along with the potential for significant impacts to water quality because of particulate loading, increased sediment deposition could occur in the channels of creeks on the NMCO property or further downstream, potentially affecting stream capacity.

Applicable Laws, Regulations, and Standards

In order to avoid potential project contributions to the deterioration of stormwater runoff quality in the City of Oakland, the project shall include the preparation and implementation of an adequate Storm Water Pollution Prevention Plan (SWPPP) consistent with National Pollution Discharge Elimination System and Regional Water Quality Control Board requirements. The SWPPP shall be submitted for review and approval by the Regional Water Quality Control Board before the start of construction. Prior to the issuance of grading permits for the project, a letter from the Regional Water Control Board showing approval of the SWPPP is to be submitted to the director of city planning. Requirements in the SWPPP shall be implemented prior to the issuance of building permits for the project.

4.7.6 Residential Alternative

Nonsignificant Impacts

No significant water resources impacts would result from implementation of the Residential Alternative, because no substantial flooding or erosion, adverse impacts to the quality of any significant water body, such as stream, lake, or bay, or exposure of people to reasonably foreseeable hydrologic

hazards, such as flooding would occur. Potentially adverse impacts to surface or ground water quality or quantity can be avoided by compliance with applicable laws, regulations, and standards discussed below. Such compliances are assumed to be conditions for approval of this alternative.

Local Flooding. The Residential Alternative would result in about the same extent of paved area as the Maximum Capacity Alternative, which represents a net overall reduction in the paved area within the riparian corridor and in several other areas of NMCO compared to the existing conditions. This would probably help to reduce peak storm discharges to Rifle Range Creek because a portion of the incident stormwater would have an opportunity to percolate below the ground surface before reaching the stream.

An accurate estimate of paved areas with each alternative is not available, and is beyond the scope of this program level document. A net decrease in paved surface area is expected with alternatives that allow for increased open space. The difference in paved surface area under different alternatives is illustrated by Figures 2-5, 2-6, 2-7, and 2-8, showing proposed uses of the site. The increased unpaved surface area may increase storm water retention time on the site, thus potentially reducing peak flows downstream of the site. However, Alameda County runoff volume estimates indicated that the net effect would not be significant enough to increase capacities of additional downstream flood mitigation measures already planned by Alameda County (Saleh 1995). This is because the contribution to downstream flood flows from the watershed in which the NMCO site is located is relatively small compared to contributions of adjacent watersheds.

It is assumed that storm water collection systems for proposed development areas would continue to direct storm water from these areas to the streams. A reduction in peak storm flows in streams would have a beneficial impact downstream (see discussion of cumulative impacts in Chapter 5), but the impact to NMCO would not be significant because none of NMCO is currently within the 100-year floodplain.

Contaminant spills. Construction equipment and operations may result in petroleum hydrocarbon spills and other accidental emissions of pollutants that could enter and contaminate streams. This impact is considered nonsignificant because spill control measures would be addressed in the construction SWPPP's.

Surface Water Quality. Grading, demolition, and construction of new buildings would result in soil disturbance and increased erosion potential. These impacts would be significant if the eroded sediments were allowed to be carried into Rifle Range Creek or its tributaries. Along with the potential for significant impacts to water quality because of particulate

loading, increased sediment deposition could occur in the channels of creeks on the NMCO property or further downstream, potentially affecting stream capacity. The potential for chemical spills would be minimal in the Residential Alternative. Potential sources would be limited to household chemical use, petroleum hydrocarbons from vehicles on residential streets, and the possible use of industrial chemicals by retail businesses.

Applicable Laws, Regulations, and Standards

In order to avoid potential project contributions to the deterioration of stormwater runoff quality in the City of Oakland, the project shall include the preparation and implementation of an adequate Storm Water Pollution Prevention Plan (SWPPP) consistent with National Pollution Discharge Elimination System and Regional Water Quality Control Board requirements. The SWPPP shall be submitted for review and approval by the Regional Water Quality Control Board before the start of construction. Prior to the issuance of grading permits for the project, a letter from the Regional Water Control Board showing approval of the SWPPP is to be submitted to the director of city planning. Requirements in the SWPPP shall be implemented prior to the issuance of building permits for the project.

4.7.7 No Action Alternative

No Impacts

Under the No Action Alternative there would be no construction activity to create a potential for soil erosion. Only minimal chemical use would occur, which is considerably less than existing conditions. Hence, there would be no impacts to surface water quality.

Applicable Laws, Regulations, and Standards

The potential for impacts to ground water associated with the existing out-of-service wells would be less than significant if the wells are abandoned. They would need to be properly sealed and maintained, according to applicable laws, regulations, and standards governing well abandonment.

4.8 GEOLOGY AND SOILS

The region of influence (ROI) for soils and geologic resources includes lands within the property boundaries of the Naval Medical Center Oakland (NMCO) and adjacent contiguous land.

4.8.1 Significance Criteria

A project may result in a significant geologic impact if it increases the likelihood of earthquake damage, loss of mineral resources, slope, and/or foundation instability, erosion, or sedimentation, land subsidence, or other severe problems of a geologic nature. Any physical changes to the property that would increase the likelihood of these events would be considered a significant impact.

For CEQA purposes only, an additional significance criterion is identified. Under the CEQA guidelines, a project that exposes people or structures to a major geologic hazard such as an active earthquake fault is considered a significant impact. No physical change to the environment is required for this environmental impact to be considered significant under CEQA.

Table 4-12 provides a summary of the geologic impacts and their significance.

Table 4-12
Summary of Geologic and Soils Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Public Exposure to Earthquakes	○	○	◑[2]	◑[2]	◑[2]	◑[2]
Slope stability	○	○	◑	◑	◑	◑
Differential settlement	○	○	◐	◐	◐	◐
Soil erosion	○	○	◐	◐	◐	◐
Likelihood of Earthquakes	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None
[2] = CEQA purposes only

4.8.2 Navy Disposal

No geologic impacts have been identified for disposal of the NMCO property by the Navy, because disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

4.8.3 Maximum Capacity Alternative

Significant Impacts

Public Exposure to Earthquakes

Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code § 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's reuse development responsibilities.

Impact 1: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Maximum Capacity Alternative. Although the physical changes required to implement the Maximum Capacity Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines.

Mitigation 1: At a minimum, seismic upgrades to reduce life safety risks associated with structural failures of the "H-shaped Buildings" (except Building 69 which has already been upgraded), for a moderate-probability earthquake, should be performed prior to reuse to meet life safety criteria. In addition, any existing structures identified for retention for future use should be evaluated in detail to determine the cost-effectiveness of seismic upgrades subject to site-specific dynamic stress conditions, as described in the current California Building Code. Existing utilities needed to support emergency services or utilities whose failure might increase safety hazards, such as natural gas lines, should be evaluated prior to reuse to determine if upgrades are needed to meet existing code requirements.

Slope Stability

Impact 2: Significant and mitigable impacts would result from slope failure under the Maximum Capacity Alternative. The Maximum Capacity Alternative proposes development on most of the remaining land in which

slopes are less than 30 percent, except in the riparian corridor and the open space area at the south end of NMCO. Since most of the areas proposed for future development are already developed, significant and mitigable impacts on slope stability probably would be limited to those areas at the base of steep slopes, where development alters existing drainage conditions, or where new development increases upslope loading.

Mitigation 2: Grading permits from the City of Oakland will be required for site preparation work involving movement of more than five cubic yards of soil or on slopes greater than 20 percent. Compliance with requirements of the grading permit should reduce risks of slope failure in new development areas. Geotechnical investigations should be conducted to identify potential geologic hazards that may affect new building or road sites in potentially vulnerable areas, adjacent to or including slopes greater than 20 percent. Stability of the slope underlain by existing landslide deposits at the north end of the site should be specifically evaluated to identify potential hazards to development in this area. A geotechnical engineer should review design plans and details and other improvement plans to determine whether they are compatible with the geotechnical conditions of the site. A geotechnical engineer and engineering geologist also should inspect site grading and should document placement of engineered fills, stability of cut and fill slopes, and placement of subdrains.

Nonsignificant Impacts

Differential Settlement. Differential settlement (i.e. different rates of settling of soils) of expansive clay soils is a potential concern for building sites in areas underlain by Climara clay on the southwestern side of NMCO, by Bottela loam in the south central portion of NMCO, and by the Los Osos-Millsholm soil complex.

A geotechnical investigation of soils will be conducted at new construction sites where expansive soils may be present. Drainage will be directed away from foundations and roadways. Foundation studies will be undertaken to identify appropriate site specific measures.

Erosion potential. Demolition and construction activities would result in an increased potential for soil loss due to erosion. Soils on many slopes are thin and highly vulnerable to erosion. Soil loss on these slopes would make re-vegetation difficult. Soil loss is not likely to be a significant impact because development will be confined mostly to areas with less than 30 percent slopes. The potential for soil loss on slopes greater than 30 percent will be reduced by implementing best management practices, including cross-contour earth moving operations whenever possible, the use of inert soil stabilizers (matting, re-seeding, etc.), topsoil stockpiling, seeding, and cross-

contour soil redistribution and revegetation upon the completion of construction. Areas from which pavement and structures are removed, such as along the riparian corridor, may require placement of topsoil and stronger means of stabilization (e.g. matting, hay bales, etc.) until vegetative cover is established.

No Impacts

Likelihood of Earthquakes. The Maximum Capacity Alternative would have no impact on the likelihood, size, or strength of future earthquakes. As described in Section 3.8, NMCO is in a seismically active area, and this would not be changed by implementation of the Maximum Capacity Alternative.

4.8.4 Mixed Use Village Alternative

Significant Impacts

Public Exposure to Earthquakes

Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code § 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's reuse development responsibilities.

Impact 1: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures near the geologically active Hayward Earthquake Fault by implementing the Mixed Use Village Alternative. Although the physical changes required to implement the Mixed Use Village Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines.

Mitigation 1: A detailed, site-specific seismic evaluation should be performed to identify and quantify the potential hazards associated with reuse of existing structures. Because of the proximity of NMCO to the Hayward Fault, all new structures should be designed to meet the site specific seismic design criteria of the California Building Code.

Slope Stability

Impact 2: Significant and mitigable impacts would result from slope failure under the Mixed Use Village Alternative. Impacts would be similar to the Maximum Capacity Alternative, except that no development is planned on the ridgetop in the northern corner of the property, nearest the existing landslide deposits.

Mitigation 2: Mitigation measures are the same as described for the Maximum Capacity Alternative.

Nonsignificant Impacts

Differential Settlement. The potential for differential settlement of expansive clay soil, will be addressed by designing foundation based on site specific geotechnical studies as described for the Maximum Capacity Alternative.

Erosion potential. During demolition and construction activities, there would be a temporary increased but nonsignificant potential for soil loss due to erosion, as described under the Maximum Capacity Alternative. After project buildout, the amount of open space land area will be greater than under the Maximum Capacity Alternative. Some of this newly-created open space may require stabilization to limit soil loss until vegetation is established.

No Impacts

Likelihood of Earthquakes. The Mixed Use Village Alternative would have no impact on the likelihood, size, or strength of future earthquakes. As described in Section 3.8, NMCO is in a seismically active area, and this would not be changed by implementation of the Mixed Use Village Alternative.

4.8.5 Single Use Campus Alternative

Significant Impacts

Public Exposure to Earthquakes

Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code § 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's reuse development responsibilities.

Impact 1: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures present near the geologically active Hayward Earthquake Fault by implementing the Single Use Campus Alternative. Although the physical changes required to implement the Single Use Campus Alternative will not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines.

Mitigation 1: Mitigation of the seismic impacts would be the same as described under the Mixed Use Village Alternative.

Slope Stability

Impact 2: Significant and mitigable impacts would result from slope failure under the Single Use Campus Alternative. Impacts would be similar to the Maximum Capacity Alternative, except that no development is planned on the ridgetop in the northern corner of the property, nearest the existing landslide deposits.

Mitigation 2: The mitigation measures for this alternative would be the same as described for the Maximum Capacity Alternative.

Nonsignificant Impacts

Differential Settlement. This alternative involves fewer structures than the Maximum Capacity Alternative, and these structures would probably be smaller and lighter than in the Maximum Capacity Alternative. Consequently, the potential for damage to structures from differential settlement will be less. Less of the proposed project area would be located on expansive soils. Building foundations will be designed based on the results of site specific geotechnical studies.

Erosion potential. Since a larger area would be devoted to open space under this alternative, more land area would be subject to erosion by stormwater runoff after project build out than under the Maximum Capacity Alternative. However, because soil erosion must be addressed to prevent impacts to streams (see Section 4.7, Water Resources), the resulting impacts should remain nonsignificant.

No Impacts

Likelihood of Earthquakes. The Single Use Campus Alternative would have no impact on the likelihood, size, or strength of future earthquakes. As described in Section 3.8, NMCO is in a seismically active area, and this

would not be changed by implementation of the Single Use Campus Alternative.

4.8.6 Residential Alternative

Impacts under the Residential Alternative would be similar to the Maximum Capacity Alternative. The Residential Alternative proposes more intensive residential development than the Maximum Capacity Alternative, using more of the available land area on the east side of Rifle Range Creek. However, no development would occur on the ridgetop in the northern corner of NMCO. There would be less commercial/retail development west of Rifle Range Creek, with the result that there would be minimal reuse of existing buildings under this option.

Significant Impacts

Public Exposure to Earthquakes

Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code § 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's reuse development responsibilities.

Impact 1: A significant and mitigable impact, for purposes of CEQA only, would result from increasing the number of people and structures present near the geologically active Hayward Earthquake Fault by implementing the Residential Alternative (Options 1 and 2). Although the physical changes required to implement the Residential Alternative (Options 1 and 2) would not change the likelihood of an earthquake, increasing the number of people and structures in the vicinity of an active earthquake fault is considered a significant (and mitigable) impact under the CEQA guidelines.

Mitigation 1: New housing units would be designed, at a minimum, to meet the requirements of the applicable version of the California Building Code. Because NMCO is located very close to the Hayward Fault and because some of the proposed development would be in areas underlain by thick alluvium, the structures should be designed to account for site specific conditions.

Slope Stability

Impact 2: Significant and mitigable impacts would result from slope failure under the Residential Alternative. The potential for slope failures to impact

developed areas under the Residential Alternative would be similar to the potential for failures under the Maximum Capacity Alternative, except that no development is proposed in the northern corner of the property above the existing landslide deposit identified by Nilsen (1975). The proposed development area corresponds with the area of existing development, so that it is unlikely that slope failure would occur provided that the existing terrain is not severely altered.

Mitigation 2: Mitigation measures under the Residential Alternative would be the same as those identified under the Maximum Capacity Alternative.

Nonsignificant Impacts

Differential Settlement. The Residential Alternative involves the largest number of new structures, and development would cover more of the areas underlain by expansive soils. Building foundations will be designed based on geotechnical studies, as described for the Maximum Capacity Alternative.

The potential for soil loss due to erosion would be similar to the Maximum Capacity Alternative during construction but less than under the Maximum Capacity Alternative after project build-out because more land area would be covered or landscaped over the long-term.

No Impacts

Likelihood of Earthquakes. The Residential Alternative (both options) would have no impact on the likelihood, size, or strength of future earthquakes. As described in Section 3.8, NMCO is in a seismically active area, and this would not be changed by implementation of the Residential Alternative.

4.8.7 No Action Alternative

No Impacts

Under the No Action Alternative seismic impacts to structures or infrastructure from earthquakes or slope failure could still occur. However, the potential for injuries or loss of life would be minimal because only a small caretaker population would be present on NMCO at any given time. Impacts from slope failure may occur, but are not likely because the existing terrain would not be altered.

Reducing the vulnerability of utilities is essential to the caretaker mission. Under the No Action Alternative the Navy will continue to protect utilities sufficiently to maintain essential firefighting services during caretaker status.

4.9 TRAFFIC AND CIRCULATION

This section presents the traffic and circulation analysis of disposal, development alternatives, and the No Action Alternative. Impacts are evaluated based upon their reduction to transportation system capacity (i.e. the amount they can affect traffic and road conditions). The region of influence for traffic and circulation includes regional and local access routes and the Naval Medical Center Oakland (NMCO) street system.

4.9.1 Significance Criteria

Traffic and circulation impacts are identified as significant based on the "level of service," or "LOS" criteria. As the volume of traffic at any intersection affected by a project alternative increases, the "capacity" of that intersection to handle that increased volume (i.e. number of cars per unit time) is affected. As the level of service becomes worse, delays at intersections increase, as described in Section 3.9, Table 3-16. The City of Oakland has identified level of service (LOS) D as the minimum acceptable operating condition for intersections that are already operating at LOS D or better. Thus, a particular reuse alternative would be considered to create a significant impact if the addition of its traffic resulted in a LOS E or F. In addition, if an intersection operating at LOS E were to deteriorate to LOS F, the alternative could be considered to have a significant effect. For any intersection operating at LOS F, an increase in overall intersection delay of four percent or greater is considered to represent a significant impact. These criteria apply only if ten or more vehicles at an intersection are affected. A particular reuse alternative would be considered to create a significant transit impact if addition of project transit demand would result in more anticipated passengers than available seats (i.e., a load factor greater than 1.00) or the project would add length to existing bus routes.

This section assesses the traffic, parking, transit, and pedestrian impacts of each alternative. It provides an impact overview and then a detailed discussion of the impacts of each alternative. Table 4-13 summarizes impacts discussed in this section.

4.9.2 Assumptions and Methodology

Future Transportation Network

Transportation conditions have been analyzed assuming completion of the 98th Avenue Unit III project, which is currently under construction. This project consists of widening and restriping of some segments of 98th Avenue and Golf Links Road from two to four lanes. The project includes the

Table 4-13
Summary of Traffic and Circulation Impacts and Significance

IMPACT ISSUES	NAVY ACTIONS		COMMUNITY REUSE ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic impacts	○	○	◑	◑	◑	◑
Parking impacts	○	○	◔	◔	◔	◔
Transit impacts	○	○	◔	◔	◔	◔
Bicycle and pedestrian system impacts	○	○	◔	◔	◔	◔
Consistency with transportation plans and regulations	○	○	◔	◔	◔	◔

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◔ = Nonsignificant
○ = None

installation of new traffic signals at the intersection of 98th Avenue/Golf Links Road/I-580 southbound off-ramp and the Golf Links Road/I-580 northbound ramps intersection. No other transportation system improvements are assumed to be in place when the alternative is built.

Trip Generation

Preclosure traffic generated by NMCO was removed from the existing traffic volumes. The resulting traffic volume was assumed to represent conditions of the site at closure. The trip generation for each reuse alternative (Table 4-14) was then added to the volume which remained when the NMCO traffic volume was removed. The No Action Alternative would generate about 15 trips during the morning and evening peak hours. Peak hours are those hours, or actually periods of time in the morning and evening when traffic volumes are highest, usually due to a high number of commuters when compared to other periods of the day.

Trip Distribution

The percentage of project trips distributed to area roadways outside the NMCO site are shown in Table 4-15. The trip distribution percentages apply to all alternatives. I-580 accounts for about 75 percent of these trips, with the remaining 25 percent of the trips occurring on portions of 98th and Keller Avenues, Golf Links Road, and Mountain Boulevard. Project trips to

Table 4-14
Total Trip Generation

Alternative	AM Peak Hour			PM Peak Hour			Average Daily Traffic[1]
	In (to NMCO)	Out (from NMCO)	Total	In (to NMCO)	Out (from NMCO)	Total	
Preclosure conditions	622	111	733	187	490	677	4,804
Maximum Capacity Alternative	655	388	1,043	671	904	1,575	13,090
Mixed Use Village Alternative	512	164	676	532	806	1,338	10,070
Single Use Campus Alternative	1,558	121	1,679	386	703	1,089	13,840
Residential Alternative (Option 1)	187	289	476	479	408	887	6,815
Residential Alternative (Option 2)	229	408	637	623	486	1,109	8,730
No Action Alternative	10	5	15	5	10	15	150

[1]See Table 4-31 for details regarding average daily trip calculations.

Source: Standard rates from the Institute of Transportation Engineers (1991, 1995); the San Diego Association of Governments (1991); Theresa Hughes & Associates (1995).

Table 4-15
Trip Distribution

Origin / Destination	Percent of Trips
I-580 north of Keller Avenue	45%
I-580 south of Golf Links Road	30%
98th Avenue west of I-580	12%
Keller Avenue west of I-580	5%
Golf Links Road west of I-580	3%
Mountain Boulevard north of Keller Avenue	3%
Keller Avenue east of Canyon Oaks Drive	2%

Source: The trip distribution rates were developed by Dowling Associates, based on existing traffic patterns and land use distribution within the Bay Area.

and from the east along Keller Avenue were assigned to the Keller Avenue Gate. Traffic to and from I-580 was distributed 80 percent to the main gate at Mountain Boulevard and 20 percent to the Keller Avenue Gate. The distribution was based on consideration of the shortest paths to and from the land area being served.

Linked Trips

Five percent of the automobile trips generated by each alternative were assumed to be linked to another trip within NMCO.

Level of Service Methodology

Analysis of intersection capacity was performed for the twelve study intersections during the AM (morning) and PM (afternoon or evening) peak hours. The methodologies contained in the 1994 Highway Capacity Manual were used to compute levels of service at all study area intersections.

Parking Demand

Estimated parking demand for the proposed action and alternatives was developed from the Parking Generation Manual, produced by the Institute of Transportation Engineers. The parking demand generated by each alternative is summarized in Table 4-16.

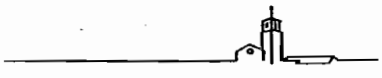
Table 4-16
Parking Demand

Alternative	Parking Demand
Maximum Capacity Alternative	2,364
Mixed Use Village Alternative	1,342
Single Use Campus Alternative	1,862
Residential Alternative (Option 1)	740
Residential Alternative (Option 2)	1,010
No Action Alternative	10

Source: Institute of Transportation Engineers, 1987.

Transit Service

Table 4-17 shows the peak hour transit ridership for the NMCO project alternatives based on an assumption that eight percent of total peak hour project trip generation would use transit. The eight percent transit share was obtained from census data documented in the final Reuse Plan for the



Naval Medical Center (OBRA 1996). It was assumed that the alternative reuse plans would generate transit ridership consistent with historic ridership.

Table 4-17
Peak Hour Transit Ridership for Project Alternatives

Project Generated Ridership = 8 percent of Total Trip Generation

Alternative	AM Peak Hour			PM Peak Hour		
	In (to NMCO)	Out (from NMCO)	Total	In (to NMCO)	Out (from NMCO)	Total
Existing Conditions (preclosure)	50	9	59	15	39	54
Maximum Capacity Alternative	53	31	84	54	72	126
Mixed Use Village Alternative	41	13	54	43	64	107
Single Use Campus Alternative	125	10	135	31	56	87
Residential Alternative (Option 1)	15	23	38	38	33	71
Residential Alternative (Option 2)	18	33	51	50	39	89
No action Alternative	1	0	1	0	1	1

Source: Oakland Base Reuse Authority (OBRA). 1996. Final Reuse Plan for the Naval Medical Center, Oakland. August 1996.

Table 4-18 shows the ridership (number of people potentially riding AC Transit) and average load factors for AC Transit service to NMCO for the alternative reuse plans. The analysis has resulted in the following conclusions:

- The existing average load factor (demand/seat capacity) for the transit routes directly serving the NMCO site is 0.28 during the AM peak hour and 0.35 during the PM peak hour.

- Ridership on individual transit routes varies from the average by ± 0.03 (11 percent) during the AM peak hour, and by ± 0.04 (11 percent) during the PM peak hour.

- Implementation of the Maximum Capacity Alternative would increase the average load factor to 0.42 during the AM peak hour and 0.58 during the PM peak hour. The Maximum Capacity Alternative would generate the highest PM peak hour demand of all the reuse alternatives.

- The Single Use Campus Alternative would generate the highest AM peak hour demand of all the reuse alternatives, resulting in an average load factor of 0.51.

Table 4-18
Total Peak Hour Ridership for Project Alternatives

	AM Peak Hour				PM Peak Hour			
	Project Ridership	Average Hourly Ridership	Average Hourly Capacity	Load/ Capacity	Project Ridership	Average Hourly Ridership	Average Hourly Capacity	Load/ Capacity
Existing Conditions (preclosure)	59	159	575	0.28	54	188	539	0.35
Maximum Capacity Alternative	84	242	575	0.42	126	313	539	0.58
Mixed Use Village Alternative	54	212	575	0.37	107	294	539	0.55
Single Use Campus Alternative	135	293	575	0.51	87	274	539	0.51
Residential Alternative (Option 1)	38	196	575	0.34	71	258	539	0.48
Residential Alternative (Option 2)	51	209	575	0.36	89	276	539	0.51
No action Alternative	1	159	575	0.28	1	188	539	0.35

- The highest load factor for any individual route would be 0.57 (57 percent of seat capacity) for the Single Use Campus Alternative during the AM peak hour and 0.64 (64 percent of seat capacity) for the Maximum Capacity Alternative during the PM peak hour. (These load factors are based on the assumption that, after implementation of reuse alternatives, the load factors for individual transit routes would vary from the average by the same percentage as for preclosure conditions).

Analysis indicates that additional transit service would not need to be provided unless the load factor for any individual route exceeded 1.00 (i.e., demand exceeded the seat capacity). Therefore, none of the reuse alternatives would result in significant transit impacts.

4.9.3 Navy Disposal

No Impacts

Disposal, essentially a transfer of title, would not affect traffic or circulation. Disposal of NMCO would not create any traffic or parking impacts.

4.9.4 Impacts Resulting from the Reuse Alternatives and from the No Action Alternative

All reuse alternatives would add traffic to area roadways. The impacts are generally expected not to be significant except at certain intersections near the project site. All significant impacts can be mitigated without acquisition of additional right of way. Twelve nearby intersections were analyzed for their potential to increase traffic delays (in seconds). Implementation of the Maximum Capacity Alternative would result in significant and mitigable delays at five intersections. Implementation of the Mixed Use Village

Alternative would also result in significant and mitigable delays at five intersections. Implementation of the Single Use Campus Alternative would result in significant and mitigable delays at four intersections. Implementation of the Residential Alternative (Option 1) would result in significant and mitigable delays at two intersections, and implementation of the Residential Alternative (Option 2) would result in significant and mitigable delays at four intersections. Impacts at all of these intersections could be mitigated by installing traffic signals and restriping some lanes. No impacts would result from the No Action Alternative.

4.9.5 Maximum Capacity Alternative

The Maximum Capacity Alternative would generate 1,043 AM peak hour trips, 1,575 PM peak hour trips, and 13,090 average daily trips. The resulting impact of the additional peak hour trips to the transportation network has been determined through calculations of the resulting LOS at the twelve potentially affected intersections serving the project area. A summary of the LOS analysis and potentially significant impacts is shown in Table 4-19.

Reading the Traffic Tables in this Report

In summary, one can look at the large table to identify which intersections may experience significant impacts, and can see how those impacts are determined, and then can look at the shorter "Intersection Operations - Mitigated" tables that follow each of the large tables to see how the significant impacts are mitigated. Tables 4-19, 4-21, 4-23, 4-25, and 4-27 include shaded rows for all intersection locations experiencing significant and mitigable level of service / delay impacts.

Significant Impacts

Impact 1: A significant and mitigable impact would result from a substantial increase in traffic congestion at five project area intersections due to peak hour traffic from the Maximum Capacity Alternative. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under preclosure conditions (left side of Table 4-19) from delays estimated as the sum of preclosure conditions and delays added by traffic from the Maximum Capacity Alternative (right side of Table 4-19) for each peak hour and affected intersection:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 19 to 64 seconds;

Table 4-19
Maximum Capacity Alternative
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus Maximum Capacity Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	F	86[2]	F	High[2]
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	F	96	D	20	Stop sign	F	High	F	72
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	E	41	F	59
southbound	Stop sign	A	2	A	3	Stop sign	A	2	A	4
eastbound	Stop sign	C	19	F	54	Stop sign	D	26	F	High[2]
westbound	Stop sign	E	32	B	5	Stop sign	E	39	C	11
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	B	5	A	5
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	E[3]	38	D	24
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	E	36	F	High
westbound	Stop sign	B	5	B	5	Stop sign	B	6	B	7
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	14	C	11
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	2	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	5	A	2	None	B	5	A	4
westbound	Stop sign	C	12	B	9	Stop sign	E	38	F	High
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	E	39	F	48
southbound	Stop sign	B	7	B	5	Stop sign	B	8	B	7
eastbound	None	B	6	A	3	None	B	5	A	3
westbound	Stop sign	B	9	B	7	Stop sign	C	12	B	9
8. Golf Links / I-580 NB ramps	Signal	D	26	C	18	Signal	C	20	C	19
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	C	24	C	18
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	B	5	C	13
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	2	A	3
westbound	Stop sign	B	5	A	4	Stop sign	B	5	B	8
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	3	A	3
westbound	Stop sign	B	8	B	6	Stop sign	C	12	C	11

[1]Delay in seconds.
[2]Indicates significant and mitigable impact.
[3]Not significant because only four vehicles are affected.
*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 7 to 46 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 18 to 80 seconds;
- Mountain Boulevard/Main Entrance intersection would experience project-caused delays ranging from about 26 to 91 seconds; and
- Mountain Boulevard/Golf Links Road intersection would experience project-caused delays ranging from about 4 to 29 seconds.

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes (restriping) would mitigate the impacts to a level of nonsignificance, as indicated on the right side of Table 4-20:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 16 to 23 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 12 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 12 to 13 seconds;
- Mountain Boulevard/Main Entrance intersection would be mitigated to delays ranging from about 15 to 20 seconds; and
- Mountain Boulevard/Golf Links Road intersection would be mitigated to delays ranging from about 16 to 18 seconds.

Peak hour traffic volumes at the Mountain Boulevard / I-580 northbound off-ramp, the Mountain Boulevard / Main Entrance, and the Mountain Boulevard / Golf Links Road intersections would not warrant (i.e. officially need) a traffic signal (Warrant 11, Caltrans Traffic Manual); however, these intersections would be close to warranting a signal. Signal warrants should be monitored at these locations and traffic signals installed when one or more signal warrants are satisfied. The City of Oakland has no formal policy regarding responsibilities for traffic signal installations. In the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue / I-580 overcrossing to provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificance, as shown in Table 4-20.

Table 4-20
Maximum Capacity Alternative
Intersection Operations - Mitigated

Intersection	Preclosure Conditions (with current construction completed*)					Mitigated Conditions Maximum Capacity Alternative				
	Traffic Control	AM Peak Hour		PM Peak Hour		Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1]	LOS	Delay		LOS	Delay	LOS	Delay
1. Keller / I-580 SB off-ramp						Signal	C	16	C	23
southbound	Stop sign	F	67	F	76					
eastbound	Stop sign	F	High	F	High					
westbound	Stop sign	E	36	D	20					
2. Keller / Mountain Blvd.						Signal	B	10	B	12
northbound	Stop sign	C	16	E	38					
southbound	Stop sign	A	2	A	3					
eastbound	Stop sign	C	19	F	54					
westbound	Stop sign	E	32	B	5					
4. Mountain Blvd. / I-580 NB off						Signal	B	12	B	13
eastbound	Stop sign	C	18	D	20					
westbound	Stop sign	B	5	B	5					
6. Mountain Blvd. / Main Entr.						Signal	C	15	C	20
southbound left	None	B	5	A	2					
westbound	Stop sign	C	12	B	9					
7. Mountain Blvd. / Golf Links						Signal	C	16	C	18
northbound	Stop sign	E	35	C	19					
southbound	Stop sign	B	7	B	5					
eastbound	None	B	6	A	3					
westbound	Stop sign	B	9	B	7					

[1]Delay in seconds.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Nonsignificant Impacts

Parking. Future parking demand generated by the proposed land uses would total approximately 2,364 spaces. This alternative would provide adequate parking on-site; therefore, the impact to parking would not be significant.

Transit Service. Some increase in demand for transit services could result from this alternative. NMCO is currently served by AC Transit Lines 56, 46, and NV, and the potential increase in demand should be met by these services. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system. This would require coordination with AC Transit but is not expected to require major changes in service. Transit impacts are not expected to be significant.

Bicycle and Pedestrian System Impacts. Reuse of this alternative property could increase the number of pedestrians and bicyclists in the area. The Maximum Capacity Alternative would provide sidewalks and bicycle facilities, according to City of Oakland standards, for all new roadways within the project site. The improved bicycle and pedestrian systems would

accommodate adequately the pedestrian and bicycle traffic generated by this alternative.

Consistency with Transportation Plans and Regulations. The Maximum Capacity Alternative would be consistent with the city's transportation goals and objectives. Two intersections (Keller at the southbound I-580 off-ramp, and Keller at Mountain Boulevard), which currently operate below city standards, would be brought into compliance. Improvements at these two intersections also would comply with Caltrans, Metropolitan Transportation Commission, and U.S. Department of Transportation policies. Regionally critical roadways would not be significantly impacted by this alternative.

4.9.6 Mixed Use Village Alternative

The Mixed Use Village Alternative would generate 676 AM peak hour trips, 1,338 PM peak hour trips, and 10,070 average daily trips. The resulting impact of the additional peak hour trips to the transportation network (i.e. the roads, intersections, parking etc.) has been determined through calculations of the resulting LOS at the twelve critical intersections serving the project area. A summary of the LOS analysis and potentially significant impacts is shown in Table 4-21.

Significant Impacts

Impact 1: A significant and mitigable impact would result from a substantial increase in traffic congestion at five project area intersections due to peak hour traffic from the Mixed Use Village Alternative. Traffic congestion is expressed as delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under preclosure conditions (left side of Table 4-21) from delays estimated as the sum of preclosure conditions and delays added by traffic from the Mixed Use Village Alternative (right side of Table 4-21) for each peak hour and affected intersection:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 46 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 46 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 0 to 64 seconds;
- Mountain Boulevard/Main Entrance intersection would experience project-caused delays ranging from about 0 to 91 seconds; and
- Mountain Boulevard/Golf Links Road intersection would experience project-caused delays ranging from about 0 to18 seconds.

Table 4-21
Mixed Use Village Alternative
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus Mixed Use Village Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	F	49	F	High
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	E	36	D	20	Stop sign	F	82	F	57
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	D	20	F	46
southbound	Stop sign	A	2	A	3	Stop sign	A	2	A	3
eastbound	Stop sign	C	19	F	54	Stop sign	C	16	E	High
westbound	Stop sign	E	32	B	5	Stop sign	E	31	C	10
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	A	4	A	4
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	D	25	D	20
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	C	18	F	84
westbound	Stop sign	B	5	B	5	Stop sign	B	5	B	6
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	12	C	10
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	2	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	5	A	2	None	B	4	A	3
westbound	Stop sign	C	12	B	9	Stop sign	C	9	F	High
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	D	26	E	37
southbound	Stop sign	B	7	B	5	Stop sign	B	6	B	6
eastbound	None	B	6	A	3	None	B	5	A	3
westbound	Stop sign	B	9	B	7	Stop sign	B	9	B	9
8. Golf Links / I-580 NB ramps	Signal	D	26	C	18	Signal	C	22	C	23
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	C	22	C	18
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	B	5	C	12
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	2	A	3
westbound	Stop sign	B	5	A	4	Stop sign	B	5	B	7
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	2	A	3
westbound	Stop sign	B	8	B	6	Stop sign	B	8	B	9

[1]Delay in seconds.
[2]Indicates significant and mitigable impact
Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.
*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Mitigation 1a: The installation of traffic signals at the above locations along with the minor lane changes (e.g. restriping) would mitigate the impacts to a level of nonsignificance, as indicated in Table 4-22:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 15 to 19 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 9 to 11 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 12 to 13 seconds;
- Mountain Boulevard/Main Entrance intersection would be mitigated to delays ranging from about 12 to 23 seconds; and
- Mountain Boulevard/Golf Links Road intersection would be mitigated to delays ranging from about 13 to 16 seconds.

Traffic volumes at the Mountain Boulevard/I-580 northbound off-ramp and the Mountain Boulevard/Golf Links Road intersections would not satisfy the peak hour signal warrant; however, these intersections would be close to satisfying the warrant.

Signal warrants should be monitored at these locations and traffic signals should be installed when one or more signal warrants are satisfied. The City of Oakland has no formal policy regarding responsibilities for traffic signal installations. In the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing, as described for the Maximum Capacity Alternative.

These mitigation measures would reduce the traffic impacts to a level of nonsignificance, as shown in Table 4-22.

Nonsignificant Impacts

Parking. Future parking demand generated by the proposed land uses would total approximately 1,342 spaces. This alternative would provide adequate parking on-site; therefore, the impact to parking would not be significant.

Table 4-22
Mixed Use Village Alternative
Intersection Operations – Mitigated

Intersection	Preclosure Conditions (with current construction completed*)					Mitigated Conditions Mixed Use Village Alternative				
	Traffic Control	AM Peak Hour		PM Peak Hour		Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1]	LOS	Delay[1]		LOS	Delay[1]	LOS	Delay[1]
1. Keller / I-580 SB off-ramp						Signal	C	15	C	19
southbound	Stop sign	F	67	F	76					
eastbound	Stop sign	F	High	F	High					
westbound	Stop sign	E	36	D	20					
2. Keller / Mountain Blvd.						Signal	B	9	B	11
northbound	Stop sign	C	16	E	38					
southbound	Stop sign	A	2	A	3					
eastbound	Stop sign	C	19	F	54					
westbound	Stop sign	E	32	B	5					
4. Mountain Blvd. / I-580 NB off						Signal	B	12	B	13
eastbound	Stop sign	C	18	D	20					
westbound	Stop sign	B	5	B	5					
6. Mountain Blvd. / Main Entr.						Signal	B	12	C	23
southbound left	None	B	5	A	2					
westbound	Stop sign	C	12	B	9					
7. Mountain Blvd. / Golf Links						Signal	B	13	C	16
northbound	Stop sign	E	35	C	19					
southbound	Stop sign	B	7	B	5					
eastbound	None	B	6	A	3					
westbound	Stop sign	B	9	B	7					

[1]Delay in seconds.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Transit Service. As with the Maximum Capacity Alternative, a nonsignificant increase in demand for transit services on AC Transit Lines 56, 46, and NV could result from this alternative. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system.

Bicycle and Pedestrian System Impacts. The Mixed Use Village Alternative would provide adequate sidewalks and bicycle facilities, according to City of Oakland standards, for all new roadways within the project site.

Consistency with Transportation Plans and Regulations. As with the Maximum Capacity Alternative, the Mixed Use Village Alternative would be consistent with the city's transportation goals and objectives. Two intersections (Keller at the southbound I-580 off-ramp and Keller at Mountain Boulevard), which currently operate below city standards, would be brought into compliance with city, regional, state, and federal standards.

4.9.7 Single Use Campus Alternative

The Single Use Campus Alternative would generate 1,679 AM peak hour trips, 1,089 PM peak hour trips, and 13,840 average daily trips. The resulting impact of the additional peak hour trips to the transportation network has been determined through calculations of the resulting LOS at the twelve critical intersections serving the project area. A summary of the LOS analysis and potentially significant impacts is shown in Table 4-23.

Significant Impacts

Impact 1: A significant and mitigable impact would result from a substantial increase in traffic congestion at four project area intersections due to peak hour traffic from the Single Use Campus Alternative. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under preclosure conditions (left side of Table 4-23) from delays estimated as the sum of preclosure conditions and delays added by traffic from the Single Use Campus Alternative (right side of Table 4-23) for each peak hour and affected intersection:

- Keller/I-580 southbound off-ramps would experience project-caused delays ranging from about 24 to 64 seconds;
- Keller/Mountain Boulevard northbound and eastbound would experience project-caused delays ranging from about 0 to 81 seconds;
- Mountain Boulevard/I-580 northbound off-ramp intersection would experience project-caused delays ranging from about 16 to 82 seconds; and
- Mountain Boulevard/Main Entrance intersection would experience project-caused delays ranging from about 1 to 95 seconds.

Mitigation 1a: The installation of traffic signals at the above locations, along with minor lane changes (e.g. restriping) described for the Maximum Capacity Alternative, would mitigate the impacts to a level of nonsignificance, as indicated in Table 4-24:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 17 to 34 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 11 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 2 to 16 seconds; and
- Mountain Boulevard/Main Entrance intersection would be mitigated to delays ranging from about 13 to 17 seconds.

Table 4-23
Single Use Campus Alternative
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus Single Use Campus Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	F	High[2]	F	High[2]
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	F	36	D	20	Stop sign	F	High	F	45
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	E	30	E	37
southbound	Stop sign	A	2	A	3	Stop sign	A	2	A	3
eastbound	Stop sign	C	19	F	54	Stop sign	F	High	F	High
westbound	Stop sign	E	32	B	5	Stop sign	D	24	B	9
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	A	4	A	4
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	D	25	C	17
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	F	High	E	36
westbound	Stop sign	B	5	B	5	Stop sign	B	7	B	5
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	12	C	10
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	7
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	3	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	15	A	2	None	F	High	A	3
westbound	Stop sign	G	42	B	9	Stop sign	F	High	E	38
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	F[3]	102	D	28
southbound	Stop sign	B	7	B	5	Stop sign	C	11	B	6
eastbound	None	B	6	A	3	None	C	13	A	3
westbound	Stop sign	B	9	B	7	Stop sign	B	9	B	8
8. Golf Links / I-580 NB ramps	Signal	D	26	C	18	Signal	D	31	C	17
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	D	31	C	17
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	B	5	C	11
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	4	A	2
westbound	Stop sign	B	5	A	4	Stop sign	B	9	B	6
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	2	A	3
westbound	Stop sign	B	8	B	6	Stop sign	C	15	B	8

[1]Delay in seconds.
[2]Indicates significant and mitigable impact.
[3]Not significant - only four vehicles are affected.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.
*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Signals at all of the above intersections would satisfy the peak hour volume warrant for the Single Use Campus Alternative. The City of Oakland has no formal policy regarding responsibilities for traffic signal installations. In the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing, as described for the Maximum Capacity Alternative. These mitigation measures would reduce the traffic impacts to a level of nonsignificance, as shown in Table 4-24.

Table 4-24
Single Use Campus Alternative
Intersection Operations - Mitigated

Intersection	Preclosure Conditions (with current construction completed*)					Mitigated Conditions Single Use Campus Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp						Signal	D	34	C	17
southbound	Stop sign	F	67	F	76					
eastbound	Stop sign	F	High	F	High					
westbound	Stop sign	E	36	D	20					
2. Keller / Mountain Blvd.						Signal	B	10	B	11
northbound	Stop sign	C	16	E	38					
southbound	Stop sign	A	2	A	3					
eastbound	Stop sign	C	19	F	54					
westbound	Stop sign	E	32	B	5					
4. Mountain Blvd. / I-580 NB off						Signal	C	16	A	2
eastbound	Stop sign	C	18	D	20					
westbound	Stop sign	B	5	B	5					
6. Mountain Blvd. / Main Entr.						Signal	C	17	B	13
southbound left	None	B	5	A	2					
westbound	Stop sign	C	12	B	9					

[1]Delay in seconds.
*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Nonsignificant Impacts

Parking. Future parking demand generated by the proposed land uses would total approximately 1,862 spaces. This alternative would provide adequate parking on-site; therefore, the impact to parking would not be significant.

Transit Service. As with the Maximum Capacity Alternative, a less than significant increase in demand for transit services on Alameda-Contra Costa Transit District (AC Transit) Lines 56, 46, and NV could result from this alternative. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system.

Bicycle and Pedestrian System Impacts. The Single Use Campus Alternative would provide adequate sidewalks and bicycle facilities, according to City of Oakland standards, for all new roadways within the project site.

Consistency with Transportation Plans and Regulations. As with the Maximum Capacity Alternative, the Single Use Campus Alternative would be consistent with the city's transportation goals and objectives. Two intersections (Keller at the southbound I-580 off-ramp and Keller at Mountain Boulevard), which currently operate below city standards, would be brought into compliance with all applicable standards.

4.9.8 Residential Alternative

Two options were evaluated for the Residential Alternative. The basic difference in the two options are the number of residential units that would be provided. Option 1 would have 357 residential dwelling units, and Option 2 would have 600 dwelling units.

Option 1

The Residential Alternative (Option 1) would generate 476 AM peak hour trips, 887 PM peak hour trips, and 6,815 average daily trips. The resulting impact of the additional peak hour trips to the transportation network has been determined through calculations of the resulting LOS at the twelve critical intersections serving the project area. A summary of the LOS analysis and potentially significant impacts is shown in Table 4-25.

Significant Impacts

Impact 1: A significant and mitigable impact would result from a substantial increase in traffic congestion at two project area intersections due to peak hour traffic from the Residential Alternative (Option 1).

Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under preclosure conditions (left side of Table 4-25) from delays estimated as the sum of preclosure conditions and delays added by traffic from the Residential Alternative (Option 1) (right side of Table 4-25) for each peak hour and affected intersection:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 24 seconds; and

Table 4-25
Residential Alternative (Option 1)
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus Residential Alternative (Option 1)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	C	15	F	High
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	E	36	D	20	Stop sign	F[2]	54	E[2]	43
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	D	21	D	23
southbound	Stop sign	A	2	A	3	Stop sign	A	1	A	3
eastbound	Stop sign	C	19	F	54	Stop sign	B	17	F	High
westbound	Stop sign	E	32	B	5	Stop sign	E	41	B	6
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	A	4	A	3
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	E[3]	30	C	11
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	C	13	D	24
westbound	Stop sign	B	5	B	5	Stop sign	B	5	B	5
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	13	B	8
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	2	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	5	A	2	None	A	3	A	3
westbound	Stop sign	C	12	B	9	Stop sign	B	7	C	13
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	D	21	D	23
southbound	Stop sign	B	7	B	5	Stop sign	B	7	B	5
eastbound	None	B	6	A	3	None	A	4	A	3
westbound	Stop sign	B	9	B	7	Stop sign	C	10	B	6
8. Golf Links / I-580 NB ramps	Signal	D	26	C	18	Signal	C	23	C	20
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	C	21	C	17
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	B	5	B	9
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	2	A	3
westbound	Stop sign	B	5	A	4	Stop sign	A	4	B	5
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	3	A	2
westbound	Stop sign	B	8	B	6	Stop sign	B	7	B	7

[1]Delay in seconds.
[2]Indicates significant and mitigable impact.
[3]Not significant - only four vehicles are affected.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.
*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 46 seconds.

Mitigation 1a: The installation of traffic signals at the above locations, along with minor lane changes (e.g. restriping) described for the Maximum Capacity Alternative, would mitigate the impacts to a level of nonsignificance, as indicated in Table 4-26:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 15 to 17 seconds; and
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 9 to 10 seconds.

Signals at the above intersections would satisfy the peak hour volume warrant for the Residential Alternative (Option 1). The City of Oakland has no formal policy regarding responsibilities for traffic signal installations. In the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue / I-580 overcrossing, as described for the Maximum Capacity Alternative. These mitigation measures would reduce the traffic impacts to a level of nonsignificance, as shown in Table 4-26.

Table 4-26
Residential Alternative (Option 1)
Intersection Operations - Mitigated

Intersection	Preclosure Conditions (with current construction completed*)					Mitigated Conditions Residential Alternative (Option 1)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp						Signal	C	15	C	17
southbound	Stop sign	F	67	F	76					
eastbound	Stop sign	F	High	F	High					
westbound	Stop sign	E	36	D	20					
2. Keller / Mountain Blvd.						Signal	B	9	B	10
northbound	Stop sign	C	16	E	38					
southbound	Stop sign	A	2	A	3					
eastbound	Stop sign	C	19	F	54					
westbound	Stop sign	E	32	B	5					

[1]Delay in seconds.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Nonsignificant Impacts

Parking. Future parking demand generated by this alternative would be approximately 740 spaces. This alternative would provide adequate parking on-site; therefore, the impact to parking would be nonsignificant.

Transit Service. A nonsignificant increase in demand for transit services on AC Transit Lines 56, 46, and NV could result from this alternative, with the need to modify the bus routes associated with the on site roadway system.

Bicycle and Pedestrian System Impacts. The Residential Alternative (Option 1) would provide adequate sidewalks and bicycle facilities, according to City of Oakland standards, for all new roadways within the project site.

Consistency with Transportation Plans and Regulations. The Residential Alternative (Option 1) would be consistent with the city's transportation goals and objectives. The two intersections (Keller at the southbound I-580 off-ramp and Keller at Mountain Boulevard), which currently operate below city standards, would be brought into compliance with all applicable standards.

Option 2

The Residential Alternative (Option 2) would generate 637 AM peak hour trips, 1,109 PM peak hour trips, and 8,730 average daily trips. The resulting impact of the additional peak hour trips to the transportation network has been determined through calculations of the resulting LOS at the twelve critical intersections serving the project area. A summary of the LOS analysis and potentially significant impacts is shown in Table 4-27.

Significant Impacts

Impact 1: A significant and mitigable impact would result from a substantial increase in traffic congestion at four project area intersections due to peak hour traffic from the Residential Alternative (Option 2).

Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under preclosure conditions (left side of Table 4-27) from delays estimated as the sum of preclosure conditions and delays added by traffic from the Residential Alternative (Option 2) (right side of Table 4-27) for each peak hour and affected intersection:

Table 4-27
Residential Alternative (Option 2)
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus Residential Alternative (Option 2)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	C	18	F	High[2]
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	E	36	D	20	Stop sign	F[2]	60	F[2]	53
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	D	26	D	28
southbound	Stop sign	A	2	A	3	Stop sign	A	1	A	4
eastbound	Stop sign	C	19	F	54	Stop sign	B	8	F	High[2]
westbound	Stop sign	E	32	B	5	Stop sign	F[2]	47	B	7
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	B	5	A	3
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	E[3]	37	C	13
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	C	16	E	44
westbound	Stop sign	B	5	B	5	Stop sign	B	5	B	5
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	14	B	9
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	2	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	5	A	2	None	A	3	A	4
westbound	Stop sign	C	12	B	9	Stop sign	C	16	E	33
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	D	26	D	29
southbound	Stop sign	B	7	B	5	Stop sign	B	7	B	5
eastbound	None	B	6	A	3	None	A	4	A	3
westbound	Stop sign	B	9	B	7	Stop sign	C	12	B	7
8. Golf Links / I-580 NB ramps	Signal	D	19	C	16	Signal	C	23	C	17
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	D	22	C	17
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	B	5	B	9
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	2	A	3
westbound	Stop sign	B	5	A	4	Stop sign	A	4	B	6
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	3	A	2
westbound	Stop sign	B	8	B	6	Stop sign	B	7	B	8

[1]Delay in seconds.
[2]Indicates significant and mitigable impact.
[3] Not significant - only four vehicles are affected.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 33 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 46 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 0 to 24 seconds and
- Mountain Boulevard/Main Entrance intersection would experience project-caused delays ranging from about 0 to 24 seconds.

The same traffic mitigation measures would be required for the Residential Alternative (Option 2) as would be required for the Maximum Capacity Alternative.

Mitigation 1a: The installation of traffic signals at the above locations, along with minor lane changes, would mitigate the impacts to a level of nonsignificance, as indicated in Table 4-28:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 15 to 20 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 seconds;
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 1 to 12 seconds; and
- Mountain Boulevard/Main Entrance intersection would be mitigated to delays ranging from about 12 to 17 seconds.

The City of Oakland has no formal policy regarding responsibilities for traffic signal installations. In the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs.

Traffic volumes at the Mountain Boulevard / I-580 northbound off-ramp and Mountain Boulevard / Main Entrance intersections would not satisfy the peak hour signal warrant specified in Warrant 11 of the Caltrans Traffic Manual; however, these intersections are close to satisfying the warrant (California Department of Transportation 1993). Signal warrants should be monitored at these locations and traffic signals installed when one or more signal warrants are satisfied.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it would be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing, as described for the other reuse alternatives.

These mitigation measures would reduce the traffic impacts to a level of nonsignificance, as shown in Table 4-28.

Table 4-28
Residential Alternative (Option 2)
Intersection Operations - Mitigated

Intersection	Preclosure Conditions (with current construction completed*)					Mitigated Conditions Residential Alternative (Option 2)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[1]	PM Peak Hour LOS	PM Peak Hour Delay[1]
1. Keller / I-580 SB off-ramp						Signal	C	15	C	20
southbound	Stop sign	F	67	F	76					
eastbound	Stop sign	F	High	F	High					
westbound	Stop sign	E	36	D	20					
2. Keller / Mountain Blvd.						Signal	B	10	B	10
northbound	Stop sign	C	16	E	38					
southbound	Stop sign	A	2	A	3					
eastbound	Stop sign	C	19	F	54					
westbound	Stop sign	E	32	B	5					
4. Mountain Blvd. / I-580 NB off						Signal	B	12	A	1
eastbound	Stop sign	C	18	D	20					
westbound	Stop sign	B	5	B	5					
6. Mountain Blvd. / Main Entr.						Signal	B	12	C	17
southbound left	None	B	5	A	2					
westbound	Stop sign	C	12	B	9					

[1]Delay in seconds.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

Nonsignificant Impacts

Parking. Future parking demand generated by this alternative would total approximately 1,010 spaces. The reuse plan would provide adequate parking on-site; therefore, the impact to parking would not be significant.

Transit Service. As with the Maximum Capacity Alternative, a less than significant increase in demand for transit services on AC Transit Lines 56, 46, and NV could result from this alternative. There will be a need to modify the bus routes associated with reconfiguration of the on-site roadway system.

Bicycle and Pedestrian System Impacts. The Residential Alternative (Option 2) would provide adequate sidewalks and bicycle facilities, according to City of Oakland standards, for all new roadways within the project site. The improved bicycle and pedestrian systems would accommodate the pedestrian and bicycle traffic generated by this alternative.

Consistency with Transportation Plans and Regulations. The Residential Alternative (Option 2) would be consistent with the city's transportation goals and objectives. The two intersections (Keller at the southbound I-580

off-ramp, and Keller at Mountain Boulevard), which currently operate below city standards, would be brought into compliance with all applicable standards.

4.9.9 No Action Alternative

No Impacts

The No Action Alternative would be limited to actions associated with federal caretaker status. A work force of about five to ten people is assumed for this traffic and circulation analysis, even though the Navy has not determined the number of caretaker staff that will be on site at NMCO. A minimal number of trips would be generated by this alternative, and these trips would not affect the local or regional transportation system. Intersection operations for the No Action Alternative are shown in Table 4-29.

Table 4-29
No Action Alternative
Intersection Operations

Intersection	Preclosure Conditions (with current construction completed*)					Preclosure Conditions Plus No Action Alternative				
	Traffic Control	AM Peak Hour		PM Peak Hour		Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay[1]	LOS	Delay[1]		LOS	Delay[1]	LOS	Delay[1]
1. Keller / I-580 SB off-ramp										
southbound	Stop sign	F	67	F	76	Stop sign	B	7	E	31
eastbound	Stop sign	F	High	F	High	Stop sign	F	High	F	High
westbound	Stop sign	E	36	D	20	Stop sign	E	36	C	19
2. Keller / Mountain Blvd.										
northbound	Stop sign	C	16	E	38	Stop sign	C	12	B	9
southbound	Stop sign	A	2	A	3	Stop sign	A	1	A	3
eastbound	Stop sign	C	19	F	54	Stop sign	A	4	D	29
westbound	Stop sign	E	32	B	5	Stop sign	E	31	B	5
3. Mountain Blvd. / I-580 NB on										
northbound left	None	A	4	A	3	None	A	4	A	3
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	D	23	C	13	Stop sign	C	19	B	7
4. Mountain Blvd. / I-580 NB off										
eastbound	Stop sign	C	18	D	20	Stop sign	B	8	B	7
westbound	Stop sign	B	5	B	5	Stop sign	A	4	A	3
5. Keller / Canyon Oaks (bk entr)										
northbound	Stop sign	C	10	B	6	Stop sign	C	10	B	7
southbound	Stop sign	A	4	A	3	Stop sign	A	4	A	3
eastbound left	None	A	4	A	2	None	A	4	A	2
westbound left	None	A	2	A	3	None	A	2	A	3
6. Mountain Blvd. / Main Entr.										
southbound left	None	B	5	A	2	None	A	2	A	2
westbound	Stop sign	C	12	B	9	Stop sign	A	4	A	3
7. Mountain Blvd. / Golf Links										
northbound	Stop sign	E	35	C	19	Stop sign	C	13	C	11
southbound	Stop sign	B	7	B	5	Stop sign	B	5	A	4
eastbound	None	B	6	A	3	None	A	2	A	2
westbound	Stop sign	B	9	B	7	Stop sign	B	8	B	5
8. Golf Links / I-580 NB ramps	Signal	D	26	C	18	Signal	C	19	C	17
northbound										
eastbound left										
9. Golf Links / 98th Ave.	Signal	C	21	C	17	Signal	C	19	C	16
northbound										
southbound										
eastbound										
westbound										
10. 98th Ave. / I-580 SB on										
northbound left	None	B	6	A	4	None	B	6	A	4
southbound left	None	B	5	C	10	None	A	4	B	7
eastbound (driveway)	Stop	B	9	B	6	Stop	B	9	B	6
11. Mountain Blvd. / Sequoyah										
southbound left	None	A	2	A	2	None	A	2	A	2
westbound	Stop sign	B	5	A	4	Stop sign	A	3	A	3
12. Mountain Blvd. / Fontaine										
southbound left	None	A	2	A	3	None	A	2	A	2
westbound	Stop sign	B	8	B	6	Stop sign	B	5	A	4

[1]Delay in seconds.

Notes: No significant impacts were identified for this alternative.

*: Current construction refers to the widening being done on some segments of 98th Avenue and Golf Links Road.

"High" delay indicates extreme values, which are outside the range of the analysis method (generally more than 100 seconds).

4.10 AIR QUALITY

This section addresses air quality impacts. It focuses on carbon monoxide, ozone, small-diameter particulates, asbestos, and lead impacts. The region of influence (ROI) for air quality issues varies according to the type of air pollution being discussed. Pollutants that are directly emitted (such as carbon monoxide and some particulate matter) have a localized ROI generally restricted to areas in the immediate vicinity of the emission source. Pollutants produced by chemical reactions in the atmosphere (such as ozone and secondary particulate matter) have an ROI that includes the entire San Francisco Bay Area.

4.10.1 Significance Criteria

Air quality impacts are judged to be significant if project implementation would directly or indirectly:

- Produce emissions that would cause or contribute to a violation of state or federal ambient air quality standards;
- Cause pollutant emissions in excess of Bay Area Air Quality Management District (BAAQMD) impact significance thresholds (80 pounds per day for reactive organic compounds, nitrogen oxides, or PM_{10}); and
- Conflict with specific Air Quality Management Plan policies or programs.

The significance criteria for physical air quality impact issues are set largely by the technical procedures used for the impact assessment. When dispersion modeling analyses are performed, the most appropriate impact significance criteria relate to the potential for causing or contributing to violations of federal or state ambient air quality standards. When dispersion modeling analyses are not performed, impact significance is evaluated in the context of appropriate emission thresholds (BAAQMD 1996). Table 4-30 summarizes the air quality impacts of the alternatives. Air emission increases are compared against a closed facility in caretaker status to determine significance. Air emissions based on previous use of NMCO are provided for comparison.

4.10.2 Navy Disposal

Navy disposal of Naval Medical Center Oakland (NMCO) would not affect any of the air quality parameters considered in this section, because Navy disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

Table 4-30
Summary of Air Quality Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic-related ozone precursor emissions	○	◐	●	●	●	●
Traffic-related PM_{10} emissions	○	◐	●	●	●	●
Dust from demolition and construction	○	○	◑	◑	◑	◑
Asbestos and lead particles from demolition and remodeling activities	○	○	◐	◐	◐	◐
Carbon monoxide hot spots	○	◐	◐	◐	◐	◐
Consistency with air quality plans	○	○	◐	◐	◐	◐
Federal Agency Clean Air Act conformity regulations	○	○	○	○	○	○

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◐ = Nonsignificant
○ = None

4.10.3 Maximum Capacity Alternative

Significant Impacts

Traffic-related Ozone Precursor Emissions

Impact 1: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. Table 4-31 summarizes the estimated daily emissions of reactive organic compounds and nitrogen oxides for the various alternatives (including the No Action Alternative). The Maximum Capacity Alternative would generate emissions above the BAAQMD significance threshold of 80 pounds per day for reactive organic compounds and nitrogen oxide emissions.

The Maximum Capacity Alternative would result in a net increase of approximately 40 pounds per day of reactive organic compounds and 68 pounds per day of nitrogen oxide emissions compared to preclosure emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected reactive organic compounds and nitrogen oxide emissions from vehicle traffic.

Table 4-31
Estimated Air Emissions

Alternative	Estimated Average Daily Trips	Estimated Daily VMT	Estimated Emissions (pounds/day)			Net Increase Over Preclosure Conditions (pounds/day)		
			ROG	NOx	PM_{10}	ROG	NOx	PM_{10}
Preclosure Activity	4,804	74,904	54	112	151	None	None	None
No Action	150	1,649	1	2	3	None	None	None
Maximum Capacity	13,090	143,859	94	180	289	40	68	138
Mixed Use Village	10,070	110,669	72	139	222	18	27	71
Single Use Campus	13,840	152,102	99	191	306	45	79	155
Residential Option 1	6,815	74,897	49	94	150	None	None	None
Residential Option 2	8,730	95,943	63	120	193	9	8	42

Notes: ROG = reactive organic compounds
NOx = nitrogen oxides
PM_{10} = inhalable particulate matter
VMT = vehicle miles traveled
NA = not applicable
Vehicle trip, VMT, and emission estimates for a continuation of preclosure activity levels are based on estimated annual values (Radian corporation 1997), assuming 240 work days per year.
Preclosure scenario emission estimates have adjusted the original 2001 emission rates to reflect 2010 emission rates.
Vehicle trip estimates for reuse alternatives and the No Action Alternative are extrapolated from peak hour trip projections, assuming that 20 percent of daily trips occur during the morning and afternoon peak hour periods.
VMT estimates assumes an average trip distance of about 11 miles for reuse alternatives and 15.6 miles for preclosure activity.
Vehicle emission rates calculated with the EMFAC7F emission rate model for the year 2010.
PM_{10} emission rates include a resuspended roadway dust component (0.69 grams per vmt) as recommended by BAAQMD (1996).
Net emission changes are based on a comparison to preclosure activity levels since the current Clean Air Plan assumed an active facility.

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates in Table 4-31, traffic associated with the Maximum Capacity Alternative would generate

PM_{10} emissions above the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Maximum Capacity Alternative would result in a net increase of approximately 138 pounds per day of PM_{10} emissions compared to preclosure PM_{10} emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

Dust from Demolition and Construction

Impact 3: A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Demolition, construction, and building renovation under the Maximum Capacity Alternative would occur incrementally over an extended buildout period, precluding specific estimates of construction-related emissions for any particular year. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures.

Mitigation 3: Use the following dust control practices during demolition, construction, and renovation activities:

- Use mowing rather than discing for weed control, thus minimizing ground disturbance and leaving a soil cover in place;
- Seed and water inactive portions of construction sites to maintain a grass cover;
- Minimize the area disturbed by clearing, earthmoving, or excavation activities;
- Prevent excessive dust generation by using water or dust control solutions on all unpaved areas subject to vehicle traffic, grading or excavation;
- Ensure that any petroleum-based dust control products used on the site meet BAAQMD regulations for cutback asphalt paving materials;

- Halt all site clearing, grading, earthmoving, and excavation activities during periods of sustained strong winds (hourly average wind speeds of 20 mph or greater);
- Sweep streets adjacent to the construction site as necessary to remove accumulated dust and soil; and
- Properly maintain all construction vehicles and avoid excessive idling of inactive equipment.

Nonsignificant Impacts

Asbestos and Lead Particles from Demolition and Remodeling Activities. Older buildings on the NMCO site may have lead-based paints and materials containing friable asbestos. Building renovation or demolition activities have the potential to release lead- or asbestos-contaminated materials into the air. Compliance with existing federal state, and BAAQMD regulations during building demolition or remodeling would prevent significant airborne releases of these materials. Consequently, this impact is considered nonsignificant.

Carbon Monoxide Hot Spots. Traffic impact analyses discussed in Section 4.9 identified several roadway intersections that would experience increased traffic congestion under the various alternatives. The potential for localized carbon monoxide problems near these intersections was evaluated with the CALINE4 dispersion model. A comparison of modeling results for the various alternatives (including the No Action Alternative) is presented in Table 4-32. Carbon monoxide emissions generated by the Maximum Capacity Alternative would be below all federal and state carbon monoxide standards as shown in Table 4-32, so this impact is considered nonsignificant.

Consistency with State and Federal Air Quality Plans. Both state and federal air quality legislation require adoption of regional air quality plans that are coordinated with local and regional land use and transportation plans. The 1994 Bay Area Clean Air Plan is based on development patterns and plans that existed in the early 1990s. Consequently, reuse plans for NMCO are not incorporated into the land use, transportation, and air quality forecasts used by current air quality plans.

Differences in development assumptions might represent an environmental impact if regional air quality plans were not regularly updated. State law requires updating of regional air quality plans every three years. A revision to the Bay Area Clean Air Plan is already in progress. Because the required updating of state and federal air quality plans provides an automatic mechanism for addressing the regional air quality impacts of changing land use and transportation plans, this issue is not considered a significant impact.

Table 4-32
Summary of Carbon Monoxide Dispersion Modeling Results

Receptor Location	Peak 1-Hour Carbon Monoxide Concentration (ppm) by Alternative						Peak 8-Hour Carbon Monoxide Concentration (ppm) by Alternative					
	No Action	Maximum Capacity	Mixed Use	Single Use Campus	Residential Option 1	Residential Option 2	No Action	Maximum Capacity	Mixed Use	Single Use Campus	Residential Option 1	Residential Option 2
NE of Keller Ave. and Mountain Blvd.	3.2	3.4	3.4	3.3	3.3	3.3	2.2	2.4	2.4	2.3	2.3	2.3
SE of Keller Ave. and Mountain Blvd.	3.0	3.2	3.2	3.1	3.1	3.1	2.1	2.2	2.2	2.2	2.2	2.2
NW of Keller Ave. and Fontaine St.	2.7	2.9	2.9	2.8	2.9	2.9	1.9	2.0	2.0	2.0	2.0	2.0
SW of Keller Ave. and Fontaine St.	2.7	2.9	2.9	2.8	2.9	2.9	1.9	2.0	2.0	2.0	2.0	2.0
NE of Mountain Blvd. and Shone Ave.	3.2	3.3	3.3	3.3	3.2	3.3	2.2	2.3	2.3	2.3	2.2	2.3
SE of Mountain Blvd. and Shone Ave.	3.6	3.8	3.8	3.8	3.8	3.8	2.5	2.7	2.7	2.7	2.7	2.7
NE of the Main Entrance	2.8	3.2	3.2	3.0	2.8	3.0	2.0	2.2	2.2	2.1	2.0	2.1
SE of the Main Entrance	2.8	3.3	3.3	3.1	2.9	3.1	2.0	2.3	2.3	2.2	2.0	2.2
NW of Mountain Blvd. and Golf Links Rd.	2.7	2.7	2.7	2.7	2.7	2.7	1.9	1.9	1.9	1.9	1.9	1.9
NE of Mountain Blvd. and Golf Links Rd.	2.7	2.8	2.9	2.8	2.8	2.8	1.9	2.0	2.0	2.0	2.0	2.0
SW of Golf Links Rd. and Zoo Drive	2.8	2.9	2.9	2.8	2.8	2.9	2.0	2.0	2.0	2.0	2.0	2.0
SE of Golf Links Rd. and Zoo Drive	2.7	2.8	2.8	2.8	2.8	2.8	1.9	2.0	2.0	2.0	2.0	2.0

Notes: ppm = parts per million, by volume
NE = northeast, NW = northwest, SE = southeast, SW = southwest.
Modeling results were generated using the CALINE4 dispersion model and EMFAC7F emission rates for the year 2010.
Modeled receptor locations are 75 feet from the centerlines of the adjacent roadways.
Emissions from extended vehicle idling at congested intersections are included in the modeling analysis.
Modeling analyses assumed poor dispersion conditions (mild temperature inversion [stability class E], 2.2 mph wind speed, 50-meter mixing height limit, and 10 degree wind direction fluctuation parameter), with wind directions varied in 10 degree increments.
A background carbon monoxide value of 2 ppm has been added to the peak one-hour modeling results.
Peak eight-hour carbon monoxide concentrations are estimated as 70 percent of the peak one-hour concentration.
Federal carbon monoxide standards are 35 ppm for a one-hour average and 9 ppm for an eight-hour average.
California carbon monoxide standards are 20 ppm for a one-hour average and 9 ppm for an eight-hour average.

No Impact

Federal Agency Clean Air Act Conformity Requirements. Section 176 of the Clean Air Act, 42 U.S.C. § 7506, as amended, requires federal agencies to review their activities to ensure that they do not hamper local efforts to control air pollution. This statute prevents federal agencies from conducting activities that do not conform to an approved implementation plan but recognizes certain categorically exempt activities. The conveyance of real property, regardless of the method, is such a categorically exempt activity. Accordingly, disposal of the NMCO property does not require the Navy to conduct a conformity analysis. Interim lease arrangements, however, might be subject to the requirements of the general conformity rule if the proposed use generated significant emissions and the Navy retained some type of control over the land uses associated with the lease. Because the Bay Area either has achieved or would soon achieve all federal air quality standards, the emissions threshold for requiring a formal conformity determination is 100 tons per year. Emissions from any individual interim lease arrangement are not likely to exceed that threshold. Implementation of the Maximum Capacity Alternative would not interfere with plans for achieving and maintaining the federal air quality standards in the Bay Area.

4.10.4 Mixed Use Village Alternative

Significant Impacts

Traffic-related Ozone Precursor Emissions

Impact 1: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Mixed Use Village Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for nitrogen oxide emissions.

The Mixed Use Village Alternative would result in a net increase of approximately 18 pounds per day of reactive organic compounds and 27 pounds per day of nitrogen oxide emissions compared to preclosure emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Mixed Use Village Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland

standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected nitrogen oxide emissions from vehicle traffic.

Traffic-related PM_{10} Emissions

Impact : A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Mixed Use Village Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Mixed Use Village Alternative would result in a net increase of approximately 71 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Mixed Use Village Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

Dust from Demolition and Construction

Impact 3: A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. This impact would be similar to that discussed for the Maximum Capacity Alternative. Construction-related dust can be reduced to acceptable (nonsignificant) levels by following normal dust control measures.

Mitigation 3: Same as for the Maximum Capacity Alternative.

Nonsignificant Impacts

Asbestos and Lead Particles from Demolition and Remodeling Activities. The potential for airborne release of lead- or asbestos-contaminated materials would

be similar to that discussed for the Maximum Capacity Alternative. Compliance with existing federal, state, and BAAQMD regulations during building demolition or remodeling would prevent significant airborne releases of these materials. Consequently, this impact is considered to be less than significant.

Carbon Monoxide Hot Spots. As indicated by the dispersion modeling results presented in Table 4-32, the Mixed Use Village Alternative would not have a significant impact on local carbon monoxide levels.

Consistency with State and Federal Air Quality Plans. Because required updating of state and federal air quality plans provides an automatic mechanism for addressing the regional air quality impacts of military facility reuse plans, this issue is not considered a significant impact.

No Impact

Federal Agency Clean Air Act Conformity Requirements. As noted for the Maximum Capacity Alternative, property transfers associated with disposal of the NMCO site are excluded from the requirements of the EPA general conformity rule. In addition, interim lease arrangements are not likely to exceed the de minimis thresholds applicable to the Bay Area. Consequently, implementation of the Mixed Use Village Alternative would not interfere with plans for achieving and maintaining the federal air quality standards in the Bay Area.

4.10.5 Single Use Campus Alternative

Significant Impacts

Traffic-related Ozone Precursor Emissions

Impact 1: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Single Use Campus Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for reactive organic compound and nitrogen oxide emissions.

The Single Use Campus Alternative would result in a net increase of approximately 45 pounds per day of reactive organic compounds and 79 pounds per day of nitrogen oxide emissions compared to preclosure emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Single Use Campus Alternative already incorporates a general consideration of the number of trips

that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected ozone precursor emissions from vehicle traffic.

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Single Use Campus Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Single Use Campus Alternative would result in a net increase of approximately 155 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Single Use Campus Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

Dust from Demolition and Construction

Impact 3: A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. This impact would be similar to that discussed for the Maximum Capacity Alternative. Construction-related dust is a significant and mitigable impact that can be reduced to acceptable (nonsignificant) levels by following normal dust control measures.

Mitigation 3: Same as for Maximum Capacity Alternative.

Nonsignificant Impacts

Asbestos and Lead Particles from Demolition and Remodeling Activities. The potential for airborne release of lead- or asbestos-contaminated materials would be similar to that discussed for the Maximum Capacity Alternative. Compliance with existing federal, state, and BAAQMD regulations during building demolition or remodeling would prevent significant airborne releases of these materials. Consequently, this impact is considered to be less than significant.

Carbon Monoxide Hot Spots. As indicated by the dispersion modeling results presented in Table 4-32, the Single Use Campus Alternative would not have a significant impact on local carbon monoxide levels.

Consistency with State and Federal Air Quality Plans. Because required updating of state and federal air quality plans provides an automatic mechanism for addressing the regional air quality impacts of military facility reuse plans, this issue is not considered a significant impact.

No Impact

Federal Agency Clean Air Act Conformity Requirements. As noted for the Maximum Capacity Alternative, property transfers associated with disposal of the NMCO site are excluded from the requirements of the EPA general conformity rule. In addition, interim lease arrangements are not likely to exceed the de minimis thresholds applicable to the Bay Area. Consequently, implementation of the Single Use Campus Alternative would not interfere with plans for achieving and maintaining the federal air quality standards in the Bay Area.

4.10.6 Residential Alternative Significant Impacts

Significant Impacts

Traffic-Related Ozone Precursor Emissions

Impact 1: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Residential Alternative (Option 1 or Option 2) would exceed the BAAQMD significance threshold of 80 pounds per day for nitrogen oxide emissions.

Option 2 of the Residential Alternative would result in a net increase of approximately 9 pounds per day of reactive organic compounds and 8 pounds

per day of nitrogen oxide emissions compared to preclosure emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Residential Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected nitrogen oxide emissions from vehicle traffic.

Traffic-Related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Residential Alternative (Option 1 or Option 2) would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Residential Alternative (Option 2) would result in a net increase of approximately 42 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Residential Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions form vehicle traffic.

Dust from Demolition and Construction

Impact 3: A significant and mitigable impact would result from dust generation associated with building demolition, renovation, and construction activities. Impacts for either Residential Alternative option (Option 1 = 357 units;

Option 2 = 600 units) would be similar to that discussed for the Maximum Capacity Alternative. Construction-related dust is a potentially significant and mitigable impact that can be reduced to acceptable (nonsignificant) levels by following normal dust control measures.

Mitigation 3: Same as for the Maximum Capacity Alternative.

Nonsignificant Impacts

Asbestos and Lead Particles from Demolition and Remodeling Activities. The potential for airborne release of lead- or asbestos-contaminated materials would be similar to that discussed for the Maximum Capacity Alternative. Compliance with existing federal, state, and BAAQMD regulations during building demolition or remodeling would prevent significant airborne releases of these materials. Consequently, this impact is considered to be nonsignificant.

Carbon Monoxide Hot Spots. As indicated by the dispersion modeling results presented in Table 4-32, the Residential Alternative (Option 1) would not have a significant impact on local carbon monoxide levels.

Consistency with State and Federal Air Quality Plans. Because required updating of state and federal air quality plans provides an automatic mechanism for addressing the regional air quality impacts of military facility reuse plans, this issue is not considered a significant impact.

No Impact

Federal Agency Clean Air Act Conformity Requirements. As noted for the Maximum Capacity Alternative, property transfers associated with disposal of the NMCO site are excluded from the requirements of the EPA general conformity rule. In addition, interim lease arrangements are not likely to exceed the de minimis thresholds applicable to the Bay Area. Consequently, implementation of this Residential Alternative would not interfere with plans for achieving and maintaining the federal air quality standards in the Bay Area.

4.10.7 No Action Alternative

Nonsignificant Impacts

Traffic-related Ozone Precursor Emissions. As indicated in Table 4-31, the No Action Alternative would generate only minor amounts of vehicle traffic and ozone precursor emissions are below the BAAQMD threshold.

Traffic-related PM_{10} Emissions. As indicated in Table 4-31, the No Action Alternative would generate only minor amounts of vehicle traffic and PM_{10} emissions are below the BAAQMD threshold.

Carbon Monoxide Hot Spots. Caretaker status under the No Action Alternative would generate only minor amounts of additional traffic. As indicated in Table 4-32, this would not have any impact on localized carbon monoxide concentrations.

No Impacts

Dust from Demolition and Construction. The No Action Alternative would not require any significant construction or demolition activity. Consequently, no impacts are anticipated.

Asbestos and Lead Particles from Demolition and Remodeling Activities. The No Action Alternative would not require any significant construction or demolition activity. Consequently, no impacts are anticipated.

Consistency with State and Federal Air Quality Plans. As indicated in Table 4-31, the No Action Alternative would generate minimal vehicle travel and fewer emissions than projected in the existing 1994 Clean Air Plan.

Federal Agency Clean Air Act Conformity Requirements. Retention of the NMCO site in caretaker status under the No Action Alternative is not a federal agency action subject to Clean Air Act conformity determination requirements.

4.11 NOISE

This section addresses noise impacts resulting from project implementation, and determines potential effects of that noise on nearby and on-site sensitive receptors. The region of influence (ROI) for noise impacts is the range of distances at which the human ear is sensitive to varying noise frequencies in the City of Oakland. The introduction to Section 3.11, earlier in this report, describes how noise is analyzed as an environmental impact.

4.11.1 Significance Criteria

Criteria used to analyze the significance of noise impacts are derived from applicable land use compatibility guidelines or from regulatory thresholds established by state or local codes. The noise element of the Oakland Comprehensive Plan discusses land use compatibility criteria used by other agencies, but does not establish precise noise policy guidance for the City of Oakland. Consequently, the state general plan guidelines have been used as a general source of numerical criteria.

Two factors complicate the interpretation of land use compatibility guidelines, such as those presented in the state general plan guidelines. The land use compatibility guidelines are presented in an ambiguous manner, with multiple categories of overlapping noise level ranges, rather than clear distinctions between acceptable and unacceptable noise levels. In addition, land use compatibility criteria are designed for relatively continuous noise sources and may be inadequate for assessing intermittent or temporary noise conditions. Consequently, it is often necessary to develop supplemental criteria that clarify the use and interpretation of land use compatibility guidelines when judging impact significance.

Annoyance effects are the primary consideration for most noise impact assessments. Because the reaction to noise level changes involves both physiological and psychological factors, the magnitude (i.e. amount) of a noise level change can be as important as the resulting overall noise level. A readily noticeable increase in noise levels often will be considered a significant effect by local residents even if the overall noise level is still within land use compatibility guidelines. On the other hand, noise level increases that are not noticeable to most people generally are not considered a significant change, even if the overall noise level is somewhat above land use compatibility guidelines.

The region of influence (ROI) for noise impacts is usually determined on a site-specific basis. For the NMCO site, the ROI includes the site, and nearby areas that are affected primarily by roadway noise. Adjacent roadways and intersections are included in the ROI to the extent that they

have the potential to cause conflicts with land use. It can generally be considered, for the NMCO site, to include about a one-half mile radius around the site, but may vary slightly based on how sound travels locally. Background traffic noise levels are the prime component of the noise ROI as background noise. Other noise sources that could be considered background noise are much quieter than traffic and intersections.

The following noise impact significance criteria are used in this EIS/EIR:

- An adverse impact will occur if an alternative would expose noise-sensitive land uses (e.g. residential, educational, and health care uses) to ambient noise levels that are higher than the 60 decibel (dB) land use compatibility criterion.

In addition, alternative-generated noise levels will be considered a significant noise impact under the following conditions:

- A Community Noise Equivalent Level (CNEL) increase of 3 decibels (dB) or more is considered a significant impact if noise-sensitive residential, medical, or educational land uses are affected and if the resulting overall noise level is within 5 dB of the applicable land use compatibility criteria (60 dB for noise-sensitive uses); and

- If a project-related CNEL increase of 1 dB or more affects noise-sensitive land uses (residential, medical, or educational uses) and results in an overall noise level that is 5 dB or more above the applicable land use compatibility criteria.

Temporary noise sources that are restricted to daytime hours (such as most construction and demolition equipment and activities) are considered a significant impact only of they result in noise levels 10 dB or more above the applicable land use compatibility criteria. Noise impacts and their significance are summarized on Table 4-33.

4.11.2 Navy Disposal

No Impacts

Navy disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action. It would not result in any demolition, construction, or new uses of the facility. Therefore it would cause no significant noise impacts.

Table 4-33
Summary of Noise Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Construction and demolition	○	○	◑	◑	◑	◑
Noise exposure of proposed land uses	○	○	◑	◑	◑	◑
Noise/land use compatibility conflicts	○	○	◐	◐	◐	◐
Noise generated by traffic associated with reuse	○	○	◐	◐	◐	◐

LEGEND:

Level of Impact

● – Significant and not mitigable
◑ – Significant but mitigable
◐ – Nonsignificant
○ – None

4.11.3 Maximum Capacity Alternative

Significant Impacts

Construction and Demolition

Impact 1: A significant and mitigable impact would result from temporary noise disturbance to adjacent land uses associated with demolition, construction, and remodeling of buildings on the NMCO site. Building demolition, new building construction, and roadway reconstruction would be the most prevalent noise sources. Table 4-34 summarizes heavy equipment noise estimates for typical building demolition and roadway reconstruction sites. If heavy equipment operations occur over a daytime eight-hour workday, CNEL increments could exceed 70 dB for locations within about 400 feet of the work site.

Any occupied residential locations within 400 feet of construction sites could experience significant temporary disturbance from construction noise. The Maximum Capacity Alternative is dominated by land uses that are considered noise-sensitive. The phasing of construction and occupancy would determine the extent to which demolition and construction activities cause impacts to on-site land uses. Most existing off-site residential development is far enough away from the major construction areas to avoid significant noise impacts. Construction activities within 400 feet of the

NMCO site boundary could cause temporary noise impacts on the surrounding property.

Table 4-34
Typical Noise Levels During Building Demolition and Roadway Construction

Receptor Distance (feet)	Noise Level Increment (dBA) per Equipment Unit					Combined Equipment Noise (dBA)			Work Day CNEL Increment (dB)
	Bulldozer	Loader	Backhoe	Jack-hammer	Truck	Daytime	Evening	Night	
50	85.0	80.0	83.0	90.0	85.0	95.2	0.0	0.0	90.5
100	78.9	73.9	76.9	83.8	79.0	89.1	0.0	0.0	84.3
200	72.7	67.8	70.8	77.4	72.9	82.8	0.0	0.0	78.0
400	66.2	61.5	64.5	70.5	66.7	76.2	0.0	0.0	71.4
600	62.2	57.7	60.7	66.2	63.0	72.1	0.0	0.0	67.4
800	59.3	54.9	57.9	62.9	60.3	69.1	0.0	0.0	64.3
1,000	56.9	52.6	55.6	60.1	58.1	66.6	0.0	0.0	61.8
1,500	52.2	48.3	51.3	54.5	54.1	61.8	0.0	0.0	57.1
2,000	48.6	45.1	48.1	50.0	51.2	58.2	0.0	0.0	53.4
2,500	45.5	42.4	45.4	46.0	48.7	55.2	0.0	0.0	50.5
3,000	42.8	40.1	43.1	42.3	46.7	52.7	0.0	0.0	47.9
4,000	38.0	36.0	39.0	35.7	43.2	48.6	0.0	0.0	43.8
5,280	32.7	31.7	34.7	28.0	39.6	44.3	0.0	0.0	39.6
7,500	24.6	25.3	28.3	15.7	34.4	38.6	0.0	0.0	33.8
9,000	19.6	21.4	24.4	7.9	31.3	35.3	0.0	0.0	30.5
10,560	14.6	17.6	20.6	0.1	28.4	32.2	0.0	0.0	27.4

Notes: Combined equipment noise level and CNEL increment calculations assume one bulldozer, two front end loaders, one backhoe, two jackhammers, and two heavy trucks operating concurrently in proximity to each other over an eight-hour workday.

Distance attenuation calculations include minimum atmospheric absorption rates of 0.229 dB/100 feet for bulldozers, 0.152 dB/100 feet for front-end loaders and backhoes, 0.415 dB/100 feet for jackhammers, and 0.098 dB/100 feet for heavy trucks.

Atmospheric noise absorption rates were calculated from source spectrum data over a range of temperature and humidity conditions; minimum absorption rates (cool temperatures and high humidity) were used for noise calculations to simulate worst-case conditions.

Except for sounds with highly distinctive tonal characteristics, noise from a particular source will not be identifiable when its incremental noise level contribution is significantly less than background noise levels.

Sources: U.S. Environmental Protection Agency 1971; Gharabegian 1985; Acoustical Society of America 1978

Mitigation 1: Construction noise impacts could be reduced by restricting most construction activity to normal daytime periods. Careful phasing of demolition, construction, and remodeling activities should be implemented to minimize the extent to which occupied areas are exposed to construction noise.

Noise Exposure of Proposed Land Uses

Impact 2: A significant and mitigable impact would result from traffic noise. The western side of the NMCO site would experience high noise levels from traffic on I-580 and, to a lesser extent, Mountain Boulevard. Areas within 500 feet of Mountain Boulevard will generally be exposed to CNEL levels above 65 dB. CNEL levels above 65 dB are higher than normally acceptable levels for residential or other noise-sensitive land uses.

Mitigation 2: Indoor noise levels could be adequately reduced through building design. Outdoor noise levels could be controlled through the use of berms/soundwalls, vegetation buffer areas, building configurations, and other site planning tools, or by placing sensitive land uses beyond 500 feet from Mountain Boulevard.

Nonsignificant Impacts

Land Use Compatibility. The Maximum Capacity Alternative does not include any land use categories that would generate potentially significant noise beyond construction. Consequently, no significant noise-related land use conflicts are anticipated.

Noise Generated by Traffic Associated with Reuse. Traffic generated by reuse is not expected to cause any significant noise impacts under the Maximum Capacity Alternative. Although this alternative will add traffic to the local highway system, the amount of new traffic will add less than 0.5 dB to ambient CNEL levels. This alternative will not cause a significant increase in ambient noise levels.

4.11.4 Mixed Use Village Alternative

Significant Impacts

Construction and Demolition

Impact 1: A significant and mitigable impact would result from temporary noise disturbance associated with demolition, construction, and remodeling of buildings at the NMCO site. This impact would be similar to that discussed for the Maximum Capacity Alternative.

Mitigation 1: Construction noise impacts should be reduced to acceptable levels by restricting most construction activity to normal daytime periods. Careful phasing of demolition, construction, and remodeling activities should be implemented to minimize the extent to which occupied areas are exposed to construction noise.

Noise Exposure of Proposed Land Uses

Impact 2: A significant and mitigable impact would result from traffic noise. As discussed under the Maximum Capacity Alternative, noise-sensitive land uses planned for the western side of the NMCO site would experience high noise levels from traffic.

Mitigation 2: Indoor noise levels could be adequately reduced through building design. Outdoor noise levels could be controlled through the use of berms/soundwalls, vegetation buffer areas, building configurations, and other site planning tools, or by placing sensitive land uses beyond 500 feet from Mountain Boulevard.

Nonsignificant Impacts

Land Use Compatibility. The Mixed Use Village Alternative does not include any land use categories that would generate potentially significant noise. Consequently, no significant noise-related land use conflicts are anticipated.

Noise Generated by Traffic Associated with Reuse. Traffic generated by reuse is not expected to cause any significant noise impacts under the Mixed Use Village Alternative. Although this alternative will add traffic to the local highway system, the amount of new traffic will add less than 0.5 dB to ambient CNEL levels. This alternative will not cause a significant increase in ambient noise levels.

4.11.5 Single Use Campus Alternative

Significant Impacts

Construction and Demolition

Impact 1: A significant and mitigable impact would result from temporary noise disturbance associated with demolition, construction, and remodeling of buildings at the NMCO site. This impact would be similar to that discussed for the Maximum Capacity Alternative.

Mitigation 1: Construction noise impacts should be reduced to acceptable levels by restricting most construction activity to normal daytime periods. Careful phasing of demolition, construction, and remodeling activities should be implemented to minimize the extent to which occupied areas are exposed to construction noise.

Noise Exposure of Proposed Land Uses

Impact 2: A significant and mitigable impact would result from traffic noise. As discussed under the Maximum Capacity Alternative, noise-sensitive land uses planned for the western side of the NMCO site would experience high noise levels from traffic.

Mitigation 2: Indoor noise levels could be adequately reduced through building design. Outdoor noise levels could be controlled through the use of berms/soundwalls, vegetation buffer areas, building configurations, and other site planning tools, or by placing sensitive land uses beyond 500 feet from Mountain Boulevard.

Nonsignificant Impacts

Land Use Compatibility. The Single Use Campus Alternative does not include any land use categories that would generate potentially significant noise. Consequently, no significant noise-related land use conflicts are anticipated.

Noise Generated by Traffic Associated with Reuse. Traffic generated by reuse is not expected to cause any significant noise impacts under the Single Use Campus Alternative. Although this alternative will add traffic to the local highway system, the amount of new traffic will add less than 0.5 dB to ambient CNEL levels. This alternative will not cause a significant increase in ambient noise levels.

4.11.6 Residential Alternative

Significant Impacts

Construction and Demolition

Impact 1: A significant and mitigable impact would result from temporary noise disturbance associated with demolition, construction, and remodeling of buildings at the NMCO site. This impact would be similar to that discussed for the Maximum Capacity Alternative.

Mitigation 1: Construction noise impacts should be reduced to acceptable levels by restricting most construction activity to normal daytime periods. Careful phasing of demolition, construction, and remodeling activities should be implemented to minimize the extent to which occupied areas are exposed to construction noise.

Noise Exposure of Proposed Land Uses

Impact 2: A significant and mitigable impact would result from traffic noise. As discussed under the Maximum Capacity Alternative, noise-sensitive land uses planned for the western side of the NMCO site would experience high noise levels from traffic.

Mitigation 2: Indoor noise levels could be adequately reduced through building design. Outdoor noise levels could be controlled through the use of berms/soundwalls, vegetation buffer areas, building configurations, and other site planning tools, or by placing sensitive land uses beyond 500 feet from Mountain Boulevard.

Nonsignificant Impacts

Land Use Compatibility. The Residential Alternative does not include any land use categories that would include potentially significant noise sources. Consequently, no significant noise-related land use conflicts are anticipated.

Noise Generated by Traffic Associated with Reuse. Traffic generated by reuse is not expected to cause any significant noise impacts under the Residential Alternative. Although this alternative will add traffic to the local highway system, the amount of new traffic will add less than 0.5 dB to ambient CNEL levels. This alternative will not cause a significant increase in ambient noise levels.

4.11.7 No Action Alternative

No Impacts

Construction and Demolition. The No Action Alternative would not require any significant construction activities. Consequently, no construction-related noise impacts are anticipated.

Noise Exposure of Proposed Land Uses. Caretaker status would not develop noise-sensitive land uses in areas of high noise levels. Consequently, no impacts are expected.

Land Use Compatibility. Caretaker status under the No Action Alternative would not produce any significant active land uses at the NMCO site. No noise-related land use compatibility impacts are anticipated.

Traffic. The No Action Alternative would not generate any significant on-site or off-site traffic. Consequently, there would be no traffic-related on-site or off-site noise impacts.

4.12 UTILITIES

This section analyzes the impacts of Naval Medical Center Oakland (NMCO) disposal and the development alternatives on existing utilities. Utilities covered include the water distribution, wastewater, storm drainage, electrical, natural gas, telephone, and solid waste management systems. The region of influence used in this analysis is the NMCO property boundaries, and, in the case of solid waste, regional landfill capacity that could be affected by demolition waste.

4.12.1 Significance Criteria

An alternative may have significant effects on a utility or service if it would increase demand in excess of utility system or service capacity to the point that substantial expansion would be necessary. Significant environmental impacts also could result from system deterioration due to improper maintenance or extension of service beyond its useful life. Effects also would be identified as significant if federal, state, or local standards or requirements regulating a public utility system would be violated.

Table 4-35
Summary of Utilities Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Landfill capacity (due to demolition)	○	○	◐	◐	◐	◐
Water distribution system	○	○	◐	◐	◐	◐
Potable water supply	○	○	◑	◐	◐	◐
Sanitary sewer system	○	○	◐	◐	◐	◐
Stormwater drainage system	○	○	◐	◐	◐	◐
Electrical system	○	○	◐	◐	◐	◐
Natural gas system	○	○	○	○	○	○
Telephone system	○	○	○	○	○	○

LEGEND:

Level of Impact

● – Significant and not mitigable
◑ – Significant and mitigable
◐ – Nonsignificant
○ – None

Each of the four reuse alternatives include the types and quantities of development, such as commercial and residential, that result in nominally similar utilities demands. None of the alternatives include land uses such as industrial plants or manufacturing that would require relatively large quantities of utilities to

support their operations. The alternative with maximum employment is the Single Use Campus Alternative, which projects 1,150 employees. The existing utilities infrastructure at NMCO was sized to serve up to 3,000 employees. Therefore, in applying these significance criteria, it does not appear that development of any of the four reuse alternatives would pose capacity problems for the existing utilities systems.

4.12.2 Navy Disposal

No Impacts

No impacts to utility systems are anticipated as a result of Navy disposal. Disposal is simply a transfer of title, and is in and of itself not an environmentally disruptive action.

4.12.3 Maximum Capacity Alternative

Significant Impacts

Impact 1: Potable Water Supply. A significant and mitigable impact would result from an increased water supply demand of about 112 percent over the historic annual demand. The Maximum Capacity Alternative is estimated to increase population in the region of influence by 3,006 which includes 1,565 residential users, and 1,441 commercial users (please see Table 4-5). Multiplying 1,565 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 187, 800 gallons of residential use per day. Multiplying 1,441 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 100,870 gallons of commercial use per day. Adding these estimated daily residential (187,800 gallons) and commercial (100,870 gallons) uses equals 288,670 gallons per day estimated water use on-site. Multiplying this use rate times 365 days subtotals 105,364,550 gallons per year. Adding an estimated 85,490,000 gallons per year to irrigate the 83-acre golf course (based on an irrigation rate of 1.03 million gallons per acre per year) totals 190,854,550 gallons per year estimated potable water demand. This represents an increase of about 112 percent over the estimated historic annual use of 90,000,000 gallons per year.

Mitigation 1: The City of Oakland will expressly identify the water supplier(s) that will provide water service to the alternative (Cal. Pub. Res. Code Section 21151.9; Cal. Wat. Code Sections 10910-10915). The City will ask those suppliers whether the water demand associated with the alternative has been included and assessed in the suppliers' urban water management plans, and will require such plans to be updated to account for estimated demand from this alternative. Government Code Sections 65352 and 65352.5 require cities to consult with water suppliers in connection with such proposed projects. Moreover, Government Code Section

65302, subdivision (d), requires cities to coordinate with such suppliers in preparing the conservation elements of their general plans. That coordination is required to include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city. In addition to supplier identification and coordination, the following best management practices will be implemented by future site developers:

- Interior and exterior water audits and incentive programs for single family residential, multi-family residential, and commercial users;
- requirement of ultra low flush toilets in all new construction;
- distribution system water audits, leak detection and repair;
- metering for all new connections and billing by volume of use;
- large landscape water audits (golf course and recreational areas);
- landscape water conservation for new single family homes; and
- water waste prohibitions.

Implementation of these water conservation practices will be consistent with the guidelines and schedules set forth in the Memorandum of Understanding Regarding Urban Water Conservation in California (California Urban Water Conservation Council 1994). Supplier identification, coordination, and best management practices implementation would reduce water supply impacts to a less than significant level by ensuring that the water supply system will have adequate capacity prior to development approval.

Nonsignificant Impacts

Landfill Capacity. For normal continuation of solid waste disposal at the NMCO property after buildout of the Maximum Capacity Alternative, it is anticipated that disposal would be handled by the City of Oakland through a private contractor. However, the demolition of unwanted structures and paving would result in the generation of significant amounts of construction and demolition debris.

At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was about 19 million tons. At the 1994 rate of fill, the facility would reach capacity in the year 2006 (Alameda County Waste Management Authority 1995). Projections in the Alameda County Integrated Waste Management Plan indicate that total demand for landfill capacity through the 15 year planning period (i.e. through the year 2010) is about 40 million tons. Alameda County landfill capacity

demand (i.e. for waste generated within Alameda County) for that period amounts to about 24 million tons through the year 2010 (Alameda County Waste Management Authority 1995).

Current countywide landfill capacity is 32,440,114 tons, which is equivalent to 45,242,896 cubic yards (Alameda County Waste Management Authority 1995). There is therefore a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010.

Demolition of the hospital and all other buildings that would not be used as part of one of the development alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Directly, this is considered a nonsignificant impact because the less than one percent impact on available landfill capacity does not cause substantial expansion of existing landfill capacity. However, it is a cumulatively significant impact over the long term, and considered in combination with present and future regional impacts to landfill capacity, and is discussed as such in Chapter 5.

Due to the significant reductions in total structures and the combined employment and total number of residents compared to historical levels at NMCO, the capacity of the existing systems to serve the proposed development for this alternative should not be significantly impacted. Overall utilities consumption may be slightly higher than that of the other alternatives due to the combined residential (584 units) and moderate built area (553,000 square feet).

Water Distribution System. Although many of the system's oldest lines were replaced following the 1985 Bechtel study recommendations (U.S. Navy 1985), many of the cast-iron lines constructed in 1942 are still in place. Many of these lines would require replacement over the next 10 to 20 years. The existing fire protection capacity and hydrant spacing are adequate to meet City of Oakland standards, although mains and hydrants would require replacement to serve new street and building locations.

The low flow pressure that exists in the upper floors of Building #500 (the hospital building) could best be corrected by installation of a standby fire pump, following the recommendations of the Bechtel study (if the hospital were not immediately demolished). In addition, a small booster system was recommended to meet low potable water pressures at the officers quarters above Building #500. The Maximum Capacity Alternative does not indicate contemplated high-rise development on the hillside. If this is not the case, systems similar to those discussed above would need to be included to provide adequate fire protection

and domestic water pressure for such facilities.

Sanitary Sewer System. Considering the good condition and satisfactory capacity of the existing Public Works Center San Francisco Bay mains, combined with the existing 12-inch City of Oakland mains that traverse the NMCO property from north to south, development of the Maximum Capacity Alternative should create no significant impact on the effectiveness of the existing system.

Stormwater Drainage System. The existing stormwater drainage system provides adequate capacity for the NMCO property. The Maximum Capacity Alternative decreases the area covered with impervious surfaces and increases open space or landscaping within the NMCO property, which would decrease stormwater runoff from the property. Therefore, development of this reuse alternative should have no significant impact on the capacity of the existing stormwater drainage system. All new development must be planned specifically to include required best management practices to meet discharge standards in accordance with National Pollution Discharge Elimination System regulations.

Electrical System. With the cessation of the hospital operation, the existing 12-kilovolt system would provide adequate capacity for the Maximum Capacity Alternative. Although many of the existing poles are deteriorated and would need replacement in the near future, it is anticipated that such improvements, including metering and possibly placing transmission lines underground, would be completed on an individual basis as new customers request service.

Natural Gas. The Pacific Gas and Electric Company has indicated that it would have adequate capacity to serve the Maximum Capacity Alternative at the site (Theresa Hughes & Associates 1995). With the abandonment of the extensive steam distribution system that previously served buildings throughout the property, the historical natural gas demand has been reduced significantly in recent years. The Pacific Gas and Electric Company and Public Works Center San Francisco Bay lines within the property are in good condition, so that supply to new customers should involve only minimal rehabilitation work in combination with installation of meters to each new facility.

Telephone System. Pacific Bell has indicated that service can be provided to all new customers associated with the Maximum Capacity Alternative (Theresa Hughes & Associates 1995). Development of this alternative would have no impact on the system capacity.

4.12.4 Mixed Use Village Alternative

Nonsignificant Impacts

Landfill Capacity. For normal continuation of solid waste disposal at the NMCO

property after buildout of the Mixed Use Village Alternative, it is anticipated that disposal would be handled by the City of Oakland through a private contractor. However, the demolition of unwanted structures and paving would result in the generation of significant amounts of construction and demolition debris.

At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was about 19 million tons. At the 1994 rate of fill, the facility would reach capacity in the year 2006 (Alameda County Waste Management Authority 1995). Projections in the Alameda County Integrated Waste Management Plan indicate that total demand for landfill capacity through the 15 year planning period (i.e. through the year 2010) is about 40 million tons. Alameda County landfill capacity demand (i.e. for waste generated within Alameda County) for that period amounts to about 24 million tons through the year 2010 (Alameda County Waste Management Authority 1995).

Current countywide landfill capacity is 32,440,114 tons, which is equivalent to 45,242,896 cubic yards (Alameda County Waste Management Authority 1995). There is therefore a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010.

Demolition of the hospital and all other buildings that would not be used as part of one of the development alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Directly, this is considered a nonsignificant impact because the less than one percent impact on available landfill capacity does not cause substantial expansion of existing landfill capacity. However, it is a cumulatively significant impact over the long term, and considered in combination with present and future regional impacts to landfill capacity, and is discussed as such in Chapter 5.

Due to the significant reductions in total structures and the combined employment and total number of residents compared to historical levels at NMCO, the capacity of the existing systems to serve the proposed development for this alternative should not be significantly impacted. Overall utilities consumption may be slightly higher than that of the other alternatives due to the combined residential (90 units) and built area (729,000 square feet).

Water Distribution System. Although many of the system's oldest lines were replaced following the 1985 Bechtel study recommendations (U.S. Navy 1985), many of the cast-iron lines constructed in 1942 are still in place. Many of these lines would require replacement over the next 10 to 20 years. The existing fire protection capacity and hydrant spacing are adequate to meet City of Oakland

standards, although mains and hydrants would require replacement to serve new street and building locations under reuse.

The low flow pressure that exists in the upper floors of Building #500 (the hospital building) could best be corrected by installation of a standby fire pump, following the recommendations of the Bechtel study (if the hospital were not immediately demolished). In addition, a small booster system was recommended to meet low potable water pressures at the officers quarters above Building #500. The Mixed Use Village Alternative does not indicate contemplated high-rise development on the hillside. If this is not the case, systems similar to those discussed above would need to be included to provide adequate fire protection and domestic water pressure for such facilities.

Potable Water Supply. The Mixed Use Village Alternative is estimated to increase population in the region of influence by 2,532 which includes 241 residential users, and 2,291 commercial users (please see Table 4-5). Multiplying 241 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 28,920 gallons of residential use per day. Multiplying 2,291 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 160,370 gallons of commercial use per day. Adding these estimated daily residential (28,920 gallons) and commercial (160,370 gallons) uses equals 189,290 gallons per day estimated water use on-site. Multiplying this use rate times 365 days totals 69,090,850 gallons per year. This represents about 77 percent of the estimated historic annual use of 90,000,000 gallons per year, and is not a significant water supply impact.

Sanitary Sewer System. Considering the good condition and satisfactory capacity of the existing Public Works Center San Francisco Bay mains, combined with the existing 12-inch City of Oakland mains that traverse the NMCO property from north to south, development of any of the Mixed Use Village Alternative should create no significant impact on the effectiveness of the existing system.

Stormwater Drainage System. The existing stormwater drainage system provides adequate capacity for the NMCO property. The Mixed Use Village Alternative decreases the area covered with impervious surfaces and increases open space or landscaping within the NMCO property, which would decrease stormwater runoff from the property. Therefore, development of this reuse alternative should have no significant impact on the capacity of the existing stormwater drainage system. All new development must be planned specifically to include required best management practices to meet discharge standards in accordance with National Pollution Discharge Elimination System regulations.

Electrical System. With the cessation of the hospital operation, the existing 12-kilovolt system would provide adequate capacity for the Mixed Use Village

Alternative. Although many of the existing poles are deteriorated and would need replacement in the near future, it is anticipated that such improvements, including metering and possibly placing transmission lines underground, would be completed on an individual basis as new customers request service.

Natural Gas. The Pacific Gas and Electric Company has indicated it would have adequate capacity to serve the Mixed Use Village Alternative at the site (Theresa Hughes & Associates 1995). With the abandonment of the extensive steam distribution system that previously served buildings throughout the property, the historical natural gas demand has been reduced significantly in recent years. The Pacific Gas and Electric Company and Public Works Center San Francisco Bay lines within the property are in good condition, so that supply to new customers should involve only minimal rehabilitation work in combination with installation of meters to each new facility.

Telephone System. Pacific Bell has indicated that service can be provided to all new customers associated with the Mixed Use Village Alternative (Theresa Hughes & Associates 1995). Development of this alternative would have no impact on the system capacity.

4.12.5 Single Use Campus Alternative

Nonsignificant Impacts

Landfill Capacity. For normal continuation of solid waste disposal at the NMCO property after buildout of the Single Use Campus Alternative, it is anticipated that disposal would be handled by the City of Oakland through a private contractor. However, the demolition of unwanted structures and paving would result in the generation of significant amounts of construction and demolition debris.

At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was about 19 million tons. At the 1994 rate of fill, the facility would reach capacity in the year 2006 (Alameda County Waste Management Authority 1995). Projections in the Alameda County Integrated Waste Management Plan indicate that total demand for landfill capacity through the 15 year planning period (i.e. through the year 2010) is about 40 million tons. Alameda County landfill capacity demand (i.e. for waste generated within Alameda County) for that period amounts to about 24 million tons through the year 2010 (Alameda County Waste Management Authority 1995).

Current countywide landfill capacity is 32,440,114 tons, which is equivalent to 45,242,896 cubic yards (Alameda County Waste Management Authority 1995). There is therefore a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010.

Demolition of the hospital and all other buildings that would not be used as part of one of the development alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Directly, this is considered a nonsignificant impact because the less than one percent impact on available landfill capacity does not cause substantial expansion of existing landfill capacity. However, it is a cumulatively significant impact over the long term, and considered in combination with present and future regional impacts to landfill capacity, and is discussed as such in Chapter 5.

Due to the significant reductions in total structures and the combined employment and total number of residents compared to historical levels at NMCO, the capacity of the existing systems to serve the proposed development for this alternative should not be significantly impacted. Overall utilities consumption may be slightly higher than that of the other alternatives due to the built area (828,000 square feet).

Water Distribution System. Although many of the system's oldest lines were replaced following the 1985 Bechtel study recommendations (U.S. Navy 1985), many of the cast-iron lines constructed in 1942 are still in place. Many of these lines would require replacement over the next 10 to 20 years. The existing fire protection capacity and hydrant spacing are adequate to meet City of Oakland standards, although mains and hydrants would require replacement to serve new street and building locations.

The low flow pressure that exists in the upper floors of Building #500 (the hospital building) could best be corrected by installation of a standby fire pump, following the recommendations of the Bechtel study (if the hospital were not immediately demolished). In addition, a small booster system was recommended to meet low potable water pressures at the officers quarters above Building #500. The Single Use Campus Alternative does not indicate contemplated high-rise development on the hillside. If this is not the case, systems similar to those discussed above would need to be included to provide adequate fire protection and domestic water pressure for such facilities.

Potable Water Supply. The Single Use Campus Alternative is estimated to increase population in the region of influence by 2,312 commercial users (please see Table 4-5). Multiplying 2,312 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 161,840 gallons of commercial use per day. Multiplying this use rate times 365 days totals 59,071,600 gallons per year estimated potable water demand. This represents about 66 percent of the estimated historic annual use of 90,000,000 gallons per

year, and is not a significant water supply impact.

Sanitary Sewer System. Considering the good condition and satisfactory capacity of the existing Public Works Center San Francisco Bay mains, combined with the existing 12-inch City of Oakland mains that traverse the NMCO property from north to south, development of any of the Single Use Campus Alternative should create no significant impact on the effectiveness of the existing system.

Stormwater Drainage System. The existing stormwater drainage system provides adequate capacity for the NMCO property. The Single Use Campus Alternative decreases the area covered with impervious surfaces and increases open space or landscaping within the NMCO property, which would decrease stormwater runoff from the property. Therefore, development of this reuse alternative should have no significant impact on the capacity of the existing stormwater drainage system. All new development must be planned specifically to include required best management practices to meet discharge standards in accordance with National Pollution Discharge Elimination System regulations.

Electrical System. With the cessation of the hospital operation, the existing 12-kilovolt system would provide adequate capacity for the Single Use Campus Alternative. Although many of the existing poles are deteriorated and would need replacement in the near future, it is anticipated that such improvements, including metering and possibly placing transmission lines underground, would be completed on an individual basis as new customers request service.

Natural Gas. The Pacific Gas and Electric Company has indicated it would have adequate capacity to serve the Single Use Campus Alternative at the site (Theresa Hughes & Associates 1995). With the abandonment of the extensive steam distribution system that previously served buildings throughout the property, the historical natural gas demand has been reduced significantly in recent years. The Pacific Gas and Electric Company and Public Works Center San Francisco Bay lines within the property are in good condition, so that supply to new customers should involve only minimal rehabilitation work in combination with installation of meters to each new facility.

Telephone System. Pacific Bell has indicated that service can be provided to all new customers associated with the Single Use Campus Alternative (Theresa Hughes & Associates 1995). Development of this alternative would have no impact on the system capacity.

4.12.6 Residential Alternative

Nonsignificant Impacts

No significant impacts to utilities systems or waste management service and

landfill capacity would result under the Residential Alternative.

Landfill Capacity. For normal continuation of solid waste disposal at the NMCO property after buildout of the Residential Alternative, it is anticipated that disposal would be handled by the City of Oakland through a private contractor. However, the demolition of unwanted structures and paving would result in the generation of significant amounts of construction and demolition debris.

At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was about 19 million tons. At the 1994 rate of fill, the facility would reach capacity in the year 2006 (Alameda County Waste Management Authority 1995). Projections in the Alameda County Integrated Waste Management Plan indicate that total demand for landfill capacity through the 15 year planning period (i.e. through the year 2010) is about 40 million tons. Alameda County landfill capacity demand (i.e. for waste generated within Alameda County) for that period amounts to about 24 million tons through the year 2010 (Alameda County Waste Management Authority 1995).

Current countywide landfill capacity is 32,440,114 tons, which is equivalent to 45,242,896 cubic yards (Alameda County Waste Management Authority 1995). There is therefore a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010.

Demolition of the hospital and all other buildings that would not be used as part of one of the development alternatives, would result in about 71,346 tons of waste. Of this total, an estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons. The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Directly, this is considered a nonsignificant impact because the less than one percent impact on available landfill capacity does not cause substantial expansion of existing landfill capacity. However, it is a cumulatively significant impact over the long term, and considered in combination with present and future regional impacts to landfill capacity, and is discussed as such in Chapter 5.

Due to the significant reductions in total structures and the combined employment and total number of residents compared to historical levels at NMCO, the capacity of the existing systems to serve the proposed development for this alternative should not be significantly impacted. Overall utilities consumption would be moderate in comparison to the other alternatives due to the combined residential (357 to 600 units) and moderate built area (83,000 square feet).

Water Distribution System. Although many of the system's oldest lines were

replaced following the 1985 Bechtel study recommendations (U.S. Navy 1985), many of the cast-iron lines constructed in 1942 are still in place. Many of these lines would require replacement over the next 10 to 20 years. The existing fire protection capacity and hydrant spacing are adequate to meet City of Oakland standards, although mains and hydrants would require replacement to serve new street and building locations.

The low flow pressure that exists in the upper floors of Building #500 (the hospital building) could best be corrected by installation of a standby fire pump, following the recommendations of the Bechtel study (if the hospital were not immediately demolished). In addition, a small booster system was recommended to meet low potable water pressures at the officers quarters above Building #500. The Residential Alternative does not indicate contemplated high-rise development on the hillside. If this is not the case, systems similar to those discussed above would need to be included to provide adequate fire protection and domestic water pressure for such facilities.

Potable Water Supply. The Residential Alternative is estimated to increase population in the region of influence from 1,299 (low density option) to 1,990 (high density option). Please see Table 4-5. Residential users could range from 957 to 1,608. Multiplying 957 and 1,608 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals a range of 114,840 (low density option) to 192,960 (high density option) gallons of residential use per day. Multiplying the range of 342 to 382 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals a range of 23,940 (low density option) to 26,740 (high density option) gallons of commercial use per day. Adding estimated low density option residential (114,840 gallons) and commercial (23,940 gallons) results in an estimated daily water use rate of 138,780 gallons per day. Multiplying this daily rate times 365 days per year totals 50,654,700 gallons per year. This represents about 56 percent of the historic use of 90,000,000 gallons per year, and is not a significant water supply impact.

Adding estimated high density option residential (192,960 gallons) and commercial (26,740 gallons) results in an estimated daily water use rate of 219,700 gallons per day. Multiplying this daily rate times 365 days per year totals 80,190,500 gallons per year. This represents about 89 percent of the historic use of 90,000,000 gallons per year, and is not a significant water supply impact.

Sanitary Sewer System. Considering the good condition and satisfactory capacity of the existing Public Works Center San Francisco Bay mains, combined with the existing 12-inch City of Oakland mains that traverse the NMCO property from north to south, development of any of the Residential Alternative should create no significant impact on the effectiveness of the existing system.

Stormwater Drainage System. The existing stormwater drainage system provides adequate capacity for the NMCO property. The Residential Alternative decreases the area covered with impervious surfaces and increases open space or landscaping within the NMCO property, which would decrease stormwater runoff from the property. Therefore, development of this reuse alternative should have no significant impact on the capacity of the existing stormwater drainage system. All new development must be planned specifically to include required best management practices to meet discharge standards in accordance with National Pollution Discharge Elimination System regulations.

Electrical System. With the cessation of the hospital operation, the existing 12-kilovolt system would provide adequate capacity for the Residential Alternative. Although many of the existing poles are deteriorated and would need replacement in the near future, it is anticipated that such improvements, including metering and possibly placing transmission lines underground, would be completed on an individual basis as new customers request service.

Natural Gas. The Pacific Gas and Electric Company has indicated it would have adequate capacity to serve the Residential Alternative at the site (Theresa Hughes & Associates 1995). With the abandonment of the extensive steam distribution system that previously served buildings throughout the property, the historical natural gas demand has been reduced significantly in recent years. The Pacific Gas and Electric Company and Public Works Center San Francisco Bay lines within the property are in good condition, so that supply to new customers should involve only minimal rehabilitation work in combination with installation of meters to each new facility.

Telephone System. Pacific Bell has indicated that service can be provided to all new customers associated with the Residential Alternative (Theresa Hughes & Associates 1995). Development of this alternative would have no impact on the system capacity.

Due to the low amounts of employment and built commercial area (83,000 square feet), both options in this alternative would require lower utilities consumption than the previous three alternatives. Although the single family residential units planned for this alternative would result in more utilities consumption during nonworking hours than the Mixed Use Village and Single Use Campus Alternatives, it is estimated that the usage during working hours would be light compared with the heavy working hours usage of the Mixed Use Village and Single Use Campus alternatives.

4.12.7 No Action Alternative

No Impacts

No utilities impacts would be expected. This alternative would place the NMCO property in a caretaker status. On-site activity would be limited to security, maintenance, and environmental cleanup activities.

4.13 HAZARDOUS MATERIALS AND WASTE

This section addresses the potential for environmental impacts caused by hazardous material and hazardous waste-related activities associated with disposal and with implementation of the development alternatives. Hazardous materials and wastes, asbestos, polychlorinated biphenyls (PCBs), storage tanks, pesticides, lead, nuclear medical materials and waste, medical/biohazardous wastes, and ordnance (i.e. military weapons, ammunition, and related supplies) are discussed in this section. The region of influence relative to hazardous material and waste issues is the Naval Medical Center Oakland (NMCO) site and any surrounding area that may have been affected by hazardous materials or hazardous wastes originating at NMCO or from which hazardous materials or wastes could migrate onto NMCO.

The Navy is committed to all required remediation of contamination at NMCO resulting from Navy activities. Removal of hazardous materials and wastes will be completed prior to disposal of these lands by the Navy. Remediation of any areas identified as contaminated will be commenced prior to transfer. Depending on the extent of contamination, the remediation may be completed prior to transfer. Delays or restrictions in disposal and land uses and activities included in alternatives implementation are possible, depending upon the extent of contamination and the results of the risk assessment and remedial designs developed for contaminated sites. However, because the areas of potential contamination are relatively few and are limited in size on the NMCO site, any such restrictions are likely to be minor. Examples of conditions resulting in possible land use restrictions would be the space required for operation of soil or ground water treatment systems and access to long-term monitoring wells. These conditions would have to be considered in the layout of future development alternatives. Conditional transfer may take place for areas undergoing long-term treatment, such as ground water remediation.

The Navy is required to remediate all hazardous waste sites prior to disposal of the sites. Section 3.13 of this environmental impact statement/environmental impact report (EIS/EIR) details the Navy, regulatory, and public review processes to ensure the protection of human health and the environment. Specifically, the Base Realignment and Closure Cleanup Plan (U.S. Navy 1996) summarizes the status of the compliance programs and presents a strategy for carrying out response actions necessary to protect human health and the environment. Cleanup of sites that have residual contamination is not expected to require substantial time and thus should have no adverse impact on the alternatives implementation schedule.

4.13.1 Significance Criteria

Impacts associated with hazardous materials and hazardous wastes reflect the handling and disposal of such materials under both the disposal of the property and the reuse actions. Negligible quantities of these materials are expected to be generated, handled, or disposed of by operations after base closure. In addition, maintenance operations associated with caretaker status are not expected to generate, handle, or dispose of significant quantities of such materials.

The following criteria were used to identify potential impacts:

- Release of asbestos during the demolition or renovation of a building;
- New operational requirements or service for underground storage tanks and tank systems; and
- Releases that result in exposure of the public or the environment to hazardous substances.

Table 4-36 summarizes hazardous materials and waste impact determinations.

Table 4-36
Summary of Hazardous Material and Waste Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Hazardous materials management	○	○	◐	◐	◐	◐
Hazardous waste management	○	○	◐	◐	◐	◐
Asbestos	○	○	◐	◐	◐	◐
PCBs	○	○	◐	◐	◐	◐
Storage tanks	○	○	◐	◐	◐	◐
Pesticides	○	○	○	○	○	○
Lead-based paint	○	○	◐	◐	◐	◐
Medical materials and waste	○	○	◐	◐	◐	◐
Radon	○	○	○	○	○	○

LEGEND:

Level of Impact

● – Significant and not mitigable
◑ – Significant and mitigable
◐ – Nonsignificant
○ – None

4.13.2 Navy Disposal

No Impacts

No hazardous material or waste-related impacts will occur from disposal of NMCO. The Navy is required to remediate any contamination prior to transfer. Base activities, including those that involve hazardous materials and waste, would cease. Disposal will therefore result in lower quantities of hazardous materials used or stored on federal surplus land or removed for off-site disposal.

4.13.3 Maximum Capacity Alternative

Nonsignificant Impacts

There will be no significant hazardous materials and waste impacts from implementation of the Maximum Capacity Alternative, because the relatively low quantities of such materials and wastes generated would not result in releases that could expose the public or the environment to hazardous levels of substances.

Hazardous Materials Management. The quantity of hazardous materials used, stored, and disposed of under the Maximum Capacity Alternative reuse activities on federal surplus land would likely decrease over current conditions, although specific chemicals and uses are not known. Such uses are tightly controlled under current regulations. Hazardous materials likely to be used for activities in all four of the proposed reuse alternatives are identified in Table 4-37.

No Impacts

Pesticides. Minimal use of pesticides is expected at NMCO following base closure. The types of pesticides are likely to be consistent with those currently in use.

Radon. A radon survey of one building at NMCO found no indication that radon levels are above the U.S. Environmental Protection Agency-recommended action level for further assessment or remediation. In accordance with Department of Defense policy, all available and relevant radon assessment data will be included in any contracts for transfer or lease.

Table 4-37
Hazardous Material Usage by Land Use Category

Land Use	Operation Process	Hazardous Materials
Industrial	Activities associated with light industry, research and development, warehousing, and manufacturing	Petroleum products, solvents, heavy metals, corrosives, catalysts, aerosols, fuels, heating oils, ignitables, pesticides
Institutional	Hospital/clinic, rehabilitation facilities, X-ray unit	Pharmaceuticals, medical biohazardous materials, chemotherapeutic drugs, nuclear medical sources, heavy metals
	Public education, higher education, research labs, training facilities, vocational schools	Laboratory chemicals, corrosives, ignitables, solvents, heating oils, solvents, lubricants, cleaners, pesticides, paints, thinners
Commercial	Activities associated with offices, light industry, research and development, and higher value warehousing, retail, service industries, restaurants	Fuels, heating oils, pesticides, dry cleaning chemicals, solvents, corrosives, ignitables.
Residential	Use and maintenance of single-family and multifamily units, landscaping	Pesticides, fertilizers, fuels, oils, chlorine, and household chemicals
Recreation/open space	Maintenance of existing recreational facilities, including golf course, sports complex, swimming pools, and other recreational facilities	Pesticides, fertilizers, chlorine, heating oils, paints, thinners, cleaners, solvents, aerosols

Source: Developed by Tetra Tech

Applicable Laws, Regulations, and Standards

As this, and all other alternatives are implemented, hazardous waste management will be the responsibility of the property recipients under state and federal regulations. Once the responsibilities of hazardous waste management are allocated to individual organizations, proficiency with those materials and spill response plans may be required by the Resource Conservation and Recovery Act regulations. Business plans and risk management programs also may be required under state health and safety code requirements. With implementation of the Maximum Capacity Alternative, separate organizations will be responsible for the management of hazardous materials according to applicable regulations. Depending on the types and quantities of hazardous materials used, each organization would be subject to Resource Conservation and Recovery Act and state hazardous material business plans and risk management prevention programs for emergency planning review and community right-to-know inventory reporting. Mutual aid agreements with surrounding jurisdictions may require additional scrutiny and training of emergency staff.

Hazardous Waste Management Practices. Prior to base closure, operation of the hazardous waste accumulation area is expected to be discontinued. Limited quantities of hazardous wastes may be generated by maintenance

operations. Such wastes would be handled and disposed according to current regulatory guidelines and industry standards.

Under the Maximum Capacity Alternative, the total quantity of hazardous wastes generated and stored on the property would drop significantly. Reduction of on-site storage and off-site disposal of such materials will result in a beneficial environmental impact to NMCO itself.

Asbestos. Under the Maximum Capacity Alternative, a number of buildings and residential structures on federal surplus land with asbestos-containing material (ACM) would be demolished or renovated. Such activities would be subject to all applicable federal, state, and local regulations. Department of Defense policy is that "property with ACM will not be disposed through the BRAC process unless it is determined that the ACM does not pose a threat to human health at the time of transfer." Asbestos removal is generally required prior to building demolition. Since demolition activities would occur following disposal, buildings at NMCO containing ACM may present minor future human health risks because of the potential for release of asbestos fibers during abatement or demolition. Any demolition or renovation would require compliance with Occupational Safety and Health Administration regulations and the National Emissions Standards for Hazardous Air Pollutants, which are intended to minimize the potential for asbestos fiber releases and associated health risks.

Polychlorinated Biphenyls No equipment containing PCBs or PCB release sites have been identified at NMCO. Because any unidentified PCB release sites are likely to be relatively small, the identification, evaluation, and any necessary remediation of such sites is not likely to significantly impact or be impacted by the implementation of the Maximum Capacity Alternative.

The existence of any other known PCB-containing electrical equipment will be disclosed by the Navy at the time of lease or transfer. Ownership of the equipment will be transferred to the new owners, who will be governed by all applicable local, state, and federal requirements in the further use or disposal of the PCB-containing electrical equipment.

Storage Tanks. Reuse activities associated with the Maximum Capacity Alternative may require both aboveground storage tanks and underground storage tanks. The Navy plans to remove all tanks before transfer unless the Oakland Base Reuse Authority expresses a desire to retain them. The existing tanks meet current standards, but may not meet standards that will be in effect in 1998. Reused and new tanks required by the property recipients on federal surplus and state reversionary land would be subject to all applicable federal, state, and local regulations. These regulations include acceptable leak detection methods, spill and overfill protection, cathodic

Hazardous Materials and Waste Management Practices. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

No Impacts

Pesticides. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

Radon. Impacts are expected to be similar to those identified for the Maximum Capacity Alternative.

Applicable Laws, Regulations, and Standards

Asbestos Applicable laws, regulations, and standards are similar to those identified for the Maximum Capacity Alternative.

Polychlorinated Biphenyls. Applicable laws, regulations, and standards are similar to those identified for the Maximum Capacity Alternative.

Storage Tanks. Applicable laws, regulations, and standards are similar to those identified for the Maximum Capacity Alternative.

Lead-Based paint. Applicable laws, regulations, and standards are similar to those identified for the Maximum Capacity Alternative.

Medical Materials and Waste. Applicable laws, regulations, and standards are similar, and slightly less than those identified for the Maximum Capacity Alternative.

4.13.5 Single Use Campus Alternative

The impact determinations for this alternative would be essentially the same as those identified for the Maximum Capacity Alternative. It is estimated that the total built area is similar to that for the Maximum Capacity Alternative. Overall hazardous materials use and hazardous waste generation could change if a corporate facility used or generated hazardous substances during its operations. For example, use of the site for research and development by a biotechnology operation could result in generation of biohazardous wastes. However, heavy industrial use is not contemplated.

Nonsignificant Impacts

There will be no significant hazardous materials and waste impacts from implementation of the Single Use Campus Alternative, because the relatively low quantities of such materials and wastes generated would not result in releases that could expose the public or the environment to hazardous levels of substances.

Hazardous Materials and Waste Management Practices. Under the Single Use Campus Alternative, as under the Maximum Capacity Alternative, the total quantity of hazardous materials generated, used, and stored on the property could increase or decrease slightly compared to current conditions. Such uses are tightly controlled under current regulations.

No Impacts

Pesticides. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

Radon. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

Applicable Laws, Regulations, and Standards

Asbestos. Applicable laws, regulations, and standards applicable under the Maximum Capacity Alternative also apply under this alternative.

Polychlorinated Biphenyls Applicable laws, regulations, and standards applicable under the Maximum Capacity Alternative also apply under this alternative.

Storage Tanks. Applicable laws, regulations, and standards applicable under the Maximum Capacity Alternative also apply under this alternative.

Lead-Based Paint. Applicable laws, regulations, and standards applicable under the Maximum Capacity Alternative also apply under this alternative.

Medical Materials and Waste. Applicable laws, regulations, and standards applicable under the Maximum Capacity Alternative also apply under this alternative.

4.13.6 Residential Alternative

Nonsignificant Impacts

There will be no significant hazardous materials and waste impacts from implementation of the Residential Alternative, because the relatively low quantities of such materials and wastes generated would not result in releases that could expose the public or the environment to hazardous levels of substances.

Hazardous Materials and Waste Management. Under the Residential Alternative, the quantity of hazardous materials used, generated, stored and disposed of would be minimal. Only limited quantities of hazardous materials, such as household cleaners and maintenance products or substances associated with facility maintenance activities, would be used.

No Impacts

Pesticides. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

Radon. Impact determinations are expected to be similar to those identified for the Maximum Capacity Alternative.

Applicable Laws, Regulations, and Standards

Asbestos. Applicable laws, standards, and regulations are similar to those that apply for the Maximum Capacity Alternative.

Polychlorinated Biphenyls. Applicable laws, standards, and regulations are similar to those that apply for the Maximum Capacity Alternative.

Storage Tanks. Applicable laws, standards, and regulations are similar to those that apply for the Maximum Capacity Alternative.

Lead-Based Paint. Applicable laws, standards, and regulations are similar to those that apply for the Maximum Capacity Alternative.

Medical Materials and Waste. Applicable laws, standards, and regulations are similar to those that apply for the Maximum Capacity Alternative.

4.13.7 No Action Alternative

No Impacts

There will be no hazardous materials and waste impacts under the No Action Alternative. Cleanup obligations during disposal and alternatives implementation have been documented previously in Section 3.13 and in the introduction to this Section 4.13.

Hazardous Materials and Waste Management. Under the No Action Alternative, the quantity of hazardous materials used, generated, stored, and disposed of would be minimal. Only limited quantities of hazardous materials associated with facility caretaker activities would be used.

Pesticides. Under the No Action Alternative, minimal use of pesticides would occur. Any pesticides that were used would likely be of the same types currently used.

Radon. No significant radon concentrations have been detected. There would be no uses under this alternative that would warrant further testing. No impacts are expected.

Applicable Laws, Regulations, and Standards

Asbestos. Any demolition or repair of existing buildings performed as part of caretaker activities under this alternative would be performed in accordance with applicable regulations controlling asbestos emissions and handling procedures.

Polychlorinated Biphenyls. No remaining PCB-containing equipment has been identified.

Storage Tanks. Removal of inactive tanks and remediation of any residual contamination would be required at the time the facility was closed.

Lead-Based Paint. The No Action Alternative would not impact lead or required lead remediation activities at NMCO.

Medical Materials and Waste. These materials would be removed prior to closure of the facility.

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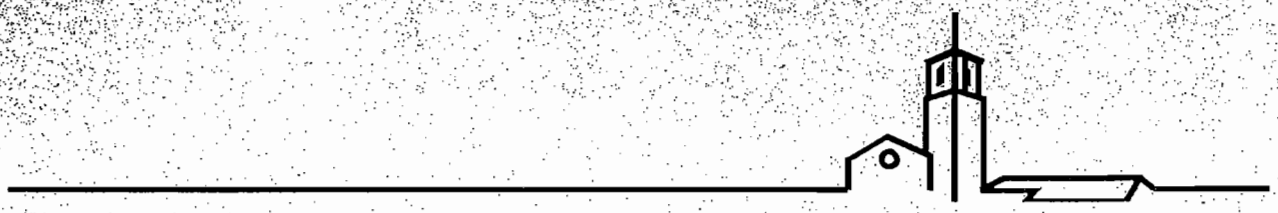


5.0 OTHER CONSIDERATIONS REQUIRED BY NEPA AND CEQA

5. OTHER CONSIDERATIONS REQUIRED BY NEPA AND CEQA

This chapter addresses additional topics required by NEPA and/or CEQA in an environmental impact statement/environmental impact report (EIS/EIR). These include, if applicable, the identification of any unavoidable adverse commitment of resources (NEPA), an analysis of significant unavoidable adverse impacts to the environment (NEPA and CEQA), a discussion of the relationship between local short-term user of man's environment and its long-term productivity (NEPA and CEQA), an analysis of cumulative impacts (NEPA and CEQA), and an analysis of growth-inducing impacts (CEQA). Issues related to environmental justice are presented in accordance with Executive Order 12898.

5.1 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

An EIS/EIR must describe any significant unavoidable adverse environmental impacts for which either no mitigation or only partial mitigation is feasible. Mitigation may include imposing an alternative design on a development alternative if that is the only means of avoiding such impacts. One significant unavoidable adverse impact associated with Naval Medical Center Oakland (NMCO) reuse is identified in this EIS/EIR. It is the unmitigable generation of traffic-related ozone precursor and PM_{10} emissions under all of the reuse alternatives above the Bay Area Air Quality Management District significance threshold of 80 pounds per day. All other potentially significant impacts of the proposed action would be mitigable to a nonsignificant level by the implementation of mitigation measures recommended in this document.

5.2 SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

An EIS/EIR must describe the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. The analysis should cover the extent to which both disposal and reuse involve tradeoffs between short-term environmental gains at the expense of long-term losses, or vice versa. It also should include a discussion of the extent to which disposal and reuse each forecloses (i.e. prevents) future options.

The environmental productivity of NMCO has historically been related to its operation as a medical center and the maintenance of existing environmental conditions. Disposal and subsequent reuse of the property will result in both short- and long-term environmental gains. Short-term gains would be achieved through increased public access to open space and

accompanying recreational opportunities on the NMCO site that were previously restricted due to Navy use. Long-term benefits also include provision of jobs, housing, and opportunities for sustained recreational use. The maintenance of open space in the East Bay Hills, and concerted protection of biological resources, represent a proactive effort to increase long-term environmental productivity. No future environmental options are foreclosed as NMCO disposal and site reuse are envisioned.

5.3 IRREVERSIBLE/IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA requires that an EIS analyze the extent to which the alternatives' primary and secondary effects would commit nonrenewable resources to uses that future generations would be unable to reverse. Federal disposal of NMCO property and structures increases options for site use, and for responsible long-term resource management, and makes no resource commitments.

Implementation of any of the NMCO reuse plan alternatives would require commitments of both renewable and nonrenewable energy and material resources for demolition, and for construction of the structures and improvement of the infrastructure required for its implementation. Development of the site with reuse facilities would commit the NMCO site to that general set of uses for the foreseeable future.

5.4 GROWTH-INDUCING IMPACTS

CEQA requires an EIR to discuss the ways in which all development alternatives could foster economic or population growth, or the construction of additional housing or other development, either directly or indirectly, in the surrounding environment. This analysis includes those characteristics that may encourage and facilitate activities that, either individually or cumulatively, could affect the environment. Population increases, for example, may impose new burdens on existing community service facilities. Similarly, improvement of access routes may encourage growth. Growth may be considered beneficial, adverse, or of little significance environmentally, depending on its actual impacts to the environmental resources present.

Each of the NMCO site reuse alternatives analyzed would induce new economic or population growth in the region. Implementation of the preferred (Maximum Capacity) alternative, or any of the other reuse alternatives would create a substantial number of jobs. These new jobs could provide benefits to local employment and income.

No substantial expansions to existing infrastructure in the site vicinity would be required, and no obstacles to surrounding growth would be removed by reuse. Most of the reuse-related employment would probably be derived from the existing regional labor force. Jobs created directly or indirectly through reuse (for any of the alternatives) could induce limited construction of new housing (in order to accommodate new workers' desires for shorter commutes). The results of any growth inducement resulting from the project would be controlled by existing and undetermined future zoning requirements, general plan designations (both on- and off-site), and specific environmental documentation for separate development projects.

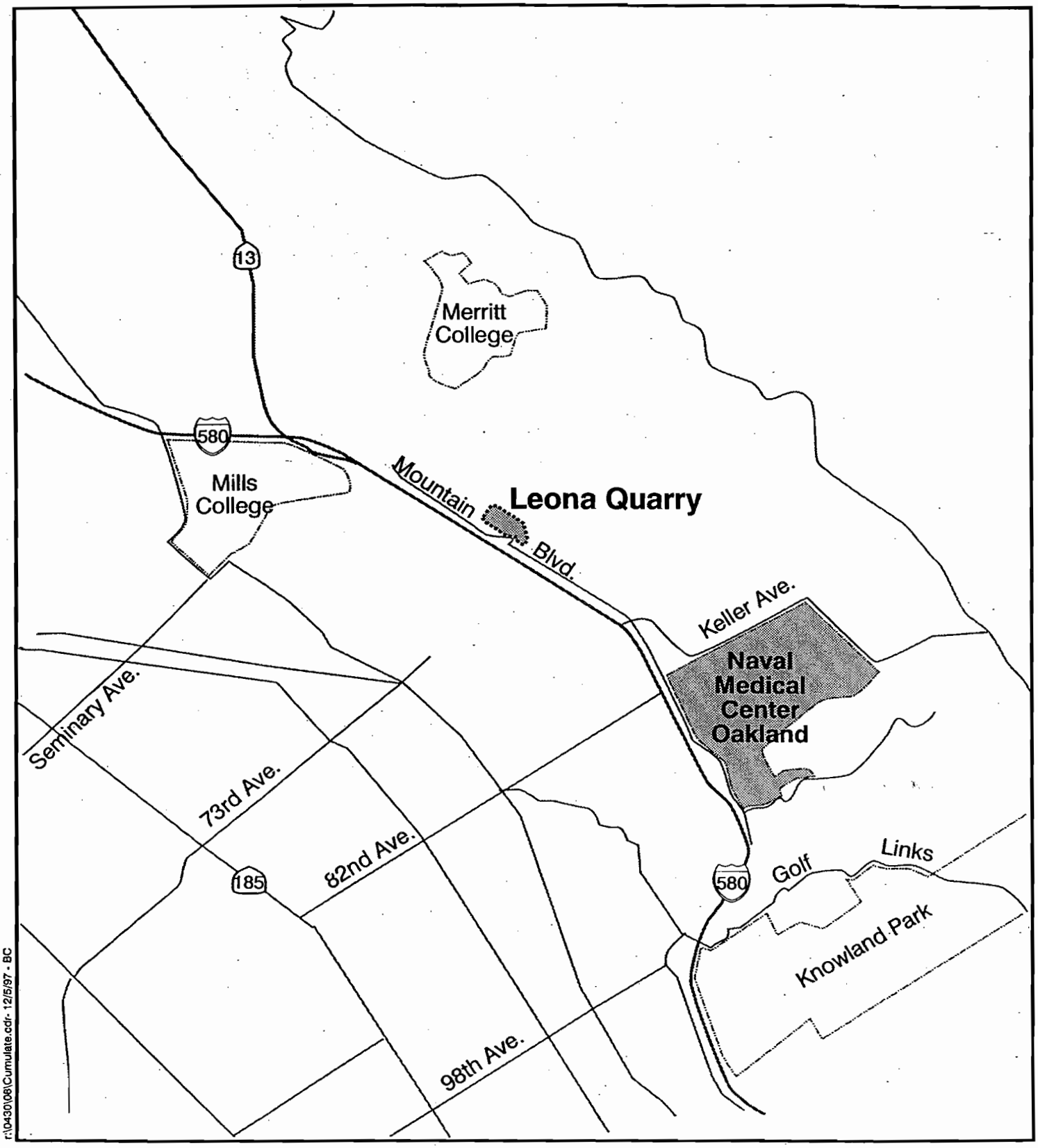
5.5 CUMULATIVE IMPACTS

Cumulative impacts are defined as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts may result from interactions of effects of a single project or overlapping effects from a number of separate, but interrelated projects. Cumulative impacts from several projects are derived from the combined incremental impact of the project added to other approved, pending, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant effects.

The region considered in this analysis is the City of Oakland. The proposed Leona Quarry Shopping Center development (Figure 5-1) is located approximately one mile from NMCO. Cumulative impacts associated with the Leona Quarry project are discussed in this section.

Other projects considered for cumulative impacts analysis in the City of Oakland included:

- Reuse of the Navy Fleet and Industrial Supply Center;
- Reuse of the Oakland Army Base;
- Arena Increased Seating Capacity project - Oakland-Alameda County Coliseum Complex (Draft EIR released for public review on February 14, 1996);
- Dreyers Headquarters Expansion project (Final EIR approved by the City of Oakland Planning Commission on February 7, 1996); and
- The Chabot Observatory and Science Center project (Final EIR approved by the City of Oakland Planning Commission in 1995).



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The Leona Quarry is being considered for redevelopment into a shopping complex.

Sites Requiring Cumulative Impact Analysis

N

0 1,000 2,000

Approximate Scale in Feet

Naval Medical Center Oakland

Figure 5-1

Developed by Tetra Tech 1995

The Navy Fleet and Industrial Supply Center and the Oakland Army Base are located along the Oakland industrial waterfront and are over 10 miles from NMCO. The Oakland-Alameda County Complex (located 2.5 miles west of NMCO), Dreyers Headquarters (located eight miles northwest of NMCO), and the Chabot Observatory (located three miles north of NMCO) were all determined to be too far away to have cumulative impacts when considered with NMCO disposal and reuse, and were therefore eliminated from further cumulative impacts analysis in this section.

Land Use

The combination of the implementation of one of the reuse alternatives at the NMCO site and the development of the Leona Quarry for shopping center activities would not increase cumulative land use conflicts, because 1) adoption of any reuse plan being considered would effectively establish land use policy for what is now the NMCO site; and 2) both the NMCO reuse plan and the Leona Quarry shopping center development must be consistent with the City of Oakland General Plan. Cumulative land use impacts are therefore not considered significant.

Socioeconomics

The reuse of NMCO in combination with reuse projects planned in the City of Oakland, and with respect to other development projects in Oakland, would generate substantial additional long-term direct and indirect employment. This would be a cumulatively beneficial economic impact.

A significant and mitigable impact may result from adding students to the capacity-constrained local schools due to the project and cumulative development. Depending on what course of action the OUSD decides to take, there may be a significant impact. This impact could be mitigated through reassigning students among district schools, use of underutilized/ abandoned facilities, year-round schools, the addition of portable classrooms, or busing. All of these measures would require some level of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

Public Services

Reuse, along with other planned public and private development in the City of Oakland, would add to cumulative service demands on Oakland's Police and Fire Departments. These impacts would be offset by fair-share funding received from project developers, again as part of a development agreement. Of particular interest is the future of Fire Station number 17 on Grass Valley Road. The station is currently scheduled for seasonal use during periods of high fire danger, and the Fire Department does not plan on opening the station for year-round use. However, the 600-unit Residential Alternative (Option 2) for the site, in combination with the Leona Quarry commercial project may eventually create sufficient need for year-round operation of this station (Baker 1995). Year-round operation would most likely require some type of development agreement provision requiring the site developer(s) to pay a fair share of the increased operational costs attributable to the increased use generated from the Residential Alternative (Option 2).

Cultural Resources

There will be no cumulative impacts to cultural resources on or eligible for the NRHP because none are present at NMCO.

Aesthetics and Scenic Resources

No increased cumulative effect on visual resources is expected from the combination of NMCO and Leona Quarry developments, since the two projects are not within the same viewshed (i.e. visible at the same time from a single viewpoint). The visual experience travelling along the I-580 corridor would vary slightly from existing conditions, depending on the reuse alternative ultimately approved and built. However, due to the planned retention of most, if not all of the vegetation that visually screens the NMCO site from I-580, cumulative adverse impacts on scenic quality and visual quality contributed by the NMCO reuse plan and Leona Quarry project would be considered nonsignificant.

Biological Resources

Reuse of NMCO in combination with other regional development and reuse activities would not significantly contribute cumulatively to the regional loss of sensitive wildlife habitat and native vegetation. Rifle Range Creek riparian corridor is the only sensitive habitat and existing regulations require mitigation for any impacts to this area, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

The Leona Quarry site, located adjacent to Mountain Boulevard at Edwards Avenue, could have impacts on the NMCO study area intersections.

The Leona Quarry project would contain a shopping center with 194,000 square feet of retail and commercial uses, plus a 4,000 square foot fast food restaurant with drive-thru window service (Pang Engineers, Inc. 1995).

The traffic and circulation impacts of the NMCO reuse alternatives in combination with the Leona Quarry project are similar to the impacts for the NMCO alternatives without the Leona Quarry development, as described in Chapter 4, except for the Residential Alternative under cumulative conditions. This scenario will require installation of a traffic signal to mitigate cumulative impacts at the intersection of Mountain Boulevard and the I-580 northbound off-ramp. Analysis indicates that additional transit service would not need to be provided unless the load factor for any individual route exceeded 1.00 (i.e., more anticipated passengers than available seats). Therefore, none of the reuse alternatives would result in significant transit impacts. Table 5-1 summarizes impacts discussed in this section.

Table 5-1
Summary of Cumulative Traffic and Circulation Impacts and Significance

Impact Issues	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic impacts	○	○	◑	◑	◑	◑
Parking impacts	○	○	◔	◔	◔	◔
Transit impacts	○	○	◔	◔	◔	◔
Bicycle and pedestrian system impacts	○	○	◔	◔	◔	◔

LEGEND:

Level of Impact

● = Significant and not mitigable
◑ = Significant and mitigable
◔ = Not significant
○ = None

Only the significant traffic and circulation impacts are discussed in this section. Tables 5-5, 5-7, 5-9, 5-11, and 5-13 include shaded rows that highlight potentially significant and mitigable impacts. Nonsignificant traffic and circulation impacts are expected to be the same as for existing plus project conditions discussed in the Chapter 4.

5.5.1 Assumptions and Methodology

Future Transportation Network

There are no transportation system improvements assumed to be in place when the reuse plan is completed in the area studied for the analysis of cumulative impacts.

Traffic impacts were evaluated for the combined effects of the Leona Quarry and the NMCO alternatives at the following intersections:

- Keller/I-580 southbound off-ramp;
- Keller/Mountain Blvd.;
- Mountain Blvd./I-580 northbound on-ramp; and
- Mountain Blvd./I-580 northbound off-ramp.

Trip Generation

The Leona Quarry project would generate 274 total AM peak hour trips and 714 total PM peak hour trips as shown in Table 5-2.

Table 5-2
Leona Quarry Trip Generation

Land Use	AM Peak Hour Trips			PM Peak Hour Trips		
	In	Out	Total	In	Out	Total
Shopping center	76	75	151	317	317	634
Fast food restaurant	63	60	123	42	38	80
Total	139	135	274	359	355	714

Source: Trip generation rates were developed by Pang Engineers, Inc., (1995) based on standard rates from the Institute of Transportation Engineers (1991 & 1995).

Trip Distribution

The distribution of Leona Quarry trips is shown in Table 5-3, which shows that a certain percentage of additional traffic associated with the Leona Quarry project would either begin or end at the "Origin or Destination" indicated by the five highway or road locations listed.

The resulting impact of these additional trips to the transportation network has been determined through calculations of the resulting level of service (LOS) at the four intersections studied for cumulative impacts.

Table 5-3
Leona Quarry Trip Distribution

Origin or Destination	Percent of Trips
I-580 north of Edwards Avenue	75 %
I-580 south of Keller Avenue	10 %
Mountain Boulevard south of Keller Avenue	3 %
Keller Avenue east of Mountain Boulevard	2 %
Edwards Avenue west of I-580	10 %

Source: The trip distribution rates were developed by Pang Engineers, Inc. (1995)

Transit Service

The analysis of cumulative impacts for the EIS/EIR considered the combined effects of the NMCO and the Leona Quarry projects. None of the transit routes directly serving the NMCO site would directly serve the Leona Quarry site; therefore, the transit impacts of these two projects would be independent and there would be no cumulative transit impacts.

5.5.2 Navy Disposal

Disposal of NMCO would not create any direct cumulative traffic impacts.

5.5.3 No Action Alternative

The No Action Alternative would be limited to actions associated with federal caretaker status. A work force of about five to ten people is assumed only for purposes of this analysis. A minimal number of trips would be generated by this alternative, and these trips would not affect the local or regional transportation system. Intersection operations for the No Action Alternative are shown in Table 5-4.

5.5.4 Maximum Capacity Alternative

The impact of adding Maximum Capacity Alternative trips to the transportation network has been determined through calculations of the resulting LOS at the four intersections studied for cumulative conditions. A summary of the cumulative LOS analysis for the Maximum Capacity Alternative is shown in Table 5-5.

Table 5-4
Cumulative No Action Alternative
Intersection Operations

Intersection	Cumulative Development[1] *Without* No Action Alternative					Cumulative Development[1] *With* No Action Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	B	7	E	33
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	E	41	D	29	Stop Sign	E	41	D	28
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	C	12	C	10
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	2	B	5
Eastbound	Stop Sign	D	20	F	60	Stop Sign	A	4	E	31
Westbound	Stop Sign	E	34	B	6	Stop Sign	E	33	B	5
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	A	4	A	3
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	D	20	B	11
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	B	8	B	8
Westbound	Stop Sign	B	5	B	5	Stop Sign	A	4	A	3

[1]Includes the Leona Quarry project.
[2]"High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

Impact 1: A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project area intersections, which were analyzed for cumulative conditions. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under existing conditions (left side of Table 5-5) from delays estimated as the sum of existing conditions and delays added by traffic from the Maximum Capacity Alternative (right side of Table 5-5) for each peak hour and affected intersection. The following intersections have significant and mitigable impacts:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 11 to 59 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 6 to 40 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 23 to 73 seconds.

Table 5-5
Cumulative Maximum Capacity Alternative
Intersection Operations

Intersection	Cumulative Development[1] *Without* Maximum Capacity Alternative					Cumulative Development[1] *With* Maximum Capacity Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	F	91	F	High[3]
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	E	41	D	29	Stop Sign	F[3]	High	F[3]	83
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	E	31	F	60
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	2	B	5
Eastbound	Stop Sign	D	29	F	60	Stop Sign	D	26	F	High[3]
Westbound	Stop Sign	E	34	B	6	Stop Sign	E	40	C	12
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	B	5	B	5
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	E[4]	44	E	33
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	E	43	F	High[3]
Westbound	Stop Sign	B	5	B	5	Stop Sign	B	6	B	7

[1] Includes the Leona Quarry project.
[2] Delay in seconds.
[3] Indicates significant and mitigable impact.
[4] Not significant - only four vehicles are affected.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes (i.e. restriping, etc.) would mitigate the impacts to a level of nonsignificant, as listed below and indicated in Table 5-6:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 17 to 26 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 13 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 12 to 14.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing. The restriping will provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant, as shown in Table 5-6.

Table 5-6
Cumulative Maximum Capacity Alternative
Intersection Operations – Mitigated

Intersection	Cumulative Development *Without* Maximum Capacity Alternative					Cumulative Development[1] *With* Maximum Capacity Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp						Signal	C	17	C	26
Southbound	Stop Sign	F	67	F	76					
Eastbound	Stop Sign	F	High	F	High					
Westbound	Stop Sign	E	36	D	20					
2. Keller/Mountain Blvd.						Signal	B	10	B	13
Northbound	Stop Sign	C	16	E	38					
Southbound	Stop Sign	A	2	A	3					
Eastbound	Stop Sign	C	19	F	54					
Westbound	Stop Sign	E	32	B	5					
4. Mountain Blvd./I-580 northbound off-ramp						Signal	B	12	B	14
Eastbound	Stop Sign	C	18	D	20					
Westbound	Stop Sign	B	5	B	5					

[1] Includes the Leona Quarry project.
2 "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

5.5.5 Mixed Use Village Alternative

The impact of adding Mixed Use Village Alternative trips to the transportation network has been determined through calculations of the resulting LOS at the four intersections studied for cumulative conditions. A summary of the cumulative LOS analysis for the Mixed Use Village Alternative is shown in Table 5-7.

Impact 1: A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project area intersections, which were analyzed for cumulative conditions. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under existing conditions (left side of Table 5-7) from delays estimated as the sum of existing conditions and delays added by traffic from the Mixed Use Village Alternative (right side of Table 5-7) for each peak hour and affected intersection. The following intersections have significant and mitigable impacts:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 57 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 40 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 0 to 73 seconds.

Table 5-7
Cumulative Mixed Use Village Alternative
Intersection Operations

Intersection	Cumulative Development[1] *Without* Mixed Use Village Alternative					Cumulative Development[1] *With* Mixed Use Village Alternative				
	Traffic Control	AM Peak Hour		PM Peak Hour		Traffic Control	AM Peak Hour		PM Peak Hour	
		LOS	Delay[2]	LOS	Delay[2]		LOS	Delay[2]	LOS	Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	F	51	F	High
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	E	41	D	29	Stop Sign	F	96	F	86
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	D	20	F	48
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	2	B	5
Eastbound	Stop Sign	D	20	F	60	Stop Sign	C	16	F	High
Westbound	Stop Sign	E	34	B	6	Stop Sign	E	32	C	11
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	A	4	B	5
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	D	28	D	27
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	D	20	F	High
Westbound	Stop Sign	B	5	B	5	Stop Sign	B	5	B	6

[1] Includes the Leona Quarry project.
[2] Delay in seconds.
[3] Indicates significant and mitigable impact.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 sesconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes (i.e. restriping, etc.) would mitigate the impacts to a level of nonsignificant, as listed below and indicated in Table 5-8:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 16 to 21 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 9 to 12 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 12 to 14 seconds.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing. The restriping will provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant, as shown in Table 5-8.

Table 5-8
Cumulative Mixed Use Village Alternative
Intersection Operations - Mitigated

Intersection	Cumulative Development[1] *Without* Mixed Use Village Alternative					Cumulative Development[1] *With* Mixed Use Village Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp						Signal	C	16	C	21
Southbound	Stop Sign	F	67	F	76					
Eastbound	Stop Sign	F	High	F	High					
Westbound	Stop Sign	E	36	D	20					
2. Keller/Mountain Blvd.						Signal	B	9	B	12
Northbound	Stop Sign	C	16	E	38					
Southbound	Stop Sign	A	2	A	3					
Eastbound	Stop Sign	C	19	F	54					
Westbound	Stop Sign	E	32	B	5					
4. Mountain Blvd./I-580 northbound off-ramp						Signal	B	12	B	14
Eastbound	Stop Sign	C	18	D	20					
Westbound	Stop Sign	B	5	B	5					

[1] Includes the Leona Quarry project.
[2] Delay in seconds.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

5.5.6 Single Use Campus Alternative

The impact of adding Single Use Campus Alternative trips to the transportation network has been determined through calculations of the resulting LOS at the four intersections studied for cumulative conditions. A summary of the cumulative LOS analysis for the Single Use Campus Alternative is shown in Table 5-9.

Impact 1 A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project area intersections, which were analyzed for cumulative conditions Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under existing conditions (left side of Table 5-9) from delays estimated as the sum of existing conditions and delays added by traffic from the Single Use Campus Alternative (right side of Table 5-9) for each peak hour and affected intersection. The following intersections have significant and mitigable impacts:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 11 to 59 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 80 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 38 to 80 seconds.

Table 5-9
Cumulative Single Use Campus Alternative
Intersection Operations

Intersection	Cumulative Development[1] *Without* Single Use Campus Alternative					Cumulative Development[1] *With* Single Use Campus Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	F	High[3]	F	High[3]
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	E	41	D	29	Stop Sign	F	High[3]	F	67
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	F	10	E	38
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	3	B	5
Eastbound	Stop Sign	D	20	F	60	Stop Sign	F	High[3]	F	High[3]
Westbound	Stop Sign	E	34	B	6	Stop Sign	D	25	C	11
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	A	5	A	4
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	D	29	D	22
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	F	High[3]	F	65
Westbound	Stop Sign	B	5	B	5	Stop Sign	B	7	B	6

[1] Includes the Leona Quarry project.
[2] Delay in seconds.
[3] Indicates significant and mitigable impact.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes (i.e. restriping) would mitigate the impacts to a level of nonsignificant, as indicated in Table 5-10:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 18 to 35 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 11 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 2 to 16 seconds.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing. The restriping will provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant, as shown in Table 5-10.

Table 5-10
Cumulative Single Use Campus Alternative
Intersection Operations – Mitigated

Intersection	Cumulative Development[1] *Without* Single Use Campus Alternative					Cumulative Development[1] *With* Single Use Campus Alternative				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp						Signal	D	35	C	18
Southbound	Stop Sign	F	67	F	76					
Eastbound	Stop Sign	F	High	F	High					
Westbound	Stop Sign	E	36	D	20					
2. Keller/Mountain Blvd.						Signal	B	10	B	11
Northbound	Stop Sign	C	16	E	38					
Southbound	Stop Sign	A	2	A	3					
Eastbound	Stop Sign	C	19	F	54					
Westbound	Stop Sign	E	32	B	5					
4. Mountain Blvd./I-580 northbound off-ramp						Signal	C	16	A	2
Eastbound	Stop Sign	C	18	D	20					
Westbound	Stop Sign	B	5	B	5					

[1] Includes the Leona Quarry project.
[2] Delay in seconds.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

5.5.7 Residential Alternative (Option 1)

The impact of adding Residential Alternative (Option 1) trips to the transportation network has been determined through calculations of the resulting LOS at the four intersections studied for cumulative conditions. A summary of the cumulative LOS analysis for the Residential Alternative (Option 1) is shown in Table 5-11.

Impact 1: A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project area intersections, which were analyzed for cumulative conditions. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under existing conditions (left side of Table 5-11) from delays estimated as the sum of existing conditions and delays added by traffic from the Residential Alternative (Option 1) (right side of Table 5-11) for each peak hour and affected intersection. The following intersections have significant and mitigable impacts:

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 36 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 40 seconds; and

Table 5-11
Cumulative Residential Alternative (Option 1)
Intersection Operations

Intersection	Cumulative Development[1] *Without* Residential Alternative (Option 1)					Cumulative Development[1] *With* Residential Alternative (Option 1)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	C	16	F	High
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	E	41	D	29	Stop Sign	E	62	F	65
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	D	21	D	24
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	2	B	5
Eastbound	Stop Sign	D	20	F	60	Stop Sign	B	7	F	High
Westbound	Stop Sign	E	34	B	6	Stop Sign	E	43	B	7
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	B	5	A	4
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	E[4]	34	C	14
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	C	14	E	37
Westbound	Stop Sign	B	5	B	5	Stop Sign	B	5	B	5

[1] Includes the Leona Quarry project
[2] Delay in seconds.
[3] Indicates significant and mitigable impact.
[4] Not significant - only four vehicles are affected.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

- Mountain Boulevard/I-580 northbound off-ramp would experience cumulatively-caused delays ranging from about 0 to 10 seconds. (this intersection would not be significantly impacted by the NMCO project, alone).

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes (i.e. restriping, etc.) would mitigate the impacts to a level of nonsignificant, as listed below and indicated in Table 5-12.

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 15 to 18 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 11 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 1 to 12 seconds.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the Keller Avenue/I-580 overcrossing. The restriping will provide two lanes

eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant, as shown in Table 5-12.

Table 5-12
Cumulative Residential Alternative (Option 1)
Intersection Operations – Mitigated

Intersection	Cumulative Development[1] *Without* Residential Alternative (Option 1)					Cumulative Development[1] *With* Residential Alternative (Option 1)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp						Signal	C	15	C	18
Southbound	Stop Sign	F	67	F	76					
Eastbound	Stop Sign	F	High	F	High					
Westbound	Stop Sign	E	36	D	20					
2. Keller/Mountain Blvd.						Signal	B	10	B	11
Northbound	Stop Sign	C	16	E	38					
Southbound	Stop Sign	A	2	A	3					
Eastbound	Stop Sign	C	19	F	54					
Westbound	Stop Sign	E	32	B	5					
4. Mountain Blvd./I-580 northbound off-ramp						Signal	B	12	A	1
Eastbound	Stop Sign	C	18	D	20					
Westbound	Stop Sign	B	5	B	5					

[1] Includes the Leona Quarry project.
[2] Delay in seconds.
Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

5.5.8 Residential Alternative (Option 2)

The impact of adding Residential Alternative (Option 2) trips to the transportation network has been determined through calculations of the resulting LOS at the four intersections studied for cumulative conditions. A summary of the cumulative LOS analysis for the Residential Alternative (Option 2) is shown in Table 5-13.

Impact 1: A significant and mitigable impact would result from peak hour traffic substantially increasing traffic congestion at three project area intersections, which were analyzed for cumulative conditions. Traffic congestion is expressed in delays, in seconds. Ranges in delays at the intersections that would have significant and mitigable impacts are estimated as follows by subtracting delays experienced under existing conditions (left side of Table 5-13) from delays estimated as the sum of existing conditions and delays added by traffic from the Residential Alternative (Option 2) (right side of Table 5-13) for each peak hour and affected intersection. The following intersections have significant and mitigable impacts:

Table 5-13
Cumulative Residential Alternative (Option 2)
Intersection Operations

Intersection	Cumulative Development[1] *Without* Residential Alternative (Option 2)					Cumulative Development[1] *With* Residential Alternative (Option 2)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp										
Southbound	Stop Sign	F	72	F	89	Stop Sign	C	19	F	High[3]
Eastbound	Stop Sign	F	High	F	High	Stop Sign	F	High	F	High
Westbound	Stop Sign	F	41	D	29	Stop Sign	F	69	F	83
2. Keller/Mountain Blvd.										
Northbound	Stop Sign	C	16	E	38	Stop Sign	D	26	D	29
Southbound	Stop Sign	A	2	A	5	Stop Sign	A	2	B	5
Eastbound	Stop Sign	D	20	F	60	Stop Sign	B	8	F	High[3]
Westbound	Stop Sign	E	34	B	6	Stop Sign	F[3]	49	B	7
3. Mountain Blvd./I-580 northbound on-ramp										
Northbound Left	None	A	4	A	4	None	B	5	A	4
Southbound Left	None	A	2	A	2	None	A	2	A	2
Westbound	Stop Sign	D	25	C	16	Stop Sign	E[4]	44	C	16
4. Mountain Blvd./I-580 northbound off-ramp										
Eastbound	Stop Sign	D	20	D	27	Stop Sign	C	17	F	89
Westbound	Stop Sign	B	5	B	5	Stop Sign	B	5	B	5

[1] Includes the Leona Quarry project
[2] Delay in seconds.
[3] Indicates significant and mitigable impact.
[4] Not significant - only four vehicles are affected.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).
Shading indicates location that may experience significant level of service/delay impacts if no mitigation is implemented.

- Keller/I-580 southbound off-ramp would experience project-caused delays ranging from about 0 to 54 seconds;
- Keller/Mountain Boulevard intersection would experience project-caused delays ranging from about 0 to 40 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would experience project-caused delays ranging from about 0 to 62 seconds.

Mitigation 1a: The installation of traffic signals at the above locations along with minor lane changes would mitigate the impacts to a level of not significant, as listed below and indicated in Table 5-14:

- Keller/I-580 southbound off-ramp would be mitigated to delays ranging from about 15 to 21 seconds;
- Keller/Mountain Boulevard intersection would be mitigated to delays ranging from about 10 to 11 seconds; and
- Mountain Boulevard/I-580 northbound off-ramp would be mitigated to delays ranging from about 12 to 14 seconds.

Mitigation 1b: Along with the installation of traffic signals at the Keller Avenue intersections, it will be necessary to restripe the traffic lanes on the

Keller Avenue/I-580 overcrossing. The restriping will provide two lanes eastbound and one lane westbound. This would require reversing the direction of the center lane, which currently serves westbound traffic.

The mitigation measures described above would reduce the traffic impacts to a level of nonsignificant, as shown in Table 5-14.

Table 5-14
Cumulative Residential Alternative (Option 2)
Intersection Operations - Mitigated

Intersection	Cumulative Development[1] *Without* Residential Alternative (Option 2)					Cumulative Development[1] *With* Residential Alternative (Option 2)				
	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]	Traffic Control	AM Peak Hour LOS	AM Peak Hour Delay[2]	PM Peak Hour LOS	PM Peak Hour Delay[2]
1. Keller/I-580 southbound off-ramp						Signal	C	15	C	21
Southbound	Stop Sign	F	67	F	76					
Eastbound	Stop Sign	F	High	F	High					
Westbound	Stop Sign	E	36	D	20					
2. Keller/Mountain Blvd.						Signal	B	10	B	11
Northbound	Stop Sign	C	16	E	38					
Southbound	Stop Sign	A	2	A	3					
Eastbound	Stop Sign	C	19	F	54					
Westbound	Stop Sign	E	32	B	5					
4. Mountain Blvd./I-580 northbound off-ramp						Signal	B	12	B	14
Eastbound	Stop Sign	C	18	D	20					
Westbound	Stop Sign	B	5	B	5					

[1] Includes the Leona Quarry project.
[2] Delay in seconds.

Note: "High" delay indicates extreme values, which are outside the range of the analysis method (generally greater than 100 seconds).

Impacts to Interstate 580

The traffic effects to Interstate 580 from any one of the four reuse alternatives would be nonsignificant. Table 5-15 shows that the Single Use Campus Alternative would increase AM peak hour traffic north of NMCO by 3.1 percent and the Maximum Capacity Alternative would increase AM peak hour traffic by one percent, both of which are nonsignificant. Implementation of the other two alternatives would result in a decrease in AM traffic compared to preclosure conditions. Decreases in traffic would occur because NMCO trips would no longer occur and some of the reuse alternatives would generate less traffic than under preclosure conditions. Morning (AM) trips generated by reuse alternatives, with the exception of the Single Use Campus Alternative and the Maximum Capacity Alternative, are fewer than the existing NMCO trips. Evening (PM) peak hour traffic entering I-580 from north of the NMCO site would be increased by about one to two percent by the four development alternatives, which is

nonsignificant. PM peak hour traffic would decrease under the No Action Alternative.

Table 5-15
Percentage of NMCO Traffic Added to I-580 by Alternative

Alternative	I-580 North of NMCO		I-580 South of NMCO	
	AM	PM	AM	PM
No Action Alternative	-2.4%	-2.2%	-1.6%	-1.5%
Maximum Capacity Alternative	1.0%	2.9%	0.7%	1.9%
Mixed Use Village Alternative	-0.2%	2.2%	-0.1%	1.4%
Single Use Campus Alternative	3.1%	1.3%	2.1%	0.9%
Residential Alternative (Option 1)	-0.9%	0.7%	-0.6%	0.4%
Residential Alternative (Option 2)	-0.3%	1.4%	-0.2%	0.9%

Source: Total trip generation is derived from Table 4-14. The calculation of percent change in traffic volumes on I-580 is based on the existing 13,600 vehicles during the peak hours and the distribution of NMCO traffic: 45 percent north and 30 percent south on I-580 (see Table 4-15).

Morning traffic impacts to I-580 south of the NMCO site are similar, ranging from decreases of less than two percent for the Mixed Use Village, Residential, and No Action Alternatives to an increase of less than one to two percent if the Maximum Capacity Alternative or Single Use Campus Alternative were implemented. Evening traffic impacts to I-580 south of the NMCO site would range from less than one percent to two percent increases for the four development alternatives, and would decrease under the No Action Alternative, as expected.

Air Quality

The combined effects of reuse and the Leona Quarry project would result in small cumulative increases in traffic congestion at nearby intersections as analyzed in Section 5.5. A comparison of intersection delay analyses in Sections 4.9 and 5.5 shows that traffic added by consideration of the Leona Quarry affects only a few turning movement patterns at the I-580 off-ramps at Keller Road and Mountain Boulevard. The added vehicle delay for these turning movements would not significantly alter the carbon monoxide modeling results presented in Table 4-32. Consequently, the combined effects of reuse and the Leona Quarry project will not have any significant impacts on future carbon monoxide levels near the NMCO site.

Significant and unmitigable impacts would result from regional air emissions of ozone precursor and PM_{10} concentrations that exceed state air quality standards. These impacts are due to vehicle emissions associated with traffic from project plus cumulative development. Reuse of NMCO plus other major developments in the region will result in a cumulative contribution to

PM_{10} and ozone precursor emissions in the Bay Area. Cumulative air quality issues in the San Francisco Bay Area are addressed through regional air quality plans developed jointly by the Bay Area Air Quality Management District (BAAQMD), the Association of Bay Area Governments, and the Metropolitan Transportation Commission. These plans reflect anticipated regional land use and transportation patterns, and are subject to periodic review and revision. BAAQMD regulations require most new industrial facilities to fully offset emissions that would be generated by their operations. However, the impacts from the reuse alternatives are related to vehicle emissions, which relies on voluntary reduction in vehicle trips for mitigation. Therefore, this impact cannot be fully mitigated.

Noise

The combination of reuse of the NMCO site and other regional developments would not significantly alter traffic volumes or speeds on major roadways in the NMCO vicinity. Because peak traffic volumes along the I-580 corridor must double before traffic noise levels increase by 3 decibels, there would be no significant noise impacts associated with cumulative development projects.

Utilities

Potable Water Supply. Past, present, and reasonably foreseeable future projects could cumulatively increase demand for potable water. Selection of either the Maximum Capacity, Mixed Use Village, or Single Use Campus reuse alternatives, in combination with other local and regional project approvals will require water suppliers to meet increasing future demands. Providing potable water requires a reliable supply and adequate treatment. Cumulative water demand increases are not potentially significant as long as reliable supplies and adequate treatment facilities are available and cost-efficient. However, increasing pressures on regional water supplies may require future cost increases in order to supply and treat enough water for anticipated regional growth. Compliance with mitigation measures presented in Sections 4.12.3, 4.12.4, and 4.12.5 of this EIS/EIR, and effective urban water management planning, including the requirement to identify adequate water supplies prior to project approvals should maintain these impacts at less than significant levels on a cumulative basis.

Impact 1. Landfill Capacity. A significant and mitigable impact would occur if solid waste diversion (reduction and recycling) goals are not met on a regional basis. This cumulative impact to landfill capacity applies similarly to each of the four reuse alternatives. The same buildings are to be demolished for each of the reuse alternatives, and therefore the volume of demolition waste that will be generated will similarly be the same for the

Maximum Capacity, Mixed Use Village, Single Use Campus, and Residential Alternative (Options 1 and 2) (Hughes 1996).

At the end of 1994, estimated remaining refuse capacity for the Altamont Landfill was about 19 million tons. At the 1994 rate of fill, the facility would reach capacity in the year 2006 (Alameda County Waste Management Authority 1995). Projections in the Alameda County Integrated Waste Management Plan indicate that total demand for landfill capacity through the 15 year planning period (i.e. through the year 2010) is about 40 million tons. Alameda County landfill capacity demand (i.e. for waste generated within Alameda County) for that period amounts to about 24 million tons through the year 2010 (Alameda County Waste Management Authority 1995).

Current countywide landfill capacity is 32,440,114 tons, which is equivalent to 45,242,896 cubic yards (Alameda County Waste Management Authority 1995). There is therefore a current capacity shortfall of about eight million tons of landfill capacity to meet projected needs through the year 2010 (i.e. 40.3 million tons - 32.4 million tons).

Examination of Table 5-16 indicates that demolition of the hospital and all other buildings that would not be used as part of one of the development alternatives, would result in about 71,346 tons of waste. Of this total, an

Table 5-16
Demolition Waste Generation

Buildings to be Demolished	Demolition Waste[1] (tons)
Hospital	36,616
All other Buildings	34,730
Total	71,346

Source: Theresa Hughes and Associates 1994 .

1. Assumptions:
   - Buildings slated for demolition by the US Navy (not demolished as part of alternative construction): Building numbers 37, 85, 88, and 107
   - Buildings to be integrated, perhaps with seismic retrofits, as part of each of the four alternatives (not demolished): Building numbers 18 (Club Knoll); 19 (Garage); 69 (Bachelor Quarters); 101 (Post Office); 101-A (Boiler Plant); 131 (Human Resources office); 133 (Command Education and Training); 138 (indoor swimming pool), 147 (indoor and outdoor racquetball courts), 507 (restroom), and 517 (Credit Union).
   - Buildings to be demolished total 895,485 square feet; 895,485 square feet * 0.03704 cubic yards per 1 cubic feet = 33,168 cubic yards; 33,168 cubic yards * 3 to account for an estimated depth of 3 feet of rubble requiring hauling; = 99,506 cubic yards total volume; 99,506 cubic yards * 0.717 tons per cubic yard (this conversion figure from Alameda County Waste Management Authority 1995; pg III-15) = 71,346 tons.

estimated 36,616 tons, or about 51 percent of the demolition waste would be generated by demolishing the hospital building. Demolition of the remaining buildings would amount to the remaining 34,730 tons.

The 71,346 tons of waste represents less than one percent of the existing landfill capacity. Although it is a very small percentage of available landfill capacity, it still represents a potentially significant and mitigable impact, because of the estimated eight million ton shortfall of landfill capacity in the County. This would significantly impact Alameda County's ability to meet their integrated waste management plan diversion goals (i.e reduction of waste at its sources, recycling, composting, or otherwise reducing the amount of wastes that reach landfills). This would not be an immediate impact, since existing landfill capacity is adequate to absorb NMCO demolition waste. However, over the long term, in combination with other activities that generate substantial quantities of solid waste that will need to be diverted or landfilled, the generation of this demolition waste represents a potentially significant impact. A study titled "Materials Inventory and Evaluation at the Oak Knoll Hospital" ("Inventory") has been completed (Winzler and Kelly 1996). The Inventory estimates that hospital demolition could generate "over 10,000 cubic yards of waste." This estimate is presented within a broader context advocating extensive reuse and recycling of equipment, items, and materials on site. It is generally consistent with the estimates and mitigation measures in this EIS/EIR. The analysis in this EIS/EIR section estimates a higher volume of generated waste, and therefore informs as a more conservative, worse-case estimation of waste generation from demolition.

If Alameda County is unable to meet the Cal/EPA solid waste reduction standards of 50 percent by the year 2000, the Solid Waste Reduction Act provides for penalties of $10,000 a day. Even if Alameda County can avoid paying the penalty through waivers or other remedies available from the state, significant economic impacts would result from higher costs of waste disposal and shortened landfill life.

In anticipation of this large quantity of construction and demolition materials, the California Integrated Waste Management Board (CIWMB) has been exploring ways to assist localities in diverting these wastes from landfills through reuse, recycling, and other strategies. An informal CIWMB base closure team has been organized with staff and others to examine the issues and to identify means to assist counties involved in base reuse.

The CIWMB asked the Trade and Commerce Agency for funds to do several projects. The following are those proposed activities applicable to the demolition issue:

- Researching and producing guidebooks on suggested demolition practices to be used to minimize contamination and maximize reuse;
- Developing a local materials exchange program adapted to base reuse;
- Identifying reuse opportunities, processors, and markets for recovered materials;
- Developing local ordinances that require construction and demolition efforts to follow recovery and recycling guidelines; and
- Developing guidelines for handling potentially hazardous materials included in construction and demolition debris.

Taking the lead in addressing recycling associated with military base closures, the Secondary Materials and Technology Branch has been conferring with the Trade and Commerce Agency about the need for funding to support the CIWMB's base closure program. The CIWMB has requested funds from the Trade and Commerce Agency to implement technical assistance activities directed toward communities impacted by base closures. The CIWMB has no direct funding for diversion efforts by affected jurisdictions.

Mitigation: The city shall develop and implement, over the long term and in consultation with the CIWMB, a construction and demolition materials waste diversion program integrating materials exchange, recycling, salvage, and other waste recovery and reuse activities to realize maximum reasonable diversion of such materials from landfills. Effective implementation of that program, combined with the achievement of quantitative estimates of source reduction and recycling attributable to long-term Alameda County policies and plans to expand existing, or acquire and develop new landfill capacity, should accommodate increased volumes of solid waste, thereby resulting in this impact being nonsignificant.

Hazardous Materials and Waste

All hazardous materials and waste have been cleaned up, or will be abated before property disposal. There would be no cumulative cleanup or waste disposal impacts.

5.6 ENVIRONMENTAL JUSTICE

As discussed in Section 3.2.5, the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* requires that "Each Federal agency shall analyze the environmental effects,

including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is required, by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, whenever feasible, should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities."

In order to comply with the executive order, preparation of this EIS/EIR included the following activities:

- Gathering of economic, and demographic information generated from the 1990 census to identify areas of low-income and high-minority populations in the vicinity of areas potentially exposed to project impacts;

- Assessment of the disposal and reuse actions for disproportionate impacts resulting from on-site activities; and

- Solicitation of community participation and input through public hearings and meetings and extensive public notification, as described in Chapter 1 of this document.

Analysis Methodology

Establishing the Region of Influence

The City of Oakland and the Oak Knoll study area have been established as the relevant region of influence for analyzing environmental justice issues. Detailed analysis focuses on the Oak Knoll study area using data from census tracts adjoining NMCO. The nature of the impacts associated with disposal and reuse, if any, would generally occur at the neighborhood level within the immediate vicinity of NMCO.

Identifying Affected Populations

To determine whether a low-income or minority population could be disproportionately affected by the proposed reuse of NMCO, the relationship of potential adverse impacts identified in the EIS/EIR to low-income and minority populations and as the overall impact of reuse actions to proximate low-income and minority populations were considered. A number of census tract tables were used to extract data on low-income and minority populations in the City of Oakland. Minority populations

included in the census tables are identified as African American, American Indian, Eskimo or Aleut, Asian or Pacific Islander, and Hispanic.

Identification of Environmental Justice Reuse Impacts

For NMCO reuse, issues of environmental justice are typically associated primarily with noise, air quality, traffic, land use conflicts, hazardous materials, disruption of and displacement within the community. Geologic and hydrologic issues are not relevant because hazards associated with those conditions (e.g., seismic hazards) in the reuse areas would not disproportionately affect any one group. Any loss of Native American archeological resources could disproportionately impact local Native American populations and would be an issue of environmental justice. However, no such archeological resources are known to occur at NMCO.

Potential socioeconomic impacts include displacement of low income neighborhoods and local businesses in Oakland. The only neighborhood with low income and higher than city-wide average minority population identified in the Study Area (which consists of census tracts 4081, 4099, 4100, 4083, 4101 and 4098) is located west of I-580 in census tract 4098. The rest of the Study Area has a higher than average household income (Theresa Hughes & Associates 1994). The residents of census tract 4098 are unlikely to be displaced by the reuse of the NMCO site because Interstate 580 acts as a physical barrier between the NMCO site and the neighborhood.

As for local business displacement, the planned retail components of the reuse alternatives would not likely displace existing businesses in the Study Area. There is sufficient market demand to support existing local businesses and the neighborhood retail use proposed at the NMCO site (Theresa Hughes & Associates 1994). According to the Existing Conditions Report, the retail environment in the Study Area is inadequate due to limited shopping opportunities in light of the socio-economic profile of the area.

As described below, no significant impact was identified in the EIS/EIR that could adversely and disproportionally affect low-income and minority populations.

5.6.1 City of Oakland Minority and Low-Income Characteristics

The City of Oakland has a diverse ethnic population. Based on 1990 census data, 32 percent of the City's population are Caucasian, 44 percent are African Americans, 15 percent are Asians and Pacific Islanders, one percent are Native American, and the remaining eight percent comprises other groups. Of the total City population, persons of Hispanic origin make up 14 percent. Persons of Hispanic origin can be of any race.

Approximately 68,000 residents (18 percent of the City's population) have been classified as living in poverty (1990 Census). The census bureau determines poverty-status for families and individuals based on 48 threshold variables, including income and amount spent on food, family size, number of children under 18, and number of family members over 65 years of age. The average poverty threshold for a family of four persons was $12,674 in 1989. Of the 68,000 residents classified as poor, African Americans, American Indians/Eskimo/Aleutians, and Hispanics are disproportionately represented in the City of Oakland. In addition, over 56 percent of poor residents in the city are African Americans, while total African American population in the city is only 44 percent. Therefore, African Americans are overrepresented in the city's poor population.

According to the socioeconomic impacts analysis in this document (Section 4.2), the long-term overall economic effects of any of the four reuse alternatives would be economically positive to the city as a whole, including minority and low-income groups. Therefore these groups would not be adversely affected on a citywide basis.

5.6.2 Potential For Disproportionate Environmental Impacts On Minority Communities And Low-Income Communities

Navy Disposal. Navy property disposal is simply a transfer of property title and would result in no environmental impacts. No significant and adverse environmental impacts or disproportionate environmental impacts on minority and low-income communities would occur as a result of the Navy property disposal. Disposal is summarized in the Executive Summary and Table ES-1 of the EIS/EIR, and is described in detail in Chapter 4.

No Action Alternative. Retaining the property indefinitely under the No Action Alternative would result in no environmental impacts. No significant and adverse environmental impacts, or disproportionate environmental impacts on minority and low-income communities would occur as a result of the No Action Alternative. The No Action Alternative is described in detail in Chapter 2 and is analyzed for environmental consequences in Chapter 4 of the EIS/EIR.

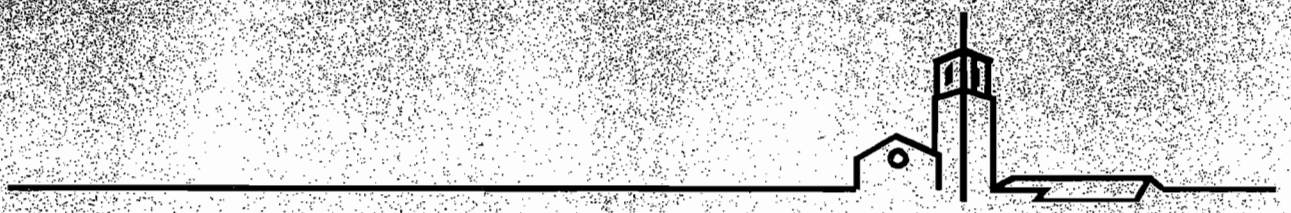
Community Reuse Alternatives. The only significant and unmitigable environmental impacts produced by the community reuse alternatives is for air quality. Motor vehicle traffic trips associated with community reuse alternatives for NMCO may exceed one or more Bay Area Air Quality Management District air emission thresholds, as shown in Table 4-31. The region of influence for ozone precursors and secondary particulate matter (PM_{10}) is the entire San Francisco Bay Area as discussed in Section 4.10,

because these pollutants are produced by secondary chemical reactions in the atmosphere and occur over a large area. In addition, vehicle traffic is a geographically dispersed source of dilute PM_{10} emissions. Minority communities and low-income communities would not be disproportionately impacted by this regional air quality impact.

All significant and mitigable environmental impacts identified in the EIS/EIR are associated with implementing of the different community reuse alternatives. If the mitigation measures associated with the community reuse alternatives are implemented as described in the EIS/EIR, no significant and adverse environmental impacts would disproportionately affect minority communities or low-income communities.

5.7 EFFECTS FOUND NOT TO BE SIGNIFICANT

Environmental effects also referred to as environmental impacts have been identified as either significant or not significant. Impacts identified as significant exceeded some or all threshold values expressed in this report as "Significance Criteria." Effects (impacts) found not to be significant did not exceed thresholds stated as "Significance Criteria."



6.0 CONSULTATION AND COORDINATION

6. CONSULTATION AND COORDINATION

6.1 AGENCY AND REPRESENTATIVES CONTACTED

The federal, state, and local agencies and private organizations and representatives that were contacted during the course of preparing this EIS/EIR are listed below.

U.S. Navy

Engineering Field Activity West, Environmental Planning Department
Doug Pomeroy
Gary Munekawa
Mary Doyle
Louis Wall

Naval Medical Center Oakland
Larry Douchand
Chief Osborn, Police Department
Chief Alianza, Fire Department
Tim Rogers

Public Works Center, San Francisco Bay
John Parsons

U.S. Fish and Wildlife Service
Jim Browning

California Department of Fish and Game
Caitlin Bean

Alameda County
Diane Akers, Alameda County EMS District

City of Oakland

Oakland Base Reuse Authority
Mel Blair
Barry Cromartie

Office of Planning and Building
Chris Buckley
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Anu Raud
Stan Muraoka

City of Oakland (continued)

Office of Public Works
Randy Mach
Ty Tekawa
Mike Vecchio
Richard Pontious

Police Department
Lynn Bellman
Sgt. Tony Hare
Lt. Vierra

Fire Department
Gene English
Al Nero
John Baker
Tony Atkission

Office of Parks and Recreation
Kerry Jo Ricketts

Oakland Unified School District
Bob Long
Joanne Camargo

East Bay Regional Park District
Public Information Department

Pacific Bell
Louise Knight

Korve Engineering
Jose I. Farran
Duncan Jones
Chi-Hsin Shao

Simon Martin-Vegue Winkelstein
Sowmya Parthasarathy

Theresa Hughes & Associates
Theresa Hughes
Sue Conaway

6.2 SCOPING

The project mailing list, including agencies, organizations, and individuals that received scoping letters, is provided in Appendix A. The following parties responded to the scoping request:

Federal Agencies

U.S. Environmental Protection Agency

State Agencies

Department of Toxic Substances Control
Department of Transportation

Local/Regional Agencies

City of Oakland, Landmarks Preservation Advisory Board
East Bay Regional Park District
East Bay Municipal Utility District
Alameda County Congestion Management Agency

Organizations

Oak Knoll Heights Townhomes Association
Oak Knoll Heritage Committee

Individuals

Mr. Thordie Ashley
Mr. Paule F. Aubery
Mr. Lester Cobb
Ms. Lori Dreyer
Mr. Joe Hadley
Mr. Louis Hal
Ms. Anna-Maria Hardenstine
Ms. Gaile Hofmann
Mr. Ken Pementell
Mr. Eugene Rainbow
Ms. Lydia Rocha
Mr. Roger Shephard
Ms. Lee Ann Smith
Ms. Barbara Sutherland
Ms. Judith Thomas
Ms. Winifred Walsh
Mr. Charles Wilson

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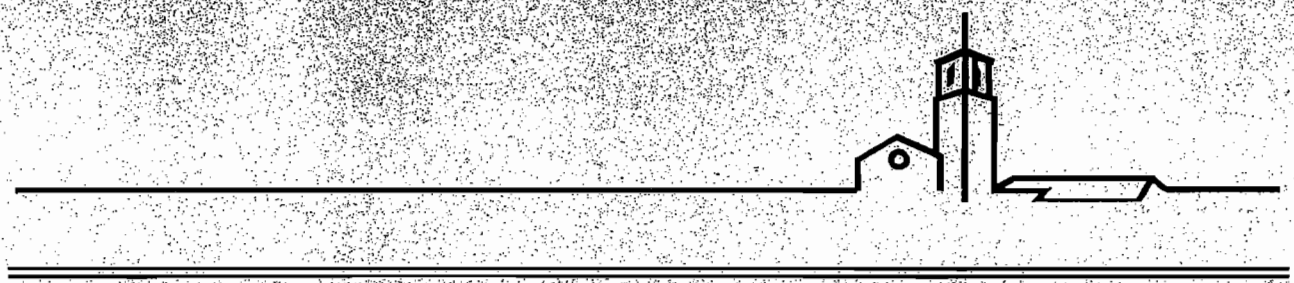

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7. REFERENCES

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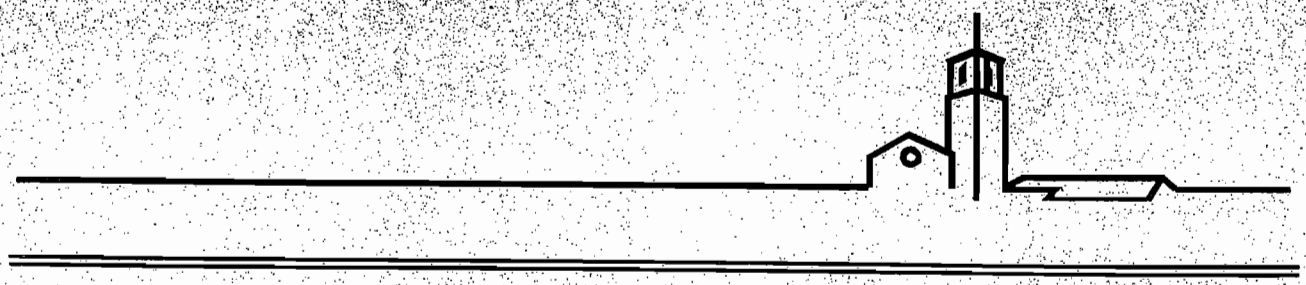

9.0 GLOSSARY AND INDEX

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9.1 GLOSSARY OF TERMS

100-Year Flood Zone	Land area having a one percent chance of being flooded during a given year.
A-Weighted Decibel (dBA)	A number representing the sound level which is frequency weighted according to a prescribed frequency response established by the American National Standards Institute (ANSI-S1.4-1971) and accounts for the response of the human ear.
Aesthetics	Referring to the perception of beauty.
Ambient Air Quality Standards	Standards established on a state or federal level that define the limits for airborne concentrations of designated criteria pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, ozone, lead), to protect public health with an adequate margin of safety (primary standards) and public welfare, including plant and animal life, visibility, and materials (secondary standards).
Artifact	Any product or human cultural activity; more specifically, any tools, weapons, artworks, etc., found in archeological contexts.
Asbestos	A carcinogenic substance formerly used widely as an insulation material by the construction industry; often found in older buildings.
Assemblage	The complete inventory of artifacts from a single, defined archaeological unit (such as a stratum or component).
Attainment Area	An area that meets the National Ambient Air Quality Standards for a criteria pollutant under the Clean Air Act or meets state air quality standards.
California Environmental Quality Act (CEQA)	CEQA is the California state equivalent to NEPA. It requires an environmental review of projects deemed to have significant environmental impacts and which require state or local government approval or are publicly funded.
Capacity (Transportation)	The maximum rate of flow at which vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.
Capacity (Utilities)	The maximum load a system is capable of carrying under existing service conditions.
Clean Air Act (CAA)	The CAA legislates that air quality standards set by federal, state, and county regulatory agencies establish maximum allowable emission rates and pollutant concentrations for sources of air pollution on federal and private property. Also regulated under this law is proper removal and safe disposal of asbestos from buildings other than schools.
Clean Water Act (CWA)	The CWA is the major federal legislation concerning improvement of the nations water resources. It provides for development of municipal and industrial wastewater treatment standards and a permitting system to control wastewater discharges to surface waters. Section 404 of the act regulates disposal into waters of the United States, including wetlands.

Climate	The prevalent or characteristic meteorological conditions (and their extremes) of any given location or region.
Community Noise Equivalent Level (CNEL)	Noise compatibility standard established by California Administrative Code, Title 21, Section 5000. The CNEL is the 24-hour average, A-weighted sound level with a 5 dB penalty added to levels occurring between 10:00 p.m. and 7:00 a.m. to account for increased annoyance due to noise during the night.
Community Environmental Response Facilitation Act (CERFA)	A 1992 amendment to CERCLA, CERFA expedites the identification of uncontaminated real property within closing facilities that offer the greatest opportunity for reuse and redevelopment.
Comprehensive Environmental Response, Compensation, And Liability Act (CERCLA)	CERCLA, also known as Superfund, was enacted in 1980 to ensure that a source of funds is available to clean up abandoned hazardous waste dumps, compensate victims, address releases of hazardous materials, and establish liability standards for responsible parties. The act also requires creation of a National Priorities List which sets forth the sites considered to have the highest priority for cleanup under Superfund.
Contamination	The degradation of naturally occurring water, air, or soil quality either directly or indirectly as a result of human activities.
Council On Environmental Quality (CEQ)	Established by NEPA, the CEQ consists of three members appointed by the President. CEQ regulations (40 CFR Pts 1500-1508, as of July 1, 1986) describe the process for implementing NEPA, including preparation of environmental assessments and environmental impact statements, and the timing and extent of public participation.
Culture	(1) The nonbiological and socially transmitted system of concepts, institutions, behavior, and materials by which a society adapts to its effective natural and human environment. (2) Similar or related assemblages of approximately the same age from a single locality or district, thought to represent the activities of one social group.
Cultural History	The archeological sequence of cultural activity through time, within a defined geographic space or relating to a particular group.
Cultural Resource	Prehistoric or historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or any other reason.
Cumulative Impacts	"Cumulative impact" is the impact on the environment which results from the incremental impact of the action (federal) or project (state) when added to other past, present, and reasonably foreseeable future actions (or projects). Cumulative impacts can result from individually minor but collectively significant activities taking place over a period of time.
Day-Night Average Sound Level (Ldn)	The 24-hour average-energy sound level expressed in decibels, with a 10 decibel penalty added to sound levels between 10:00 p.m. and 7:00 a.m. to account for increased annoyance due to noise during the night.
Decibel (dB)	A unit of measurement on a logarithmic scale which describes the magnitude of a particular quantity of sound pressure or power with respect to a standard reference value.

Defense Environmental Restoration Program (DERP)	DERP is the Department of Defense hazardous materials cleanup program. It is separate from CERCLA but follows the same basic procedures, including the same regulatory oversight. The goals of the program are the identification, investigation, remediation, and cleanup of contamination from hazardous substances, pollutants, and contaminants. The funding for DERP is independent of Superfund.
Developed	Said of land, a lot, a parcel, or an area that has been built upon, or where public services have been installed prior to residential or commercial construction.
Direct Impact	Effects resulting solely from the proposed program.
Disposal	Legal transfer of Navy property to other ownership.
Effluent	Waste material discharged into the environment.
Endangered Species	A species with potential for extinction throughout all or a significant portion of its range.
Endangered Species Act (ESA)	The ESA requires federal agencies to determine the effects of their actions on endangered species and their critical habitats.
Environmental Impact Statement (EIS)	A document required of federal agencies by NEPA for major projects or legislative proposals significantly affecting the environment. A tool for decision making, the EIS describes the positive and negative effects of the undertaking and analyzes alternative actions.
Equivalent Noise Levels (Leq)	Equivalent noise levels are used to develop single-value descriptions of average noise exposure over various periods of time.
Ethnography	The direct anthropological study of living human groups or the study of recent, historically documented groups.
Fault	Fracture in earth's crust accompanied by a displacement of one side of the fracture with respect to the other and in a direction parallel to the fracture.
Feasibility Study (FS)	The feasibility study (FS) identifies and evaluates all applicable site cleanup alternatives. For most sites, a long list of alternatives are possible. A risk investigation (RI) is performed as part of the study to quantify the level of risk to the public and environment posed by the site. Often, the RI determines which alternative is selected for final remediation. Each alternative is evaluated for effectiveness in protecting human health and the environment, ease of implementation, and overall cost. Typically, the RI and FS are performed concurrently.
Feature	A large, complex artifact or part of a site such as a hearth, cairn, housepit, rock alignment, or activity area.
Ground Water	Water within the earth that supplies wells and springs.
Hazard Ranking System (HRS)	This system provides a uniform method of scoring or ranking of the potential risk of a facility site where a hazardous substance has been present. The EPA developed the HRS to prioritize their cleanup efforts. The EPA evaluates the draft HRS packages and proposes any facilities scoring over 28.5 or higher for inclusion on the National Priorities List (NPL). Facilities which are listed on the NPL receive the highest priority.

Hazardous Material	A substance or mixture of substances that poses a substantial present or potential risk to human health or the environment. Any substance designated by the EPA to be reported if a designated quantity of the substance is spilled in the waters of the United States or if it is otherwise released into the environment.
Hazardous Waste	A waste or combination of wastes that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause or significantly contribute to an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Regulated under RCRA.
Hazardous Waste Accumulation Area	An area which may store hazardous wastes for up to 90 days.
Hazardous Waste Storage Area	An area which may store hazardous waste for up to one year.
Historic (Cultural Resources)	A period of time after the advent of written history dating to the time first Euro-American contact in an area. Also refers to items primarily of Euro-American manufacture.
Impacts	An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the adverse effects, usually measured using a qualitative and nominally subjective technique.
Infrastructure	The basic installations and facilities on which the continuance and growth of a locale depend (roads, schools, power plants, transportation, and communication systems).
Installation Restoration Program (IRP)	A program established by the Department of Defense to meet requirements of CERCLA of 1980 and SARA of 1986 which identifies, assesses, and cleans up or controls contamination from past hazardous waste disposal practices and hazardous material spills.
Land Use Plans And Policies	Guidelines adopted by governments to direct future land use within their jurisdictions.
Level Of Service (LOS)	In transportation analysis, a qualitative measure describing operational conditions within a traffic stream and how they are perceived by motorists and/or pedestrians. In public services, a measure describing the amount of public services available to community residents, generally expressed as the number of personnel providing service per 1,000 population.
Liquefaction	The transformation during an earthquake of unconsolidated, water-saturated sediment into a liquid form.
Long-Term	Impacts that would occur over an extended period of time, whether they start during the construction or operations phase. Most impacts from the operations phase are expected to be long term since program operations essentially represent a steady-state condition (i.e., impacts resulting from actions that occur repeatedly over a long period of time). However, long-term impacts could also be caused by construction activities if a resource is destroyed or irreparably damaged or of the recovery rate of the resource is very slow.

McKinney Act	The McKinney Act gives recognized providers of assistance to the homeless a high priority in acquiring unneeded land and buildings on federal properties. The property can be used only for the homeless and only for two years. Homeless providers must be able to finance upgrades of facilities, pay a proportionate share of municipal service costs, and fund its program operations.
Migratory Bird Treaty Act	This act prohibits the taking or harming of a migratory bird, its eggs, nests, or young without the appropriate permit.
Mitigation	A method or action to reduce or eliminate program impacts.
Multi-Family Housing	Townhouse or apartment units that accommodate more than one family though each dwelling unit is only occupied by one household.
National Environmental Policy Act (NEPA)	Public Law 91-190, passed by Congress in 1969, established a national policy designed to encourage consideration of the influence of human activities on the natural environment. NEPA also established the Council on Environmental Quality. NEPA procedures require that environmental information be made available to the public before decisions are made.
National Historic Preservation Act (NHPA)	The NHPA protects cultural resources. Section 106 of the act requires a federal agency to take into account the potential effect of a proposed action on properties listed on or eligible for listing on the National Register of Historic Places.
National Pollution Discharge Elimination System (NPDES)	The NPDES is a provision of the Clean Water Act that prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the EPA or state.
National Priorities List (NPL)	A list of sites (federal and state) where releases of hazardous materials may have occurred and may cause an unreasonable risk to the health and safety of individuals, property, or the environment.
National Register of Historic Places	A federally maintained register of districts, sites, buildings, structures, architecture, and culture.
National Register Resources	Properties listed on the National Register of Historic Places, properties formally determined eligible for listing on the National Register, and those properties appearing to qualify for listing on the National Register.
Native American Graves Protection and Repatriation Act (NAGPRA)	NAGPRA defines the ownership and control of Native American human remains and associated funerary objects discovered or recovered from federal or tribal land.
Native Americans	Used in the collective sense to refer to individuals, bands, or tribes who trace their ancestry to indigenous populations of North America prior to Euro-American contacts.
Native Vegetation	Plant life that occurs naturally in an area without agricultural or cultivational efforts. It does not include species that have been introduced from other geographical areas and have become naturalized.
Natural Gas	A natural fuel containing primarily methane and ethane that occurs in certain geologic formations.

Nitrogen Oxides (Nox)	Gases formed primarily by methane and ethane that occurs in certain geologic formations.
Noise	Any sound that is undesirable because is interferes with speech and hearing, or intense enough to damage hearing, or is otherwise annoying.
Nonnative species	Species that have invaded or been introduced into an area.
Ozone	A major ingredient of smog. Ozone is produced from reactions of hydrocarbons and nitrogren oxides in the presence of sunlight and heat.
PCB-Contaminated Equipment	Equipment which contains a concentration of PCBs from 50 to 449 ppm or greater. Disposal and removal are regulated by the EPA.
Particulate Matter (PM10)	PM10 is a fractional sampling of particle sizes that approximate the extent to which particles with aerodynamic equivalent diameters smaller than fifty (50) microns penetrate to the lower respitory tract. The "10" in PM10 refers to a 50 percent collection efficiency size range, not an upper size limit.
Peak Hour	The hour of highest traffic volume on a given section of roadway between 7:00 a.m. and 9:00 a.m. or between 4:00 p.m. and 6:00 p.m.
Permit	An authorization, license, or equivalent control document to implement the requirements of an environmental regulation.
Phase	A distinctive archeological unit representing a fairly brief interval of time within a locality or region. A phase may be a single component at one site or a prolonged occupation of numerous related sites.
Polychlorinated Biphenyls (PCBs)	Any of a family of industrial compounds produced by chlorination of biphenyl. These compounds are noted chiefly as an environmental pollutant that accumulates in organisms and concentrates in the food chain with resultant pathogenic and teratogenic effects. They also decompose very slowly.
Potable Water	Water that is suitable for drinking.
Prehistory/Prehistoric	The archeological record of nonliterate cultures; the cultural past before the advent of written records.
Preliminary Assessment (PA)	The preliminary assessment identifies areas of potential contamination and evaluates each area to determine if a threat to human health or the environment exists. A PA report is developed from readily available information such as past inventory records, aerial photographs, employee interviews, existing analytical data, and a site visit. A PA may recommend no further action, additional work, or a removal action.
Radon	A colorless naturally occurring, radioactive, inert gaseous element formed by radioactive decay of radium in soil or rocks.
Record Of Decision (ROD)	The document prepared under the federal government that documents the reasoning behind the decision.
Recycling	The process of minimizing the generation of waste by recovering usable products that might otherwise become waste.

Region of Influence (ROI)	For each resource, the region affected by the proposed action or alternatives and used for analysis in the affected environment and impact discussion.
Remedial Action (RA)	During the remedial action (RA) phase, the selected cleanup technology is implemented. RA can be as simple as soil excavation or as complicated as a complete ground water treatment system which may operate for many years. Remedial action work plans for long term remediations will include Operation and Maintenance (O&M) plans. O&M efforts continue until the cleanup is complete.
Remedial Action Plan (RAP)	The document prepared under the state government that documents the reasoning behind the selection of a particular cleanup alternative.
Remedial Design (RD)	After the RAP/ROD is signed, remedial design (RD) can begin. During the RD phase, specific construction parameters and equipment specifications are prepared for the selected cleanup alternative.
Remedial Investigation (RI)	This investigation is performed to more fully define the nature and extent of the contamination at a site and evaluate possible methods of cleaning up the site. During the investigation, ground water, surface water, soil, sediment, and biological samples are collected and analyzed to determine the type and concentration of each contaminant. Samples are collected at different areas and depths to help determine the spread of contamination.
Removal Actions	In the event of an immediate threat or potential threat to human health or the environment, a short term removal or cleanup action may be implemented. The goal of the removal action is to isolate the contamination hot spot and their source from all biological receptors. Usually, removal actions do not completely clean up a site, and additional remediation steps are required.
Resource Conservation And Recovery Act (RCRA)	RCRA was enacted in 1976 as the first step in regulating the potential health and environmental problems associated with hazardous waste disposal. RCRA and the regulations developed by EPA to implement its provisions provide the general framework of the national hazardous waste management system, including the determination of whether hazardous wastes are being generated, techniques for tracking wastes to eventual disposal, and the design and permitting of hazardous waste management facilities.
Runoff	The noninfiltrating surface water entering a stream or other conveyance channel shortly after a rainfall event.
Safe Drinking Water Act (SDWA)	The SDWA establishes the amount of concentrated contaminants allowable in public drinking water. The SDWA also reviews federal agencies which maintain public water supply or contribute to groundwater contamination following all applicable requirements issued by the state.
Seismicity	Relative frequency and distribution of earthquakes.
Short Term	Transitory effects of the proposed program that are of limited duration and are generally caused by construction activities or operations start-up.
Significance	The importance of a given impact on a specific resource as defined under the Council on Environmental Quality NEPA regulations, and under the California Environmental Quality Act statutes and guidelines.

Single-Family Housing	A conventionally built house consisting of a single dwelling unit occupied by one household.
Site	The location of past cultural activity; a defined space with more or less continuous archeological evidence. May also refer to specific site where an impact may have emphasis; or to the site occupied by a facility.
Site Discovery (SD)	A site is an area that has or has had the potential for a hazardous substance release. A single facility may contain several sites to be studied. Potential sites are occasionally discovered by searching through records or during construction projects.
Site Inspection (SI)	An inspection conducted after a preliminary assessment when additional information is needed to evaluate the site. The collection and analysis of soil, sediment, and surface or ground water samples may help determine the need for further study. The SI collects any information needed for hazard ranking. The SI may recommend a site for no action, further study, or an immediate removal action.
Soil	A natural body consisting of layers or horizons of mineral and/or organic constituents of variable thickness and differing from the parent material in their morphological, physical, chemical, and mineralogical properties, and biological characteristics.
Soil Types	A category or detailed mapping unit used for soil surveys based on phases or changes within a series (e.g. slope, salinity), that substantially affect one's ability to manage the soil.
Solid Waste Management	Supervised handling of waste materials from their source through recovery processes to disposal.
State Historic Preservation Officer (SHPO)	The official within each state, authorized by the state at the request of the Secretary of the Interior, to act as a liaison for purposes of implementing the National Historic Preservation Act.
Stratigraphy	The study of cultural and natural strata or layers in archeological and geological deposits, particularly with the aim of determining the relative age of strata.
Superfund Amendments And Reauthorization Act (SARA)	SASRA was enacted in 1986 to increase the Sueprfund to $85. Billion, modify contaminated site cleanup criteria scheduling, and revise settlement procedures. It also provides a fund for leaking underground storage tank cleanups and a broad, new emergency planning and community right to know program.
Surface Water	All water naturally open to the atmosphere and all wells, springs, or other collectors which are directly influenced by surface water.
Threatened Species	Plant and wildlife species likely to become endangered in the foreseeable future.
Toxic	Harmful to living organisms.
Toxic Substances Control Act (TSCA)	TSCA provides authority to test and regulate chemicals to protect human health. Substances regulated under TSCA included asbestos and PCBs.
Transfer	Deliver US government property accountability to another federal agency.

Tribelet	The basic, autonomous, self-governing, and independent sociopolitical group in aboriginal California; an aggregation of several villages under the authority of a single chief.
US Environmental Protection Agency	The independent federal agency established in 1970 to regulate federal environmental matters and oversee the implementation of federal environmental laws.
Waters of the United States	Waters that are subject to Section 404 of the clean Water Act. These include both deep water aquatic habitats and special aquatic sites, including wetlands.
Wetlands	Areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil. This classification includes swamps, marshes, bogs, and similar areas. Jurisdictional wetlands are those wetlands that meet the vegetation, soils, and hydrology criteria under normal circumstances (or met the special circumstances as described in the US Army Corps of Engineers, 1987 wetland delineation manual where one or more of these criteria may be absent) and are a subset of "waters of the Untied States."
Zoning	The division of a municipality into districts for the purpose of regulating land use, types of buildings, required yards, necessary off-street parking, and other prerequisites to development. Zones are generally shown on a map and the text of the zoning ordinance species requirement for each zoning category.

9.2 INDEX

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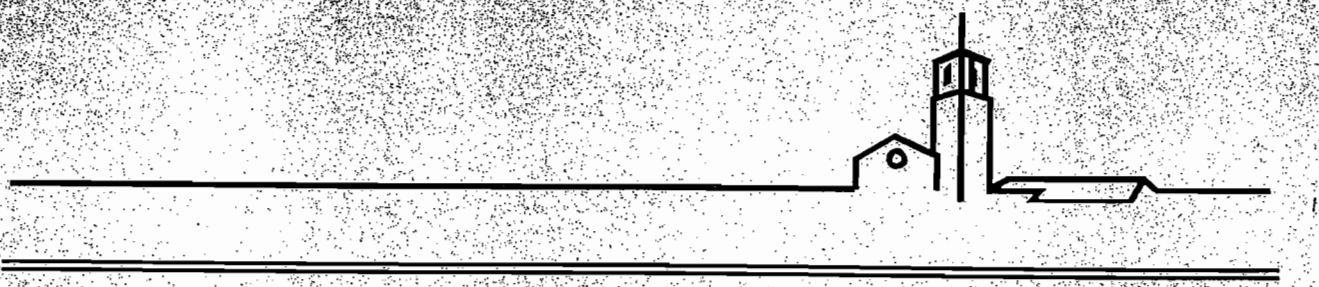

10.0 DISTRIBUTION LIST

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Naval Medical Center Oakland Final EIS/EIR Distribution and Notification List

Title	First	Last	Organization	Branch	City	State
			Elected Officials			
Supervisor	Mary	King	Alameda County	District No. 4	Oakland	CA
			Assemblyman Bates' Office	14th District	Oakland	CA
			Assemblywoman Lee's Office	16th District	Oakland	CA
Mayor	Ralph	Appezzato	City of Alameda	Office of the Mayor	Alameda	CA
Mayor	Shirley	Dean	City of Berkeley	Office of the Mayor	Berkeley	CA
Mayor	Dick	Kassis	City of Emeryville	Office of the Mayor	Emeryville	CA
Mayor	Elihu	Harris	City of Oakland	Office of the Mayor	Oakland	CA
Councilmember	Nancy	Nadel	City of Oakland	District No. 3	Oakland	CA
Councilmember	Henry	Chang, Jr.	City of Oakland	Member at Large	Oakland	CA
Councilmember	Ignacio	De La Fuente	City of Oakland	District No. 5	Oakland	CA
Councilmember	Jane	Brunner	City of Oakland	District No. 1	Oakland	CA
Councilmember	Nate	Miley	City of Oakland	District No. 6	Oakland	CA
Councilmember	John	Russo	City of Oakland	District No. 2	Oakland	CA
Councilmember	Richard	Spees	City of Oakland	District No. 4	Oakland	CA
Mayor	Milt	Kegley	City of Piedmont	Office of the Mayor	Piedmont	CA
Mayor	Willie	Brown	City of San Francisco	Office of the Mayor	San Francisco	CA
Mayor	Ellen	Corbitt	City of San Leandro	Office of the Mayor	San Leandro	CA
			Congressman Dellum's Office		Oakland	CA
			Congressman Stark's Office		Hayward	CA
Mr.	John	Hass	Senator Boxer's Office		San Francisco	CA
Mr.	Russell	Lowe	Senator Feinstein's Office		San Francisco	CA
Senior Staff Member	Roberta	Brooks	9th Congressional District		Oakland	CA
District Director	Sandre	Swanson	9th Congressional District		Oakland	CA
			Federal Agencies			
Director HUD Office	Steven	Sachs	Department of Housing and Urban Development	Community Planning & Development, 9ADE	San Francisco	CA
Mr.	Jimmy	Prater	Department of Housing and Urban Development		San Francisco	CA
Chief			Federal Aviation Administration, Air Space & Program	Branch AWP 530	Los Angeles	CA
Regional Director			Federal Emergency Management Agency	Region IX	San Francisco	CA
			Federal Transit Administration		San Francisco	CA
	Sharel	Gates	General Services Administration		Sacramento	CA
Chief, Northern Branch	Dianne	Cah	General Services Administration	Office of Real Estate Sales (90R)	San Francisco	CA
Mr.	Tom	Doszkocs	General Services Administration	Interagency Real Estate Coordinator	San Francisco	CA
			Housing and Urban Development Headquarters Library		Washington	DC
Mr.	Richard	Brown	Housing and Urban Development Office of Community Viability		Washington	DC
Refuge Manager	Marge	Kolar	San Francisco Bay National Wildlife Refuge		Newark	CA
Ms.	Denise	Klimas	U.S. Dept. of Commerce	National Oceanic & Atmospheric Administration	San Francisco	CA
Mr.	George	Hoops	U.S. Dept. of Education	Federal Real Property Assistance Program	Seattle	WA
Mr.	David	Hakola	U.S. Dept. of Education	Real Property Group	Washington	DC

Title	First	Last	Organization	Branch	City	State
			U.S. Dept. of Energy	Office of EC&E, Environmental Prg. Div., 3G-092	Oakland	CA
			U.S. Dept. of State	Environmental Affairs Office	Washington	DC
Chief		Environmental Section	U.S. Dept. of the Interior	Bureau of Indian Affairs	Sacramento	CA
Mr.	Ed	Hestey	U.S. Dept. of the Interior	Bureau of Land Management	Sacramento	CA
Mr.	Stanley	Albright	U.S. Dept. of the Interior	National Park Service	San Francisco	CA
Chief of Planning & Environmental Quality	Ray	Murray	U.S. Dept. of the Interior	National Park Service	San Francisco	CA
Regional Environmental Officer	Patricia	Port	U.S. Dept. of the Interior	Office of Environmental Policy and Compliance	San Francisco	CA
Director			U.S. Dept. of the Interior	Office of Environmental Policy and Compliance	Washington	DC
Director's Representative			U.S. Dept. of the Interior, USGS		Menlo Park	CA
Region IX Secretary	Thomas	Patak	U.S. Dept. of Transportation		San Francisco	CA
			U.S. Dept. of Transportation, Federal Highway Administration	Regional Administration, Region IX	San Francisco	CA
			U.S. Dept. of Transportation		Washington	DC
Mr.	David	Farrel	U.S. Environmental Protection Agency, Region IX	Environmental Review Section (E-3-1)	San Francisco	CA
Mr.	David	Tomsovic	U.S. Environmental Protection Agency, Region IX	Office of External Affairs	San Francisco	CA
Ms.	Esther	Hill	U.S. Environmental Protection Agency, Region IX	Reuse Rep.	San Francisco	CA
Mr.	Barbara	Smith	U.S. Environmental Protection Agency, Region IX		San Francisco	CA
Mr.	Wayne	White	U.S. Fish & Wildlife Service	Ecological Services	Sacramento	CA
			Military			
Mr.	Pat	O'Brien	U.S. Dept. of Defense	Office of Economic Adjustment	Arlington	VA
Mr.	Paul	Ryeff	U.S. Dept. of Defense	Office of Economic Adjustment	Sacramento	CA
District Engineer			U.S. Army Corps of Engineers		San Francisco	CA
District Engineer			U.S. Army Corps of Engineers	Attn: CESPK-PM-M	Sacramento	CA
			Defense Technical Information Center	DTIC Customer Service Help Desk (DTIC-BLS)	Ft. Belvoir	VA
Env. Planning Manager	Gary	Munekawa	US Navy	EFA West, Code 1852	San Bruno	CA
Code N45, Environmental Programs			US Navy	COMNAVBASE San Diego	San Diego	CA
			State Agencies			
Mr.	Bob	Fletcher	CA Air Resources Board		Sacramento	CA
			CA Dept. of Conservation	Division of Mines & Geology	San Francisco	CA
Mr.	Ken	Trott	CA Dept. of Conservation	Office of Land Conservation	Sacramento	CA
Program Coordinator	Dennis	O'Bryant	CA Dept. of Conservation		Sacramento	CA
Mr.	Pete	Phillips	CA Dept. of Fish & Game	Environmental Services Division	Sacramento	CA
Mr.	Brian	Hunter	CA Dept. of Fish & Game	NW Region 3	Yountville	CA

Title	First	Last	Organization	Branch	City	State
Director			CA Dept. of Fish & Game		Sacramento	CA
Mr.	Douglas	Wickizer	CA Dept. of Forestry		Sacramento	CA
Mr.	Jerome	Lucas	CA Dept. of Health Services	Office of Noise Control	Berkeley	CA
Mr.	Steve	Hsu	CA Dept. of Health Services	Radiological Health Dept.	Sacramento	CA
Director			CA Dept. of Health Services		Sacramento	CA
Mr.	Ken	Pierce	CA Dept. of Parks & Recreation	Resource Management Division	Sacramento	CA
	Terry	Barrie	CA Dept. of Transportation	Transportation Planning	Oakland	CA
Branch Chief	Phillip	Badal	CA Dept. of Transportation, District 4	Office of Transportation Planning, IGR/CEQA Branch	Oakland	CA
Mr.	Walt	Pettit	CA Dept. of Water Resources		Sacramento	CA
Ms.	Shirley	Buford	CA Environmental Protection Agency	Dept. of Toxic Substance Control	Berkeley	CA
Ms.	Mary Rose	Cassa	CA Environmental Protection Agency		Berkeley	CA
Ms.	Diana	Peebler	CA Environmental Protection Agency	Dept. of Toxic Substance Control, Office of Military Facilities - Reuse Rep.	Sacramento	CA
			CA Environmental Protection Agency		Sacramento	CA
Mr.	Mike	White	CA Labor Foundation		San Francisco	CA
			CA Office of Emergency Services		Pleasant Hill	CA
Mr.	Mike	Chiaritti	CA Office of Planning & Research		Sacramento	CA
Mr.	Tom	Gansbury	CA Regional Water Quality Control Board	Basic Planning Unit	Oakland	CA
Mr.	John	Adams	CA Regional Water Quality Control Board	Land Disposal Section	Sacramento	CA
Ms.	Shin-Rae	Lee	CA Regional Water Quality Control Board		Oakland	CA
			CA State Clearinghouse		Sacramento	CA
Mr.	Dave	Plummer	CA State Lands Commission	Division of Research & Planning	Sacramento	CA
Chief	Jane	Sekelsky	CA State Lands Commission	Division of Land Management	Sacramento	CA
Mr.	Robert	Berry	CA Trade and Commerce		Sacramento	CA
District CEQA Coordinator			CA Dept. of Transportation District #4	Transport Pl Br. 14th Fl.	Oakland	CA
	Chris	Brittle	Metropolitan Transportation Commission	Metro Center	Oakland	CA
Mr.	Craig	Goldblatt	Metropolitan Transportation Commission	Metro Center	Oakland	CA
Mr.	Marc F.	Roddin	Metropolitan Transportation Commission	Metro Center	Oakland	CA
Mr.	Larry	Myers	Native American Heritage Commission	Executive Secretary	Sacramento	CA
Ms.	Shin Rae	Lee	SF Bay Regional Water Quality Control Board		Oakland	CA
Mr.	Vincent	Christian	SF Bay Regional Water Quality Control Board		Oakland	CA
Mr.	Douglas	Wheeler	The Resources Agency		Sacramento	CA
			Regional and Local Agencies			
			AC Transit	Planning & Development Dept.	Oakland	CA
Ms.	Sharon	Banks	AC Transit		Oakland	CA
Mr.	Kenneth	Shieldig	AC Transit	Office of General Council	Oakland	CA
Mr.	Bruce	Kern	Alameda County	Economic Development Director	Oakland	CA

Title	First	Last	Organization	Branch	City	State
			Alameda County	Mosquito Abatement District	Hayward	CA
Planning Director			Alameda County	Planning Department	Hayward	CA
	Rohin	Saleh	Alameda County	Public Works	Hayward	CA
Ms.	Jean	Hart	Alameda County	Congestion Management Agency	Oakland	CA
Ms.	Patricia	Perry	Association of Bay Area Governments		Oakland	CA
Planning Director	Gary	Binger	Association of Bay Area Governments		Oakland	CA
	Terry	Bursztynsky	Association of Bay Area Governments		Oakland	CA
Executive Director	Eugene	Leong	Association of Bay Area Governments		Oakland	CA
Ms.	Margaret	Pryor	BART		Oakland	CA
Mr.	Richard	White	BART		Oakland	CA
Mr.	Jeff	Ordway	BART District Planning		Oakland	CA
Co-Chair	Albert	DeWitt	Base Reuse Group		Alameda	CA
Supervising Environmental Planner	Niko	Letunic	Bay Area Air Quality Management District		San Francisco	CA
Mr.	Milton	Feldstein	Bay Area Air Quality Management District		San Francisco	CA
Planning Director	Colette	Meunier	City of Alameda	Planning Department	Alameda	CA
Director			City of Berkeley	Planning Department	Berkeley	CA
Planning Director	Claudia	Cappio	City of Emeryville	Planning Department	Emeryville	CA
Mr.	Patrick	Guiboa	City of Fremont	Employment Development Department	Fremont	CA
Planning Director	Bruce	Allred	City of Hayward	Planning Department	Hayward	CA
Ms.	Jayne	Becker	City of Oakland		Oakland	CA
Mr.	Ralph	Wheeler	City of Oakland	City Attorney's Office	Oakland	CA
Mr.	Robert	Bobb	City of Oakland	City Manager	Oakland	CA
Director			City of Oakland	Development Services Department	Oakland	CA
Fire Marshal	Jerry	Blueford	City of Oakland	Fire Department	Oakland	CA
Fire Chief			City of Oakland	Fire Department	Oakland	CA
Mr.	Andrew	Altman	City of Oakland	CEDA	Oakland	CA
Ms.	Anu	Raud	City of Oakland	CEDA	Oakland	CA
Mr.	Willie	Yee	City of Oakland	CEDA	Oakland	CA
Mr.	Anthony	Batarse, Jr.	City of Oakland	Planning Commission	Oakland	CA
Ms.	Linda	Bytof	City of Oakland	Planning Commission	San Francisco	CA
Mr.	Les	Hausrath	City of Oakland	Planning Commission	Oakland	CA
Ms.	Glen	Jarvis	City of Oakland	Planning Commission	Berkeley	CA
Mr.	Anthony	Pegram	City of Oakland	Planning Commission	Oakland	CA
Mr.	Vincent	Reyes	City of Oakland	Planning Commission	Oakland	CA
Mr.	Frazier	Scurry-Scott	City of Oakland	Planning Commission	Oakland	CA
Police Chief			City of Oakland	Police Department	Oakland	CA
Community Services Division			City of Oakland	Police Department	Oakland	CA
			City of Oakland	Police Department	Oakland	CA
				Public Works Dept.	Oakland	CA
Manager	Frank	Fanelli	City of Oakland	Real Estate	Oakland	CA
			City of Oakland		Oakland	CA
CEDA	Kent	Sims	City of Oakland		Oakland	CA
Planning Director			City of Piedmont		Piedmont	CA
Director	James	Farah	City of Richmond	Planning Department	Richmond	CA
Planning Director			City of San Francisco	City Planning	San Francisco	CA
Planning Director	Stephen	Emslie	City of San Leandro	Planning Division	San Leandro	CA
Director	Craig	Monroe	City of San Pablo	Planning Department	San Pablo	CA
Planning Director			City of South San Francisco	City Planning Division	S. San Francisco	CA

Title	First	Last	Organization	Branch	City	State
Community Development Director	Harvey	Bragdon	Contra Costa County		Martinez	CA
Planning Director			Contra Costra County	Community Development Department	Martinez	CA
Senior Civil Engineer	Prab	Jog	East Bay Municipal Utility District		Oakland	CA
Manager of Water Distribution Planning			East Bay Municipal Utility District, M/S 701		Oakland	CA
Ms.	Susan	Smart	East Bay Regional Park District	Finance and Legislation	Oakland	CA
Ms.	Gladys	Green	Elmhurst District Board		Oakland	CA
Mr.	Dywane	Land	Landmarks Preservation	Advisory Board	Oakland	CA
			Oakland Base Reuse Authority		Oakland	CA
Mr.	Henry	Gardner	Oakland Base Reuse Authority		Oakland	CA
Executive Director	Paul	Nahm	Oakland Base Reuse Authority		Oakland	CA
			Oakland Chamber of Commerce		Oakland	CA
Chair, Employment & Social Committees	Gay Plair	Cobb	Oakland Private Industry Council		Oakland	CA
Ms.	Marilyn	Handis	Oakland Private Industry Council		Oakland	CA
Ms.	Toni	McElroy	Oakland Private Industry Council		Oakland	CA
Facilities Director			Oakland Unified School District		Oakland	CA
Mr.	Robert	Dias	Oakland Unified School District		Oakland	CA
Superintendent	Carolyn	Getridge	Oakland Unified School District		Oakland	CA
Mr.	Mark	Beratta	Office of Economic Development and Employment		Oakland	CA
	Aliza	Gallo	CEDA		Oakland	CA
Manager	Lonnie	Carter	Office of Housing & Neighborhood Development.	Program Development. & Coordinator	Oakland	CA
Director	Tony	Acosta	Office of Parks and Recreation		Oakland	CA
	Brooke	Levin	Office of Public Works	Environmental Affairs	Oakland	CA
Director	Terry	Roberts	Office of Public Works		Oakland	CA
Ms.	Lorraine	Giordano	Port of Oakland	East Bay Conversion & Reinvestment Commission	Oakland	CA
Mr.	James	McGrath	Port of Oakland	Environmental Division	Oakland	CA
Executive Director	Charles	Foster	Port of Oakland		Oakland	CA
Mr.	Carl	Bobino	Public Health Department		Oakland	CA
			Organizations			
Ms.	Lorine	Hesleph	Ackland International, Inc		Oakland	CA
Ms.	Lavern	Holmes	Apricot Street Home Alert		Oakland	CA
			ARC Ecology		San Francisco	CA
			Asian Immigrant Workers Advocates		Oakland	CA
			Asian Pacific Environmental Network		Oakland	CA
Mr.	Rodger	Shepherd	Associated Residents of Sequoyah Highlands, Inc.		Oakland	CA
Mr.	Austin	Penny	Austin Penny & Associates		Oakland	CA
Ms.	Ellen	Johnck	Bay Planning Coalition		San Francisco	CA
Mr.	Frank	Gilbert	Brookfield Home Improvement Association		Oakland	CA
			CA Council for Environmental. and Economic. Balance		San Francisco	CA
			CA Environmental Trust		San Francisco	CA
			CA Native Plant Society	East Bay Chapter	Berkeley	CA
			CA Network for a New Economy		San Francisco	CA
Ms.	Karen	Crit	California Research Bureau		Sacramento	CA
			Center for Economic Conversion		Mountain View	CA
Mr.	Ben	Littles	Chabot Park Estates		Oakland	CA

Title	First	Last	Organization	Branch	City	State
Ms.	Nancy	Van Huffel	Chabot Park Highlands Homeowners Association		Oakland	CA
Ms.	Ethel	Oliver	Concerned Citizens of South Eastmont		Oakland	CA
Mr.	Alfred	Blunt	Crest Avenue Homeowners Association		Oakland	CA
Ms.	Winifred	Walsh	Durant Park Highlands		Oakland	CA
Ms.	Martha	Matsuoka	Earth Island Institute	Urban Habitat Program	San Francisco	CA
Ms.	Wenona	Wilson	Earth Island Institute	Urban Habitat Program	San Francisco	CA
Mr.	Henry	Hemphill	Eastmont Mall		Oakland	CA
Mr.	Charles	Hill	Elmhurst Merchant Association		Oakland	CA
Ms.	Mary Jane	Gallagher	Environmental Defense Fund		Oakland	CA
			Golden Gate Audubon Society		Berkeley	CA
			Greenpeace		San Francisco	CA
Mr.	Virgil W.	Eaton	Hillcrest Court Homeowners Association		Oakland	CA
Mrs.	Robert H.	Hadley	Hillcrest Estates Improvement Association		Oakland	CA
Ms.	Sandra	Taylor	Hillcrest Estates Improvement Association		Oakland	CA
Mr.	Jeffrey E.	Frazen	Hill Area Coalition Homeowners Association		Oakland	CA
Ms.	Sonja	Proulx	Homeowners of Crestmont Association		Oakland	CA
Co-Chair, Land Reuse	Frank	Dobson	Jordon, Woodman, Dobson		Oakland	CA
Mr.	Michael	Rawson	Legal Aid Society		Oakland	CA
Mr.	Gordon L.	Laverty	Leona Heights Improvement Association		Oakland	CA
Ms.	Shirley	Ware	Local 250		Oakland	CA
Mr.	Bruce	Thompson	Metropolitan Horsemans Association		Oakland	CA
			Military Toxics Project		San Francisco	CA
Mr.	Harvey M.	Franklin	Mills Neighborhood Home Alert Association		Oakland	CA
Ms.	Diane	Daley-Smith	Montclarion		Oakland	CA
Mr.	Bill	Pesonen	Montebello Terrace Homeowners Association		Oakland	CA
			National Rifle Association		Sacramento	CA
Mr.	Hal	Candee	Natural Resources Defense Council		San Francisco	CA
			Nature Conservancy		San Francisco	CA
	Harold	Logwood	Northern California MBOC		Oakland	CA
Mr.	Russell L.	Moran	Oak Knoll Businesses		Oakland	CA
Ms.	Sharon	Robinson	Oak Knoll Estates		Oakland	CA
	Melvin	Gage	Oak Knoll Heights Townhomes Association		Oakland	CA
Ms.	Nancy	McDowell	Oak Knoll Heritage Committee		Oakland	CA
Mr.	Glen	Daniel	Oak Knoll Homeowners Improvement Association		Oakland	CA
Ms.	Barbara	Sutherland	Oak Knoll Kings Estates		Oakland	CA
Ms.	Laura	Dreyer	Oak Knoll Neighbors		Oakland	CA
Ms.	Melody	Marr	Oakland Airport Center, Inc.		Oakland	CA
Ms.	Deborah	Muse	Oakland Community Development District, Central East Oakland		Oakland	CA
Ms.	Gladys	Green	Oakland Community Development District, Elmhurst		Oakland	CA
	Chris	Pattillo	Oakland Design Advocates		Oakland	CA
Mr.	Ken	Ryan	Oakland Design Advocates		Oakland	CA
			Oakland Heritage Alliance		Oakland	CA
Mr.	David	MacDonald	Oakland Waste Management		Oakland	CA
Ms.	Leola	Terry	Organized People of Elmhurst Neighborhood Association		Oakland	CA

Title	First	Last	Organization	Branch	City	State
Mr.	Michael	Schonherr	Pacific Gas & Electric		San Francisco	CA
Ms.	Jane	Yura	Pacific Gas & Electric		Oakland	CA
Mr.	Donald R.	Binggeli	Parkside Estates Improvement Association		Oakland	CA
Mr.	Owen	Byrd	People for Open Space-Greenbelt Alliance		San Francisco	CA
Mr.	Mike	Boyle	Redwood Creek Village Neighborhood Association		Oakland	CA
Ms.	Mary M.	O'Toole	Redwood Heights Improvement Association		Oakland	CA
Mr.	Patrick	Nunar	Redwood Hills Homeowners Association		Oakland	CA
Ms.	Pat	Marsh	Ridgemont at Skyline Condominiums		Oakland	CA
Mr.	Larry	Robbin	Robbin & Associates		Oakland	CA
Ms.	Helen	Lore	Sequoyah Highlands		Oakland	CA
Ms.	Sandra	Marburg	Sequoyah Highlands		Oakland	CA
Mr.	Rodger	Shepherd	Sequoyah Highlands		Oakland	CA
Mr.	James H.	Haskins	Sequoyah Hills Homeowners Association		Oakland	CA
Ms.	Barbara	Bray	Sequoyah Hills/Oak Knoll Association		Oakland	CA
			Sierra Club	San Francisco Bay Chapter	Oakland	CA
			Social Economic Environmental Justice Advocates		San Francisco	CA
Mr.	Oscar	Montgomery	Stonehurst Homeowners and Renters Association		Oakland	CA
Ms.	Therea	Hughes	Theresa Hughes & Associates		Oakland	CA
Co-Chair, Housing & Homeless	Joseph	Newman	Toler Heights		Oakland	CA
Ms.	Eunice	Robinson	Toler Heights Citizens Council		Oakland	CA
Ms.	Carol	Watson	United Way		Oakland	CA
Ms.	Jacquee	Castain	Webster Tract Neighbors		Oakland	CA
			Individuals			
Mr.	Walter	Allen			Oakland	CA
Mr.	Paul	Allegro			Oakland	CA
Ms.	Thordie	Ashley			Oakland	CA
Mr.	Paul	Aubery			Oakland	CA
	Lisa & Mike	Baeta			Oakland	CA
Ms.	Arlene	Bautista			Oakland	CA
Ms.	Mary	Bergman			Oakland	CA
Mr.	Ken	Berick			San Leandro	CA
Ms.	Sandi	Bethune			Oakland	CA
	Joann & Paul	Bierman			Oakland	CA
	Marilyn & Arden	Bishop			Oakland	CA
Ms.	Roberta	Bodine			Oakland	CA
Mr.	Nat	Bornor			Oakland	CA
Ms.	Mary	Borrelli			Oakland	CA
Mr.	Mark	Braly			Sacramento	CA
Ms.	Valerie	Brice			Oakland	CA
	Amelie & Cordell	Brown			Oakland	CA
	Richard & Gertrude	Brown			Oakland	CA
Mr.	Ron	Brown			Oakland	CA
Mr.	Tony	Cabrera			Oakland	CA
Chairperson	Rosemary	Cambra	Muwekma Indian Tribe		San Jose	CA
Ms.	Claire	Canning			Oakland	CA
Mr.	Ed	Carlson			Oakland	CA
Ms.	Jacquee	Castain			Oakland	CA

Title	First	Last	Organization	Branch	City	State
Mr.	Peter	Cheng			San Francisco	CA
Ms.	Pamela	Clark			Oakland	CA
Ms.	Colleen F.	Clay			Oakland	CA
Ms.	Shirley	Coaston			Oakland	CA
	Lester and Connie	Cobb			Oakland	CA
Mr.	Glen	Coddington			Oakland	CA
Ms.	Diane	Coffee			Oakland	CA
	Zommei	Collins			Oakland	CA
Ms.	Rosselyn	Combs			Oakland	CA
Mr.	Noel	Cook			Oakland	CA
Mr.	Stephen	Cowan			Oakland	CA
Ms.	Mary	Crawford			Oakland	CA
Ms.	Valerie	Crawford			Oakland	CA
	Barbara & Kermit	Cross			Oakland	CA
Ms.	Lorna	Dare			Oakland	CA
Mr.	John	Davis			Oakland	CA
Ms.	Elaine	De Coligny			Oakland	CA
	Myrkle	Deaton			Oakland	CA
Mr.	Bill	Dehn			Oakland	CA
	C.E.	Dickie			Oakland	CA
Ms.	Sylvena Hoff	Dornet			Oakland	CA
	L.E.	Douchard			Oakland	CA
Ms.	Susan	Duncan			Oakland	CA
	Onnil	Durst			Berkeley	CA
Ms.	Susan	Feller			Oakland	CA
Ms.	Sheila	Findley			Oakland	CA
	Meilian	Flannagan			Oakland	CA
Ms.	Stephanie	Fleming			Oakland	CA
Mr.	Ross	Flewelling			Oakland	CA
Mr.	Herb	Floriani			Oakland	CA
Ms.	Melanie	Fong			Oakland	CA
Mr.	Jeff	Franha			Oakland	CA
Ms.	Evelyn	Franke			Oakland	CA
Mr.	Melvin	Gage			Oakland	CA
	David & Jean	Galant			Oakland	CA
	Pat	Gallagher			Oakland	CA
Ms.	Barbara	Geiy			Oakland	CA
Mr.	John	Gezelle			Oakland	CA
Mr.	Michael	Giampaeli			Castro Valley	CA
Ms.	Margaret	Glyer			Oakland	CA
	Gerald & Monica	Green			Oakland	CA
Mr.	Cecil	Grimes			Oakland	CA
Mr.	Sylvester	Grisby			Oakland	CA
	Thelma & Rob	Groeschel			Oakland	CA
Mr.	Elmer	Haberman			San Lorenzo	CA
	Joe & Laurie	Hadley			Oakland	CA
Mr.	Louis	Hal			Oakland	CA
Mr.	Henry	Hamphill			Oakland	CA
	A.M.	Hardenstine			Oakland	CA
Ms.	Mable	Henderson			Oakland	CA
Mr.	Larry	Hill			Oakland	CA
Mr.	Sylvester	Hodges			Oakland	CA
Ms.	Gaile	Hofmann			Oakland	CA
Ms.	Phyllis	Holmlund			Oakland	CA
Ms.	Hazel	Houston			Oakland	CA
Ms.	Mary	Hunt			Oakland	CA
Ms.	Celeste	Hunter			Oakland	CA
Ms.	Doris	Huntting			Oakland	CA
Ms.	Lynne	Huntting			Oakland	CA
	Noel	Hyde			Oakland	CA

Title	First	Last	Organization	Branch	City	State
Ms.	Claudette	Inge			Hayward	CA
Ms.	Erika	Jenks			Oakland	CA
Mr.	Howard	Jeter			Berkeley	CA
	Alva	Johnson			Oakland	CA
Mr.	Marc	Johnson			Carmel Valley	CA
Mr.	Tom	Johnson			Oakland	CA
Ms.	Ann	Jones			Oakland	CA
Mr.	Marvin	Jones			Oakland	CA
Ms.	Vivian	Kahn			Oakland	CA
Ms.	Kathryn	Kasal			Oakland	CA
Mr.	Paul	Keener			Oakland	CA
Ms.	Jakki	Kehl			Byron	CA
Ms.	Thelda	King			Oakland	CA
Ms.	Kathleen	Kirkwood			Oakland	CA
Ms.	Deena	Lahn			Oakland	CA
Co-Chair	Jim	Lamenti			Concord	CA
Ms.	Marie	Lawrence			Oakland	CA
	Leonard & Betty	Leath			Oakland	CA
Mrs.	Toni	Lemus			Oakland	CA
	Bill & Naomi	Lentz			Oakland	CA
Mr.	Nolan	Lew			San Francisco	CA
Ms.	Irene	Litherland			Oakland	CA
	Clark & Marguerite	Lowe			Oakland	CA
Mr.	Barry	Luboviski			Oakland	CA
Ms.	Joyce	Mack			Oakland	CA
Mr.	Ricky	Maeren-Beweden			Oakland	CA
	Pat	March			Oakland	CA
Ms.	Andree	Marechal-Workman			Oakland	CA
	Lucelle & Chris	Martin			Oakland	CA
Mr.	Freddie	Martin Jr.			Oakland	CA
Mr.	Frank	Matoces			Oakland	CA
	Una & Mac	McCarty			Oakland	CA
Ms.	Heather	McCulloch			Oakland	CA
Mr.	Alex	McElree			Oakland	CA
Mr.	William	McFerren			Oakland	CA
Ms.	Alda	McNichol			San Lorenzo	CA
Ms.	Clara	Mechan			Oakland	CA
	Dorothy & Richard	Meissner			Oakland	CA
Mr.	Geoff	Merideth			San Francisco	CA
Mr.	Jerry	Metz			Castro Valley	CA
Ms.	Eleanor	Monwell			Oakland	CA
Mr.	John	Moran			Oakland	CA
Ms.	Mayme	Murphy			Oakland	CA
	Uhib	Nanlohy			Oakland	CA
Ms.	Deborah	Neal			Oakland	CA
Ms.	Margaret	Nelson			Oakland	CA
Mr.	Richard	Neveln			Oakland	CA
Mr.	Jack	Nicholson			Oakland	CA
Mr.	John	Nisby			Lodi	CA
Mr.	Francois	Njike			Oakland	CA
Ms.	Gloria	Oliver			Oakland	CA
	Shirley & Bob	Olofson			Oakland	CA
Mr.	Peter	Palm			Oakland	CA
Mr.	Ken	Pementell			Oakland	CA
Ms.	Versa	Perkins			Oakland	CA
Mr.	Tom	Peterson			Orinda	CA
	Preston & Freda	Pleasants			Oakland	CA
	Leo & Helen	Quakenbush			Oakland	CA

Title	First	Last	Organization	Branch	City	State
Mr.	Herb	Queller			Oakland	CA
Mrs.	Eugene	Rainbow			Sunnyvale	CA
Mr.	Ron	Ratto			Oakland	CA
Ms.	Diana	Raulsten			Oakland	CA
Mr.	Robert	Reese			Oakland	CA
Mr.	Dan	Richardson			Castro Valley	CA
Ms.	Kerry Jo	Ricketts			Oakland	CA
Ms.	Lucille	Robbins			Hayward	CA
Ms.	Sharon	Robinson			Oakland	CA
Ms.	Rita	Robrich			Oakland	CA
Ms.	Lydia	Rocha			Oakland	CA
Ms.	Ella Mae	Rodriguez			Seaside	CA
Mr.	Eddie N.	Rogers			San Francisco	CA
	Inman	Rouice			Oakland	CA
Ms.	Betty	Roure			Oakland	CA
Mr.	Bill	Russell			Oakland	CA
Mr.	Johnathan	Sachs			Oakland	CA
Mr.	Lars	Sandstrom			Oakland	CA
Chairperson	Ann Marie	Sayer	Indian Canyon Mutsun Band of Costanoan		Hollister	CA
Ms.	Christa	Schreiber			Oakland	CA
	E.	Seaman			Oakland	CA
Ms.	Kristina	Seher			Berkeley	CA
Mr.	Alan	Sherman			San Leandro	CA
Ms.	Dorothy	Shogren			Oakland	CA
	Arletta and Charles	Smith			Oakland	CA
Ms.	Lee Ann	Smith			Oakland	CA
Mr.	Lincoln	Smith			Oakland	CA
Mr.	Steve	Stallone			Oakland	CA
Mr.	John	Steinfirst			Oakland	CA
Mr.	Patrick	Stoute			Oakland	CA
Mr.	Ralph	Tate			Oakland	CA
Ms.	Gloria	Taylor			Oakland	CA
Ms.	Leon	Taylor			Oakland	CA
	M	Taylor			Oakland	CA
Mr.	James V.	Thomas			Oakland	CA
Ms.	Judith	Thomas			Oakland	CA
Mr.	Hadwick & Lily	Thompson			Oakland	CA
Ms.	Eleis	Thornton			Oakland	CA
Mr.	Robert L.	Toney			Oakland	CA
Ms.	Audrey	Tolbert			Oakland	CA
Mr.	Michael	Torrey			Alameda	CA
	Louise & Joseph	Troulx			Oakland	CA
Mr.	Thomas R.	Tryon			Oakland	CA
Mr.	Clark	Tucker			Oakland	CA
Ms.	Yvonne	van Leeuwen			Oakland	CA
Ms.	Vicki	Vrankovich			Oakland	CA
	Scott & Barbara	W			Oakland	CA
Mr.	Dan	Walker			Oakland	CA
	Raber	Wharton			Oakland	CA
Mr.	Martin	White			Oakland	CA
Mr.	Josef	Williams			Oakland	CA
Mr.	John	Willis			Oakland	CA
Mr.	Charles	Wilson			Oakland	CA
Mr.	Henry	Winston			Oakland	CA
	Loren	Worm			Oakland	CA
Ms.	Jill	Wyuns			Hayward	CA
Ms.	Carolyn	Younger			Oakland	CA

Title	First	Last	Organization	Branch	City	State
			Libraries			
Mr.	Fred	Schmidt	Colorado State University		Fort Collins	CO
			Oakland Public Library	Eastmont Branch	Oakland	CA
			Oakland Public Library	Main Library	Oakland	CA
			Oakland Public Library	Montclair Branch	Oakland	CA
			San Leandro Main Library		San Leandro	CA
			Newspapers			
			KTVU Television		Oakland	CA
			Oakland Tribune	City Desk	Oakland	CA
			San Francisco Chronicle	News Room	San Francisco	CA
			The Montclarion	News Room	Oakland	CA
			Oak Knoll Newsletter Hotline			

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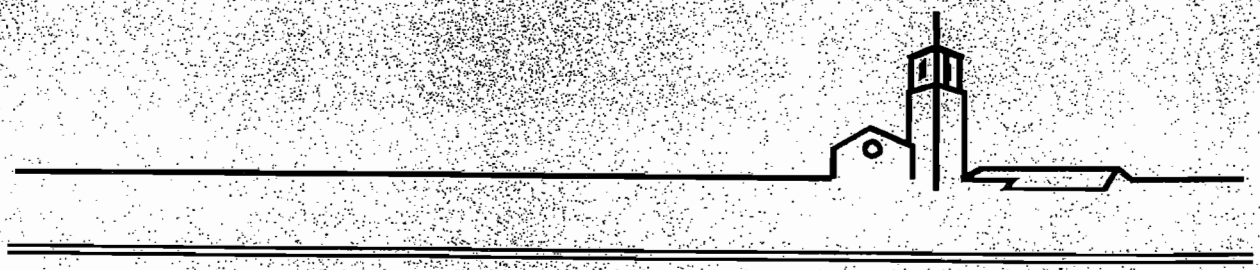


COMMENTS AND RESPONSES

RESPONSE TO COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT/ENVIRONMENTAL IMPACT REPORT FOR THE DISPOSAL AND REUSE OF NAVAL MEDICAL CENTER OAKLAND

Response to Comments on the Draft Environmental Impact Statement/Environmental Impact Report

The Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Disposal and Reuse of Naval Medical Center Oakland was circulated for public and agency review from October 11, 1996, to November 27, 1996. The lead agencies, the US Department of the Navy and the City of Oakland, held a public hearing on November 13, 1996, to provide the public with an opportunity to comment on the content and accuracy of the Draft EIS/EIR. In addition, written comments were accepted throughout the review period.

In accordance with National Environmental Policy Act (NEPA) regulations and guidelines for the California Environmental Quality Act (CEQA), the Final EIS/EIR will provide responses to comments on the Draft EIS/EIR (40 CFR 1503.4; CEQA Guidelines § 15132). In compliance with those regulations and guidelines, this section of the Final EIS/EIR includes a list of agencies, organizations, and individuals commenting on the Draft EIS/EIR, comment letters, and responses to the substantive environmental issues raised in the comments. Responses to comments raised at the public hearing also are included. If a comment did not relate to an environmental issue or was worded more as a statement to be entered into the record, it was indicated by the response "comment noted."

Although more detailed quantitative analysis was performed in response to comments regarding potential transit and congestion management and secondary noise and air quality considerations, except for the PM_{10} analysis, no new significant and not mitigable impacts were identified, nor was there an increase in the severity of previously identified impacts. In short, the more detailed quantitative analysis confirms the analysis and conclusions in the Draft EIS/EIR; the Draft EIS/EIR is not required to be recirculated except for the PM_{10} analysis which required recirculation under CEQA only.

Response to Comments on California Environmental Quality Act Recirculation of New Significant Information Regarding Fine Particulate Matter (PM_{10})

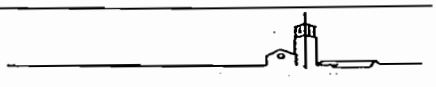
A response to comments on the recirculation under the California Environmental Quality Act of new information regarding fine particle emissions (PM_{10}) prior to distribution of the Final EIS/EIR is given at the end of this section. The recirculation letter and attachment is provided before the response to comments on the recirculation.

Response to Comments on California Environmental Quality Act Recirculation of New Significant Information Regarding Fine Particulate Matter (PM_{10}) and Ozone Precursors

A response to comments on the recirculation under the California Environmental Quality Act of new information regarding fine particle emissions (PM_{10}) and ozone precursors prior to distribution of the Final EIS/EIR is given at the end of this section. The recirculation letter and attachment is provided before the response to comments on the recirculation.

Response to Comments on Draft Environmental Impact Statement/Environmental Impact Report

Response to Comments on California Environmental Quality Act Recirculation of New Significant Information Regarding Fine Particulate Matter (PM_{10})



Response to Comments on California Environmental Quality Act Recirculation of New Significant Information Regarding Fine Particulate Matter (PM_{10}) and Ozone Precursors

RESPONSE TO COMMENTS ON DRAFT ENVIRONMENTAL IMPACT STATEMENT/ ENVIRONMENTAL IMPACT REPORT

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Letter A

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
600 Harrison Street, Suite 515
San Francisco, California 94107-1376

December 12, 1996

ER 96/690

U.S. Navy
Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-5006
Attn: Mr. Gary Munekawa, Code 1852GM

Dear Mr. Munekawa:

A-1 The Department of the Interior has reviewed the Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR)for the Disposal and Reuse of Naval Medical Center, Oakland, Alameda County, California, and has no comments to offer.

Thank you for the opportunity to comment on this document.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc: Director, OEPC (w/orig. incoming)
Regional Director, FWS, Portland

Response to Comments

Response to Comment A-1. Comment noted. Thank you.

Letter B

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

NOV 2 7 1996

Mr. Gary Munekawa (Code 1852.GM)
U.S. Navy
Engineering Field Activity West
900 Commodore Drive
San Bruno, California 94066-5006

Dear Mr. Munekawa:

The Environmental Protection Agency (EPA) has received the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Disposal and Reuse of Naval Medical Center Oakland, Alameda County, California. Our review is based on the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) NEPA Implementation Regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act (CAA).

The EIS/EIR evaluates the proposed disposal of federal surplus property at the Naval Medical Center Oakland (NMCO) site and its subsequent reuse. Potential reuse impacts are projected to 2020.

2

The facility was closed in September, 1996 and is currently under caretaker status. Remediation of site hazardous materials and contamination is on-going and would be completed prior to site transfer. The 183-acre medical center site is developed with approximately 90 structures, including a main hospital and 38 residential buildings. Situated on sloping terrain, the NMCO site is bounded by Mountain Boulevard and Interstate Route 580 to the west, and by residential neighborhoods elsewhere.

Future site uses have been identified by the Oakland Base Reuse Authority (OBRA), which adopted a formal reuse plan in August 1996. The plan, designated the "Maximum Capacity Alternative" in the EIS/EIR, includes 250 units of single- and multi-family housing, 40 acres of commercial and corporate uses, and cultural and recreational uses. Other alternatives include a "Mixed Use Village Alternative," a Single Use Campus Alternative, a "Residential Alternative," and a "No Action Alternative."

B-1

Based upon our review, we have rated the Draft EIS/EIR EC-2, Environmental Concerns - Insufficient Information (see attached *Summary of the EPA Rating System*). This rating reflects our conclusion that the Draft EIS/EIR should provide additional information, including: further clarification between the NEPA and CEQA roles in the analysis; additional biological and water resources information; and, further refinement of some proposed mitigation measures. Our detailed comments are enclosed.

Response to Comments

Response to Comment B-1. Comment noted. Please see responses to comments B-3 through B-17 for a discussion clarifying NEPA and CEQA roles, additional biological and water resources information, and the refinement of some mitigation measures. Thank you.

We commend the Navy for preparing a generally well-written and organized report. We particularly appreciate the use of clear significance criteria, impact and mitigation statements and integrated impact summary tables throughout the document. We B-2 appreciate the opportunity to comment on the proposed project and request that you provide this office (mail code E-3) with two copies of the Final EIS/EIR at the same time it is filed with our Washington, D.C. office. If you have any questions or wish to discuss any aspect of our comments, please contact me at (415) 744-1584 or Jeff Philliber of my staff at (415) 744-1574.

Sincerely,

David J. Farrel, Chief
Federal Activities Office

2525nmco.ds.jp
Enclosures: (2)

3

Response to Comment B-2. Comment noted. Two copies will be provided as requested.

EPA COMMENTS, NAVY DRAFT EIS/EIR, NMCO DISPOSAL AND REUSE, ALAMEDA COUNTY, CALIFORNIA, NOVEMBER 27, 1996

NEPA

B-3 1. Pages ES-2, 1-5, 1-11, 2-5: The Draft EIS/EIR reports that "the NEPA federal action evaluated ... is the disposal of federal surplus property at the NMCO site, while the local CEQA project evaluated is the proposed reuse of the NMCO site." This implies a limit on the federal government's environmental consequences responsibilities for the proposed action. NEPA stipulates that the EIS should include discussions of direct and indirect effects [40 CFR Part 1502.16 (a) and (b)]. "Indirect effects" are those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems." [40 CFR Part 1508.8 (b)] The Final EIS/EIR should clarify the federal government's role and responsibilities for reuse-related (indirect) effects under NEPA.

B-4 2. Page 2-5: The Draft EIS/EIR No Action Alternative is the same for both disposal and reuse actions--the alternative evaluates NMCO "in caretaker status, closed but remaining in federal ownership." The Final EIS/EIR should include explanation as to why a no action alternative specific to the reuse action (i.e., one that assumes disposal and transfer but not substantial development) was not developed and analyzed.

B-5 3. Page 4-57: Refer to Biological Resources comment #4, below.

B-6 4. Page 5-25: Refer to Public Services and Utilities comment #2, below.

BIOLOGICAL RESOURCES

B-7 1. Pages 4-29, 4-30, 4-31, 4-34, 4-55: Refer to Public Services and Utilities comment #1, below.

B-8 2. Pages 4-56, 4-58, 4-59, 4-61: In order to mitigate potentially significant biological resource impacts to the site's riparian corridor, the Draft EIS/EIR declares that a 50-foot wide, restricted access buffer zone should be used to protect the Rifle Range Creek riparian area during demolition and construction activities. Final EIS/EIR mitigation measures should extend similar protection to this

Response to Comment B-3. The introduction to Chapter 4 of the EIS/EIR was revised to clarify the Navy's roles and responsibilities for addressing indirect reuse-related impacts. The following paragraph was inserted immediately preceding the final paragraph of the introduction to Chapter 4:

> For purposes of the Navy's NEPA analysis, environmental impacts associated with implementation of the reuse alternatives are considered indirect environmental impacts. The Navy's role and responsibilities for disclosing indirect reuse-related environmental impacts is to address reasonably foreseeable impacts. However, property reuse will occur after it is transferred from federal ownership and in support of local reuse actions. Implementation of mitigation measures for reuse environmental impacts is a local responsibility and not the responsibility of the Navy.

Response to Comment B-4. The following text was inserted as the second paragraph of Section 2.3.6:

> A No Action Alternative of Navy property disposal to the City of Oakland or other entity with no subsequent community reuse would have the same environmental impacts as the Navy No Action Alternative except that the new owner would be responsible for providing caretaker services. Therefore, a separate alternative describing a No Action reuse was unnecessary. Although the project objective, costs, and jurisdictional responsibilities would differ administratively from Navy caretaker status, the site would be in an equivalent status for CEQA purposes, and impacts would be the same

B-8 area permanently. Otherwise, post-construction activities and land use could result in significant, adverse effects to this resource.

B-9 3. Page 4-57: As mitigation to protect the site riparian corridor, the Draft EIS/EIR stipulates that a detailed habitat restoration plan be developed by the project applicant. The Final EIS/EIR should specify that a qualified biologist be retained by the applicant to devise such a plan.

B-10 4. Page 4-57: The Draft EIS/EIR reads that "for CEQA purposes only, removal of nonsensitive species of trees protected under the City of Oakland Tree Ordinance would be considered a significant and mitigable impact." Although it is correct that CEQA (rather than NEPA) is the appropriate regulatory vehicle through which Oakland's Tree Ordinance should be observed in this analysis, NEPA nevertheless concerns itself with the environmental effects of any proposed tree removal associated with this project. This should be clarified in the Final EIS/EIR.

B-11 5. Pages 4-62 - 63: In order to offer more effective protection of site wetlands, the Final EIS/EIR should provide that the proposed 50-foot wide restricted corridor for Rifle Range Creek be expanded, as necessary, to encompass any out-lying wetlands and upland drainage areas, as appropriate.

WATER RESOURCES

B-12 1. Pages 4-66, 4-68, 4-70, 4-71: The Draft EIS/EIR reports that the various alternatives would result in a net decrease in paved area on the site, but does not indicate what that area would be. The Draft EIS/EIR adds that this reduction would "probably help to reduce peak storm discharges to Rifle Range Creek." The Final EIS/EIR should include estimates for surface coverage to help decisionmakers assess this potentially beneficial impact.

GEOLOGY AND SOILS

B-13 1. Pages 4-74, 4-76, 4-77, 4-78: The Draft EIS/EIR reports that "for purposes of CEQA only, increasing the number of people and structures present on the NMCO (under the various reuse alternatives) is considered a significant and mitigable impact." While we agree that such an impact is

as projected under the No Action Alternative.

Response to Comment B-5. Comment noted. Please see response to Comment B-10, below.

Response to Comment B-6. Comment noted. Please see response to Comment B-17, below.

Response to Comment B-7. Comment noted. Please see response to Comment B-16, below.

Response to Comment B-8. The restricted access buffer zone is intended to be a permanent zone of protection through reuse plan implementation and to be incorporated into later specific plan development proposals. The second sentence of each "Mitigation 1" in Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 was modified to state:

> Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor.

Response to Comment B-9. Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 of the EIS/EIR were revised to state that:

> A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone.

Response to Comment B-10. The Navy has no plans to remove trees under

not specifically addressed under NEPA Guidelines, it should be noted in the Final EIS/EIR that NEPA is primarily
B-13 concerned with public health and welfare, as well as environmental quality [40 CFR Part 1504.1 (b)]. We consider that public safety issues from development near earthquake faults is a NEPA issue in that context.

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

1. Page 4-11: In the significance criteria discussion for socioeconomic impacts, the Draft EIS/EIR reads that action-related "changes in population and housing are considered neither beneficial nor adverse impacts because these changes are the natural consequences of natural fluctuations in the employment level in the region; that is, people follow jobs. Therefore, jobs attract people to move into an area." The
B-14 Final EIS/EIR should clarify this statement. First, designating these project-related changes as "natural" implies that they are not, in fact, project-related. Second, the statement appears not to differentiate between project-related and regionally-induced effects. Finally, the criterion does not acknowledge that changes in population and housing in a given area can indeed result in beneficial or adverse impacts given that such changes would be expected to result in environmental and socioeconomic effects.

B-15 2. Page 5-27: The Final EIS/EIR should define "stable community" as used in its environmental justice analysis.

PUBLIC SERVICES AND UTILITIES

1. Pages 4-29, 4-30, 4-31, 4-34: The Draft EIS/EIR should include discussion as to whether trees, brush and other foliage would be removed for fire-prevention reasons or ordinances. This concern is especially appropriate for this
B-16 site, which is in the Oakland hills and which contains acres of woodlands, grassland, riparian and scrub areas. If such fire-prevention removal would be necessary, it should be identified in both the public services and biological resources impact discussions.

2. Pages 4-125, 4-128, 4-130, 4-133, 5-25: In its public utilities analysis, the Draft EIS/EIR reports that impacts
B-17 to the water distribution system under the various alternatives would be "nonsignificant." The analysis does not discuss the issue of potable water supply, however.

caretaker status. This is not significant for the purposes of NEPA because it addresses single trees not exceeding NEPA significance thresholds. Mitigation measures required under CEQA for any reasonably foreseeable tree removal would require permits for any trees to be removed during reuse. These requirements address tree removal concerns.

Response to Comment B-11. The following paragraph has been added to Section 4.6.8:

> To the fullest extent legally required, the proposed 50-foot wide restricted access corridor for Rifle Range Creek may be expanded, as necessary, to account for the protection of wetlands and important upland drainage areas, as such areas may be affected by subsequent development proposals. Although no upland drainage areas have been identified, subsequent development proposals will need to address this issue if legally required to do so.

Absent identification of any wetlands or important upland drainage areas on-site, this response does not require additional expansion of the recommended 50-foot wide corridor. Future expansion needs will be addressed if such wetlands or areas become evident.

Response to Comment B-12. Actual paved surface area estimates are not available. The following text was added to Sections 4.7.3, 4.7.4, 4.7.5, and 4.7.6, as clarification regarding the effect of estimated paved surface area changes on peak storm discharges:

> An accurate estimate of paved areas with each alternative is not

B-17 This omission is more pronounced because the preceding public utilities issue, landfill capacity supply, is thoroughly discussed. The Final EIS/EIR should include water supply in its analysis of utilities and, more importantly, in its cumulative impacts analysis.

7

available, and is beyond the scope of this program level document. A net decrease in paved surface area is expected with alternatives that allow for increased open space. The difference in paved surface area under different alternatives is illustrated by Figures 2-5, 2-6, 2-7, and 2-8, showing proposed uses of the site. The increased unpaved surface area may increase storm water retention time on the site, thus potentially reducing peak flows downstream of the site. However, Alameda County runoff volume estimates indicated that the net effect would not be significant enough to increase capacities of additional downstream flood mitigation measures already planned by Alameda County (Saleh 1995). This is because the contribution to downstream flood flows from the watershed in which the NMCO site is located is relatively small compared to contributions of adjacent watersheds.

Response to Comment B-13. Seismic impacts were considered nonsignificant impacts under NEPA because no disposal activities proposed in the reuse alternatives would change the potential for earthquakes at the NMCO site. The following text was added as an introduction to each of Sections 4.8.3, 4.8.4, 4.8.5, and 4.8.6, immediately following the heading titled "*Public Exposure to Earthquakes*":

> Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code §§ 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of environmental quality, public health or welfare. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommend for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1-Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

reuse development responsibilities.

Response to Comment B-14. The "natural" terminology was revised to clarify that such population fluctuations are in fact not project-related. In order to differentiate between project-related and regionally induced effects, the first paragraph of Section 4.2.1 was revised to state that:

> Regional changes in population and housing are considered neither beneficial nor adverse impacts. These changes reflect the normal range of fluctuations in population and housing. Population and housing can change in response to several changes in the regional economy. For example, large scale residential projects can attract construction workers in a rapidly growing area, or the entry of a large firm into a city can attract workers at all levels of skill and education. Depending on these trends, both regionally and locally, people move to respond to job opportunities.

In order to explicitly relate the effects of population and housing changes to beneficial or adverse impacts, the second paragraph of Section 4.2.1 was revised to state that:

> Population and housing in a given area can result in beneficial or adverse impacts to the extent that such changes would be expected to result in environmental and socioeconomic effects. However, increasing population in and of itself is not an environmental effect.

Response to Comment B-15. The reference to a stable community was unclear and was deleted.

Response to Comment B-16. Text was added at the end of public services and biological resources, Sections 4.3.7 and 4.6.7 (analyzing environmental impacts) stating the following:

> Vegetation will be controlled during caretaker and reuse operations to the extent necessary as required by all applicable laws and regulations. These operations would include fire breaks and weed control.

Response to Comment B-17. The following text was inserted in Chapter 3, Affected Environment, as Section 3.12.8:

> **3.12.8 Potable Water Supply**
>
> Historic consumptive water use at NMCO ranged from about 5 to 9 million gallons per month (Rogers 1997). Average annual consumptive water use was about 7.5 million gallons per month, or about 90 million gallons per year (Rogers 1997).

Section 3.12.8 from the Draft EIS/EIR now appears as Section 3.12.9 in the Final EIS/EIR, with no other changes.

The following text (indented) was added under the heading titled "***Significant Impacts***" in Chapter 4, Section 4.12.3

> *Impact 1. Potable Water Supply.* A significant and mitigable impact would result from an increased water supply demand of about 112 percent over the historic demand. The Maximum Capacity Alternative is estimated to increase population in the region of influence by 3,006,

which includes 1,565 residential users, and 1,441 commercial users (please see Table 4-5). Multiplying 1,565 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 187, 800 gallons of residential use per day. Multiplying 1,441 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 100,870 gallons of commercial use per day. Adding these estimated daily residential (187,800 gallons) and commercial (100,870 gallons) uses equals 288,670 gallons per day estimated water use on-site. Multiplying this use rate times 365 days subtotals 105,364,550 gallons per year. Adding an estimated 85,490,000 gallons per year to irrigate the 83-acre golf course (based on an irrigation rate of 1.03 million gallons per acre per year) totals 190,854,550 gallons per year estimated potable water demand. This represents an increase of about 112 percent over the estimated historic annual use of 90,000,000 gallons per year.

Mitigation 1. The City of Oakland will expressly identify the water supplier(s) that will provide water service to the alternative (Cal. Pub. Res. Code Section 21151.9; Cal. Wat. Code Sections 10910-10915). The City will ask those suppliers whether the water demand associated with the alternative has been included and assessed in the suppliers' urban water management plans, and will require such plans to be updated to account for estimated demand from this alternative. Government Code Sections 65352 and 65352.5 require cities to consult with water suppliers in connection with such proposed

projects. Moreover, Government Code Section 65302, subdivision (d), requires cities to coordinate with such suppliers in preparing the conservation elements of their general plans. That coordination is required to include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city. In addition to supplier identification and coordination, the following best management practices will be implemented by future site developers:

- Interior and exterior water audits and incentive programs for single family residential, multi-family residential, and commercial users;
- requirement of ultra low flush toilets in all new construction;
- distribution system water audits, leak detection and repair;
- metering for all new connections and billing by volume of use;
- large landscape water audits (golf course and recreational areas);
- landscape water conservation for new single family homes; and
- water waste prohibitions.

Implementation of these water conservation practices will be

consistent with the guidelines and schedules set forth in the Memorandum of Understanding Regarding Urban Water Conservation in California (California Urban Water Conservation Council 1994). Supplier identification, coordination, and best management practices implementation would reduce water supply impacts to a less than significant level by ensuring that the water supply system will have adequate capacity prior to development approval.

Potable water supply impacts for all of the other reuse alternatives were nonsignificant, as identified in Chapter 4, Sections 4.12.4, 4.12.5, and 4.12.6. Water usage by the Mixed Use Village Alternative, Single Use Campus Alternative, and Residential Alternative, Options 1 and 2, represent 77 percent, 66 percent, 56 percent, and 89 percent, respectively, of the estimated historic annual demand of 90,000,000 gallons per year. These demand levels do not affect system capacity.

Letter C

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Sacramento Field Office
3310 El Camino Avenue, Suite 130
Sacramento, California 95821-6340

IN REPLY REFER TO:

1-1-97-I-116

November 21, 1996

Mr. Douglas Pomeroy
Group Leader, Base Conversion/Biology Section
U.S. Department of the Navy
Engineering Field Activity, West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, California 94066-5006

Subject: Request for Concurrence for the Proposed Disposal and Reuse of the Naval Medical Center Oakland (NMCO), Alameda County, California, on the Alameda Whip Snake (*Masticophis lateralis euryxanthus*)

Dear Mr. Pomeroy:

C-1 The U.S. Fish and Wildlife Service (Service) has reviewed Volumes I and II of the Draft Environmental Impact Statement/ Environmental Impact Report (DEIS/EIR) for the proposed disposal and reuse of Naval Medical Center Oakland. The Service concurs with your determination that the project is not likely to adversely affect the alameda whip snake, a species federally proposed as endangered.

13 No further action pursuant to the Endangered Species Act of 1973, as amended, is necessary, unless new information reveals effects of the proposed action may affect listed species in a manner or to an extent not considered, or a new species or critical habitat is designated that may be affected by the proposed action.

Please contact Meri Moore of my staff at (916) 979-2752, if you have questions regarding this response.

Sincerely,

Joel A. Medlin
Field Supervisor

cc: SFO-Wetlands
CDFG, Environmental Services, Sacramento, CA
CDFG, Region III, Yountville, CA

Response to Comments

Response to Comment C-1. Comment noted. Thank you. No new information relevant to proposed action effects on species or habitats has been revealed during preparation of these responses.

Letter D

Office of the General Counsel

AC Transit
Alameda-Contra Costa Transit District

Office ☐ (510) 891-4827
FAX ☐ (510) 891-4724

VIA FACSIMILE & U.S. MAIL

November 25, 1996

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attn: Mr. Gary J. Munekawa, Environmental Planning Branch
Code 1852GM,
900 Commodore Drive
San Bruno, CA 94066-5006

Re: Draft Environmental Impact Statement/Environmental Impact Report for the Disposal and Reuse of Naval Medical Center Oakland SCH#95103035

Dear Mr. Munekawa:

The following comments on the proposed Draft Environmental Impact Statement/Environmental Impact Report ("DEIR/EIS") for the Disposal and Reuse of Naval Medical Center Oakland ("Project") are submitted by the Alameda-Contra Costa Transit District ("the District"). These comments are provided to inform the City of Oakland and the Navy of the District's concerns about the adequacy of the DEIR/EIS with respect to its analysis of transit impacts. The District has three principal comments at this stage of the proceedings:

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D-1 1. That the project selected should be designed to encourage non-auto dependent travel.

D-2 2. That an analysis of impacts to transit be completed at this time.

D-3 3. That the final project fully mitigate for transit impacts.

D-4 The draft EIS/EIR recognizes all of the four reuse alternatives will create potentially significant environmental impacts on traffic and circulation, as well as air quality. There will also be cumulative impacts to traffic circulation. It is undisputed that Alameda County is confronted by an increasingly critical traffic and circulation problem caused by increasing numbers of automobiles on the roads and highways. These increasing numbers of automobiles are also causing air quality problems that cannot be mitigated. At the same time traditional funding sources for public mass transit have decreased. The only realistic solution is encouraging mass transit by the use of appropriate

1600 Franklin Street, Oakland, California 94612

Response to Comments

Response to Comment D-1. The preferred alternative (Maximum Capacity Alternative) was selected after considering a number of criteria, including encouraging travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." Application of this criterion, among others, resulted in selecting the Maximum Capacity Alternative as the preferred alternative. The Maximum Capacity Alternative would contain loading areas, bus shelters, and benches for use by transit patrons, if AC Transit were to provide on-site transit service.

Response to Comment D-2. A quantitative analysis of transit impacts was performed in response to this letter (containing Comments D-1 through D-24) from AC Transit. The criteria used for determining significance thresholds is described in response to Comment D-18 and is added to Section 4.9.1 of the EIS/EIR.

Using data provided by AC Transit staff and procedures for analysis suggested by AC Transit staff, an analysis of AM and PM peak period ridership was performed on three transit routes directly serving NMCO (Route 46 and 46A, Route 56 and 56A, and Route NV). This analysis has been inserted in the EIS/EIR in Sections 3.9.6 and 4.9.2. This analysis assumes that eight percent of the trips were on mass transit. However, automobile use was not changed from the original five percent transit usage. This is considered to be a conservative estimate, and the three percent difference would not affect the level of significance of any of the impacts.

D-4 Incentives and/or disincentives by Project applicants. Other major project applicants have worked with The District on creating mitigation measures to encourage mass transit use. This same approach should be recognized by the Navy and City of Oakland for this Project.

The draft to address EIS/EIR does not provide the analysis necessary to accomplish and mitigate the impacts of this project on the District. Specifically, the major defects in the DEIR/EIS discussion of transit can be summarized as follows:

1. **The DEIR/EIS identifies impacts to transit as "nonsignificant" for all Project alternatives.** These conclusions are reached without analysis or quantification of the Project's impacts on demand for transit service. Indeed, the impact statements for the four development alternatives are extremely vague and lack any supporting evidence or analysis:

   "Some increase in demand for transit services could result from this [Maximum Capacity] alternative. NMCO is currently served by AC Transit Lines 56, 46, and NV, and the potential increase in demand should be met by these services. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system. This would require coordination with AC Transit but is not expected to require major changes in service. Transit impacts are not expected to be significant." DEIR/EIS at page 4-88. (emphasis added).

   D-5 "As with the Maximum Capacity Alternative, a nonsignificant increase in demand for transit services on AC Transit Lines 56, 46, and NV could result from this [Mixed Use Village] alternative. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system." DEIR/EIS at page 4-92. (emphasis added).

   "As with the Maximum Capacity Alternative, a less than significant increase in demand for transit services on Alameda-Contra Costa Transit District (AC Transit) Lines 56, 46, and NV could result from this [Single Use Campus] alternative. There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system." DEIR/EIS at page 4-96. (emphasis added).

   "A nonsignificant increase in demand for transit services on AC Transit Lines 56, 46, and NV could result from this [Residential] alternative, with

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The following is inserted at the end of the transit service discussion in Section 4.9.2:

> Analysis indicates that additional transit service would not need to be provided unless the load factor for any individual route exceeded 1.00 (i.e., demand exceeded the seat capacity). Therefore, none of the reuse alternatives would result in significant transit impacts.

Response to Comment D-3. No significant transit impacts would occur (please see response to Comment D-2), and therefore no transit mitigation would be required.

Response to Comment D-4. Traffic and circulation impacts would be mitigated as described in the EIS/EIR, Sections 4.9 and 5.5. It is doubtful that the project would generate enough transit demand to justify extending transit service onto the site. Similar developments in the area have had transit service reductions due to the inability to support the service. If AC Transit extends transit service on-site, the project developer would work with AC Transit to provide practical transit amenities to encourage mass transit use and the incentives requested in the comment. No disincentives to other modes of transportation are substantiated by this analysis.

Response to Comment D-5. Please see response to Comments D-2 and D-4 and revised Sections 4.9 and 5.5, which provide an extensive quantitative analysis of transit demand and a determination that no cumulative transit impacts would result.

D-5 the need to modify the bus routes associated with the on site roadway system." DEIR/EIS at page 4-98 (emphasis added).

2. **Potentially significant impacts to transit as a result of the project alone, and in combination with cumulative impacts, are omitted from discussion and analysis in the DEIR/EIS.** Specifically, two of the Lines that serve the project are potentially already at or near capacity during the peak hours. Moreover, the DEIR/EIS lacks any significance criteria directed at transit impacts. The significance criteria for traffic and circulation (e.g. the addition of traffic resulting in LOS E or F) would indirectly impact transit, but does not address all potentially significant transit impacts. The project would have a potentially significant impact on transit due to increased demand for services that are at capacity, traffic delays and construction period service interruptions.

D-6

3. **No formal mitigation measures for transit-related impacts are listed in the DEIR/EIS.** However, the impact statement does refer to the need to modify the bus routes associated with the on site roadway system. It is impossible to tell from the cursory discussion whether the modification of bus routes is a prerequisite to the DEIR/EIS's conclusion that impacts to transit will be nonsignificant.

D-7

4. **Implementation of mitigation measures required to reduce potentially significant impacts as a result of increased traffic from the project on local ramps and intersections are not a certainty.** For example, the DEIR/EIS states that "[i]n the event that the city chooses to enter into a development agreement for this alternative, it is assumed that the developer of the alternative will be responsible for a fair share of traffic signal installation costs" in the absence of a city policy regarding responsibilities for traffic signal installations. DEIR/EIS at pages, 4-87, 4-98. The DEIR/EIS fails to discuss the impacts of traffic delays on transit service.

D-8

5. **The DEIR/EIS omits specific mitigation measures which could reduce or eliminate Project-related and cumulative transit and air quality impacts, including but not limited to impact fees, facility relocation measures, construction phasing plans.**

D-9

Response to Comment D-6. Section 4.9.1, first paragraph, has been modified to include the following significance thresholds:

> A particular reuse alternative would be considered to create a significant transit impact if addition of project transit demand would result in more anticipated passengers than available seats (i.e., a load factor greater than 1.00) or the project would add length to existing bus routes.

No significant transit impacts were identified in the EIS/EIR because none of the transit routes directly serving the NMCO site currently experience heavy demand, and none of the project alternatives would generate new transit use beyond the capacity of the existing transit system. This assessment has been quantified in response to Comment D-2. The existing transit routes serving the NMCO site have more than enough capacity to accommodate the minor increases in transit use that would result from any of the project alternatives.

Impacts to traffic and circulation may affect transit operations. However, the measures identified for mitigation of automobile traffic and circulation impacts in Sections 4.9.5, 4.9.6, 4.9.7, 4.9.8, 5.5.4, 5.5.5, 5.5.6, 5.5.7, and 5.5.8 also would mitigate traffic and circulation impacts for transit buses.

Construction at the NMCO site would not create significant impacts for transit operations. None of the routes now serving NMCO pass through the NMCO site. During construction, no on-site bus service would be required. Construction at the access points to the NMCO site would not substantially reduce the accessibility of buses or transit flow along perimeter streets.

Response to Comment D-7. No additional transit service would be required to serve the project. Routes 56 and 56A formerly served the NMCO hospital directly (Konvalinka 1997). The project site could be adequately served by the existing transit routes along Mountain Boulevard and Keller Avenue. Therefore, no additional transit service or modified routing would be required, and there would be no significant impacts to transit.

Response to Comment D-8. The mitigation measures described in the EIS/EIR would be paid for by the future owner. If the future owner enters into agreements with the project developer or others, the developer or others would be responsible for a fair share of the cost of mitigation.

Impacts to transit operations on City streets are addressed under the discussion of general traffic impacts in Section 4.9. The impacts to on-street transit operations would be the same as impacts for other traffic. All general traffic impacts would be mitigated to nonsignificant levels, as discussed in Sections 4.9 and 5.5 of the EIS/EIR.

Response to Comment D-9. No significant transit impacts would occur. A quantitative analysis of transit impacts was performed in response to Comment D-2. Using data provided by AC Transit staff and procedures for analysis suggested by staff, an analysis of AM and PM peak period ridership was performed on three transit routes directly serving NMCO (Route 46 and 46A, Route 56 and 56A, and Route NV). This analysis has been inserted in the EIS/EIR in Sections 3.9.6 and 4.9.2.

No significant transit impacts were identified because none of the transit routes

directly serving the NMCO site currently experience heavy demand and none of the project alternatives would generate new transit use beyond the capacity of the existing transit system. The existing transit routes serving the NMCO site have more than enough capacity to accommodate the minor increases in transit use that would result from any of the project reuse alternatives. Impacts to traffic and circulation may affect transit operations. However, the measures identified for mitigation of automobile traffic and circulation impacts in Sections 4.9.5, 4.9.6, 4.9.7, 4.9.8, 5.5.4, 5.5.5, 5.5.6, 5.5.7, and 5.5.8 would also mitigate traffic and circulation impacts for transit buses.

Construction at the NMCO site would not create significant impacts for transit operations. None of the routes now serving NMCO pass through the NMCO site. During construction, no on-site bus service would be required. Construction at the access points to the NMCO site would not substantially reduce the accessibility of buses or transit flow along perimeter streets.

No additional transit service would be required to serve the project. Routes 56 and 56A formerly served the NMCO hospital directly (Konvalinka 1997). The project site could be adequately served by the existing transit routes along Mountain Boulevard and Keller Avenue. Therefore, no additional service or modified routing would be required, and there would be no significant impacts to transit. No transit mitigation measures would be required.

D-10

6. Finally, **the DEIR/EIS description of the transit system setting is less than 1/2 page and provides no information about the current capacity of the lines serving the Project area or other operational details.** DEIR/EIS at page 3-91-92. Therefore, there is no foundation for a meaningful analysis of Project-related or cumulative impacts on transit.

D-11

In submitting these comments, the District hopes that a revised DEIR/EIS will be prepared which contains an analysis of Project-related and cumulative impacts to transit based on significance criteria for transit impacts as well as a commitment to mitigate impacts of the project on transit service. A list of mitigation measures is provided which the District believes would reduce significant impacts to the District's service and operations. This list is intended as a basis for discussions with the City and the Navy to resolve District concerns prior to the final action on the Project. Our introductory comments are followed by detailed concerns on the adequacy of the DEIR/EIS.

I. INTRODUCTORY COMMENTS

The DEIR/EIS analyzed five alternative reuse plans:

- the Maximum Capacity Alternative
- the Mixed Use Village Alterative
- Single Use Campus Alternative
- Residential Alternative
- No Action Alternative

D-12

According to the DEIR/EIS, the trip generation rates were adjusted to account for a five percent transit mode split (e.g. five percent of the trips were assumed to be using mass transit; the remaining 95% of project trips are expected to be by automobile.) DEIR/EIS at page 4-84. This appears to be below the transit ridership in Oakland. There is no requirement of any of the Project alternatives that transit use should be encouraged by project design.

D-13

Peak hour traffic for the four development alternatives would substantially increase traffic at between two and five project intersections. There is no discussion in the DEIR/EIS of the impacts to transit service that would result from these substantial increases in traffic and concomitant delays at intersections and freeway ramps. Specifically, the additional traffic on roadways and at intersections and ramps through which buses must travel would significantly increase the amount of time buses take to

19

Response to Comment D-10. Please see response to Comment D-2 and accompanying text and tables inserted into Sections 3.9.6 and 4.9.2. This ridership analysis adequately describes the transit system to support informed decision-making regarding impacts to transit service capabilities.

Response to Comment D-11. Please see response to Comment D-2. The ridership and transit analyses represent substantial additional analysis in the EIS/EIR, resulting in the conclusion that there are no significant transit impacts. No commitments to mitigation are needed.

Response to Comment D-12. The five percent transit ridership was taken from the Final Existing Conditions Report, Oak Knoll Naval Medical Center Reuse Plan (Theresa Hughes & Associates 1994). The Oakland Base Reuse Authority Final Reuse Plan for the Naval Medical Center, Oakland (OBRA 1996) provided a revised eight percent transit ridership estimate, which was taken from census data. The eight percent figure was used in the quantitative analysis of transit impacts in the response to Comment D-2.

Transit use would be encouraged by two means related to design, namely selecting an alternative that reduces reliance on automobiles and developing appropriate transit amenities (please see response to Comment D-1). Transit use will depend on a combination of project-specific development timing and City of Oakland plans and policies, as implemented during reuse, including specific design standards at key access points, if transit service is extended.

Response to Comment D-13. Additional street system delay would be mitigated by the measures identified in Sections 4.9 and 5.5. These measures would mitigate

complete their routes, resulting in increases travel time, delay to passengers and increased costs to the District.

These impacts can be evaluated, but are not disclosed or evaluated in the DEIR/EIS. Depending on the amount of time which must be added to the District's bus Lines affected by the Project and cumulative traffic in the region, the increase may require that D-14 additional buses, or larger buses, be added to meet the same level of demand with the same headways. This would result in major cost increases to the District in order to maintain adequate service levels.

The failure of the DEIR/EIS to evaluate impacts to the District's service and operations constitutes a significant defect in the DEIR/EIS. The District believes the DEIR/EIS must be revised and recirculated to properly address this serious omission.

II. PROPOSED MITIGATION MEASURES FOR INCLUSION IN A REVISED DEIR/EIS

20

The District believes that identification of appropriate transit significance criteria and adequate analysis of impacts on the District's service and operations will support a conclusion that such impacts would be significant. A summary of likely significant impacts to transit and corresponding mitigation measures that collectively would discourage drive-alone commuters and improve transit service is identified below:

To Mitigate Significant Traffic Delay Impacts on District Service and Operations: Payment of a transit impact fee, a portion of which would be allocated to the District to compensate the District for increased costs associated with delays and other impacts related to increased congestion and construction period service D-15 disruptions. The fee shall be sufficient to pay for the addition of new buses to impacted Lines, relocation and/or establishment of new bus stops, relocated bus routes and other impacts to District services and operations.

To Mitigate Air Quality, Traffic Delays and Related Transit and other Impacts Associated with the Encouragement of Drive-Alone Commuters: Purchase by all new employers of bus passes for up to ten percent of employees as of occupancy of the on-site buildings. Employers shall offer bus passes to the first ten-percent of employees at no cost. The District shall cooperate with Employers in providing promotional materials for the bus pass program and shall participate in any transportation fairs.

potential on-street impacts to buses and automobiles.

Response to Comment D-14. No additional or larger buses would be required to meet estimated demand from any of the reuse alternatives (please see response to Comment D-2). No new impacts have been identified in these responses to comments. Recirculation of the EIS/EIR is not required.

Response to Comment D-15. None of the reuse alternatives would result in significant impacts (please see response to Comment D-2). Delays related to increased on-street traffic congestion would be mitigated by measures identified in the EIS/EIR. Construction at the NMCO site would not create significant impacts for transit operations. None of the routes now serving NMCO pass through the NMCO site. During construction, no on-site bus service would be required. Construction at the access points to the NMCO site would not disrupt transit flow along perimeter streets. No new buses would be required to serve ridership estimated from our analysis of the reuse alternatives. A transit impact fee assessment does not appear to be justified.

OBRA has implemented a program to develop reuse plans that reduce reliance on automobiles (please see response to Comment D-1). The developer will be required to meet and confer with AC Transit representatives in order to understand their service and operations. No special transit routing would be required during construction. AC Transit would be provided with the opportunity to review construction plans and would be encouraged to provide input on how transit service would be maintained or enhanced. Reestablishing routes through the project site would be welcomed and accommodated if AC Transit determines it is in its interest to extend those routes.

In addition, the Project should include design and land use refinements that would encourage transit use. See AC Transit Board Policy No. 520, attached to this letter.

D-15 To Mitigate Construction Impacts to District Services and Operations: Prior to submitting requests to the City for approval of the construction phasing, the developer shall meet and confer with District representatives in order to understand District service and operations **so that construction-related traffic routes and any new transit routes** can take into account District service and operations to the maximum extent feasible. The final construction phasing plan submitted to the City shall reflect modifications necessary to reduce to the extent feasible any impacts to District service and operations.

III. THE DEIR/EIS FAILS TO ADEQUATELY ADDRESS IMPACTS TO THE DISTRICT'S TRANSIT SERVICE AND OPERATIONS

21 The DEIR/EIS contains no analysis of the impacts of the Project on transit. Nor does the DEIR/EIS define a significance criteria for transit impacts. The DEIR/EIS discussions of transit are conclusory in nature and result in more questions than answers concerning potentially significant impacts to transit. A summary of the major inadequacies in the DEIR/EIS is set forth below:

A. The DEIR/EIS Fails to Include Key Information Concerning the Project Setting

D-16 A DEIR "must include a description of the environment in the vicinity of the project, as it exists before the commencement of the project, from both a local and regional perspective." CEQA Guidelines section 15125. This requirement derives from the principle that "[k]nowledge of the regional setting is critical to the assessment of environmental impacts." Id. Lacking an adequate description of a project's environmental setting, it is "impossible for the [EIR] to accurately assess the impacts the project [would] have...or to determine appropriate mitigation measures for those impacts." San Joaquin Raptor, 27 Cal.App.4th at 722 (quoting with approval argument made by the challengers of the EIR).

The DEIR/EIS's entire discussion of the project's regional and local setting related to transit is approximately a half page long. DEIR/EIS at page 3-91 to 92. Information concerning existing District services and facilities, including bus stops, bus shelters, existing capacity of bus lines serving the area and the like, are

Response to Comment D-16. Routes 56, 46, and NV are discussed in the EIS/EIR, Section 3.9.6, Transit System. This discussion specifies the bus lines that stop at the NMCO site and supporting information regarding those times when service is provided to the site and connecting points. Section 3.9.6 also characterizes existing shelter conditions on the site as adequate for the level of service provided. Route 57 does not directly serve NMCO, passing no closer than three-quarters of a mile from the project site. It is not standard practice in an EIS/EIR to analyze impacts to transit routes located so far from a project site. The Affected Environment section of the EIS/EIR is supplemented by an evaluation of existing ridership and load factors for the bus routes directly serving the NMCO site (please see response to Comment D-2).

completely missing from the DEIR/EIS setting section. Moreover, in describing the bus Lines that could potentially be affected by the Project, the DEIR refers only to Line 56 (which is described in the DEIR as serving the Project site) but entirely omits any reference to Line 57 which serves the MacArthur Corridor along with Line 56. If a bus Line is impacted by any project on the MacArthur Corridor, it has the potential to impact the entire Corridor. The setting area should be expanded to include potential Project and cumulative impacts on the entire MacArthur Corridor.

D-16

In addition, critical information about existing load factors and foreseeable demand on transit services is also omitted. These omissions render the DEIR/EIS inadequate because without adequate setting information, the document cannot fully assess the environmental impacts associated with the Project. If impact analyses are based on an incomplete, out-dated or inaccurate setting, the results of those analyses cannot be accurate. Further, failure to consider the Project's entire environmental setting leads to a lack of analysis of impacts in those omitted areas (e.g. bus line capacity, impact of traffic delays).

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B. Significant Impacts to the District Are Not Adequately Analyzed or Disclosed

Critical to the environmental analysis is the determination of significant environmental effect. The Guidelines define the term "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project..." (CEQA Guidelines section 15382; Pub. Resource Code, section 21068). In judging the legal sufficiency of an EIR, the focus is on adequacy, completeness and a good faith effort at full disclosure. The document should provide a sufficient degree of analysis to allow decision-makers to make intelligent judgments. CEQA Guidelines section 15151. A number of court decisions have developed criteria for determining what constitutes a "reasonable" effort to analyze a project's potential impacts. For example, Kings County Farm Bureau, 221 Cal.App.3d 692 emphasizes that an EIR must support with rigorous analysis and substantial evidence the conclusion that environmental impacts will be insignificant.

D-17

In this case, the DEIR/EIS lacks support for its conclusions regarding the insignificance of transit impacts. In so doing, the DEIR/EIS violates CEQA's fundamental principal that even if an EIR concludes that an impact is insignificant, it must provide "facts and analysis" so that the public can understand and evaluate

Response to Comment D-17. No significant transit impacts would occur. A quantitative analysis of transit impacts was performed in response to Comment D-2. Using data provided by AC Transit staff and procedures for analysis suggested by staff, an analysis of AM and PM peak period ridership was performed on three transit routes directly serving NMCO (Route 46 and 46A, Route 56 and 56A, and Route NV). This analysis has been inserted in the EIS/EIR in Sections 3.9.6 and 4.9.2.

No significant transit impacts were identified because none of the transit routes directly serving the NMCO site currently experience heavy demand, and none of the project alternatives would generate new transit use beyond the capacity of the existing transit system. The existing transit routes serving the NMCO site have more than enough capacity to accommodate the minor increases in transit use that would result from any of the project reuse alternatives. Impacts to traffic and circulation may affect transit operations. However, the measures identified for mitigation of automobile traffic and circulation impacts in Sections 4.9.5, 4.9.6, 4.9.7, 4.9.8, 5.5.4, 5.5.5, 5.5.6, 5.5.7, and 5.5.8 also would mitigate traffic and circulation impacts for transit buses.

Construction at the NMCO site would not create significant impacts for transit operations. Lines 46 and 56 give direct service to the main entrance, but none of the other routes serving the area pass through the NMCO site. During construction, no on-site bus service would be required. Construction at the access points to the NMCO site would not substantially reduce the accessibility of buses or transit flow along perimeter streets.

No additional transit service would be required to serve the project. Routes 56 and

its conclusions. Laurel Heights Improvement Assn., 47 Cal.3d at 404. Specifically, the DEIR/EIS found that transit impacts for all alternatives would be nonsignificant without providing any evidence or analysis to support those conclusions.

Courts have not hesitated to overturn certification of an EIR where the EIR presents unsupported conclusions regarding a project's impact on the environment. For example, in Santiago County Water District v. County of Orange, 118 Cal.App.3d 818, 831 (1981), the court found inadequate an EIR's unsupported conclusions regarding a mining project's impact on water service. Similarly, in Mountain Lion Coalition v. California Fish & Game Commission, 214 Cal.App.3d 1043, 1051-52 (1989), the court held that an EIR's mere reference to a population model predicting that no significant long-term impact to wildlife would result from a proposed mountain lion hunt, did not constitute an adequate impacts analysis because the document did not explain how it reached its conclusion. See also Whitman v. Board of Supervisors, 88 Cal.App.3d 397, 411 (1979), quoting, People v. County of Kern, 39 Cal.App.3d 830, 841-42 (1974)(cumulative impacts analysis of drilling project violated CEQA where analysis was "unsupported by empirical or experimental data, scientific authorities, or explanatory information of any kind. . . .").

D-17

Like the EIRs in the above-listed cases, the DEIR/EIS for this Project fails to provide facts or analysis to support its conclusions regarding transit impacts, and therefore fails to provide a realistic assessment of the various alternatives' impacts on transit. It is not the District's responsibility to undertake analysis of impacts to its services for a project proposed in Oakland.

1. The Impacts Analysis is Based on Faulty Significance Criteria

The DEIR/EIS fails to include any significance criteria for transit impacts. While the DEIR/EIS does include a significance criteria for transportation impacts , this criteria is not applied to transit. The significance criteria for traffic and circulation (e.g. the addition of traffic resulting in LOS E or F) would indirectly impact transit, but does not address all potentially significant transit impacts. Specifically, traffic delays would also adversely impact bus service. However, this criteria does not address other potentially significant impacts to transit including increased demand over existing capacity on bus lines serving the area, need for new or relocated transit facilities, and the like.

D-18

23

56A formerly served the NMCO hospital directly (Konvalinka 1997). The project site could be adequately served by the existing transit routes along Mountain Boulevard and Keller Avenue. Therefore, no additional service or modified routing would be required, and no significant impacts to transit would occur. No transit mitigation measures would be required.

Response to Comment D-18. No specific significance criteria were identified for transit impacts in the EIS/EIR. It was determined without quantitative analysis that project impacts to transit operations would not be significant. However, in response to the comments from AC Transit, significance criteria for transit impacts were developed, and a quantitative analysis of impacts was conducted according to the criteria (please see response to Comment D-2). Section 4.9.1, first paragraph, has been modified to include the following significance thresholds:

> A particular reuse alternative would be considered to create a significant transit impact if addition of project transit demand would result in more anticipated passengers than available seats (i.e., a load factor greater than 1.00) or the project would add length to existing bus routes.

No additional significance criteria are necessary for assessing transit impacts. The effect of increased congestion along bus routes is addressed under the discussion of traffic impacts, which addresses delays to all modes of motor vehicles. Construction on the project site and at project access points would not result in significant disruptions along existing transit routes. There would be no secondary impacts of proposed mitigation measures that would adversely affect AC Transit's ridership. The responses to Comments D-2 and D-7 use the significance criteria

A revised transit analysis should be completed based on the following significance criteria for transit impacts. Specifically, impacts to the District should be considered significant if any of the following standards are met:

- If additional demand from a Project or the combination of the Project plus foreseeable demand from cumulative projects increases the peak period load factor on any bus Line serving the Project by increasing or results in excess demand over existing capacity on any Line serving the Project.

- If additional traffic from the Project or the combination of Project traffic plus cumulative projects affects the on-time performance of affected bus Lines or increases dead-heading times (i.e. on time performance is "affected" when buses on a route are consistently delayed by four (4) minutes or more; or additional buses are required on any route to maintain on time performance; or larger buses are required on any route in order to maintain on-time performance. Dead-heading time is "affected" when there are increases of four (4) minutes or more.)

D-18

- If Project construction or the combination of Project plus cumulative project construction phases affects the on-time performance of affected bus Lines or increases dead-heading times.

- If there are secondary impacts of proposed mitigation measures which adversely affect the District's ridership (e.g. proposed traffic improvements, encouragement of drive-alone commuters, etc.).

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The DEIR should be revised to include impact analyses on transit based on these significance criteria.

2. <u>The DEIR/EIS Understates the Significance of Impacts to the District's Service and Operations</u>

D-19

The DEIR/EIS fails to describe the increase in peak period load factors on the bus Lines serving the Project site. Nor does the DEIR/EIS describe foreseeable increases in demand (by load factor increases) as a result of cumulative projects. An analysis of the Project, and Project plus cumulative projects, impact on peak period load factors must be completed. In the

listed above. There would be no significant transit impacts.

Response to Comment D-19. Peak load factors are addressed in Table 3-20 in Section 3.9.6 of the EIS/EIR. Detailed ridership counts were used to develop load factor increase estimates for Lines 46, 46A, 56, and 56A. These estimates are inserted as Tables 3-21, 4-17, and 4-18 in Sections 3.9.6 and 4.9.2 of the EIS/EIR. The analysis of cumulative impacts for the EIS/EIR considered the combined effects of the NMCO and the Leona Quarry projects. None of the transit routes directly serving the NMCO site would directly serve the Leona Quarry site; therefore, the transit impacts of these two projects would be independent, and there would be no cumulative transit impacts. Line 57 does not directly serve NMCO, passing no closer than three-quarters of a mile from the project site. It is not standard practice in an EIS/EIR to analyze impacts to transit routes located so far from a project site.

None of the reuse alternatives would result in significant impacts (please see response to Comment D-2). Delays related to increased on-street traffic congestion would be mitigated by measures identified in the EIS/EIR. Construction at the NMCO site would not create significant impacts for transit operations. None of the routes now serving NMCO pass through the NMCO site. During construction, no on-site bus service would be required. Construction at the access points to the NMCO site would not disrupt transit flow along perimeter streets. No new buses would be required to serve ridership estimated from our analysis of the reuse alternatives.

absence of this analysis, the DEIR/EIS cannot support the conclusion that there will be no significant impacts to transit service.

Currently, at least one of the bus Lines serving the Project (Line 56) is operating at or above the system average during the peak period. The DEIR/EIS should disclose the existing load factors for all Lines serving the Project site including Line 57. This analysis would involve obtaining detailed counts on all Lines serving the Project site. Based on detailed counts and estimates of Project and cumulative demand during the peak period, the analysis should state the increase in load factors on all Lines serving the site for both the Project alone and the Project plus cumulative conditions.

D-19

The DEIR/EIS reveals that the Project will result in substantial increases in traffic at between 2 and 5 intersections during the peak hour. Specifically, depending on the Project alternative selected, there would be significant impacts to traffic service levels in the area without mitigation. The DEIR/EIS must be revised to include an analysis of the impacts of the deterioration in intersection levels of service on the District's service.

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3. The DEIR/EIS Fails to Adequately Describe or Analyze the Construction Period Impacts on Transit Service and Facilities

Impact statements in the DEIR/EIS acknowledge that the transit system will be impacted during Project construction:

> "There would be a need to modify the bus routes associated with reconfiguration of the on-site roadway system. This would require coordination with AC Transit but is not expected to require major changes in service. Transit impacts are not expected to be significant." DEIR/EIS at page 4-88. (emphasis added).

D-20

The extent to which reconfiguration of the on-site roadway system will impact transit service and require new facilities to be constructed is not disclosed. Nor is any evidence provided to support the conclusion that such impacts to service and facilities will not be significant. Impacts not analyzed or disclosed include requiring bus routes to be modified and/or temporarily rerouted, delays and other impacts to service. These potential

Response to Comment D-20. No additional transit service would be required to serve reuse. Routes 56 and 56A formerly served the NMCO hospital directly (Konvalinka 1997). Reuse could be adequately served by the existing transit routes along Mountain Boulevard and Keller Avenue; therefore, no additional service or modified routing would be required, and there would be no significant impacts to transit. The lack of transit impacts was disclosed in the Draft EIS/EIR and has been supplemented by detailed supplemental quantitative analysis in the response to Comment D-2 and accompanying tables and text inserted into the EIS/EIR.

D-20 significant impacts must be disclosed and mitigation measures identified (including an impact fee to offset the cost of providing new facilities in the area, both on a temporary and long-term basis). Impacts as a result of the construction period on bus service along the MacArthur Corridor should be disclosed.

4. The DEIR/EIS Fails to Analyze the Impacts of Proposed Mitigation Measures on District Service and Operations

D-21 The DEIR/EIS proposed a number of measures to mitigate for increased traffic as a result of the Project. Such measures include installation of traffic signals and restriping of lanes. These measures would directly affect streets currently used by bus Lines in the area. Yet, there is no discussion or analysis of how these changes to the street network could affect bus Lines and facilities.

C. The DEIR/EIS Fails to Quantify the Efficacy of Transportation Mitigation Measures and Omits Feasible Mitigation Measures

26

The DEIR/EIS concludes that potentially significant traffic impacts will be mitigated to a level of insignificance by proposed mitigation measures. However, there is no analysis that supports this conclusion in the DEIR/EIS.

In addition, the DEIR/EIS omits mitigation measures that could reduce significant project impacts. For example, a number of Alternatives will result in traffic-related ozone precursor emissions in excess of significance thresholds. DEIR/EIS at page 4-106. No mitigation is identified in the DEIR/EIS as explained at page 4-106:

D-22

> "The ozone precursor emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (5% of total trips) and by linked trips (5% of total trips)...Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected emissions from vehicle traffic."

Response to Comment D-21. Installing traffic signals and restriping lanes would have no long-term impacts on traffic or transit operations. The mitigation measures would require only temporary traffic restrictions typically required for the safety of construction workers; they would not result in significant impacts. After implementation, the mitigation measures would fully mitigate the significant project traffic impacts. The mitigation measures would not improve traffic operations to the point where people would shift from transit to auto travel.

Response to Comment D-22. The traffic impacts analysis is quantified according to significance thresholds set by the City of Oakland. These thresholds are presented in Section 4.9.1 of the EIS/EIR and are used in subsequent impacts analysis in Sections 4.9.5, 4.9.6, 4.9.7, 4.9.8, 4.9.9 and 5.5.4, 5.5.5, 5.5.6, 5.5.7, and 5.5.8. Most thresholds are based on estimated impacts to levels of traffic service. Estimates of these levels account for time of day (e.g., morning and evening commute, or "peak" hours), existing levels of service (usually expressed as some measure of delay), and other quantitative factors. Tables 4-17 and 4-18 summarize the quantitative difference between existing and projected traffic impacts for the No Action Alternative and reuse alternatives. Peak load factors are addressed in Table 3-20 in Section 3.9.6 of the EIS/EIR. Detailed ridership counts were used to develop load factor increase estimates for Lines 46, 46A, 56, and 56A. These estimates are inserted as Tables 3-21, 4-17, and 4-18 in Sections 3.9.6 and 4.9.2 of the EIS/EIR.

The preferred project alternative was selected after considering a number of criteria, including encouraging travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to

D-22

Specific measures do exist to encourage reductions in single-occupant vehicle use. Such measures must be identified in the DEIR/EIS including but not limited to:

- A transit impact fee
- New employee programs including requiring parking fees, reserved parking for car and van-pools, and the like. See AC Transit Board Policy No. 520, attached hereto.
- Project design which fosters alternative transportation to the single-occupancy automobile.

These measures could be made a requirement of future development on the site.

D-23

IV. A REVISED DEIR/EIS SHOULD BE COMPLETED AND RECIRCULATED

CEQA requires preparation of a revised DEIR/EIS whenever an agency learns of a new substantial environmental impact resulting from the project. The discussions in the preceding sections provide just a sampling of the potentially significant impacts to transit that are likely to arise from the project that were not disclosed in the DEIR/EIS. Moreover, the DEIR/EIS is so fundamentally inadequate and conclusory in nature that public comment on the draft is of limited value. These facts make clear the need to prepare and recirculate a revised draft EIR/EIS that analyzes the potentially significant impacts to transit.

V. CONCLUSION

The District appreciates this opportunity to comment on the proposed DEIR/EIS. We urge the City of Oakland and the Navy to consult with District Staff regarding the assumptions and methodology for a revised analysis of transit impacts and identification of appropriate mitigation measures to eliminate significant transit impacts.

Sincerely,

Kenneth C. Scheidig
General Counsel

KCS/af

cc: Board of Directors
Executive Staff

proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." Application of this criterion, among others, resulted in selecting the Maximum Capacity Alternative as the preferred alternative. The Maximum Capacity Alternative would contain loading areas, bus shelters, and benches for use by transit patrons if AC Transit were to provide on-site transit service.

No new buses would be required to serve additional rider sharing generated by the reuse alternatives. Therefore, a transit impact fee assessment does not appear to be justified. In accordance with state law, trip reduction programs, including ride sharing, are voluntary, and therefore cannot be required.

Response to Comment D-23. A quantitative analysis of transit impacts was performed in response to Comment D-2 from AC Transit. It has been used in responding to most of Comments D-2 through D-24. Using data provided by AC Transit staff and procedures for analysis suggested by staff, an analysis of AM and PM peak period ridership was performed on three transit routes directly serving NMCO (Route 46 and 46A, Route 56 and 56A, and Route NV). Peak load factors for transit services are addressed in Table 3-20 in Section 3.9.6 of the EIS/EIR. Detailed ridership counts were used to develop load factor increase estimates for Lines 46, 46A, 56, and 56A. These estimates are inserted as Tables 3-21, 4-17, and 4-18 in Sections 3.9.6 and 4.9.2 of the EIS/EIR.

The analysis of cumulative impacts for the Draft EIS/EIR considered the combined effects of the NMCO and the Leona Quarry projects. After analyzing transit impacts of the two projects, it was determined that the combined impacts of the NMCO and Leona Quarry projects would not significantly affect traffic and

AC Transit Policy No. 520

BOARD POLICY

Subject Category: Board & General Administrative Matters

D-24

POLICY FOR AC TRANSIT COMMENTS ON LAND USE DEVELOPMENT PROPOSALS

I. Statement of Purpose

The purpose of this policy is to identify positions that AC Transit will advocate when local governments are considering development proposals. These positions are intended to maximize public transit usage by ensuring that land use decisions are made with full awareness of their impact on public transit.

It is not the intent of the policies to suggest that AC Transit will advocate for or against particular developments. Rather, AC Transit's role will be to inform local governments of the basic principles that will result in improved public transit service and ridership, and to comment on the extent to which developments under consideration by local government meet those principles. This policy document is intended to provide the framework by which comments are prepared and submitted to local governments as part of environmental analyses and other land use permit processes.

II. GENERAL PLANS AND ZONING ORDINANCES.

Local agencies within AC Transit's service area can promote and assist the use of mass transit through their general plans and zoning ordinances. These decisions determine if a project will encourage or discourage the use of AC Transit's services.

AC Transit should actively solicit the assistance of the cities and counties it serves to include in their general plans and zoning ordinances the land development principles identified in this policy. District staff should review general plan amendments and zoning changes, as well as environmental documents, to ensure that the District's land use principles are being considered and included in new developments.

Adopted: 5/94

Amendment(s):

circulation. There would be no cumulative transit impacts.

The traffic impacts analysis is quantified according to significance thresholds set by the City of Oakland. These thresholds are presented in Sections 4.9 and 5.5 of the EIS/EIR. Most thresholds are based on estimated impacts to levels of traffic service. Estimates of these levels account for time of day (e.g morning and evening commute, or "peak" hours), existing levels of service (usually expressed as some measure of delay), and other quantitative factors. Tables 4-17 and 4-18 summarize the quantitative difference between existing and projected traffic impacts for the No Action Alternative and reuse alternatives.

As a result of this analysis, there are no new substantial or significant environmental impacts. No additional or larger buses would be required to accommodate the additional demand for any of the reuse alternatives. No new significant or substantial traffic impacts have been identified in this revised analysis. Traffic impacts do not require recirculation of the EIS/EIR. However, because new significant information under CEQA was added to the Final EIS/EIR for traffic-related PM_{10} emissions, the air quality section was recirculated (see response to Comment F-6).

Response to Comment D-24. OBRA has established policies that encourage travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." The selected reuse alternative for NMCO would contain loading areas, bus shelters, benches, and other reasonable transit

4. provide bus bibs or turnouts, as requested by the District, to accommodate the loading/unloading of passengers;

5. require cathodic protection for underground utility and other lines, whether in the public right-of-way or on private property; and

6. in East 14th Street, San Pablo Avenue and Telegraph Avenue provide an appropriate median for light rail use.

IV. LAND USE CONSIDERATIONS.

A. The cities and counties served by the District should be encouraged to review and amend, where appropriate, the circulation and land use elements of their general plans to require new development (including remodeling of an existing facility) to include and incorporate transit-related issues and design concepts in the planning, design and improvement, and development of a project.

B. The cities and counties served by the District should be encouraged to include in any Specific Plan that is developed or amended transit improvements which enhance the use of transit to the developments within the Specific Plan.

C. The cities and counties served by the District should be encouraged to review their zoning regulations and encouraged to amend those regulations to conform with the provisions of this policy.

D. The District should be included in the review of environmental documents for projects throughout the District. The District should request that mitigation measures for projects include specific transit improvements required by the project, with all construction and maintenance costs to be borne by the project.

E. Development agreements should be encouraged, to provide the greatest flexibility in securing and financing transit improvements and mitigation measures for District use and to meet the District's needs.

V. LOCATION AND TYPE OF DEVELOPMENT.

General Principle: New development should be located in a manner that maximizes the potential for transit use.

A. Encourage mixed-use development. Mixed-use developments can enhance the attractiveness of public transit by permitting multiple-trip purposes to be accomplished simultaneously. Automobile usage increases when people must take numerous single-purpose trips. Further, mixed-use developments can improve the efficiency of public transit by providing more even travel over the course of each day between week days and weekends and by season.

amenities to support and encourage transit use.

maps). TDM programs should have clear performance goals, monitoring mechanism, and penalties for non-compliance. TDM programs should be required for the life of the project, regardless of changes in ownership.

D. In large multi-unit residential projects, off-street parking spaces should be rented separately and not included in the unit rental or sale price. Mitigation measures similar to those stated in #3 above should be applied to prevent spillover parking on nearby residential streets. Off-street parking requirements should be reduced if the developer agrees to offer rebates or lower rents to tenants who sign an affidavit that they will not own a car while residing in the development.

VII. REDEVELOPMENT PROJECTS.

Redevelopment projects should be reviewed to determine their fiscal impacts upon the District, and what improvements/developments contemplated by the plan can and should include transit-related facilities, e.g., bus shelters, bus stops, turn-ins, etc. (See list in Item #7, Design Issues.) The District should be held harmless from any short or long term advance financial impact as a result of the establishment of a redeveloped area. In addition, the costs for any transit required facilities, as well as opportunities for additional bus service to serve the area, should be included in the redevelopment plan with the costs of the additional service being funded by individual projects or by redevelopment funds.

VIII. LOCAL AGENCY FORMATION COMMISSIONS.

Notify Local Agency Formation Commissions (LAFCOs)in Alameda and Contra Costa counties of the District's interest in receiving notice of annexations affecting the District's boundaries. Ensure that any annexations which affect the District's boundary are brought to the attention of the Board of Directors.

Letter E

ALAMEDA COUNTY
CONGESTION MANAGEMENT AGENCY

November 22, 1996

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attn: Mr. Gary Munekawa, Environmental Planning Branch
Code 1852GM
900 Commodore Drive
San Bruno, CA 94066-5006

Subject: **Comments on combined Draft Environmental Impact Statement/Environmental Impact Report for the Disposal and Reuse of the Former Naval Medical Center Oakland, Oakland, California (5090.1B 1852GM/EP7-1115)**

Dear Mr. Munekawa:

Thank you for the opportunity to comment on the Department of Navy's combined Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R) for the Disposal and Reuse of the Naval Medical Center Oakland (NMCO) located in Oakland, California. The project site encompasses 183 acres developed with 82 structures as described in the DEIS/R. Of the alternatives analyzed, the preferred reuse alternative in the DEIS/R is the Maximum Capacity alternative which proposes development of an executive 9-hole golf course combined with residential development, mixed corporate, commercial and residential uses, open space, and active recreation. Many of the comments below were previously submitted in the CMA's response to the Notice of Scoping on October 12, 1996. (See attachment)

The CMA respectfully submits the following comments:

- The Oakland City Council adopted Resolution #69475 on November 10, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County Congestion Management Program (CMP). The proposed reuse project generates at least 100 p.m. peak hour trips above that already assumed in the year 2000 baseline scenario. The CMP guidelines (see attached, item #1) require the City to submit land use data (complete Table 1 attached, item #2) to enable the CMA to conduct a traffic analysis of the project using the Countywide Transportation Demand Model for year 2000 conditions. Because a model other than the Countywide Transportation Demand Model was used, a comparison must be made of the traffic projections. Should the model results differ, for purposes of CEQA, the higher projections must be used to determine project impacts. The comparison of the model results showing which volumes are higher should be included in the environmental documentation.

E-1

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Response to Comments

Response to Comment E-1. An analysis of year 2000 PM peak hour conditions was conducted using the Alameda County CMA Countywide Transportation Demand Model. A comparison was made between the CMA year 2000 PM peak hour traffic volume forecasts and the existing traffic counts, which were used as the basis of the Draft EIS/EIR. This analysis has been inserted in Appendix G of the Final EIS/EIR.

Although cumulative project impacts could be reasonably assumed to be included in the CMA traffic volume forecasts, a separate analysis of cumulative impacts was performed to assess the impacts of the Leona Quarry project. This analysis was performed in a manner consistent with the original cumulative impacts analysis in the EIS/EIR and found that the mitigation measures proposed in the EIS/EIR would mitigate project impacts to a level of nonsignificance. Please refer to Appendix G, Tables G-15 through G-25. This analysis is noted in Section 5.5.

Noise and air quality impacts also were analyzed using the CMA transportation model data. There was no change in modeled noise levels. Traffic volumes do not change sufficiently to alter any of the noise modeling results. In comparison to the results in the Draft EIS/EIR there were minor increases in carbon monoxide concentrations under the CMA model, but this would not result in any changes to the significance level of any impacts. The increases in carbon monoxide concentrations are due to minor changes in traffic volumes combined with a more elaborate analysis of excess idling conditions in the CMA model. The results of this analysis are shown in Table E-1 of this response to comments document.

E-2 • The DEIS/R needs to address project impacts on the surrounding regional freeways. Particularly, the 2000 and 2010 impacts need to be analyzed for I-580 and SR 13.

E-3 • The CMP requires that Level of Service E or better be maintained on the CMP-designated system. The environmental documentation should state that I-580, SR 13, and Golf Links Road are portions of the Congestion Management Program-designated system with Level of Service E as the adopted (October 24, 1991). The standard for these roadways is the existing LOS. The LOS F roadway segments are presented in the 1995 Draft CMP on Tables 4 and 5 (pages 30 through 32) and Figure 8 (page 34). It should be noted that although a roadway may be operating at LOS F, this does not preculde proposing mitigation measures for that facility.

E-4 • The CMA should be added to the list of agencies in Section 3.9.9 - Transportation Plans and Regulations.

E-5 • Funding of transit mitigation (i.e., additional service, modified routing) recommended as part of the project should be addressed in the environmental documentation.

E-6 • In general, the CMA requests that there be a discussion on the proposed finding sources of the transportation mitigation measures identified in the environmental documentation. Given the limited resources at the state and federal levels, it would be speculative to assume finding of an improvement unless it is consistent with the project finding priorities established in the Capital Improvement Program (CIP) of the CMP, the federal Transportation Improvement Program (TIP), or the recently adopted Regional Transportation Plan (RTP). Therefore, we are requesting that the environmental documentation include a financial program for all transportation improvements.

E-7 • The CMP establishes a Capital Improvement Program (See 1995 CMP, Chapter 7) that assigns priorities for finding roadway and transit projects throughout Alameda County. The improvements called for in the DEIS/R should be consistent with the CMP CIP. The DEIS/R should discuss potential sources of funding for proposed roadway and transit improvements required by the project. The environmental documentation should discuss the feasibility of funding these transportation improvements in light of the limited amount of State and Federal resources to fund local improvements in Alameda County.

E-8 Adequacy of project mitigation measures. On February 25, 1993 the CMA Board adopted three criteria for evaluating the adequacy of EIR project mitigation measures, as follows:

✓ Project mitigation measures must be adequate to sustain CMP service standards for roadways and transit;

Response to Comment E-2. An analysis of year 2000 and 2010 PM peak hour conditions was conducted for I-580 and SR 13, based on forecasts from the CMA transportation model. Six freeway segments were analyzed. Traffic generated by each of the project alternatives was added to the traffic volume forecasts for year 2000 and 2010. The project traffic assigned to the freeways was reduced by 18 percent to account for eight percent transit ridership, six percent use of nonmotorized transportation, and four percent of people who would work at home. This analysis is included in Appendix G of the Final EIS/EIR.

For year 2000 conditions, all freeway segments would operate at LOS E or better for all alternatives, with one exception; for the eastbound segment of I-580 between SR 13 and Edwards Avenue, traffic would operate at LOS F without implementation of any of the project alternatives. The addition of project traffic would result in a drop in the V/C ratio of no greater than 0.02. A drop in V/C ratio of 0.03 or less would not be perceptible to the public; therefore, none of the project alternatives would result in significant freeway impacts in year 2000.

For year 2010 conditions, several freeway segments would operate below the LOS E CMA standard. All segments that would operate at LOS F after implementation of the project alternatives also would operate at LOS F without the project. The addition of project traffic would result in a drop in the V/C ratio of no greater than 0.02; therefore, none of the project alternatives would result in significant freeway impacts in year 2010.

Table E-1
Summary of Carbon Monoxide Dispersion Modeling Results

Receptor Location	Peak 1-Hour Carbon Monoxide Concentration (ppm) by Alternative						Peak 8-Hour Carbon Monoxide Concentration (ppm) by Alternative					
	No Action	Maximum Capacity	Mixed Use	Single Use Campus	Residential Option 1	Residential Option 2	No Action	Maximum Capacity	Mixed Use	Single Use Campus	Residential Option 1	Residential Option 2
NE of Keller Ave. and Mountain Blvd.	3.9	4.7	4.5	4.4	4.3	4.4	3.1	3.7	3.6	3.5	3.4	3.5
SE of Keller Ave. and Mountain Blvd.	3.6	4.1	4.0	3.9	3.8	3.9	2.8	3.2	3.2	3.1	3.0	3.1
NW of Keller Ave. and Fontaine St.	3.0	3.4	3.2	3.1	3.1	3.2	2.4	2.7	2.5	2.4	2.4	2.5
SW of Keller Ave. and Fontaine St.	3.0	3.3	3.2	3.1	3.1	3.2	2.4	2.6	2.5	2.4	2.4	2.5
NE of Mountain Blvd. and Shone Ave.	3.7	4.4	4.2	4.1	4.0	4.1	2.9	3.5	3.3	3.2	3.2	3.2
SE of Mountain Blvd. and Shone Ave.	4.5	5.0	4.9	4.8	4.8	4.9	3.6	4.0	3.9	3.8	3.8	3.9
NE of the Main Entrance	3.2	3.4	3.5	3.3	3.3	3.4	2.5	2.7	2.8	2.6	2.6	2.7
SE of the Main Entrance	3.2	3.6	3.6	3.4	3.4	3.5	2.5	2.8	2.8	2.7	2.7	2.8
NW of Mountain Blvd. and Golf Links Rd.	3.0	3.2	3.2	3.2	3.2	3.2	2.4	2.5	2.5	2.5	2.5	2.5
NE of Mountain Blvd. and Golf Links Rd.	3.1	3.3	3.3	3.2	3.2	3.2	2.4	2.6	2.6	2.5	2.5	2.5
SW of Golf Links Rd. and Zoo Drive	3.5	3.9	3.9	3.8	3.7	3.7	2.8	3.1	3.1	3.0	2.9	2.9
SE of Golf Links Rd. and Zoo Drive	3.6	4.3	4.4	4.1	3.8	3.9	2.8	3.4	3.5	3.2	3.0	3.1

Notes: ppm = parts per million, by volume
Modeling results were generated using the CALINE4 dispersion model and EMFAC7F emission rates for the year 2010.
Modeled receptor locations are 75 feet from the centerlines of the adjacent roadways.
Emissions from extended vehicle idling at congested intersections are included in the modeling analysis.
Modeling analyses assumed poor dispersion conditions: a mild temperature inversion (stability class E), a wind speed of 1 meter per second (2.2 mph), a mixing height limit of 50-meters (164 feet), and a 10 degree horizontal wind direction fluctuation parameter.
Results presented in this table represent the highest concentrations at each receptor location (based on wind directions varied in 10 degree increments).
A background carbon monoxide value of 2 ppm has been included in the peak one-hour modeling results.
Peak eight-hour carbon monoxide concentrations are estimated as 79% of the peak one-hour concentration (based on monitoring data from the Alice Street monitoring station).
Federal carbon monoxide standards are 35 ppm for a one-hour average and 9 ppm for an eight-hour average.
California carbon monoxide standards are 20 ppm for a one-hour average and 9 ppm for an eight-hour average.

- ✓ Project mitigation measures must be fully funded to be considered adequate;
- ✓ Project mitigation measures that rely on state or federal funds directed by or influenced by the CMA must be consistent with the project funding priorities established in the Capital Improvement Program (CIP) section of the CMP or the Regional Transportation Plan (RTP).

E-8

It would be helpful to indicate in the DEIS/R the adequacy of proposed mitigation measures relative to these criteria. In particular, the DEIS/R should detail when route improvements are expected to be completed, how they will be funded, and what would be the effect on LOS if only the funded portions of these projects were assumed to be built prior to project completion.

E-9

We appreciate the opportunity to review and comment on this project. If you have any questions, please feel free to call Beth Wahikas or me at 836-2560.

Regards,

Jean Hart
Deputy Director

cc: Ms. Anu Raud, City of Oakland
Beth Wahikas, Senior Transportation Planner
File: CMP/Environmental Review Opinions - Responses - 1995

E-10

GPA SUMMARY DATA FORM
Tier I, GPA Land Use Analysis Program
August 21, 1992

To conform to the Alameda County Congestion Management Agency's Tier I, GPA Land Use Analysis Program requirement, a jurisdiction must complete and return this Form, and a copy of the subject GPA application document to the CMA. If required, an ASCII file format of the data may be requested by the CMA. This Form is not complete unless all questions are answered (attach additional pages, if required):

1. Project description, including location of proposed street access and relationship to CMP roadway system.

_____

_____

_____

_____

_____

2. Attach a study area map to this Form.

3. Describe the types of uses to be included in the project (e.g. single family dwellings, low income senior housing units, etc.).

_____

_____

_____

_____

_____

4. Will any trips generated by low or very low income housing be excluded in determining if this GPA generates 100 or more additional PM peak hour trips? Yes___ No___. If yes, attach supporting documentation describing the low or very low income housing, and the methodology used to identify and subtract those trips from total trips.

5. Have any traffic studies been prepared for this project? Yes___ No___. If yes, attach to this Form.

6. What is the expected occupancy date (year) for this project? If a multi-phase project, then the expected occupancy date for each phase _____.

7. What will be the per cent completion of the project by the year 2000 (e.g. 10%, 50%, etc.)?

8. Complete Table 1 (attached), describing net demographic change by TAZ that is expected to occur with this project. Include none, if appropriate.

_____

Name of Jurisdiction: Contact Person and Phone Number:

Date of Submittal:

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Response to Comment E-3. I-580, SR 13, and Golf Links Road are portions of the Congestion Management Program designated system with LOS E as the adopted standard. None of the project alternatives would create significant freeway impacts. The significant impacts on Golf Links Road would be mitigated with the measures proposed in the EIS/EIR.

Response to Comment E-4. The following paragraph about the Alameda County Congestion Management Agency (CMA) was added to Section 3.9.9, Transportation Plans and Regulations, immediately following the description of the Metropolitan Transportation Commission:

Alameda County Congestion Management Agency (CMA)

The Alameda County Congestion Management Agency (CMA) is responsible for ensuring local government conformance with the congestion management plan, a seven-year program aimed at reducing traffic congestion. The CMA has review responsibility for proposed development projects that are expected to generate 100 more PM peak hour trips than otherwise would occur. The CMA reviews the adequacy of CEQA analyses and measures proposed to mitigate impacts. The CMA maintains a county-wide transportation model and has approval authority for the use of any local or subarea transportation models. The Oakland City Council adopted Resolution #69475 on November 10, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County CMP. An analysis based on the CMA transportation model of year 2000 and year 2010 peak hour conditions was conducted for all of

the reuse alternatives, and is summarized in Appendix G.

The analysis of traffic impacts was based on the year 2000 and year 2010 Alameda County CMA transportation model. The model incorporates a representation of land use and demographic characteristics of the nine-county Bay Area, which allows it to produce travel demand forecasts that incorporate influences of regional travel demand on transportation facilities in Alameda County. The CMA model has been structured to provide forecasting detail that addresses the evaluation needs of both countywide and corridor-specific transportation strategies.

The CMA model was used as the basis for the study of traffic and circulation impacts because the assumptions in the model have been refined and agreed to on a regional basis. The land use assumptions contained in the year 2000 and year 2010 CMA model were developed by the Association of Bay Area Governments (ABAG) with input from local member jurisdictions on planned development.

Response to Comment E-5. No transit mitigation funding is required. No additional transit service would be required to serve the project. The project site could be adequately served by the existing transit routes that run along Mountain Boulevard and Keller Avenue. Therefore, no additional service or modified routing would be required, and no significant impacts to transit would occur. No financial program is provided in this EIS/EIR.

Response to Comment E-6. The mitigation measures described in the EIS/EIR would be paid for by the future owner. If the future owner enters into agreements

Jurisdiction:
Sumittal Date:
Contact Person and Phone:

Table 1
Demographic Change in the Year:

TAZ (1) Local	TAZ (1) Ala.Co.	Demographic Change	Employed Residents	House-holds	Household Population	Employment: Manu-facturing	Employment: Other	Employment: Retail	Employment: Services	Employment: Total Employment	Comments
		Projections									
		GPA									
		Exclusions (2)									
		Subtotal									
		Projections									
		GPA									
		Exclusions (2)									
		Subtotal									
		Projections									
		GPA									
		Exclusions (2)									
		Subtotal									
		Projections									
		GPA									
		Exclusions (2)									
		Subtotal									

(1) = Traffic Analysis Zone
(2) = Low or very low income housing

ALAMEDA COUNTY
CONGESTION MANAGEMENT AGENCY

October 12, 1994

Mr. Gary Munekawa
Environmental Planning Branch, Code 185
U.S. Navy, Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

Subject: **Comments on Notice of Scoping for a combined Environmental Impact Statement/Environmental Impact Report on the Disposal and Reuse of the Naval Medical Center Oakland, California (5090.1 Ser 185/P5-836)**

Dear Mr. Munekawa:

Thank you for the opportunity to comment on the Department of Navy's Notice of Scoping for a combined Environmental Impact Statement/Environmental Impact Report on the Disposal and Reuse of the Naval Medical Center (NMCO) located in Oakland, California. The project site encompasses 192 acres developed with 89 structures as described in the Notice of Scoping.

The Oakland City Council adopted Resolution #69475 on November 10, 1992 establishing guidelines for reviewing the impacts of local land use decisions consistent with the Alameda County Congestion Management Program (CMP). The proposed reuse project appears to generate at least 100 p.m. peak hour trips above that already assumed in the year 2000 baseline scenario. If this is the case, the CMP guidelines (see attached, item #1) require the City to submit land use data (complete Table 1 attached, item #2) to enable the CMA to conduct a traffic analysis of the project using the Countywide Transportation Demand Model.

In general, the CMA requests that there be a discussion on the proposed funding sources of the transportation mitigation measures identified in the environmental documentation. Given the limited resources at the state and federal levels, it would be speculative to assume funding of an improvement unless it is consistent with the project funding priorities established in the Capital Improvement Program (CIP) of the CMP, the federal Transportation Improvement Program (TIP), or the recently adopted Regional Transportation Plan (RTP). Therefore, we are requesting that the environmental documentation include a financial program for all transportation improvements.

1333 BROADWAY, SUITE 220 · OAKLAND, CA 94612 · PHONE: (510) 836-2560 · FAX: (510) 836-2185

with the project developer or others, the developer or others would be responsible for a fair share of the cost of mitigation. Public funding is not anticipated to be required for project mitigation; however, the City of Oakland Redevelopment Agency reserves the right to seek additional funding, as appropriate, at a later date. Funding plans are beyond the scope of this program level EIS/EIR.

Response to Comment E-7. Please see response to Comment E-6. Funding plans are beyond the scope of this program level EIS/EIR.

Response to Comment E-8. Please see response to Comment E-6. Funding plans are beyond the scope of this program level EIS/EIR.

Response to Comment E-9. The EIS/EIR is a programmatic document. Evaluating each incremental step and identifying the funding and schedule for each incremental step is beyond the scope of a programmatic EIS/EIR. However, the City of Oakland anticipates restriping the roadways and installing traffic signals where necessary reuse of the NMCO site would generate substantial traffic.

Response to Comment E-10. Comment noted. Completing the form would be premature prior to completing a specific development plan for the site.

The 1995-96 workplan for the CMA includes development of corridor/areawide transportation planning studies which will assist in assessing longer term land use impacts and possible solutions and identify comprehensive approaches to congestion management to aid in the development of deficiency plans. Participation in the corridor/areawide transportation planning process should be considered as a general mitigation measure for transportation impacts identified in the environmental documentation.

The following are concerns of the CMA regarding the project which should be addressed in the environmental documentation:

1. Potential impacts of the project on the Metropolitan Transportation System (MTS) (See 1995 CMP Figures E-2 and E-3, pages vii and viii and Figures 2 through 7, pages 14 through 19). The EIS/EIR should address all potential impacts of the project on the MTS roadway and transit systems. These include I-580, I-880, State Route 13, State Route 238, State Route 24, and the other MTS routes which would be impacted by the project.

2. Potential impacts of the project on MTS roadway levels of service. (See 1995 CMP, Chapter 3). The CMP roadway level of service standard is LOS E for designated roadways, except where LOS F was originally measured at the time the CMP was adopted (October 24, 1991). The standard for these roadways is the existing LOS. The LOS F roadway segments are presented in the 1995 Draft CMP on Tables 4 and 5 (pages 30 through 32) and Figure 8 (page 34). The CMA requests analyses be conducted for two horizon years: 2000 and 2010. Although a roadway segment may be operating at LOS F, this does not preclude proposing mitigation measures for that facility.

3. Adequacy of project mitigation measures. On February 25, 1993 the CMA Board adopted three criteria for evaluating the adequacy of EIR project mitigation measures, as follows:

- ✓ Project mitigation measures must be adequate to sustain CMP service standards for roadways and transit;
- ✓ Project mitigation measures must be fully funded to be considered adequate;
- ✓ Project mitigation measures that rely on state or federal funds directed by or influenced by the CMA must be consistent with the project funding priorities established in the Capital Improvement Program (CIP) section of the CMP or the Regional Transportation Plan (RTP).

It would be helpful to indicate in the EIR/EIS the adequacy of proposed mitigation measures relative to these criteria. In particular, the EIR/EIS should detail when route improvements are expected to be completed, how they will be funded, and what would be the effect on LOS if only the funded portions of these projects were assumed to be built prior to project completion.

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Attachment - no response required

4. Potential impacts of the project on CMP transit levels of service. (See 1995 CMP, Chapter 4). Transit service standards are 15-30 minute headways for bus service and 3.75-15 minute headways for BART during peak hours. The EIR/EIS should address the issue of transit funding as a mitigation measure in the context of the CMA's policies, as discussed in item #3 above.

5. Potential impacts of the project on trip reduction measures. (See 1995 CMP, Chapter 5). The City of Oakland has adopted a Trip Reduction Ordinance (TRO) that provides for mechanisms to encourage ridesharing, flextime, transit, bicycling, telecommuting and other means of reducing peak hour traffic trips. The EIR/EIS should consider the use of TDM measures, in conjunction with roadway and transit improvements, as a means of attaining acceptable levels of service.

6. Feasibility of funding roadway and transit improvements. The CMP establishes a Capital Improvement Program (See 1995 CMP, Chapter 7) that assigns priorities for funding roadway and transit projects throughout Alameda County. The improvements called for in the EIR/EIS should be consistent with the CMP CIP. The EIR/EIS should discuss potential sources of funding for proposed roadway and transit improvements required by the project. The environmental documentation should discuss the feasibility of funding these transportation improvements in light of the limited amount of State and Federal resources to fund local improvements in Alameda County.

We appreciate the opportunity to review and comment on this project. If you have any questions, please feel free to call Beth Walukas or me at 836-2560.

Regards,

Jean Hart

Jean Hart
Deputy Director

cc: Ms. Anu Raud, City of Oakland
Beth Walukas, Senior Transportation Planner
File: CMP/Environmental Review Opinions - Responses - 1995

Attachment – no response required

Letter F

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

November 27, 1996

Mr. Gary J. Munekawa
Naval Facilities Engineering Command
Engineering Field Activity West (Code 1852GM)
900 Commodore Drive
San Bruno, CA 94066-5006

Subject: Draft Environmental Impact Statement/Environmental Impact Report for the Disposal and Reuse of Naval Medical Center Oakland

Dear Mr. Munekawa:

Bay Area Air Quality Management District (BAAQMD) staff have reviewed the Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the disposal and reuse of Naval Medical Center Oakland (NMCO). This document examines the potential environmental impacts from the implementation of several reuse alternatives at the 183-acre NMCO site. We concur with your finding that all reuse alternatives would have significant impacts on regional air quality from increased emissions of ozone precursors resulting from project-generated automobile traffic. However, we strongly disagree with the conclusion that no measures are available to mitigate this impact significantly since our experience indicates that there are many ways to reduce or offset motor vehicle emissions for development projects similar to the proposed reuse of NMCO.

By facilitating trip-linking and alternative modes of transportation, higher density, mixed use projects generally yield fewer vehicle trips per resident or employee than conventional single use developments. For this reason, we encourage the City, above all else, to select the Maximum Capacity or Mixed Use Village alternative for the NMCO site. Also, the Final EIS/EIR should propose strategies to increase the percentage of transit trips above the five percent mode split assumed in the EIS/EIR, a level that is significantly lower than current transit use in northwestern Alameda County. A transit center, furnished with attractive shelters, benches, landscaping and lighting, featuring route and schedule information, and placed in a central location within the site, should be provided. The City of Oakland—acting as the decision-making body for land use approvals—should cooperate with AC Transit to provide bus service directly to the center. Also, shuttle service could be provided between the transit center and large nearby residential or commercial concentrations as well as the Coliseum or San Leandro BART station. F-1

While the EIS/EIR briefly addresses bicycle and pedestrian movement within the site, it overlooks bike/ped access *to* the site. Existing sidewalks, pedestrian paths, bicycle lanes,

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Response to Comments

Response to Comment F-1. The preferred alternative was selected after considering a number of criteria, including encouraging travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." Application of this criterion, among others, resulted in selecting the Maximum Capacity Alternative as the preferred alternative. The Maximum Capacity Alternative would contain loading areas, bus shelters, and benches for use by transit patrons, if AC Transit were to provide on-site transit service.

No significant transit impacts are identified in the EIS/EIR because none of the transit routes directly serving the NMCO site currently experience heavy demand and none of the project alternatives would generate new transit patronage beyond the capacity of the existing transit system. This assessment was not detailed in the Draft EIS/EIR but has been detailed in the Final EIS/EIR and is summarized in the response to Comment D-2. The existing transit routes serving the NMCO site have more than enough capacity to accommodate the minor increases in transit patronage resulting from any of the project alternatives.

The Final Reuse Plan (OBRA 1996) recommends that OBRA enter into discussions with appropriate agencies (e.g., AC Transit, page 79 of the Final Reuse Plan). The actual location, timing, and representatives attending these meetings on behalf of the City of Oakland and AC Transit have not been specified. Thank you for the

F-2 segregated bike paths, traffic signals and marked crosswalks linking the Oakland street system to NMCO should be mentioned, and their condition described. The Final EIS/EIR should propose to upgrade inadequate facilities and to build new ones to provide missing connections to the site. Within the site, a system of off-road paths for non-motorized modes of transportation should be provided to connect the major activity points. Additionally, the project should provide secure and conveniently located bicycle parking and storage at all buildings, shower and locker facilities for employees, and a bicycle repair station.

F-3 The EIS/EIR correctly states that mandatory trip reduction programs have been invalidated by State law; however, the City of Oakland can still choose to institute a program for its own project, with specific, enforceable trip reduction goals, in order to mitigate air quality—and traffic—impacts. The Final EIS/EIR should identify possible transportation demand management (TDM) strategies and propose that feasible ones be incorporated into the project. Proven strategies include guaranteed rides home, transit subsidies, on-site sale of transit passes, preferential parking for carpools and vanpools, ridematching programs, telecommuting, and designation of a transportation management coordinator to promote transportation alternatives.

Numerous studies indicate that the most effective TDM measures are those that manage the demand for parking, either by offering employees a monthly transportation allowance while charging for parking, or by offering employees the cash equivalent (or parking "cash out") of the cost to the employer of providing parking. (This way, some employees will choose to find alternative ways of getting to work and "pocket" the cash.) Parking demand management programs are best coupled with a reduction in the number of code-required parking spaces, which yields a monetary savings while reinforcing other aspects of the trip reduction program.

F-4 Transportation programs and facilities that reduce dependence on automobiles will not only benefit air quality but will also help achieve other important community goals, such as reducing congestion and noise, and increasing mobility options for those without access to a car. For additional strategies to reduce vehicle trips, please consult Appendices E and F of *Improving Air Quality Through Local Plans and Programs* (April 1994), a joint publication of the BAAQMD and the Association of Bay Area Governments (ABAG); for a copy of this document, call ABAG Publications at (510) 464-7900. Other useful ideas are found in Tables 15 and 16 of our *BAAQMD CEQA Guidelines: Assessing the Air Quality Impacts of Projects and Plans* (April 1996), which is available from the BAAQMD's Public Information Office, at (415) 749-4900.

F-5 The FEIR should also propose energy conservation measures for the project that exceed minimum California Title 24 building efficiency standards. Energy-efficient lighting systems, building envelopes, and heating, ventilation and air conditioning would reduce direct and indirect air quality impacts of the project by lowering nitrogen oxide emissions produced by power plants and on-site natural gas combustion. Energy conservation improvements are usually cost effective but are often overlooked during a project's design stage due to a focus on construction costs rather than on life-cycle costs. [For information

proposed strategies; they will be considered.

Response to Comment F-2. Section 3.9.7 adequately describes the NMCO site as having "extensive internal pedestrian pathways on the project site; however, sidewalks along roadways are almost nonexistent except at selected segments on Blackwood Street." Hazards to pedestrians are noted. Sections 4.9.5, 4.9.6, 4.9.7, and 4.9.8 address bicycle and pedestrian impacts and state that each reuse alternative would have adequate bicycle and pedestrian facilities.

Response to Comment F-3. OBRA has established policies that encourage travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." The selected reuse alternative for NMCO would contain loading areas, bus shelters, benches, and other reasonable transit amenities to support and encourage transit use.

The purpose and scope of the analysis in Sections 4.9 and 5.5 of the EIS/EIR supports informed decision- making. The City of Oakland encourages voluntary transportation demand management. Reuse of NMCO is infill development and is consistent with the goals of the City's general plan. The infrastructure is in place to reuse the site, and all city and county services are in place. The net effect of reuse at the NMCO site is to reduce overall trips.

Although the City of Oakland can not mandate trip reduction programs, it will strongly advocate in discussions with future developers that the that the following

F-5 on rebates for new energy-efficient construction available from PG&E, contact Grant Duhon at (415) 972-5695.]

F-6 Finally, the EIS/EIR's air quality analysis did not estimate project emissions of fine particulate matter (PM_{10}). This is a significant omission since the Bay Area is in nonattainment for the State PM_{10} standard. The Final EIS/EIR should calculate PM_{10} emissions and compare the total against our significance threshold of 80 lb/day. Care should be taken to account not only for tailpipe and tire wear emissions but also for the much larger contribution of entrained dust from paved roads, as indicated on page 31 of our *BAAQMD CEQA Guidelines*.

Thank you for the opportunity to comment on the EIS/EIR for the disposal and reuse of NMCO. BAAQMD staff would be glad to provide further assistance on mitigating the air quality impacts of your project. If you need additional information or have any questions regarding our comments, please call Niko Letunic, Environmental Planner on my staff, at (415) 749-5170.

Sincerely,

Ellen Garvey
Air Pollution Control Officer

EG:NL

cc: BAAQMD Director Edward R. Campbell
BAAQMD Director Greg Harper
BAAQMD Director Mary King
BAAQMD Director Ben C. Tarver
Gary Binger, Association of Bay Area Governments

transportation demand management strategies be incorporated into the project as economically feasible:

- On-site sale of transit passes and related subsidies
- Telecommuting incentives
- Parking demand management through the use of monthly transportation allowances and parking charges for some parking spaces
- Preferential carpool and vanpool parking spaces

The City will also recommend that the developer consider other similar strategies and maintain an open-door policy to coordinate informal trip reduction investigations with local and regional transportation agencies.

Response to Comment F-4. OBRA has established policies that encourage travel that does not depend on the automobile. As stated in the NMCO Final Reuse Plan (OBRA 1996), one of the evaluation criteria for all proposed uses at the site was stated as follows: "Preference will be given to proposed uses which provide an acceptable transportation plan that limits adverse traffic impacts at the site and reduces reliance upon automobiles." The selected reuse alternative for NMCO would contain loading areas, bus shelters, benches, and other reasonable transit amenities to support and encourage transit use.

Response to Comment F-5. The City of Oakland will encourage reasonable energy conservation measures when a specific development plan is prepared for the site. Government Code § 66473.1 provides that the design of a subdivision shall provide, to the extent feasible, for future passive or natural heating or cooling

opportunities. The law shall not, however, be construed to require a reduction in allowable densities.

Response to Comment F-6. The EIS/EIR text and Table 4-31 have been revised to include estimates of PM_{10} emissions generated by vehicle traffic associated with alternative reuse plans. Because this analysis represents new significant information under the CEQA Guidelines, § 15088.5, it was recirculated for public review. The recirculation letters, attachments, and associated comments and responses are included at the end of this comments and responses section.

Letter G

EAST BAY
MUNICIPAL UTILITY DISTRICT

MARILYN L. MILLER
DIRECTOR OF ENGINEERING AND CONSTRUCTION

November 20, 1996

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attn.: Mr. Gary J. Munekawa, Environmental Planning Branch,
Code 1852GM,
900 Commodore Drive
San Bruno, CA 94066-5006

SUBJECT: Disposal and Reuse of the Former Naval Medical Center, Oakland (NMCO)
Draft Environmental Impact Statement / Environmental Impact Report

Dear Mr. Munekawa:

Thank you for the opportunity to comment on the subject document. The District has the following comments regarding water service and wastewater service.

WATER SERVICE

G-1 The Draft Environmental Impact Statement/Environmental Impact Report (DEIS/EIR) should include water consumption for the various alternatives, compared against historical usage patterns of NMCO, to determine the impact on the District's finite water supply. Table 4-33 on page 4-123 concludes that the water distribution system impacts will be non-significant under any of the four alternatives. Without the comparative consumption rates, the conclusion cannot be verified.

G-2 Depending upon the alternative selected and the water service requirements of that alternative, off-site pipeline improvements may be needed. The location, extent, and cost of any pipeline improvements will be determined when the individual project sponsors request water service to the project sites. When the development plans have been finalized, the project sponsors should contact the District's New Business Office and request a water service estimate to determine costs and conditions of providing water service. Engineering and installation of pipeline improvements, if needed, often require substantial lead time that should be provided for in the project sponsors' development schedules.

G-3 The DEIS/EIR should include information on the ownership of the existing utility infrastructure at NMCO after closure. The operation and maintenance responsibilities for the existing utility infrastructure, after the Navy relinquishes ownership of the property need to be addressed in the DEIS/EIR. If the NMCO site does not remain under a single ownership, after the closure, the existing on-site water distribution system, as presently configured would not meet District Water Service Regulations. The report should detail the need for pipeline improvements, including pipeline installations, water meter installations, and backflow prevention. This information is needed to implement the conversion process.

375 ELEVENTH STREET . OAKLAND . CA 94607-4240 . (510) 835-3000

Response to Comments

Response to Comment G-1. The following text was inserted in Chapter 3 - Affected Environment, as Section 3.12.9:

> **3.12.8 Potable Water Supply**
>
> Historic consumptive water use at NMCO ranged from about 5 to 9 million gallons per month (Rogers 1997). Average annual consumptive water use was about 7.5 million gallons per month, or about 90 million gallons per year (Rogers 1997).

Section 3.12.8 from the Draft EIS/EIR ("Regulatory Considerations") now appears as Section 3.12.9 in the Final EIS/EIR, with no other changes.

The following text was added as the final section in Chapter 4, Sections 4.12.3, 4.12.4, 4.12.5, and 4.12.6:

> **4.12.3 Maximum Capacity Alternative**
>
> *Impact 1: Potable Water Supply.* A significant and mitigable impact would result from an increased water supply demand of about 112 percent over the historic demand. The Maximum Capacity Alternative is estimated to increase population in the region of influence by 3,006, which includes 1,565 residential users, and 1,441 commercial users (please see Table 4-5). Multiplying 1,565 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 187, 800 gallons of residential use per day. Multiplying 1,441 commercial users times an estimated 70

gallons per day per commercial user (Department of Water Resources 1994b) equals 100,870 gallons of commercial use per day. Adding these estimated daily residential (187,800 gallons) and commercial (100,870 gallons) uses equals 288,670 gallons per day estimated water use on-site. Multiplying this use rate times 365 days subtotals 105,364,550 gallons per year. Adding an estimated 85,490,000 gallons per year to irrigate the 83-acre golf course (based on an irrigation rate of 1.03 million gallons per acre per year) totals 190,854,550 gallons per year estimated potable water demand. This represents an increase of about 112 percent over the estimated historic annual use of 90,000,000 gallons per year.

Mitigation 1: The City of Oakland will expressly identify the water supplier(s) that will provide water service to the alternative (Cal. Pub. Res. Code Section 21151.9; Cal. Wat. Code Sections 10910-10915). The City will ask those suppliers whether the water demand associated with the alternative has been included and assessed in the suppliers' urban water management plans, and will require such plans to be updated to account for estimated demand from this alternative. Government Code Sections 65352 and 65352.5 require cities to consult with water suppliers in connection with such proposed projects. Moreover, Government Code Section 65302, subdivision (d), requires cities to coordinate with such suppliers in preparing the conservation elements of their general plans. That coordination is required to include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that

information has been submitted by the water agency to the city. In addition to supplier identification and coordination, the following best management practices will be implemented by future site developers:

- Interior and exterior water audits and incentive programs for single family residential, multi-family residential, and commercial users;
- requirement of ultra low flush toilets in all new construction;
- distribution system water audits, leak detection and repair;
- metering for all new connections and billing by volume of use;
- large landscape water audits (golf course and recreational areas);
- landscape water conservation for new single family homes; and
- water waste prohibitions.

Implementation of these water conservation practices will be consistent with the guidelines and schedules set forth in the Memorandum of Understanding Regarding Urban Water Conservation in California (California Urban Water Conservation Council 1994). Supplier identification, coordination, and best management practices implementation would reduce water supply impacts to a less than

significant level by ensuring that the water supply system will have adequate capacity prior to development approval.

No other significant impacts to utilities systems or waste management service and landfill capacity would result under the Maximum Capacity Alternative. The generation of about 71,346 tons of demolition waste would, however, be a significant but mitigable cumulative impact, and is discussed in Chapter 5 of this EIS/EIR.

4.12.4 Mixed Use Village Alternative

Potable Water Supply. The Mixed Use Village Alternative is estimated to increase population in the region of influence by 2,532, which includes 241 residential users, and 2,291 commercial users (please see Table 4-5). Multiplying 241 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals 28,920 gallons of residential use per day. Multiplying 2,291 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 160,370 gallons of commercial use per day. Adding these estimated daily residential (28,920 gallons) and commercial (160,370 gallons) uses equals 189,290 gallons per day estimated water use on-site. Multiplying this use rate times 365 days totals 69,090,850 gallons per year. This represents about 77 percent of the estimated historic annual use of 90,000,000 gallons per year, and is not a significant water supply impact.

4.12.5 Single Use Campus Alternative

Potable Water Supply. The Single Use Campus Alternative is estimated to increase population in the region of influence by 2,312 commercial users (please see Table 4-5). Multiplying 2,312 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals 161,840 gallons of commercial use per day. Multiplying this use rate times 365 days totals 59,071,600 gallons per year estimated potable water demand. This represents about 66 percent the estimated historic annual use of 90,000,000 gallons per year, and is not a significant water supply impact.

4.12.6 Residential Alternative

Potable Water Supply. The Residential Alternative is estimated to increase population in the region of influence from 1,299 (low density option) to 1,990 (high density option). Please see Table 4-5. Residential users could range from 957 to 1,608. Multiplying 957 and 1,608 residential users times an estimated 120 gallons per day per residential user (Department of Water Resources 1994a) equals a range of 114,840 (low density option) to 192,960 (high density option) gallons of residential use per day. Multiplying the range of 342 to 382 commercial users times an estimated 70 gallons per day per commercial user (Department of Water Resources 1994b) equals a range of 23,940 (low density option) to 26,740 (high density option) gallons of commercial use per day. Adding estimated low density

option residential (114,840 gallons) and commercial (23,940 gallons) results in an estimated daily water use rate of 138,780 gallons per day. Multiplying this daily rate times 365 days per year totals 50,654,700 gallons per year. This represents about 56 percent of the historic use of 90,000,000 gallons per year, and is not a significant water supply impact.

Adding estimated high density option residential (192,960 gallons) and commercial (26,740 gallons) results in an estimated daily water use rate of 219,700 gallons per day. Multiplying this daily rate times 365 days per year totals 80,190,500 gallons per year. This represents about 89 percent of the historic use of 90,000,000 gallons per year, and is not a significant water supply impact.

Response to Comment G-2. Comment noted. The City of Oakland will require the project developer to contact the East Bay Municipal Utility District's New Business Office for the correct costs and conditions information.

Response to Comment G-3. The ownership of the existing utility infrastructure after the Navy conveys title to the property has not been determined; therefore we cannot speculate about ownership and maintenance responsibilities. It is anticipated that the City of Oakland, consistent with the response to Comment G-2, will require the developer to comply with all applicable laws, regulations, and code provisions regulating pipeline improvements, including, but not limited to, pipeline and water meter installations and backflow prevention.

Gary J. Munekawa, Naval Facilities Engineering Command
November 20, 1996
Page 2

WASTEWATER SERVICE

G-4 The City of Oakland's Inflow/Infiltration (I/I) Correction Program allowed for a 20 percent increase in the base wastewater flow for each sub-basin due to changes in land use or population. The projected flow increase for the development under the various alternatives may be below the base flow increase allowance for the sub-basins impacted by the development. The project sponsor should confirm with the City of Oakland Public Works Department that the sub-basin base flow increase allocation has not been allocated to other developments. If the wastewater flow increase under the various alternatives were to exceed the City of Oakland's base flow increase allowance for the appropriate sub-basin, conveyance and treatment capacity for wet weather flows may be adversely impacted.

G-5 In general, the DEIS/EIR should address the replacement or rehabilitation of the existing sanitary sewer collection system to reduce inflow and infiltration (I/I) to the sanitary sewer system. A provision to control or reduce the amount of I/I should also be addressed in the DEIS/EIR.

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G-6 The mailing list shown on Page 10-5 shows that two copies of this document were sent to the District. The addressees shown are Gary L. Hunt and John B. Lampe. In the future, all communications with the District related to water and wastewater planning and environmental documentation should be sent to:

Manager of Water Distribution Planning
East Bay Municipal Utility District, M/S 701
P. O. Box 24055
Oakland, CA 94623-1055

If the District can be of further assistance, or if you have any questions, please contact Prab Jog, Senior Civil Engineer, Water Service Planning, at (510) 287-1026.

Very truly yours,

William R. Kirkpatrick
Manager of Water Distribution Planning

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Response to Comment G-4. The City of Oakland will require the project developer to contact the City of Oakland's Department of Public Works for all approvals of the water distribution system when considering site-specific development proposals. Specifically, the project sponsor/applicant will be required to confirm that the sub-basin base flow increase allocation that may be needed has not been allocated. As of March 1997, the sub-basin baseflow increase has not been allocated (Neary, 1997).

Response to Comment G-5. The sanitary sewer collection system may require replacement and rehabilitation when reuse is implemented, as noted in response to Comment G-4. Infiltration/inflow was addressed in a utility assessment in 1985. As noted in Section 3.12.2 of the EIS/EIR, a major upgrade was completed in 1988 that involved slip lining all six-inch, eight-inch, and 10-inch sewer lines.

Response to Comment G-6. Comment noted. Changes to the mailing addresses have been made for subsequent mailings.

cc: Ms. Anu Raud, Environmental Review Section
City of Oakland
Community and Economic Development Agency
1330 Broadway
Oakland. CA 94612

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Letter H

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November 26, 1996

VIA FEDERAL EXPRESS

Gary Munekawa
Code 1852GM
U.S. Department of the Navy Engineering Field Activity West
900 Commodore Drive
San Bruno, CA 94066-5006

Re: Oakland Unified School District
Oak Knoll Naval Medical Center Draft Environmental Impact Statement/Environmental Impact Report
Our file 5390.1.001.6

Dear Mr. Munekawa:

Our firm represents the Oakland Unified School District with regard to the disposal and reuse of the Naval Medical Center Oakland (NMCO) ("the Project"). The Oakland Unified School District ("District") has the following comments concerning the impact of the NMCO preferred reuse alternative on the District's ability to house and educate students generated by the Project and the proposed mitigation.

Summary

The preferred reuse alternative, dubbed the "maximum capacity alternative" in the joint draft Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") for the Project, recommends among other things the development of 250 units of single- and multi-family housing and 300 multi-family residential units. The EIS/EIR concludes that the preferred reuse alternative will have significant and mitigable impacts on schools. (Vol. I, § 4.2.3, tab. 4-4 at p. 4-14.)

H-1 The District agrees with this conclusion and, in fact, the District's own analysis indicates that the impact may be even greater than the impact identified in the EIS/EIR. The District disagrees emphatically, however, with the conclusion that the proposed mitigation measure would reduce this impact to insignificance. That mitigation measure

Response to Comments

Response to Comment H-1. The Draft EIS/EIR projected an addition of 805 students under the Maximum Capacity Alternative, which was identified as a significant but mitigable impact. However, the impact of the reuse alternatives on schools was reanalyzed, as detailed below, using (1) the student yield factor provided by the Oakland Unified School District (OUSD), and (2) a more realistic estimate of new households in the City of Oakland attributable to the reuse plan. The revised analysis indicates that only 261 additional students district-wide will be generated as a result of the reuse plan.

Moreover, the actual net increase of new students will be less than 261 because NMCO, when fully operational in 1994 generated 215 students (Theresa Hughes & Associates, 1994). This estimate of students when NMCO was operational is based on the number of households due to employment, the existing number of family housing units (82 units), and factors used to generate Table 4-4, including the OUSD provided yield factor of 0.364 students per household. Table H-1 presents a comparison of the number of students generated when NMCO was fully operational to those generated by the reuse alternatives. In addition, the current R-30 zoning of NMCO would permit, without any legislative rezoning action by the city, a theoretical maximum of about 1,140 single family residences (using the same methodology of the Residential Alternative and 5,000 square feet per lot). This would generate about 415 new students.

The revised student generation projections were calculated as follows. First, the student yield factor was reduced since the OUSD is now using a more precise yield factor of 0.364 students per household (OUSD 1996). This yield factor is roughly

H-1 places the burden of housing students generated by the Project on a district already stretched beyond its resources to accommodate its current students, class size reduction in the elementary schools, and anticipated further growth throughout the 25 years during which the Project's impact is measured.

Recommended Mitigation

The District therefore requests that the following mitigation measures be incorporated into the final EIS/EIR and adopted by the lead agencies for each, or that an alternative plan be adopted that will substantially reduce the impact on schools from the closure and reuse of the NMCO.

H-2 1. A new permanent elementary school be provided for grades K-5, paid for by and on land provided by the federal government.

2. Permanent additions be provided at the middle and high school levels to meet the needs of additional enrollment generated by the Project. If additional land is required at these grade levels, that additional land be acquired adjacent to the schools to accommodate the additional facilities.

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3. Before the approval of any general plan amendment, specific plan, zone change, use permit, building permit, contract or other governmental authorization to participate in the reuse plan, each developer be required to enter into an agreement with the District to fully mitigate the impact on the District of new development.

Impact on the District of the NMCO Reuse Plan

H-3 The District's recently prepared developer fee justification study, copy attached, concludes that the District's enrollment currently exceeds its capacity and that enrollment will continue to exceed capacity into the 2005-06 school year. (Developer Fee Justification Study for Oakland Unified School District, by Jack Schreder & Associates, Sept. 30, 1996, "Developer Fee Study," p.1.) The District's capacity is currently 48,617 students in grades K-12. (Developer Fee Study, p. 1.) This capacity is determined by loading District-owned permanent classrooms at the District's class loading standards shown on Table 1.

Only permanent classrooms are included in the capacity analysis as portable classrooms are considered an interim measure to house students. However, these loading standards have already been modified by implementation of the Class Size Reduction Act that further reduces school facility capacity.

half of the 0.68 factor used in the Draft EIS/EIR to estimate school impacts. The 0.68 student per household factor was based on a conventional single-family unit generation rate estimated for Northern California. Second, the Draft EIS/EIR estimated that 100 percent of new employees moving to the region of influence (Alameda County) would move to the City of Oakland. The original analysis used 100 percent estimate to support a worst-case analysis of potential impacts from new employees moving into the region. However, this figure is seen as an unrealistic worst-case estimate (ERA 1997) and has been reduced to 25 percent because an estimated 75 percent of jobholders in Oakland commute from elsewhere in Alameda County (ERA 1997). The new estimates are shown in the revised Table 4-4. This table is included in the Final EIS/EIR, along with text revising schools impacts under each of the alternatives in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6. Under the Maximum Capacity Alternative, the addition of 261 students throughout the District, spread over the twenty-three year life of the reuse plan and assuming full project buildout in 2020, is not considered a significant impact that requires mitigation because school overcrowding, per se, is a social impact. This is a maximum of 46 additional students under the Maximum Capacity Alternative when compared to preclosure conditions. Only if physical changes occur as a result of the Reuse Plan, is there a potential for significant impacts. Here, because the increase in enrollment (261 students) is so small, especially when compared to the overall size at the district (0.5 percent) construction of additional classrooms is speculative and remote. However, strictly as an accommodation to the OUSD, this EIS/EIR will treat the impact as if it were significant and migitable.

Table H-1
Impact on School District Enrollments

	Fully Operational Base (1994)	Alternatives: Maximum Capacity	Mixed Use Village	Single Use Campus[4]	Residential Option 1	Residential Option 2
Jobs in the ROI due to alternative	2,718	717	1,140	1,150	170	190
No. of households due to employment[1]	510	134	214	216	32	36
No. of households due to family housing units	82	584	90	0	357	600
Gain in households due to alternative	592	718	304	216	389	636
Impact on the Oakland Unified School District[2,3]	215	261	110	79	141	231
Total 1994 OUSD enrollment	51,594	51,594	51,594	51,594	51,594	51,594
Percent of total 1994 School District enrollment	<1%	<1%	<1%	<1%	<1%	<1%
Impact on schools in the Oak Knoll Study Area[2,3]	30	213	33	0	130	218
Total 1994 Oak Knoll Study Area enrollment	2,786	2,786	2,786	2,786	2,786	2,786
Percent of total 1994 School District enrollment	1%	8%	1%	0%	5%	8%

[1] Assume that 75 percent of the jobs would attract new residents in the ROI (Alameda County and City of Oakland). Oakland is assumed to receive a quarter of the new households. Multiply jobs in the ROI due to alternative by .75 and again by .25 to obtain number of new households due to employment.
[2] Estimates based on 0.364 students per household (OUSD 1996). Only the housing units proposed at the NMCO site are included in the analysis of impact to the Oak Knoll CTA. Number could be higher if jobs induce additional housing construction in the area.
[3] The estimated impact on OUSD by grade groupings is as follows:

Estimated Impact on OUSD by Grade Groupings:	OUSD Yield Factor	Fully Operational Base	Maximum Capacity	Mixed-Use Village	Single Use Campus	Residential Option 1	Residential Option 2
Grades K-6	0.230	136	165	70	50	89	146
Grades 7-8	0.054	32	39	16	12	21	34
Grades 9-12	0.080	47	57	24	17	31	51
Total students	0.364	215	261	110	79	141	231

[4] The Single Use Campus Alternative would include student and/or guest facility housing but no estimates regarding number of units were developed.
Source: OUSD 1996; Economics Research Associates; Theresa Hughes & Associates 1994.

Gary Munekawa
U.S. Department of the Navy Engineering Field Activity West
November 26, 1996
Page 3

Table 1

Grade	Max. Class Size
Kindergarten (Double Session)	54
Kindergarten (Single Session)	27
1-3	29
4-6	31
7-8 Standard	33
7-8 Laboratory	26
9-12 Standard	28
9-12 Laboratory	24
Special Day Class	12
Continuation High School	15

(Developer Fee Study, p. 6.)

Table 2 indicates District-wide capacity, current enrollment, and projected enrollment for 2005-06. At the time these statistics were compiled, the elementary schools were overcrowded by 4,736 students; there was space for 3,725 middle school students; and the high schools were overcrowded by 2,824 students. (Developer Fee Study, p. 9.) To accommodate these variations, the District is in the process of reconfiguring its schools to K-5, 6-8, and 9-12. Reconfiguration does not, however, create new classrooms, it improves utilization of existing ones. Even before consideration of the impact of class size reduction, the District was over capacity by 3,835 students and would have exceeded its K-12 capacity in the 2005-06 school year by 20,075 students. (Developer Fee Study, p. 9.) The District has not built any new facilities in several years, nor does it have funds to accommodate new students. Rather its available bond funds have been designated for badly needed deferred maintenance, and portable classrooms have been added to existing campuses to accommodate enrollment increases.

Table 2

	Capacity 1995-96	Current Enrollment 1995-96	Projected Enrollment 2005-06
Elementary K-6	28,408	33,144	40,940
Middle School 7-9	11,456	7,731	9,550
High School 10-12	8,753	11,577	14,300
Total	**48,617**	**52,452**	**64,790**

(Developer Fee Study, p. 9.)

H-3 The District's enrollment projections were calculated by using cohort data and projected residential construction as identified by the Association of Bay Area Governments ("ABAG"). According to the ABAG housing unit projections for 1996, 5,490 additional housing units will be constructed in the District by the 2005-06 school year. (Developer Fee Study, p. 7.) This will be a significant cumulative impact on the District in addition to the reuse plan.

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In addition, with the District's implementation of the Class Size Reduction Program (Assem. Bill No. 1777 (Stats. 1996, ch. 163, effective July 15, 1996) and Assem. Bill No. 1789 (Stats 1996. ch. 164, effective July 15, 1996)), the District's elementary schools will be over capacity. The reduction of class size to 20 students per class in first grade has already seriously affected the District's ability to house elementary students. Extension of the program to K-3 as already authorized and possibly beyond, will further impact school capacity. By the 2005-06 school year, the District will also become more impacted at the middle and high school levels. Because the District's enrollment exceeds its capacity, and because enrollment will continue to increase as a result of new residential development, all students generated by new residential development in the Project will have to be housed in new facilities.

H-4 The draft EIS/EIR documents that all schools serving the Project area were at or near capacity as of 1994-95. The draft EIS/EIR concludes that the maximum capacity alternative would generate approximately 805 students annually by the year 2020. (Draft EIS/EIR, § 4.2.3, p. 4-14.) This increase would represent a 1.6 percent increase over total 1994 enrollment. Of this increase, the EIS/EIR projects that the housing units proposed for the Project would generate approximately 547 additional students in the three schools that serve the Oak Knoll area. This represents an approximate 22.4 percent increase over

To encourage solutions to the less than significant overcrowding issue, the following text was added to the mitigation measures in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6:

Mitigation 1: Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

1994-95 enrollment in the Oak Knoll study area schools. Thus, the draft EIS/EIR concludes that the maximum capacity alternative "may result in school overcrowding" and that constitutes a significant mitigable impact. (Draft EIS/EIR, § 4.2.3, pp. 4-14 - 4-15.)

Proposed Mitigation

The District will need facilities, staff, and programs to accommodate this additional student load. Even with state funding of staff and programs, mitigation of the Project's impact on District facilities is vital.

Table 3 indicates the percent and number by grade level of students generated by the Project, the cost of construction of school facilities per student, and the total cost to house students generated by the Project District-wide.

Table 3

	Percent of new students generated by development	Number of students generated by the Project	Cost of housing per student	Total cost to house students generated by project, including land
Elementary	60%	483	$27,858	$13,455,414
Middle School	18%	145	$36,666	$ 5,316,570
High School	22%	177	$43,991	$ 7,786,407
Total District-wide	100%	805	----	$26,558,391

(Developer Fee Study, p. 10.)

According to the District's recently prepared developer fee justification study, the average cost of housing per student equals $34,855 for new facilities; $12,179 for reconstructed facilities; and $5,000 for modular portable classroom facilities.[1/] As indicated by Table 3, the cost of housing all students generated by the Project in new facilities would be over $26.5 million.

The acquisition of land by the District for prospective school sites and expansion of

[1/]These figures are based on state cost formulas and information from the Office of Public School Construction and State Department of Education.

H-4

55

However, the City of Oakland cannot "require each developer to enter into agreement with the OUSD for mutually agreeable mitigation of its project before the City approves any permit for development," as requested by the OUSD. This requirement is not legally mandated and is too restrictive and does not touch upon the necessity of first establishing a clear connection between the specific project and the resulting physical change in the environment. That is, there must be direct connection between the mitigation measure being requested by the OUSD and the development's physical impact. In addition, the mitigation should be roughly proportional to the impact. It is beyond the scope of a programmatic EIS/EIR to provide specific mitigation funding amounts or values.

The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO.

Response to Comment H-2. Please see response to Comment H-1.

Response to Comment H-3. The district's lack of facilities and capacity are noted.

Response to Comment H-4. Estimates of impacts to schools have changed. Please see response to Comment H-1. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO. The EIS/EIR can only suggest possible mitigation measures.

existing sites to accommodate the anticipated increase of 805 students is a necessary mitigation measure.

Table 4 indicates the number of acres for a school site at each grade level, the land cost for a new school, and the percent of that land cost attributable to students generated by the Project. Thus the total land cost to house students generated by the Project would be approximately $16 million. The other approximately $10.6 million cost of housing students is the cost of building the facilities.

H-4

Table 4

	Acres for new school per state regulations	Land cost for new school at $1 million per acre	Land cost for students generated by the Project
Elementary	10	$10 million	$8,050,000
Middle	20	$20 million	$3,222,222
High	40	$40 million	$4,720,000
Total			**$15,922,222**

(Interview with Robert Dias, Assistant Superintendent, Facilities Planning and Management, Oakland Unified School District.)

Mitigation of Impact at the Elementary Level

Based upon the figures provided in the EIS/EIR, 483 students generated by the Project will require elementary facilities. An elementary school requires roughly 10 acres. In the Oak Knoll study area, the cost per acre is approximately $1 million. Thus, the cost to acquire a site in the area is $10 million, and the total cost to acquire the site and build a new elementary school in the Oak Knoll study area is estimated to be approximately $16.8 million.

H-5

The infusion of 483 elementary students annually justifies the construction of a new elementary school. Additional students at the middle and high school levels justify additions to those existing schools. As outlined above, future impacts are anticipated at the elementary level when class-size reduction is expanded beyond the first grade to the K-3 levels. An additional impact will occur if class-size reduction is implemented at the 4-6 grade levels.

Response to Comment H-5. The revised impact estimates amount to the addition of 165 students in grades K-6 (Maximum Capacity Alternative). Please see response to Comment H-1.

H-5 If a new school is to be constructed, the most viable site would be within the boundaries of the NMCO. Any other site would involve additional negotiations with potential sellers, and if a negotiated purchase were not possible, eminent domain could be necessary.

Mitigation of Impact at Middle and High School Levels

H-6 Additions to the existing middle and high schools will only be feasible if land area on the existing sites allows for expansion. If not, additional land area will have to be acquired to provide for building additions to accommodate the increased student load. The use of portable classrooms is only a viable option for short-term facility needs. Portable classrooms are typically used as temporary buffers to accommodate the cyclical patterns of enrollment growth and decline. If long-term enrollment projections indicate a steady increase in enrollment, provision must be made for permanent facilities.

The Mitigation Measure in the EIS/EIR is Insufficient

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Busing is not a viable option for the District because of its impact on the educational process, parent opposition, and cost. The District relies on AC Transit to provide public transportation for all its students, except special education students. Either through AC Transit, with its own, or with leased buses, the cost of busing is prohibitive, and the traffic and air impacts negative.

Public benefit conveyance of the land for an elementary school could reduce the cost to mitigate the impact of this project. However, the draft EIS/EIR sole mitigation measure makes construction of new school facilities a District responsibility. Adequate school facilities must be funded by the federal government as well as by the developers who will benefit by new development, rather than by existing residents and tax payers. In

H-7 light of the restrictions in California Government Code sections 65995-65996 on requiring developers to mitigate the impact of new development on schools, the EIS/EIR should require as mitigation that all new development within the Project, residential and/or commercial, mitigate the Project's impact on schools. The EIS/EIR suggests this could be through imposition of financing, through districts formed pursuant to the Mello-Roos Community Facilities Act or other agreed financing mechanisms. Since these mitigations are impractical or impossible in Oakland, the District requests a more practical approach.

If a Mello-Roos district were formed, any voter approved tax levy would require two-thirds vote by the voters of the proposed Mello-Roos district. It is not likely that two-thirds of the voters in a Mello-Roos district in Oakland would vote to impose a special tax with regard to the Project. If a Mello-Roos district were established in an area in which fewer than twelve registered voters reside, the property owners may elect to establish a Mello-Roos district. Developers in the Oakland area have not, however, elected to do so

Response to Comment H-6. Comments noted. No response required.

Response to Comment H-7. The EIS/EIR can only suggest possible mitigation measures. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO.

to date. (Developer Fee Study, p. 27.) Therefore, the formation of a Mello-Roos district may not be feasible to mitigate the impact of the reuse plan.

General obligation bonds ("GO bonds") may be issued by any school district for the purposes of purchasing real property or constructing or purchasing buildings or equipment "of a permanent nature." Because GO bonds are secured by an ad valorem tax levied on all taxable property in the District, their issuance is subject to two-thirds voter approval. In November 1994, the District passed a GO bond totaling $169,730,000. This bond money, however, was earmarked for special uses: "to reduce dangers from earthquakes and other hazards; upgrade vocational, library, science, and computer classrooms; provide disabled access; and repair inadequate lighting, heating, plumbing, and electrical systems." (Developer Fee Study, p. 28.) This bond money is restricted to these purposes and the likelihood of passage of a bond for new facilities to house children from new developments would be low even if the District's bonding capacity were adequate.

H-8 The District's general funds finance the District's instructional program. The District has no unencumbered funds that could be used to construct new facilities or reconstruct existing facilities. (Developer Fee Study, p. 28.)

S8

In addition, state lottery funds cannot be utilized for acquisition of real property, construction of facilities, financing research, or any other noninstructional purpose. (Gov. Code, § 8880.5, Developer Fee Study, p. 29.)

Thus a more realistic mitigation measure would be to require that each developer enter into an agreement with the District for mutually agreeable mitigation of its project before the City approves any permit for development of the Project. If this mitigation were to supplement mitigation by the federal government, it could be workable for both parties. California case law supports this type of mitigation. (*Murrieta Valley Unified School District* v. *County of Riverside* (1991) 228 Cal.App.3d 1212.) Because the underlying zoning for the NMCO is R 30, medium density residential, approval of the reuse plan and EIS/EIR may be the last legislative act before the development of the area. Therefore adoption of appropriate and sufficient mitigation measures is essential.

Conclusion

H-9 On the basis of the foregoing, the District requests either that the following mitigation measures be incorporated into the final EIS/EIR and adopted by the lead agencies for each, or that an alternative plan be adopted that will substantially reduce the impact on schools from the closure and reuse of the NMCO.

1. A new permanent elementary school be provided for grades K-5, paid for by and on land provided by the federal government.

Response to Comment H-8. Please see response to Comments H-1 and H-7.

Response to Comment H-9. Please see responses to Comments H-1 and H-7.

2. Permanent additions be provided at the middle and high school levels to meet the needs of additional enrollment generated by the Project. If additional land is required at these grade levels, that additional land be acquired adjacent to the schools to accommodate the additional facilities.

H-9

3. Before the approval of any general plan amendment, specific plan, zone change, use permit, building permit, contract or other governmental authorization to participate in the reuse plan, each developer be required to enter into an agreement with the District to fully mitigate the impact on the District of new development.

Please contact us if you have any questions regarding the foregoing or would like to discuss this matter further.

Very truly yours,

BREON, O'DONNELL, MILLER,
BROWN & DANNIS

Marilyn Cleveland

Guy A. Bryant

MJC/GAB/jra
cc: Jean Quan
Sylvester Hodges
Carolyn Getridge
Edgar Rakestraw, Jr.
Steven Royston
Robert Dias
Vernon Hal
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SCRIPT FOR NOVEMBER 13, 1996 COUNCIL MEETING

COMMENTS BY ROBERT DIAS, ASSISTANT SUPERINTENDENT FOR FACILITIES PLANNING AND MANAGEMENT ON BEHALF OF THE OAKLAND UNIFIED SCHOOL DISTRICT

Thank you for the opportunity to address the impact of this project on the District.

1. As you know, the draft combined environmental impact statement and environmental impact report ("EIS/EIR") for the disposal and reuse of the NMCO, including the preferred reuse alternative selected by OBRA, identifies the impact of the preferred reuse plan on schools as a significant mitigable impact. We agree with this analysis and, in fact, the District's own analysis indicates that this impact may be even greater than the impact identified in the EIS/EIR. I-1

2. The District disagrees emphatically, however, with the conclusion that proposed mitigation measure would reduce this impact to insignificance. That mitigation measure places the burden of housing students generated by this project on the District, a District already stretched beyond its resources to accommodate its current students, class size reduction in the elementary schools, and anticipated further growth throughout the 25 years during which the impact is measured. To mitigate these impacts, the District has already reconfigured all of its schools and instituted year-round schooling at every feasible school. I-2

3. The District respectfully requests the replacement of the proposed inadequate mitigation measure with the following mitigation measures:

A. A new permanent elementary school be provided for grades K-5, paid for by and on land conveyed to the District by the federal government.

B. Permanent additions be provided at the middle and high schools affected to

Response to Comments

Response to Comment I-1. The Draft EIS/EIR projected an addition of 805 students under the Maximum Capacity Alternative, which was identified as a significant but mitigable impact. However, the impact of the reuse alternatives on schools was reanalyzed, as detailed below, using (1) the student yield factor provided by the Oakland Unified School District (OUSD), and (2) a more realistic estimate of new households in the City of Oakland attributable to the reuse plan. The revised analysis indicates that only 261 additional students district-wide will be generated as a result of the reuse plan.

Moreover, the actual net increase of new students will be less than 261 because NMCO, when fully operational in 1994 generated 215 students (Theresa Hughes & Associates, 1994). This estimate of students when NMCO was operational is based on the number of households due to employment, the existing number of family housing units (82 units), and factors used to generate Table 4-4, including the OUSD provided yield factor of 0.364 students per household. Table H-1 (see response to Comment H-1) presents a comparison of the number of students generated when NMCO was fully operational to those generated by the reuse alternatives. In addition, the current R-30 zoning of NMCO would permit, without any legislative rezoning action by the city, a theoretical maximum of about 1,140 single family residences (using the same methodology of the Residential Alternative and 5,000 square feet per lot). This would generate about 415 new students.

The revised student generation projections were calculated as follows. First, the student yield factor was reduced since the OUSD is now using a more precise yield

house the number of students estimated to be generated by the reuse plan, paid for by the federal government. If additional land is required in order to expand facilities at these grade levels, that additional land be provided adjacent to the schools to accommodate the additional facilities, also paid for by the federal government. I-2

C. Before the approval of any contract or permit to participate in the reuse plan, each developer be required to enter into an agreement with the District to fully mitigate the impact on the District of new development pursuant to the reuse plan.

4. The preferred reuse alternative, dubbed the "maximum capacity alternative," for development of the NMCO recommends, among other things, the development of 550 units of single- and multi-family housing. The EIS/EIR concludes that the maximum capacity alternative will have significant and mitigable impacts on schools. According to the draft EIS/EIR, all schools serving the NMCO area were at or near capacity as of 1995. In fact, the entire District was at 97.5 percent of capacity during the 1995-1996 school year. Within ten years, enrollment is expected to increase by 23.5 percent without the NMCO reuse plan. Enrollment will then exceed current capacity by over 20 percent. I-3

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5. The draft EIS/EIR concludes that the maximum capacity alternative would generate approximately 805 students annually by the year 2020. The housing proposed in the NMCO reuse plan would generate an approximate 22.4 percent increase over 1994 enrollment in the Oak Knoll study area schools. Thus, the NMCO reuse plan creates a significant cumulative impact. I-4

6. The District will need facilities, staff, and programs to accommodate the cumulative District-wide impact of the students generated by this reuse plan, other I-5

factor of 0.364 students per household (OUSD 1996). This yield factor is roughly half of the 0.68 factor used in the Draft EIS/EIR to estimate school impacts. The 0.68 student per household factor was based on a conventional single-family unit generation rate estimated for Northern California. Second, the Draft EIS/EIR estimated that 100 percent of new employees moving to the region of influence (Alameda County) would move to the City of Oakland. Third, the original analysis used 100 percent estimate to support a worst-case analysis of potential impacts from new employees moving into the region. However, this figure is seen as an unrealistic worst-case estimate (ERA 1997) and has been reduced to 25 percent because an estimated 75 percent of jobholders in Oakland commute from elsewhere in Alameda County (ERA 1997). The new estimates are shown in the revised Table 4-4. This table is included in the Final EIS/EIR, along with text revising schools impacts under each of the alternatives in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6. Under the Maximum Capacity Alternative, the addition of 261 students throughout the District, spread over the twenty-three year life of the reuse plan and assuming full project buildout in 2020, is not considered a significant impact that requires mitigation because school overcrowding, per se, is a social impact. This is a maximum of 46 additional students under the Maximum Capacity Alternative when compared to preclosure conditions. Only if physical changes occur as a result of the Reuse Plan, is there a potential for significant impacts. Here, because the increase in enrollment (261 students) is so small, especially when compared to the overall size at the district (0.5 percent) construction of additional classrooms is speculative and remote. However, strictly as an accommodation to the OUSD, this EIS/EIR will treat the impact as if it were significant and migitable.

To encourage solutions to the less than significant overcrowding issue, the

District growth and expanding class-size reduction. While state and local funding supports the District's operational costs, no funding exists for the provision of classrooms and related facilities to house these anticipated students. I-5

7. The District therefore requests that the stated mitigation measure be replaced by mitigation measures providing land for a new elementary school site and financial support for additional school facilities to accommodate students generated by this project and other District growth. I-6

8. According to the distribution of students by grade level provided by the District's recently prepared development fee justification study, after reuse, annually an additional 483 students will require elementary facilities, 145 will require middle school facilities, and 177 will require high school facilities. I-7

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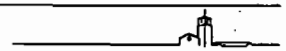
9. For each new student generated by this reuse plan, the District's recently prepared development fee justification study projects the cost of housing to be approximately $34.9 thousand for new facilities. The cost of housing all students generated by the reuse plan in new facilities appropriate to their grade level would be $29.9 million. I-8

10. For reconstructed facilities, the per student cost of housing would be approximately $12 thousand, and for modular portable classroom facilities the cost would be approximately $5,000 per student, not including the cost of land on which to locate those portable classrooms and of multipurpose rooms and other adjunct facilities. The use of portable classrooms is only a viable option as a solution for short-term facility needs. Portable classrooms are temporary buffers to accommodate the cyclical patterns of enrollment, growth and decline. Since long-term enrollment projections indicate a I-9

following text was added to the mitigation measures in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6:

> *Mitigation 1:* Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).



I-9 | steady increase in enrollment, provisions must be made for permanent facilities.

I-10 | 11. The elementary school students generated by the reuse plan are sufficient to require an entire new elementary school, one for which the District has no funding. An elementary school requires 10 acres. The cost to obtain a site and build a new elementary school in or near the Oak Knoll study area is estimated to be $16.7 million.

I-11 | 12. This would accommodate only sixty percent of the students generated by the reuse plan, with the secondary students requiring additional facilities at the appropriate grade levels. When class-size reduction in the District is implemented beyond the first grade level, anticipated impact of the reuse plan at the elementary grade level will be even greater.

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I-12 | 13. The most viable site for a new elementary school is within the boundaries of the NMCO. Because of the absence of undeveloped space in Oakland, any other site could involve expensive negotiations and even eminent domain.

I-13 | 14. Additional students at the middle or high school levels will require additions to the existing schools at those levels. Additions to those schools will only be feasible if space on the existing sites allows for expansion. If not, additional space near these facilities will have to be acquired to accommodate the increased student load.

I-14 | 15. Busing is not a viable option for the District because of its impact on the educational process of students in the District, the opposition of parents and the cost.

I-15 | 16. The mitigation measure in the draft EIS/EIR makes financing and construction of new school facilities to accommodate students generated by the reuse plan a District responsibility. Since the City will want to expedite the economic advantages of proceeding with the reuse plan when a developer or developers are selected, it is

However, the City of Oakland cannot "require each developer to enter into agreement with the OUSD for mutually agreeable mitigation of its project before the City approves any permit for development," as requested by the OUSD. This requirement is not legally mandated and is too restrictive and does not touch upon the necessity of first establishing a clear connection between the specific project and the resulting physical change in the environment. That is, there must be direct connection between the mitigation measure being requested by the OUSD and the development's physical impact. In addition, the mitigation should be roughly proportional to the impact. It is beyond the scope of a programmatic EIS/EIR to provide specific mitigation funding amounts or values.

Response to Comment I-2. Please see response to Comment I-1. The EIS/EIR can only suggest possible mitigation measures. The OUSD would need to determine the most feasible measures to implement. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO.

Response to Comment I-3. Please see response to Comment I-1.

Response to Comment I-4. Please see response to Comment I-1.

Response to Comment I-5. Please see response to Comment I-1.

Response to Comment I-6. The EIS/EIR can only suggest possible mitigation measures. The OUSD would need to determine the most feasible measures to implement. The federal government's limited role of property disposal in this

important that the City Council make the commitment now to mitigate this reuse plan sufficiently. In light of California case law requiring developers to mitigate the impact of new development on school facilities, the District urgently requests that the City Council

I-15 require as a mitigation measure that a prerequisite to all new development, residential and/or commercial, be that the District and developers enter into agreements to fully mitigate the remaining impact of new development on school facilities.

17. The District also requests that financing of construction and the conveyance of land to the District for an elementary school within the residential portion of the reuse

I-16 plan area be added as a mitigation measure. It also requests that financing of additions at the middle and high school levels be added. These mitigation measures must be adopted now in order to accommodate students generated by the reuse plan. This is a

I-17 responsibility of the federal government and must be included in the EIS. It is also a responsibility of the City as lead agency for the EIR. The District may not have another

I-18 opportunity to present its needs to the City and have them imposed on new developers.

Thank you for your attention to this urgent matter.

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EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO.

Response to Comment I-7. The revised impact estimates add 165 students in grades K-6 and 261 students for all grades (Maximum Capacity Alternative)(OUSD 1996). Estimates of impacts to schools have changed. Please see response to Comment I-1. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO. The EIS/EIR can only suggest possible mitigation measures. The OUSD would need to determine the most feasible measures to implement, which may or may not include school construction.

Please see response to Comment I-1 and revised Table 4-4.

Response to Comment I-8. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-9. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-10. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-11. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-12. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-13. Comment noted. Please refer to mitigation regarding funding described in Response to Comment I-1. It is beyond the scope of a programmatic EIS/EIR such as this to provide specific mitigation funding amounts.

Response to Comment I-14. The EIS/EIR can only suggest possible mitigation measures. The OUSD would need to determine the most feasible measures to implement.

Response to Comment I-15. The City of Oakland cannot "require each developer to enter into agreement with the OUSD for mutually agreeable mitigation of its project before the City approves any permit for development," as requested by the OUSD. This requirement is not legally mandated and is too restrictive and does not touch upon the necessity of first establishing a clear connection between the specific project and its impact on the school district. That is, there must be direct connection between the mitigation measure being requested by the OUSD and the development's impact. In addition, the mitigation should be roughly proportional to the impact. It is beyond the scope of a programmatic EIS/EIR to provide specific mitigation funding amounts or values.

Response to Comment I-16. The City cannot "require that each developer enter into agreement with the OUSD for mutually agreeable mitigation of its project before the City approves any permit for development," as requested by the OUSD. This requirement is not legally mandated and is too restrictive and does not touch upon the necessity of first establishing a clear connection between the specific project and its impact on the school district. That is, there must be direct connection between the mitigation measure being requested by the OUSD and the development's impact. In addition, the mitigation should be roughly proportional to the impact. It is beyond the scope of a programmatic EIS/EIR to provide specific mitigation funding amounts or values. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring building schools or provides for the cost of housing students due to local reuse of the NMCO.

Response to Comment I-17. The federal government's limited role of property disposal in this EIS/EIR generates no environmental impacts requiring construction of new schools or providing for the cost of housing students due to local reuse of the NMCO.

Response to Comment I-18. Comment noted. The City will make all reasonable efforts to cooperatively address the school overcrowding issue.

Letter J

November 25, 1996

Commanding officer
Engineering Field Activity West
Naval Facilities Engineering Command
attn: Mr. Gary F. Munekawa, Environmental
Planning Branch,
Code 1852 GM,
900 Commodore Drive
San Bruno, CA 94066-5006

Re: Draft Environmental Impact Statement
EIR for Disposal and Reuse of the
former Naval Medical Center Oakland,
Oakland, CA.

Regarding the future Disposal and Reuse
the Golden Gate Audubon Society favors
a plan whereby the maximum riparian
system and tree environment would be
retained for the habitat of existing birds
many of which are on the list of
California Species of Special Concern.

J-1

Hazel N. Houston
for Golden Gate Audubon
Society

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Response to Comments

Response to Comment J-1. The City of Oakland is sensitive to conserving habitat values at the NMCO site. Several mitigation measures and permanent habitat protections have been incorporated as conditions of approval for any project ultimately approved at the NMCO site. The 50-foot wide restricted access buffer zone surrounding Rifle Range Creek is intended to be a permanent zone of protection through reuse plan implementation and to be incorporated into later specific plan development proposals. The second sentence of each "Mitigation 1" in Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 was modified as follows:

> Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor.

Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 of the EIS/EIR were revised as follows:

> A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone.

The Navy has no plans to remove trees under caretaker status. This is not significant for the purposes of NEPA because it addresses single trees not exceeding NEPA significance thresholds. Mitigation measures required under CEQA for any reasonably foreseeable tree removal would require permits for any trees to be removed during reuse.

Letter K

OAK KNOLL NEIGHBORS

REPRESENTING APPROXIMATELY 6500 HOUSEHOLDS

Hotline Number
(510) 464-1134

Mailing Address:
4400 Keller Ave.,
Suite 260, Box 102,
Oakland, CA 94605

November 8, 1996

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attention: Mr. Gary J. Munekawa, Environmental Planning Branch
Code 1852GM
900 Commodore Drive
San Bruno, CA 94066-5006

Dear Sir,

In accordance with your announcement of 10 October 1996 we are submitting the following written comments on the Draft EIS/EIR for the disposal and reuse of the Naval Medical Center Oakland (NMCO).

Before submitting our comments, we wish to commend the preparers of the Draft EIS/EIR on the comprehensiveness and organization of the report. This was a massive undertaking and many aspects were addressed very fairly and effectively.

However, in conducting such a complex study and drafting such a detailed report there are bound to be errors of commission and omission. The current opportunity for comment recognizes that reality, and this letter addresses such problems.

1. **Houses on Ridgeline**
   The EIS/EIR fails to recognize United Indian Nations (UIN) and possible others' access to the existing officers housing on the ridgeline, as a result of the OBRA vote on March 28, 1996. The EIS/EIR should address this potential impact and consider the impact on views and the Leona Quarry development in connection to the site. Prior to the March 28 vote, OBRA voted "no building on the ridgeline" and that the OBRA preferred open space (page 214 of report). The CAG, OBRA, the Town Hall meetings, Oak Knoll Neighbors, and Oak Knoll Neighbors community meetings agreed unanimously that no buildings should be on the ridgeline. The EIS/EIR gives the impression that the neighbors in the surrounding vicinity approved this ridgeline housing, when in fact, it did not. Oak Knoll Neighbors therefore requests the permanent demolition of the 3 officer houses, and that NO building ever take place on the ridgeline.

K-1

Response to Comments

Response to Comment K-1. Page 2-12 of the EIS/EIR states that "The Maximum Capacity Alternative also includes residences in the hills along Keller Avenue. These residences were included only to provide analysis of the greatest density of development that is reasonably foreseeable during reuse. This residential area was considered for development by OBRA in December 1995 but was not included in the August 1996 NMCO Reuse Plan." Nowhere in the EIS/EIR is it expressed or implied that the neighbors in the surrounding vicinity approved this ridgeline housing. Demolition request noted.

The United Indians Nation (UIN) is briefly described in Volume I, Section 2.3.2. Nothing in the UIN proposal mentions access to the ridgeline housing. Access is therefore not considered a potential impact.

Volume I, Section 4.5 analyzes aesthetics and scenic resources impacts. If any ridgeline housing becomes part of subsequent development proposals for the NMCO site, the applicant proposing such development would be required to analyze its impact consistent with CEQA.

2. **The Neighbors in the Immediate Vicinity Did NOT Agree to the Plan**
The EIS/EIR fails to recognize the immediate vicinity's response to the maximum density plan, fails to respond to the finalized maximum density plan and the immediate community's rejection of it. It also fails to recognize failures in the community input process for the plan. In fact, community input is vital. According to the middle paragraph on page 3-10, City policy requires that:

> ***"In considering those land use questions which most affect a particular neighborhood or other area, the City will give substantial weight to the opinions of the local citizens."***

Specifically, the neighbors in the immediate vicinity voiced several objections to the proposed Public Benefit Conveyance to Seneca (to be discussed further under item number 4).

Immediate Vicinity Response. Over 1100 letters and signed petitions from residents living in the immediate vicinity (within 2 miles) were not in favor of the final plan. Also, a lawsuit was filed by neighbors in the vicinity in response to a specific portion of the plan; this lawsuit in now on appeal. Almost all the CAG members who represented the neighbors in the immediate vicinity were unanimously and consistently vocal in their position against specific portions of the final plan.

K-2

69

The Community input process was flawed. The Community Advisory Group was formed to provide the community input for the plan. There was complete agreement regarding 80% of the plan; however there was considerable and consistent disagreement about 20% of the plan and there were numerous procedural failures.

Here are some of the problems identified with the planning process.

(A) There was never a chair of the committee, and even when the process ended, there was still no chairperson, no procedures, no voting process.

(B) The entire CAG committee never voted on the final plan. In fact, immediate vicinity (neighborhood) members of CAG were prevented from voting—even though they were assured for more than a year that they would be able to do so.

(C) The CAG committee never reached consensus. A majority of the voting members of the CAG spoke out against a portion of the plan.

(D) One of the subcommittees (Housing & Homeless)—on which a majority of neighbors in the immediate vicinity were represented—was not called, by OBRA staff, to meet for 4 months. Another subcommittee, Employment and Social Impacts (on which there were no neighbors from the immediate vicinity), invited two of the PBC applicants—Seneca and the United Indian

Response to Comment K-2. The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states that "The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group."

The purpose of this EIS/EIR is to evaluate the environmental impacts associated with reuse. In meeting that purpose, background information regarding the OBRA reuse planning process has been provided so that decision-makers were informed about the process that was used in developing the alternatives. This background information indicates that the Oak Knoll Neighbors had a substantial role in developing the alternatives consistent with City policy. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak Knoll Neighbors. The immediate vicinity response has been considered throughout the procedurally by correct process. The City of Oakland does not consider the Seneca Center or UIN proposals as having unfair advantages. All proposals were evaluated using the same criteria. Consensus, which refers to a "general agreement," or a judgment arrived at by most of those concerned, was reached.

Nations—into a special meeting and then assisted them in the approval process while ignoring the other 12 PBC applicants. This gave Seneca and the United Indian Nations an unfair advantage.

(E) A paid, OBRA consultant, Henry Gardner, was brought in at the end to facilitate the process, but he never called for a vote on the plan although he claimed that the process would be by consensus. There was no consensus, and he never called for vote to reach a majority opinion. Finally, neither he nor any OBRA staff addressed or publicly discussed the process flaws, pointed out by Oak Knoll Neighbors in several public meetings.

K-2

(F) The section 6 portion of the PBC application was never reviewed by CAG.

3 **Environmental Justice**

Section 3.2.5 begins by stating the obligation to address the relative impacts on any federal actions on minority or low-income populations to avoid placing a disproportionate share of burden of adverse impacts of Federal action on these groups. (Note that the operative word is "or", not "and".) The EIS/EIR begins addressing this requirement in Section 3.2.5 by providing demographic information on the ethnicity and poverty status for the City of Oakland and the Oak Knoll study area. In Section 5.6 the EIS/EIR offers an appraisal of the impact of the Maximum Capacity Alternative on ethnic minorities and the poor. Unfortunately both sections are seriously flawed.

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In Section 3.2.5 the third paragraph begins as follows:

" Based on the 1990 U.S. Census, 43.9 percent of the City of Oakland's population is African American, 32.5 percent is Caucasian, 14.8 percent is Asian and Pacific Islander, ..."

K-3

The next paragraph begins as follows:

" In the Oak Knoll study area the ethnic composition is different in the following respects: 34.3 percent of the area's population is Caucasian, instead of 15.4 (sic) percent city wide, and 9.6 percent is Asian or Pacific Islander, instead of 18.1 (sic) percent city wide. African Americans make up 55.4 percent of the Oak Knoll study area...."

There are three serious problems (detailed below) with this paragraph that compares the Oak Knoll study area with the City.

K-4

(A) The underlined numbers are incorrect. Clearly they were copied from the wrong column in Table 3-9. The correct numbers are 32.5 and 14.8.

K-5

(B) By moving the reference to the African American percentage of the Oak Knoll study area population to the second sentence, the paragraph tends to call

Response to Comment K-3. Comment noted. References to demographic estimates and concerns associated with the analysis are addressed in the responses to comments K-4, K-5, and K-6.

Response to Comment K-4. These corrections have been made.

Response to Comment K-5. Comment noted. Corrections made in response to Comment K-4 clarify the difference in proportion of Caucasians.

K-5 attention to an inaccurate difference in the proportion of Caucasians (34.3 vs. 15.4) when the real difference is trivial (34.3 vs. 32.5 percent).

(C) By moving the reference to the African American percentage of the Oak Knoll study area population to the second sentence, the paragraph suggests that the proportion of African Americans in the Oak Knoll study area is not significantly different from the rest of the city. Clearly this is false. The proportion of African Americans in the Oak Knoll study area is 55.4 percent which is much higher than the proportion in the City of Oakland (i.e. 43.9 percent). Thus the Oak Knoll area is more predominantly African American than the city as a whole.

K-6 **Thus Section 3.2.5 fails to make an important point, i.e. that a recognized ethnic minority, specifically African Americans, are over represented in the Oak Knoll study area and that <u>any adverse impacts of any plan would indeed place a disproportionate share of the burden of such adverse impacts on a recognized ethnic minority</u>.**

K-7 Before proceeding to Section 5.6 it is important to note that the second paragraph of Section 3.2.5 correctly identifies both The City of Oakland and the Oak Knoll study area as the relevant Region of Impact (ROI) for analyzing issues of environmental justice. In the corresponding paragraph of Section 5.6 (page 5-26) the recognition of the Oak Knoll study area as a ROI is less explicit, but is clearly implied.

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K-8 Unfortunately, this perspective is not maintained in the subsequent parts of Section 5.6. Subsection 5.6.1 specifically addresses the impact on the City of Oakland, however there is no corresponding section on the impact on minorities within the other recognized ROI, i.e. the Oak Knoll study area. The study improperly focuses ONLY on the citywide ROI, but NOT on the relevant Oak Knoll study area. Section 5.6 concludes (page 5-27) that "...no significant impact was identified in the EIS/EIR that could adversely and disproportionately affect low-income <u>and</u> minority populations. There should be a separate subsection that (a) addresses the other ROI, i.e. the Oak Knoll study area and (b) acknowledges that in the Oak Knoll study area a recognized ethnic minority would assume a disproportionate burden of specific adverse impacts.

K-9 Note that the conclusion quoted above uses the operative word "and". Although Section 3.2.5 opens with a statement that indicates that the issues of ethnic minority status and poverty are separate, the discussion on page 5-27 leads the reader to the conclusion that these two issues must be considered jointly. This clearly not true. By hiring a solvent African American, an employer gets the same credit toward compliance with ethnic minority employment goals as he or she gets by hiring a poor one. In the case of environmental impact, a home-owning African American is entitled to just as much ethnic minority protection as an impoverished one.

K-10 Therefore, we argue that the Sections 3.2.5 and 5.6 should acknowledge any adverse impact would place a disproportionate share of burden on a recognized ethnic minority, specifically African Americans, in one of the ROIs. Furthermore, Section

Response to Comment K-6. The analysis of Environmental Justice issues is a federal requirement accompanying NEPA analysis of federal actions. Analysis of direct impacts related to issues of environmental justice are therefore limited to Navy property disposal and the Navy No Action Alternative, but indirect impacts extend to the environmental impacts of projects initiated by those taking title to the property.

Section 3.2.5 has been revised to more clearly state the environmental analysis requirements of NEPA in relation to the requirements of the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*.

> On February 11, 1994, President Clinton issued the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. This order requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is *required* (emphasis added), by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, *whenever feasible*, (emphasis added) should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities.

Section 5.6 has been revised to more clearly state the environmental analysis

5.6 should recognize that such adverse impacts include at least one that is admittedly significant and cannot be mitigated, specifically traffic-related ozone precursor emissions. Furthermore, in view of the pivotal controversy over Seneca, Sections 3.2.5 and 5.6 should address the economic impact of the Seneca component on the ethnic minority property owners in both ROIs. The issue of property values is particularly relevant since Tables 3.5 and 3.9 support the widely held view that the African American ethnic majority in the Oak Knoll study area would be particularly impacted by any decline in property values.

K-10

4. Specific Impacts of the Proposed Seneca Facility

In view of the city policy described in item #2 that "[i]n considering those land use questions which most affect a particular neighborhood or other area, the City will give substantial weight to the opinions of the local citizens" and the pivotal role that the proposed Seneca facility and program played in the neighborhood's ultimate opposition to the Maximum Capacity Alternative, it seems strange that the EIS/EIR devotes so little space to the Seneca component.

The EIS/EIR fails to address the specific impacts of PBC applicants (other than the East Bay Regional Parks--which has pulled out of the process--and the Oakland Parks and Recreation) to the plan because the Seneca applicants were not part of the plan when the EIS/EIR process started.

Here are significant issues that should be addressed in the EIS/EIR regarding Seneca.

K-11

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(A) If Seneca acquires the land through a separate public benefit conveyance, clear title to the Seneca site will be contingent on the continuation of the program for the next 30 years, i.e. well beyond the year 2020.

(B) The nature of the Seneca residential population should be recognized in the projections for police and fire protection.

(C) The long term performance and the public perception of the Seneca program could have a major impact on property values in the Oak Knoll study area. If this impact could be adverse, it would place a disproportionate burden on at least one ethnic minority. (See below.)

The EIS/EIR also fails to recognize the specific impacts of Seneca on the immediate vicinity, the development of the rest of the site, and the next 30 years of the use at the site. Here are several specific potential impacts of this kind that should be addressed .

K-12

(D) The Seneca proposal includes segregated use of a portion of the site which is illegal under the Unruh act.

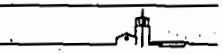
(E) The Seneca proposal includes a 24 hour, involuntary lock-down and assessment facility relocating from Hayward. Awarding such a facility a

requirements of NEPA is relation to the requirements of the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. The following text has been inserted in Section 5.6:

> As discussed in Section 3.2.5, the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is *required* (emphasis added), by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et. seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, *whenever feasible*, (emphasis added) should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities."

As further clarification, the following headings and text was added as Section 5.6.2:

> **5.6.2 Potential For Disproportionate Environmental Impacts On Minority Communities And Low-Income Communities**
>
> *Navy Disposal.* Navy property disposal is simply a transfer of property title and would result in no environmental impacts. No significant and adverse environmental impacts or disproportionate environmental impacts on minority and low-income communities would occur as a result of the Navy property disposal. Disposal is



public benefit conveyance at Oak Knoll is especially important when considering earthquake faults. State of California Education Code 39000.2 prohibits building an educational facility near an earthquake fault. Other regulations no doubt require special environmental consideration for involuntary detainment facilities such as those proposed by Seneca.

(F) The EIS/EIR does not even consider the impact on property values when (a) a six acre institution for Severely Emotionally Disturbed (SED) juveniles is located nearby, (b) the likelihood that more RCF's will locate near it, and(c) the California Real Estate Disclosure Law (1102.5) requires that the Seneca facility must be disclosed when a neighbor sells their home.

(G) The EIS/EIR does not include the impact of Seneca on other potential development at the site. For example, will it have an impact on the adjacent Credit Union if it remains at the current site?

(H) Seneca is funded by the public tax funds. What if funding is cut as it has been in recent years?

(I) What if SED children are legally required to return to public schools (case law in New York state)?

K-12

(J) What about economic sustainability? Seneca is seeking a bond and is looking for contributors for short-term adjustable rates and taxable securities, or a tax-exempt bond from ABAG—secured by what or whom? (One ABAG official is on OBRA and voted for Seneca, a clear of interest.) These finances are not secured and at the whim of current and future voters. What if they need future bonds? At Fort Ord, many PBC's have unable to occupy the site due to financial reasons. Can Seneca sustain and finance their use for 30 years? What are the adverse scenarios? The section 6 portion of their application is again, still not public—should the EIS/EIR consider it?

(K) Who does Seneca serve? Which counties' children are served by Seneca? Many of the children come from San Francisco, Contra Costa—less than half are from Alameda, yet they are now being concentrated in Oakland which has the highest majority African American population in Alameda. This concentration of residential care facilities may constitute a form of environmental racism (see Federal case law US v. Marshall Village No. 90-C-524-S-1991). Seneca proposed to bring its San Leandro and a Hayward facilities to Oakland. Will the Seneca Santa Cruz facility also relocate to Oakland?

(L) Seneca is participating in "Project Destiny" which proposes to serves the MOST severely disturbed children (the highest level of SED cases) in conjunction with the Berkeley Academy, Fred Finch and Lincoln Center. Will this mean still more expansion at a later time? And would this result in

summarized in the Executive Summary and Table ES-1 of the EIS/EIR, and is described in detail in Chapter 4.

No Action Alternative. Retaining the property indefinitely under the No Action Alternative would result in no environmental impacts. No significant and adverse environmental impacts, or disproportionate environmental impacts on minority and low-income communities would occur as a result of the No Action Alternative. The No Action Alternative is described in detail in Chapter 2 and is analyzed for environmental consequences in Chapter 4 of the EIS/EIR.

Community Reuse Alternatives. The only significant and unmitigable environmental impacts produced by the community reuse alternatives is for air quality. Motor vehicle traffic trips associated with community reuse alternatives for NMCO may exceed one or more Bay Area Air Quality Management District air emission thresholds as shown in Table 4-31. The region of influence for ozone precursors and secondary particulate matter (PM_{10}) is the entire San Francisco Bay Area as discussed in Section 4.10, because these pollutants are produced by secondary chemical reactions in the atmosphere and occur over a large area. In addition, vehicle traffic is a geographically dispersed source of dilute PM_{10} emissions. Minority communities and low-income communities would not be disproportionately impacted by this regional air quality impact.

All significant and mitigable environmental impacts identified in the EIS/EIR are associated with implementing the different community

more children from other counties being served in Oakland? More children at the site than previously planned? What potential impact would the Project Destiny proposal have on Seneca and consequently on the surrounding neighborhoods? And would this mean an even greater concentration of residential care facilities in an ethnically protected area?

K-12

5. Tipping Effect

Seneca may also have an adverse impact on a majority minority population neighborhood. Residential Care Facilities (RCF's) have an adverse impact on minority communities that can lead to their economic decline, a process described as a "tipping effect" (see Federal case law US v. Marshall Village No. 90-C-524-S-1991 and the Turning Point, Federal Appellate Court 9535223, 9535237). Local Real Estate surveys indicate that some real estate values in the immediate vicinity of the Oak Knoll Naval Base area continue to drop based on 1st quarter 1996 sales. Will Seneca tip the scales of the neighborhood and will its placement here therefore be environmental racism?

K-13

6. Concerns Specific to Base Closure

The EIS/EIR report does not consider several idiosyncrasies of base closure. For instance, what if a PBC applicant cannot keep the land use the same for 30 years? What if the land is leased to another user who cannot sustain the use? What has happened at other bases? Have property values dropped near other base closures? What about the fact that this is one (if not the only) base closure in the United States completely surrounded by homes and therefore home values are of crucial interest in considering social impacts? What about these and other "base-closure-specific" impacts?

K-14

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7. Cumulative Retail Development Impacts

The impacts of Retail development in this area of Oakland are not properly addressed. The existing retail on Keller Avenue adjacent to the base is not very successful, Eastmont Mall has had numerous failures, the Grass Valley Safeway has closed. By contrast, nearby Leona Quarry will be developed including 21 acres of new retail.

Here is a list of crucial questions that need to be addressed.

K-15

(A) What are the cumulative impacts of the other nearby failed retail developments and of current developments on proposed retail on the Base site?

(B) What is the likely success rate of retail when it has consistently not done well in a given area?

(C) What market studies were used to look at the success of the retail? Were these same studies used by other developers in the area?

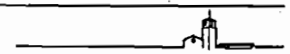
reuse alternatives. If the mitigation measures associated with the community reuse alternatives are implemented as described in the EIS/EIR, no significant and adverse environmental impacts would disproportionately affect minority communities or low-income communities would occur.

Response to Comment K-7. Please see response to Comment K-6. In addition, Section 5.6 was expanded to evaluate potential significant environmental impacts on minority and low-income populations in more detail for both the City of Oakland and the Oak Knoll study area. The "Establishing the Region of Influence" section was revised with the following text:

> The City of Oakland and the Oak Knoll study area have been established as the relevant region of influence for analyzing environmental justice issues. Detailed analysis focuses on the Oak Knoll study area using data from census tracts adjoining NMCO. The nature of the impacts associated with disposal and reuse, if any, would generally occur at the neighborhood level within the immediate vicinity of NMCO.

Response to Comment K-8. As described in the response to Comment K-6 and Section 5.6.2, the EIS/EIR identifies no significant and adverse environmental impacts that would disproportionately affect minority or low-income communities, provided the mitigation measures identified in the EIS/EIR are implemented.

Response to Comment K-9. Please see response to Comment K-6 regarding clarifying the requirements of the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.*



(D) What relationship exists between crime levels, public safety issues and retail? The stores on Keller Avenue have been held up at gun point at least 10 times in the past 2 years.

(E) What is the likelihood that several retail developments will succeed in the nearby vicinity where they have not succeeded before? The entire impact of the 150 acre development of the Leona Quarry site must be considered in the EIS/EIR. The plans for this development were made public October 13, 1996.

K-15

(F) Once a retail establishment fails--what is its impact on home values in the vicinity? What is the likelihood the retail buildings are converted to new uses that decrease or increase property values? (Nearby examples of declining property values due to failed retail exists at nearby Foothill Square and Eastmont Mall.)

8. Rezoning Issues

The entire site is currently R-30, compatible with the surrounding residential area. To rezone means a change in the city general plan. What impact will this rezoning have on the surrounding homes? There are small leaps in zoning and large leaps--which ones are needed for the Maximum Density Plan and what are the probable impacts? Which proposed uses in the plan are least compatible or non-conforming with R-30? Home values in the vicinity reflect distance from retail and open space amenities (which Oak Knoll Neighbor surveys indicate is valued by the residents), therefore a change in zoning will likely result in a decrease in property values. Transforming the residential character of the area to a retail hub constitutes a major change that should be assessed.

K-16

9. Region of Influence

The EIS/EIR shows the area of impact as the entire City of Oakland. This is incomplete and flawed. There are two regions of influence. One is the city of Oakland. The other is the study area of the immediate vicinity. The greatest weight must be given to the immediate vicinity. City policy requires that "[i]n considering those land use questions which most affect a particular neighborhood or other area, the City will give substantial weight to the opinions of the local citizens." The EIS/EIR does not give adequate consideration to the neighborhoods surrounding the base site. Any negative impact at Oak Knoll has the largest negative impact on the immediate neighborhoods surrounding the base, and these constitute a predominantly African American community.

K-17

10. Density of Housing

EIS/EIR states that R-30 allows for 5,000 square feet per housing unit. Does this 5,000 SF include setbacks, roads, and nearby unbuildable open space/slopes? If so, this is an inaccurate application of the zoning laws. A number of lawsuits have been filed in this region of the City regarding the density of housing issue. See comments below regarding current building trends in the area.

K-18

Response to Comment K-10. Please see the responses to Comments K-6 and K-7. Ozone precursor emissions are adequately addressed as reuse impacts in Section 4.10 of the EIS/EIR. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

Response to Comment K-11 Property obtained under any conveyance would still be subject to City of Oakland zoning and land use policies associated with reuse of the NMCO property, as described in Section 3.1.3. Should a public benefit conveyance recipient be unable to continue using the property for the purpose specified in the conveyance, the property would return to the federal agency sponsoring the conveyance. The federal agency could then reassign the property to another applicant meeting the conveyance requirements, or it could dispose of the property from federal ownership.

We realize that the nature of the Seneca population is a controversial local issue. However, the City of Oakland feels that supporting assistance to troubled children under the age of 12 serves a valuable socioeconomic purpose. Children are an important resource deserving of support. Speculation regarding any alleged criminal tendencies of these children would be prejudicial. We have chosen to avoid prejudice in the reuse planning process against any group.

We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are

not considered as environmental impacts for purposes of NEPA or CEQA.

Funding, education, economic sustainability, and the operation of the Seneca facility and the conduct of its students are speculative in nature. Their socioeconomic results will depend on the ability to generate funds and cooperation. The long-term sustainability of the reuse plan is therefore speculative. We believe the analysis provided in this EIS/EIR, and these responses to comments provide decisionmakers with adequate information to support the selection of a final reuse plan.

Response to Comment K-12. Please see responses to Comments B-13, K-11, and K-19.

Response to Comment K-13. Neither of the cited cases dealt with "tipping effect," property values, or "environmental racism." United States v. Village of Marshall, Wisconsin, 787 F, Supp. 872 (W.D. Wis. 1991), held that a village's refusal to grant an exception to a state law spacing restriction for group homes constituted handicap (mental illness) discrimination under the Fair Housing Act. In Turning Point, Inc., v. City of Caldwell, 74 F, 3d 941 (9th Cir. 1996), the Ninth Circuit affirmed a district court decision that a city's occupancy limitation on a group home for the homeless constituted handicap (mental and physical impairments) discrimination under the Fair Housing Act. If the "troubled youth facllity" proposed for NMCO could be called housing for the handicapped, these cases would indicate that the City of Oakland is required to "reasonably accommodate" such a facility.

Response to Comment K-14. Property obtained under any conveyance would still be subject to City of Oakland zoning and land use policies associated with reuse of

the NMCO property, as described in Section 3.1.3. Should a public benefit conveyance recipient be unable to continue using the property for the purpose specified in the conveyance, the property would return to the federal agency sponsoring the conveyance. The federal agency could then reassign the property to another applicant meeting the conveyance requirements, or it could dispose of the property from federal ownership. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

Response to Comment K-15. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

Although local experience regarding existing crime rates is an important consideration, there is no reasonable basis for assuming that increased crime will unavoidably result upon reuse. Crime may increase or decrease locally. This EIS/EIR has analyzed the need for police services in Sections 3.3 and 4.3, and generally recommends adequate mitigation for significant impacts (Section 4.3). Further speculation regarding uncertain future trends in local crime would not enhance the ability of decisionmakers to make an informed decision regarding reuse, and is therefore not included.

Speculation regarding detailed site design specifications cannot effectively be

analyzed in this programmatic EIS/EIR. CEQA Guidelines, § 15145, says that "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact" (Cal. Pub. Res. Code, § 21000, et seq.; Guidelines, § 15145 [Office of Planning and Research 1995]).

Response to Comment K-16. Please see responses to Comments K-14 and K-15. We appreciate your concerns. Speculation regarding relationships between property value trends and potential zoning designations is not within the scope of environmental impacts under NEPA since the information supporting such an analysis is lacking, is based on conjecture, and is not reasonably foreseeable (40 CFR, § 1502.22[b][1]). CEQA Guidelines, § 15145, says that "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact" (Cal. Pub. Res. Code, § 21000, et seq.; Guidelines, § 15145 [Office of Planning and Research 1995]).

Response to Comment K-17. Please see responses to Comments K-6 and K-7.

Response to Comment K-18. To clarify, the EIS/EIR states in Section 3.1.3 (Land Use - Regulatory Considerations) that "The City of Oakland's R-30 zoning allows for a single dwelling unit per lot designation, with minimum lot sizes of 5,000 square feet." Later, in the subsection titled "Rezoning for Reuse," it is stated that "Following transfer of federal surplus land to the City of Oakland (or other nonfederal entities), future development of portions of the site would be under city jurisdiction. Oakland's zoning for the site, Residential (R-30), *may not accommodate some of the proposed reuse land uses* (emphasis added for this

11. **Earthquake Faults and Public Safety**

K-19 The EIS/EIR fails to adequately consider the faults on and around the Base. A report issued by ABAG states that there is a 70% chance that the Hayward fault will experience a 7.0 or greater magnitude earthquake in the next 30 years. What impact will this have? Have all the faults been given adequate and appropriate consideration? A study by Lawrence Livermore Labs in 1987 shows fault activity that differs from the EIS/EIR--how do you account for this difference? A recent 1996 public news broadcast showed evidence of a new, deeper, and more serious active fault in our area. What specific impact does this have on the intent to build a school, or keep SED (Severely Emotionally Disturbed) children on the site, some of them locked up in a 24 hour assessment center?

K-20 Has the cumulative effect of greater retail, residential, recreational and educational activities been analyzed with regard to overarching questions of public safety associated with earthquake and related fire hazards? Given the limited access problems and the complex circulation patterns likely to develop, these public safety questions deserve highest priority.

12. **CEQA Guidelines and Other Laws Followed?**

K-21 California State Fish and Game documents and drawings clarify how testing for the Alameda Striped Racer is to be conducted--was this procedure followed for two consecutive mating seasons, as required? Was the trap made to the specifications of the state biologist? Over the period of time required with nothing to inhibit the movement of the racer?

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K-22 The report is superficial in its assessment of potential endangered plant species. There seems to be minimal effort to examine whether seasonal native, endangered plants exist at the site. The report also fails to identify known historic native Oaks (that are of special preservation interest to the city of Oakland) and should be earmarked for special consideration. In particular, there is little attention given the fact that large trees--some along the riparian corridor, especially one extremely large historic coast live oak (with a circumference of over 6 feet) should be given highest priority for preservation status. These and other omissions suggest that a more thorough investigation of existing potentially significant native or endangered species should be conducted.

13. **Potentially Unique Land Ownership?**

K-23 Did the EIS/EIR consider the unique land ownership and impact of the United Indian Nations (UIN) land ownership? What if the urban tribal entity UIN which is not currently a recognized tribe, becomes recognized, or through another tribe, obtains a sovereign nation status? The EIS/EIR fails to look at this issue and the likely impacts. Is there a potential that gambling could then occur on base since it occurs on other sovereign Native American land in the U.S.?

14. **Noise and Lighting Nuisances**

K-24 The impacts of noise and night lighting related to the driving range, retail, and other proposed uses, are not adequately addressed.

response). To achieve consistency between the selected reuse alternative and city policies it *may be necessary to amend the Oakland Comprehensive Plan to include the NMCO site and surrounding uses, prior to approving future land uses* (emphasis added for this response). The land use amendments would need to be based on the goals and policies of the selected reuse alternative, while maintaining consistency with the current goals and policies in the Oakland Comprehensive Plan." Such amendments would account for any discrepancies associated with unbuildable roads and slopes.

Response to Comment K-19. Since there are no recently active faults within the site boundary, it is not likely that damage would occur directly as a result of a fault rupture. Instead, damage may occur due to ground shaking, originating on a fault outside the site boundary. The EIS/EIR considers earthquake hazards associated with active faults throughout the San Andreas Fault Zone. The most damaging earthquake to the site could be an earthquake originating on the Hayward Fault. The region of the site contains many faults, but most of them have not been active within the past 11,000 years or more.

In general, ground motion decreases away from the fault rupture, so it is possible for a small nearby earthquake to cause more damage than a more distant but larger earthquake. Since the Hayward Fault could generate a large earthquake near the site, it probably represents the reasonably expected worst-case earthquake scenario for NMCO. Current seismic codes, based on the California Building Code (CBC), require that buildings be designed to withstand a high degree of ground motion without structural failure that would cause injury. Seismic design standards depend on the shape and height of the structure, its intended use or occupancy, and the type of soil underlying the structure. For some types of structures the CBC requires that

site-specific ground motion studies be performed and that the building be designed to withstand these forces. At some locations, the level of ground motion or the presence of liquefiable soils, unstable slopes, or other conditions not foreseen by the CBC may exist. In such cases the minimum design standards of the CBC may not be adequately protective.

Site-specific ground motion studies are required by the CBC for schools, hospitals, and other critical facilities. These studies may be appropriate for some facilities where they are not specifically required to ensure that the safe CBC design objective is met. Future development at NMCO would be required to meet the current CBC standards. It is not necessarily appropriate to design against an extremely infrequent seismic event, such as the maximum credible earthquake.

Response to Comment K-20. Cumulative demands for police and fire services are described in the Public Services discussion of the cumulative impacts analysis in Chapter 5. Increased demand for public services during disasters are a component of the cumulative demand described for Oakland's Police and Fire Departments. As described in the Geology and Soils discussion of Chapter 5, cumulative development would add to the number of people and structures subject to regional seismic hazards but would not change the likelihood or severity of any potential earthquake. Limitations on emergency access to the site and the need for Oakland Fire Department approval of site specific development plans is discussed under Section 4.3.3 of the EIS/EIR.

Response to Comment K-21. A 90-day spring survey was conducted for the Alameda whipsnake, also known as the Alameda striped racer, in accordance with methods of the California Department of Fish and Game. No Alameda whipsnakes

were found. The survey report is presented in Appendix F of Volume II of the EIS/EIR and is referenced in Section 3.6.4 of the EIS/EIR. Figure 4 of Appendix F shows a schematic of the trapline and photographs of the funnel trap. A detailed description of the traplines and traps is presented in the Methods section of Appendix F. The US Fish and Wildlife Service (Comment C-1) has concurred that no additional Endangered Species Act consultations are required.

Response to Comment K-22. A detailed sensitive species survey consisting of a rare plant assessment and a survey for sensitive wildlife species was conducted at NMCO. The US Fish and Wildlife Service (Comment C-1) has concurred that no additional Endangered Species Act consultations are required. The entire survey report is presented in Appendix B of Volume II of the EIS/EIR and is referenced in EIS/EIR, Section 3.6.4.

A tree study was conducted to estimate trees protected under the City of Oakland Tree Ordinance (Article 6, Section 7-6) at NMCO. The study report is in Appendix E of Volume II of the EIS/EIR. The ordinance protects coast live oaks with a diameter breast height (dbh) of four inches or larger and any other tree, except eucalyptus and Monterey pine, with a dbh of nine inches or larger. There is no reference in the ordinance to "historic" trees. In this program level document, it would be speculative to determine which specific trees may be affected by development. In accordance with CEQA Guidelines, §.15145, if a particular impact is too speculative for evaluation, the agency should note its conclusion and discuss the topic no further. Under NEPA, speculation that is not reasonably foreseeable, such as that due to the lack of specific tree removal plans, does not warrant further analysis (40 CFR, § 1502.22[b][1]). Mitigation 2 under Section 4.6.3 states that when a specific site plan for development (i.e., grading) of the area is presented to

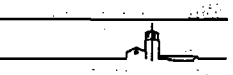
the City of Oakland, the applicant would have to conduct a site-specific survey of which trees would be removed and would have to comply with all other requirements of the ordinance, including obtaining tree removal permits.

Response to Comment K-23. The conveyance methods do not establish any unique methods of land ownership or special exemptions from state or local laws and zoning regulations. Lands transferred under a public benefit conveyance would have to be consistent with local zoning and with the terms of the public benefit conveyance itself. The primary City of Oakland zoning and land use policies associated with reuse of the NMCO property are described in Section 3.1.3.

Response to Comment K-24. None of the proposed land uses could be considered capable of significant noise generation. Traffic on Interstate 580 will remain as the dominant noise source in the project vicinity after reuse. Minor noise contributions will come from traffic on Mountain Boulevard and Keller Avenue. Please see Sections 3.11 and 4.11 of the EIS/EIR for a thorough analysis of noise impacts.

The following heading and text were added at the end of each No Impacts subsection within Sections 4.5.3, 4.5.4, 4.5.5, and 4.5.6, regarding Aesthetic and Visual Impacts:

> *Light and Glare.* Evaluation of potential light and glare problems requires detailed lighting system design plans. These plans are seldom developed prior to the drafting of detailed construction design plans. Since detailed design plans are not available, this EIS/EIR does not provide such an analysis. None of the land uses can be readily identified as capable of causing significant light and glare problems. Any land uses that propose to use high intensity outdoor lighting



15. **Potential Fire Hazards and Public Safety Issues**
Increased development at the site should require that clear fire hazard planning (including road circulation patterns, water reservoir capacity, and access and exit routes) be addressed. Without such information, potential public safety problems cannot be adequately assessed by the community. At least three incidents of arson in 1996 burned several acres of land and threatened houses on Keller Avenue and Campus Drive across the street from the Oak Knoll Base. K-25

16. **Parking**
Section 4.9.5 concludes that 2,364 parking spaces would be adequate for the Maximum Capacity Alternative. However, the allocation of these spaces is not considered. There should be a table showing the number of housing units, the number of commercial locations, all recreational facilities, and the number of parking spaces serving each of these components of the plan. Very few families in this hill area have fewer than two cars, thus it is important to plan two spaces for every housing unit. The City's failure to recognize this reality has already resulted in a distressing problem with on-street parking in front of the nearby apartment houses on Mountain at Golf Links Road. Facilities for swimming, golf, softball, and soccer will each attract cars from outside the site, and the provision of adequate parking spaces for each recreational area should be clearly documented. K-26

17. **Riparian Corridor**
We cannot find where the EIS/EIR addresses the issue of bridges crossing the riparian corridor. Such bridges would decrease the favorable esthetic and environmental effects of the corridor. They would disrupt any pedestrian or bicycle traffic along the corridor. They could become problems in times of flooding or earthquake. On the other hand, limiting the number of bridges could impede traffic flow within the site. K-27

In addition, the effects of demolition, building, and development on stream quality is not sufficiently covered. For example, will the eventual use of fertilizers and pesticides in the residential areas significantly reduce downstream water quality? How do the different scenarios ultimately compare with regard to protection of the watershed?

18. **The Homeless**
The report asserts that the "OBRA plans to accommodate homeless assistance off site" and the impact of homeless programs on site is not addressed further. This is problematic. Although at one point the representatives of the neighborhood, the homeless, and the City reached a verbal understanding about an off site plan, a written plan has not been signed-off by all parties. Thus the status of the homeless cannot be considered resolved or addressed in compliance with the laws governing base closure. K-28

19. **Police Services**
Subsection 4.3.3 asserts that the Maximum Capacity Alternative will ... "require one new full-time officer working 40 hours per week in Beat 35 to adequately respond and provide coverage at ..." the site. This is puzzling and requires confirmation for three reasons. First, the neighborhood was assured that there would be one additional K-29

should be reviewed by the City of Oakland prior to issuance of building permits to ensure proper design and shielding of outdoor lighting. Particular attention should be given to nighttime recreational activities often requiring such lighting, including but not limited to ball fields, the golf course driving range, or similar uses.

Response to Comment K-25. Clear fire hazard planning (e.g., road circulation patterns, water reservoir capacity, and access and exit routes) will be addressed at the reuse site design stage. This EIS/EIR is a program level document that does not address all planning considerations at all levels of detail. It is assumed that specific design standards will require that fire hazard planning and other public safety considerations will be required to comply with all applicable laws, regulations, and codes relating to access and response times of public service providers.

Response to Comment K-26. Parking planning will be addressed at the reuse site design stage. Please see response to Comment K-25. This EIS/EIR is a program level document that does not address all planning considerations at all levels of detail.

Response to Comment K-27. If specific site designs include bridges, they will be addressed at that stage of reuse development. The restricted access buffer zone is intended to be a permanent zone of protection through reuse plan implementation and to be incorporated into later specific plan development proposals. The second sentence of each Mitigation 1 in Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 was modified to state the following:

> Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor.

policeman covering this beat around the clock. This translates into 5 additional policemen hired. Second, Subsection 3.3.1 indicates that the police services at the NMCO averaged 12 on-duty officers at all times and used five police vehicles. This implies that, under the Maximum Capacity Alternative, the residents and visitors would be 12 times more disciplined and law abiding that the personnel at the NMCO. This is very difficult to believe. Third, the EIS/EIR does not make it clear that the special requirements of the Seneca program were considered in estimating the requirements for police services under the Maximum Capacity Alternative.

K-29

20. **Traffic**
Additional traffic resulting from residential, recreational, educational, retail and other uses of the site are not adequately addressed in terms of a reasonable approximation of existing or potential roads. The inadequacy of the existing road patterns regarding fire and police protection should also be investigated.

K-30

21. **Schools**
Did the EIS/EIR analyze the increased need for schools and the new California requirement that class sized be reduced in order to obtain additional state funding?

K-31

22. **Easements and Private Ownership of Boundary Lands**
Did the EIS/EIR consider the presence of an East Bay Municipal Utility District easement along the northern boundary of the site? What affects would this have on potential development?

K-32

Has the EIS/EIR adequately discussed how the private ownership of strips of land along the perimeter of the property (particularly along Keller Avenue) would affect potential development, public health and safety issues?

K-33

23. **Views and Potentially Impacted Neighborhoods**
In the section on views, Ridgemont (a single family neighborhood on the hilltop directly north of the base) is not mentioned, nor are the Skyline Apartments or the portions of Sequoyah Hills/Oak Knoll directly near the base. The omission of the Oak Knoll Height condominium community is also perplexing since it lies at the entry to the base on Mountain Boulevard. The view and traffic impact on these neighborhoods in the immediate vicinity will be substantial. Mislabeling and omission of the nearby neighborhoods should be corrected, and new assessments (if needed) should be made.

K-34

24. **Neighborhood Designations--Mislabeling and Omissions**
Several residential neighborhoods in the vicinity of the base are repeatedly mislabeled in the text and maps of the report. So, too, are nearby neighborhoods (such as Ridgemont, Skyline apartments, Oak Knoll Heights) normally omitted. Sequoyah Heights is confused with Sequoyah Hills, and Sequoyah Hills/Oak Knoll is vaguely conceived to be part of Sequoyah Hills. The errors in this respect are so numerous that a separate account is needed to correct the report.

K-35

Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 of the EIS/EIR were revised to state the following:

> A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone.

Section 4.6.8 has been changed to read as follows:

> To the fullest extent legally required, the proposed 50-foot wide restricted access corridor for Rifle Range Creek may be expanded, as necessary, to account for the protection of wetlands and important upland drainage areas as such areas may be affected by subsequent development proposals. Although no upland drainage areas have been identified, subsequent development proposals will need to address this issue if legally required to do so.

Please see Section 4.7.3 of the EIS/EIR. Applicable state and federal laws, regulations, and standards intended to control the volume and timing of nonpoint source pollutants will apply.

Response to Comment K-28. The Homeless Assistance Screening section in Chapter 1 has been revised to read as follows:

> *Homeless Assistance Screening*. The Base Closure Community Redevelopment and Homeless Assistance Act of 1994 (PL 103-421) (Redevelopment Act) established revised procedures for addressing the

needs of the homeless as an alternative to the McKinney Act (42 U.S.C. § 11411 as implemented by PL 101-510, PL 100-526, and PL 103-160). The revised procedures require that the needs of the homeless be balanced with the economic development and other development of the base in the community's reuse planning process. The City of Oakland ("City") was recognized by the Secretary of Defense as the local redevelopment authority (LRA). The City, in turn, designated the Oakland Base Reuse Authority (OBRA) as the LRA for all base conversions in the City.

In March 1995, OBRA recognized the Alameda County Base Conversion Homeless Collaborative (ACBCHC) as the sole representative for all homeless assistance providers in the county under the Redevelopment Act. The ACBCHC (ACBCHC 1995) submitted a notice of interest to OBRA listing properties at NMCO for homeless assistance. OBRA and the ACBCHC and community representatives subsequently negotiated a homeless assistance submission (plan) for approval by the US Department of Housing and Urban Development (HUD) and the ACBCHC agreed to the terms of the plan in lieu of obtaining real property at NMCO. The OBRA reuse plan, including the homeless assistance plan, was submitted to HUD in August 1996. The OBRA plan proposed to provide $2,000,000 to ACBCHC for use in the provision of new homeless services in Alameda County. The OBRA plan also proposed providing NMCO personal property such as furniture and equipment to support homeless services, and proposed a goal of hiring homeless persons to fill 15 percent of the future

positions hired in support of the use or development of NMCO.

HUD (HUD 1996) advised OBRA in September 1996 of recommended modification to OBRA's homeless assistance plan. OBRA (OBRA 1997) submitted a revised homeless assistance plan on 17 July 1997. On 24 September 1997, HUD approved OBRA's revised homeless assistance plan (HUD 1997b).

Response to Comment K-29. As described in Section 4.3.3 of the EIS/EIR, the increased demand for police services in the Oakland Police Department's Beat 35 would require one new full-time officer working 40 hours per week. The Oakland Police Department would be responsible for scheduling these 40-hours of additional coverage in Beat 35. The level of Navy-provided police services at NMCO was typical for a military installation and reflected the need for continual perimeter security and a higher standard of internal security than is provided for civilian uses. The coverage to be provided for reuse of NMCO will be similar to the coverage provided for areas currently in Beat 35. With regard to the Seneca Center, no special requirements for police services have been identified. The center will be responsible for providing adequate protection and supervision.

Response to Comment K-30. The traffic and circulation analysis in Sections 3.9, 4.9, and 5.5 of the EIS/EIR has been extensive. Further analysis done in response to Comment D-2 and comments E-1 and E-2 has provided even greater detail and is therefore adequate for purposes of NEPA and CEQA. The precise road pattern that will be proposed at the site design stage of reuse is not yet certain and cannot be effectively analyzed without a high level of speculation going beyond the purpose of this document to support informed decision-making. CEQA Guidelines,

§ 15145, says that "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact. Under NEPA, speculation that is not reasonably foreseeable such as that due to the lack of specific roadway placement and routing, does not warrant further analysis (40 CFR § 1502.22[b][1]).

Response to Comment K-31. The Draft EIS/EIR projected an addition of 805 students under the Maximum Capacity Alternative, which was identified as a significant but mitigable impact. However, the impact of the reuse alternatives on schools was reanalyzed, as detailed below, using (1) the student yield factor provided by the Oakland Unified School District (OUSD), and (2) a more realistic estimate of new households in the City of Oakland attributable to the reuse plan. The revised analysis indicates that only 261 additional students district-wide will be generated as a result of the reuse plan.

Moreover, the actual net increase of new students will be less than 261 because NMCO, when fully operational in 1994 generated 215 students (Theresa Hughes & Associates, 1994). This estimate of students when NMCO was operational is based on the number of households due to employment, the existing number of family housing units (82 units), and factors used to generate Table 4-4, including the OUSD provided yield factor of 0.364 students per household. Table H-1 (see Response to Comment H-1) presents a comparison of the number of students generated when NMCO was fully operational to those generated by the reuse alternatives.

The revised student generation projections were calculated as follows. First, the student yield factor was reduced since the OUSD is now using a more precise yield

factor of 0.364 students per household (OUSD 1996). This yield factor is roughly half of the 0.68 factor used in the Draft EIS/EIR to estimate school impacts. The 0.68 student per household factor was based on a conventional single-family unit generation rate estimated for Northern California. Second, the Draft EIS/EIR estimated that 100 percent of new employees moving to the region of influence (Alameda County) would move to the City of Oakland. Third, the original analysis used 100 percent estimate to support a worst-case analysis of potential impacts from new employees moving into the region. However, this figure is seen as an unrealistic worst-case estimate (ERA 1997) and has been reduced to 25 percent because an estimated 75 percent of jobholders in Oakland commute from elsewhere in Alameda County (ERA 1997). The new estimates are shown in the revised Table 4-4. This table is included in the Final EIS/EIR, along with text revising schools impacts under each of the alternatives in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6. Under the Maximum Capacity Alternative, the addition of 261 students throughout the District, spread over the twenty-three year life of the reuse plan and assuming full project buildout in 2020, is not considered a significant impact that requires mitigation because school overcrowding, per se, is a social impact. This is a maximum of 46 additional students under the Maximum Capacity Alternative when compared to preclosure conditions. Only if physical changes occur as a result of the Reuse Plan, is there a potential for significant impacts. Here, because the increase in enrollment (261 students) is so small, especially when compared to the overall size at the district (0.5 percent) construction of additional classrooms is speculative and remote. However, strictly as an accommodation to the OUSD, this EIS/EIR will treat the impact as if it were significant but mitigable.

To encourage solutions to the overcrowding issue, text was added to the mitigation

measures in Sections 4.2.3, 4.2.4, 4.2.5, and 4.2.6, which were revised as follows:

> *Mitigation 1:* Mitigation measures to reduce overcrowding to less than significant levels would include the following: (1) reassigning students among district schools to account for changing population and new development; (2) continuation and expansion of year-round schools; (3) more efficient use of underutilized and/or abandoned school facilities; (4) the addition of portable classrooms; and (5) the busing of students to less crowded schools. If these measures do not reduce overcrowding, OUSD may have to expand existing schools or construct new schools. All of these measures would require varying amounts of funding. If current sources of funding, including the City of Oakland school mitigation fees, increases in property tax and sales tax revenues, and increases in state funding are insufficient to pay for the cost of mitigating overcrowding, the OUSD would formulate and implement specific measures to raise additional funds. Funding sources which may be considered by the OUSD include: (1) adjustments of school mitigation fees on commercial and residential development; (2) the creation of special assessment or Mello Roos districts or annexation to a Community Facilities District; (3) sale of surplus OUSD property; and (4) any other funding mechanism available to the OUSD by state law or local ordinances, including those measures identified in the OUSD's Developer Fee Justification Study (OUSD 1996).

However, the City of Oakland cannot "require each developer to enter into agreement with the OUSD for mutually agreeable mitigation of its project before

the City approves any permit for development," as requested by the OUSD. This requirement is not legally mandated and is too restrictive and does not touch upon the necessity of first establishing a clear connection between the specific project and its impact on the school district. That is, there must be direct connection between the mitigation measure being requested by the OUSD and the development's impact. In addition, the mitigation should be roughly proportional to the impact. It is beyond the scope of a programmatic EIS/EIR to provide specific mitigation funding amounts or values. Ultimately, it is up to the OUSD to meet the connection requirement and to request, with the City's help, proportional mitigation from developers.

Response to Comment K-32 and K-33. This EIS/EIR analyzes potentially significant and nonsignificant impacts that are reasonably foreseeable from disposal and reuse. We assume that future easements, peripheral land ownership patterns, and related public health and safety issues will require minor modifications in how reuse is actually implemented at construction. Minor adjustments in land use boundaries may be required because of easements. The effects of such an easement on development cannot be reasonably foreseen. Overall, the relationship between future private ownership patterns and future development is highly speculative and requires looking at several factors beyond the scope of this EIS/EIR (e.g. real property value trends in the region, land uses in development applications, and subsequent revisions to those applications). With regard to such reuse considerations, CEQA Guidelines, § 15145, says that "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact." Under NEPA, actual relationships between private ownership patterns

and unplanned development is not reasonably foreseeable, exorbitantly expensive to obtain, and would not support a reliable analysis allowing decision-makers to make informed decisions regarding effects to the human environment (40 CFR, Part 1502.22), and is therefore not analyzed further.

Response to Comment K-34. Aesthetic and visual resources as seen from the Ridgemont neighborhood, Skyline Apartments, or portions of Sequoyah Hills/Oak Knoll, and Oak Knoll Height condominium community were considered in the analysis of significant impacts. No long-term aesthetic or visual impacts were identified for either neighborhoods overlooking the site or for neighborhoods that may temporarily be exposed to views of construction activities.

The preferred alternative (Maximum Capacity Alternative) proposes a combination of mixed uses in the northwest quadrant of the site and single-family housing, active recreation, open space, and an executive nine-hole golf course (please see Figure 2-5 in the EIS/EIR). Neighborhoods overlooking the site therefore will have their views changed from Navy facilities to views of a site predominantly characterized by more than 86 acres of golf course and open space covered with vegetation. This is potentially a beneficial aesthetic/visual impact not emphasized in the EIS/EIR. In addition, most construction in the mixed-use zone and other areas requiring development for reuse will be new buildings that probably will be more visually pleasing than the existing service buildings (please see Table 2-2 that immediately follows Figure 2-5 in the EIS/EIR).

All views either overlooking the site or at access locations will be affected by short-term construction impacts, which were not considered significant aesthetic/visual impacts. The significance criteria for aesthetics and scenic resources impacts is

25. **Incomplete Consideration because of Lack of Knowledge**

K-36 Many areas of the EIS/EIR fail to adequately look at impacts because the final uses of the PBC's were not known when the EIS/EIR process began.

26. **Inaccurate Portrayal of Building Trends in the Vicinity of the Base**

The EIS/EIR fails to properly describe the area or the building trends in the immediate vicinity.

(A) The EIS/EIR looks only selective at *some* building since 1980--namely high density housing not single-family housing--and not the community in its entirety, which has a distinct majority of single family homes. In fact, recent successful and selling single family home developments in the vicinity include the following:

1) 10 acres of planned single family homes on Leona Quarry land off Campus Drive (proposed October 1996)
2) a new single family home community by Kaufman and Broad, opening fall 1996 (Skyline near Keller Avenue)
3) single family homes on Mountain Boulevard between Sequoyah Rd. and Golf Links Road, opening 1995-1996
4) recently built single family homes at Ridgemont (valued from $325,000 to $1,000,000+).

K-37 Therefore, single family home developments--not high density housing--are the trend for the Oak Knoll vicinity. Denser housing, condominiums and apartments will lower property values of nearby, existing single family homes.

(B) The EIS/EIR analysis is obviously faulty when it portrays only higher occupancy buildings as defining the trends for the Oak Knoll vicinity. By implying that Skyline Apartments and Ridgemont-at-Skyline Apartments (now condominiums) represent the building trend in the area is both selective and false.

(C) There is a also distinct difference--left out of the report--between the Skyline apartments and the Ridgemont-at-Skyline Condominiums.

(D) The EIS/EIR looks at the number of units and not the dollar value of the units. The drop in property values in the area has been greatest in condominiums and houses near apartments. There are many unsold condominiums in the area. Where is a market study that supports building more of what is not selling?

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In conclusion, we hope that these comments will be helpful.

Sincerely yours,

Laurie Dreyer
President, Oak Knoll Neighbors

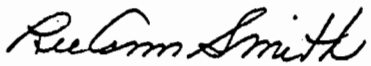
presented in Section 4.5.1 of the EIS/EIR. The analysis focuses on visual contrast with respect to scale, form, line, color, and texture, as seen from viewpoints within five miles of NMCO, which is the visual/aesthetic region of influence. Temporary visual effects lasting one year or less are not identified as significant. The significance criteria are therefore not fully informative because they do not explicltly state that only visual effects that would last beyond construction are considered significant. The following text was added at the end of the first paragraph of Section 4.5.1:

> Only visual effects that would last beyond construction are considered significant.

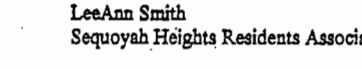
Response to Comment K-35. Neighborhood labeling relied on the Existing Conditions Report (Theresa Hughes & Associates 1994). We apologize if minor errors in boundaries were replicated in the Draft EIS/EIR. However, we contend that the boundaries as presented are sufficiently accurate to support informed NEPA and CEQA decision- making for environmental and socioeconomic issues in the EIS/EIR that materially depend on neighborhood boundaries. A separate account would not materially improve the ability of the EIS/EIR to support such decisions.

Response to Comment K-36. Comment noted. The analysis is adequate to support informed decision making regarding reuse as proposed uses of public benefit conveyances are consistent with the EIS/EIR alternatives at the program level. Should additional site-specific documentation be required, additional CEQA documentation would be completed.

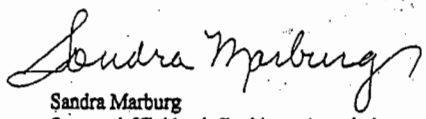
Response to Comment K-37. The scope of the land use analysis in the EIS/EIR is to evaluate the environmental consequences of Navy disposal and subsequent reuse



LeeAnn Smith
Sequoyah Heights Residents Association



Thordie Ashley
Ridgemont-at-Skyline Residents Association



Sandra Marburg
Sequoyah Highlands Residents Association

Gaile Hofmann
Sequoyah Hills/Oak Knoll Residents Association

Lisa Maule
Sequoyah Hills/Oak Knoll Residents Association

Louis Hal
Sequoyah Hills Residents Association

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impacts on existing land use conditions. Navy disposal is a transfer of title and does not affect existing land use conditions. Section 3.1 of the EIS/EIR adequately characterizes land uses surrounding the NMCO site. Section 4.1 of the EIS/EIR evaluates reuse impacts of the preferred alternative (Maximum Capacity Alternative), as presented in the Final Reuse Plan (OBRA 1996). Section 2, Subsection V, and Section 3, Subsection VII, of the Final Reuse Plan (OBRA 1996) provide overviews of the community reuse planning process and the prevailing trends and conditions used in developing the preferred alternative. Examination of building trends and accompanying inferences regarding property values is not appropriate in the EIS/EIR.

William McFerren
Toler Heights Citizen's Council

Melvin Gage
Oak Knoll Heights Townhomes Association

Margaret Glyer
Oak Knoll Heights Townhomes Association

Barbara Sutherland
Oak Knoll/King Estates Residents Association

Winifred Walsh
Durant Park Highlands Association

Letter L

To: C.O.-Eng. Field Act. West. NFEC.
Mr Gary J. Munekawa.
Envir. Planning Branch - 1852 GM.
900 Commodore Drive
San Bruno, CA. 94066-5006.

L-1 The Best Use (Reuse) for the Naval Medical Center Oakland, Ca.

is.

a Residential Alternative - low density housing unit with combined retail development, open space, & active recreation -

Reason: The least harmful to the Area -
Still Brings Jobs & Revenue to the City.
Least traffic, noise, potential people problems.

The reason the residents like the area - its Not so BAD yet -

Please Dont Do anything to harm us. Since all will have negative affects - Please only the alternative with the least mitigating effects to the current homeowners & TAX Payers —

Valius Brice

Response to Comments

Response to Comment L-1. The preferred alternative (Maximum Capacity Alternative) was developed using a careful balancing of several criteria, including the compatibility of housing, retail, educational, recreational, open space, and other land uses. Substantial weight was given to local neighborhoods that participated in the reuse planning process. The Final Reuse Plan (OBRA 1996) describes a reuse planning process that used public meetings, community advisory group participation, and general criteria for evaluating proposals. These criteria included permanently retaining the Club Knoll building, presenting new employment opportunities, protecting the diverse environmental resources of the area, minimizing noise, light, and traffic impacts to local neighborhoods, and many other environmental, quality of life, and economic criteria (OBRA 1996).

This EIS/EIR evaluates potentially significant traffic, noise, and other environmental impacts and recommends mitigation during reuse plan construction. The combined purposes of the reuse planning process and the environmental impacts analysis in this EIS/EIR are to provide decision-makers with adequate information to choose the best plan for the community balanced against the least adverse environmental impacts. Your support for the low-density residential alternative is noted.

Letter M

November 23, 1996

Draft EIS/EIR Oak Knoll Base
Commanding Officer, Engineering Field Activity West
Naval Facilities Engineering Command
Attn: Mr. Gary J. Munekawa
Environmental Planning Branch
Code 1852GM
900 Commodore Dr.,
San Bruno CA 94066-5006

Dear Sir:

In addition to my comments of November 13th and our Oak Knoll Neighbors submittal of impacts to consider, I would like to add these additional thoughts.

While I appreciate all the hard work being done in this process of the joint EIS/EIR it still appears to me that we receive analysis that is typical of almost all other base closures that are in industrial, port, or outlying areas of the "communities" in which they exist. The single unmitigable impact of importance to the Oak Knoll vicinity is the impact on our property values. We are one of the only (if not the only) base site that is completely surrounded by residential neighborhoods. In talking to other base closure communities, we have been told that there is a ***distinct drop in property values*** associated with the base closure. Are the proposed uses for Oak Knoll likely to drop our property values? I have many times been referred to the "mortgage recovery division" when I have called Washington DC with questions. Where is this critical property value analysis? M-1

I think a comparison of what ***other bases have selected/chosen for Public Benefit*** Conveyances would also be enlightening. How do we compare? Having called a number of them I know they have given most of the land to colleges, universities and parks- good 30 year risks. Your knowledge of other base closures most certainly has an impact on this particular base closure- for you can predict what is likely to happen.

In my public comments November 13, 1996 I referred to a very important memo from the Community and Economic Development Agency to Craig Kocian, Oakland City Manager, regarding the "***Residential Care facilities study***" for the city of Oakland. Reading this study will give you a better understanding of our concerns about a 6 acre institution being located smack in the middle of single family homes. We are not alone in our concerns- we are joined by virtually every organized neighborhood in Oakland, with the concern that Oakland is becoming the "dumping ground" of social services for all of Alameda County. M-2

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Response to Comments

Response to Comment M-1. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. It is just as likely that local property values could either increase or decrease after reuse. Regardless, these changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An EIS/EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes (Cal. Pub. Res. Code, §§, 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental act under CEQA. Property values are not physical changes that may be forecast from changes in land use and ownership and are therefore not analyzed because the information supporting such an analysis is lacking, based on conjecture, and not reasonably foreseeable (40 CFR, § 1502.22[b][1]). CEQA Guidelines, § 15145, says that "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact" (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15145 [Office of

I was also struck by the concerns of representatives from the school district, one of whom commented that an ***elementary school requires 10 acres of land*** according to State of California Code, yet Seneca has only 6 acres, and intends to also house many administrative buildings and a 24 hour care facility as well...hmmm.

M-3

Lastly and perhaps most importantly, the issues that has been discussed for over 2 years--***density***. As I mentioned November 13th- you fail to capture the trend of what sells in our community. ***Density has a direct link to property values***. I direct your attention to an article in the Friday November 22, 1996 Montclarion (page 22) in which Don Dunning, CRB, CRS a real estate columnist writes:

> *People spend their hard earned money to buy a home. Invariably, buyers prefer lower density locales to more populated ones. They are seeking peace and quiet. In general, the lower the density the greater the desirability and the higher the value of the properties.*
>
> *When People buy they rely on single family zoning as a component of value. If this reliance is shattered by repeated exceptions to the rule, there can be uneasiness about the stability of the area*

M-4

So it easy to understand our concerns with the implicit re-zoning that would occur with the maximum capacity alternative, and our concerns relative to density of housing. What will these impacts be on our property values?

I look forward to hearing your response to these vital questions.

Sincerely,

Laurie Dreyer
Neighbor "Within 100' of the Base"
4301 St. Andrews Rd.
Oakland, CA 94605

Planning and Research 1995]).

Response to Comment M-2. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

We realize that the nature of the Seneca population is a controversial local issue. However, the City of Oakland feels that supporting assistance to troubled children under the age of 12 serves a valuable socioeconomic purpose. Children are an important resource deserving of support. Speculation regarding any alleged criminal tendencies of these children would be prejudicial. We have chosen to avoid prejudice in the reuse planning process against any group.

Response to Comment M-3. Comment noted. The analysis is adequate to support informed decision making regarding reuse as proposed uses of public benefit conveyances are consistent with the EIS/EIR alternatives at the program level. Should additional site-specific documentation be required, additional CEQA documentation would be completed.

Response to Comment M-4. The scope of the land use analysis in the EIS/EIR is to evaluate the environmental consequences of Navy disposal and subsequent reuse impacts on existing land use conditions. Navy disposal, as a transfer of title, does not directly affect existing land use conditions. Section 3.1 of the EIS/EIR adequately characterizes land uses surrounding the NMCO site. Section 4.1 of the EIS/EIR evaluates reuse impacts of the preferred alternative (Maximum Capacity Alternative) as presented in the Final Reuse Plan (OBRA 1996). Section 2,

Subsection V, and Section 3, Subsection VII, of the Final Reuse Plan (OBRA 1996) provide overviews of the community reuse planning process and the prevailing trends and conditions used in developing the preferred alternative. Examination of building trends, density, and accompanying inferences regarding property values is not appropriate in the EIS/EIR.

Letter N

Gaile Hofmann
4255 St. Andrews Rd
Oakland, CA 94605

November 12, 1996

Commanding Officer
Engineering Field Activity West
Naval Facilities Engineering Command
Attention : Mr Gary J. Munekawa, Environmental Planning Branch
Code 1852GM
900 Coommodore Drive
San Bruno, CA 94066-5006

Dear Sir,

I am submitting my written comments on the Draft EIS/EIR for the disposal and reuse of the Naval Medical Center Oakland.

N-1 1. The report did not give sufficient consideration to the earthquake faults in the immediate vicinity. This should have strong implications as to the density of housing, types of facilities (i.e. no schools or hospitals), traffic problems related to possible freeway collapse, etc.

N-2 2. The report implied that the residents in the region of influence preferred the maximum density alternative. In fact the majority of residents preferred a plan with low density, single family housing, recreation and golfing, and open space. The process for including the nearby residents" preferences was inadequate.

N-3 3. Public safety issues are not adequately addressed. There are particular fire hazards in this area that will be exacerbated by increased development. planning for this was not included in the report.

Sincerely yours,

Gaile Hofmann

Response to Comments

Response to Comment N-1. Seismic impacts were considered nonsignificant under NEPA because no disposal activities proposed in the reuse alternatives would change the potential for earthquakes at the NMCO site. The following text was added as an introduction to Sections 4.8.3, 4.8.4, 4.8.5, and 4.8.6, immediately following the heading titled "Public Exposure to Earthquakes":

> Seismic impacts are public health and welfare concerns of NEPA [40 CFR Part 1504.1 (b)] and CEQA [Cal. Pub. Res. Code §§ 21000 et. seq; CEQA Guidelines Appx. I, III (b)]. Public safety issues are addressed in this impacts analysis as they separately relate to the Navy's NEPA disposal responsibilities and to the City of Oakland's reuse development responsibilities.

Since there are no recently active faults within the site boundary, it is not likely that damage would occur directly as a result of a fault rupture. Instead, damage may occur due to ground shaking, originating on a fault outside the site boundary. The EIS/EIR considered earthquake hazards associated with active faults throughout the San Andreas Fault Zone. The most damaging earthquake to the site could be an earthquake originating on the Hayward Fault. The region of the site contains many faults, but most of them have not been active within the past 11,000 years or more.

In general, ground motion decreases away from the fault rupture, so it is possible for a small nearby earthquake to cause more damage than a more distant, but larger earthquake. Since the Hayward Fault could generate a large earthquake near the site, it probably represents the reasonably expected worst-case earthquake scenario for NMCO. Current seismic codes, based on the California Building Code (CBC),

require that buildings be designed to withstand a high degree of ground motion without resulting in structural failure that would cause injury. Seismic design standards depend on the shape and height of the structure, its intended use or occupancy, and the type of soil underlying the structure. For some types of structures the CBC requires that site-specific ground motion studies be performed and that the building be designed to withstand these forces. At some locations, the level of ground motion or the presence of liquefiable soils, unstable slopes, or other conditions not foreseen by the CBC may exist. In such cases the minimum design standards of the CBC may not be adequately protective.

Site-specific ground motion studies are required by the CBC for schools, hospitals, and other critical facilities. These studies may be appropriate for some facilities where they are not specifically required to ensure that the safe CBC design objective is met. Future development at NMCO would be required to meet the current CBC standards. It is not necessarily appropriate to design against an extremely infrequent seismic event, such as the maximum credible earthquake.

Response to Comment N-2. The "preferred alternative" designation refers to OBRA's preference of the Maximum Capacity Alternative for reuse planning purposes. We apologize for any implications regarding preferences of the local neighborhoods or that would purport to speak for the representatives of those neighborhoods.

The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states the following:

> The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group.

The purpose of this EIS/EIR is to evaluate the environmental impacts of property disposal and reuse. In meeting that purpose, background information regarding the OBRA reuse planning process has been provided so that decision-makers will be informed regarding the process used in developing the alternatives. This background information indicates that the Oak Knoll Neighbors had a substantial role in developing the alternatives. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak Knoll Neighbors. Further analysis of the procedural adequacy of the reuse planning process addresses issues that are not related to the analysis of environmental impacts and therefore are beyond the scope of analysis in the EIS/EIR.

Response to Comment N-3. Text was added at the end of public services and biological resources, Sections 4.3.7 and 4.6.7 (analyzing environmental impacts) stating the following:

> Vegetation will be controlled during caretaker and reuse operations to the extent necessary as required by all applicable laws and regulations. These operations would include fire breaks and weed control.

Clear fire hazard planning (e.g., road circulation patterns, water reservoir capacity,

and access and exit routes) will be addressed at the reuse site design stage. This EIS/EIR is a program level document that does not address all planning considerations at all levels of detail. It is assumed that specific design standards will require that fire hazard planning and other public safety considerations will be required to comply with all applicable laws, regulations, and codes relating to access and response times of public service providers.

Letter O

November 13, 1996

Mr. Gary J. Munekawa
Code 1852GM
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-5006

RE: PUBLIC HEARING ON THE DRAFT EIS/EIR
HEARING ROOM 2 - CITY HALL OAKLAND CA.
DISPOSAL AND REUSE OF NAVAL MEDICAL CENTER OAKLAND

Dear Mr. Munekawa,

103 This letter to you contains the full text of my oral presentation to the DEPARTMENT OF THE NAVY identifying the neighborhoods demand and reasons why all retail space be eliminated from the base reuse plan. It also maintains that our local govt. officials have blocked our attempt to participate in the base reuse process as allowed by the Base Closure Act .

I also refer you to my letter to you on October 11, 1995 (copy enclosed), my June 11, 1996 letter to William J. Perry - Secretary of Defense (copy enclosed) and my April 24, 1996 to Mr. Paul Nahm - Head of OBRA - Oakland Base Reuse Authority (copy enclosed).

TEXT OF PRESENTATION

My name is Kenneth C. Pementell, former President of the Sequoyah Heights Homeowners Association and an outspoken critic of expanding retail space on the Oak Knoll property which is surrounded by residential neighborhoods.

I am here tonight to inform the Department of the Navy of some major flaws in the current base reuse plan, the reason why these major flaws exit, the negative impact it will have on our neighborhoods if these major flaws are allowed to be implemented and an easy cost effective way to solve the problem.

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1. The major flaw in these base reuse plan alternatives is the INCLUSION OF RETAIL SPACE in these heavily residential neighborhood. There is a well documented link between crime and retail space in the city of Oakland. In the Rockridge District, on College Ave. in the Grand Lake/Lakeshore District, in the Fruitvale District, in the Castlemont District, in the Dimond District, in the Laurel District and in only a few blocks away in our nearby EASTMONT MALL .

   Just of few blocks away from Oak Knoll Hospital on 73rd Ave. is a large defunct shopping center called EastMont Mall. The major tenants moved away because the huge levels of crime and violence. The customers and many employees were "robbing the place blind". It has become one of the most crime ridden Area in the City of Oakland. The crime and violence was so bad that the city put a POLICE SUBSTATION on the site to protect the residents from the uncivilized behavior of the criminals.

   Just a few blocks south of the main gate to the Oak knoll Hospital near 98th Ave. And mountain Blvd. Is a small retail areas where a recent armed robbery took place at the entrance to Knowland. The criminals were so brazen that they robbed the Ranger Station at the entrance to the park. The liquor store and gas station (which also Sells liquor) are problem retail outlets.

   At Ridgemont Plaza, a new retail strip center adjacent to Oak Knoll on Keller Ave. An armed robbery took place just 30 DAYS after a Round Table Pizza opened its doors. It has been robbed twice since then.

I could go on and on, but the point I am making here is that the Navy Hospital at Oak Knoll has acted as a buffer zone surrounding residential properties an insulating from the crime that follows retail establishment in the city of Oakland. We will miss you! It doesn't take as a rocket scientist to see which way crime is heading and the opportunity that retail space provides for the scumbags of our city.

Conspicuously absent from OBRA records is the city grandiose plan to put an EASTMONT MALL style shopping center just as a few blocks north of the Oak Knoll property on the site of the Leona Quarry on mountain blvd.

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O-1

Response to Comments

Response to Comment O-1. CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An [EIS/]EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental impact under CEQA. California courts have not considered crime as an environmental impact. For example, In Baird v. County of Contra Costa, 32 Cal. App. 4th 1464, 1470, fn 2, 38 Cal. Rptr. 2d 93 (1995), a petitioner's "claim of increased crime problems" from a project "is not a proper subject of CEQA inquiry," based on the reasoning found in Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131(a). Similarly, "The economic impact on small businesses and property values" did not trigger CEQA in Citizens Action to Serve All Students v. Thornley, 222 Cal. App. 3d 748, 757-758, 272 Cal. Rptr 83 (1990).

Although local experience regarding existing crime rates is an important consideration, there is no reasonable basis for assuming that increased crime will unavoidably result upon reuse. Crime may increase or decrease locally. This EIS/EIR has analyzed the need for police services in Sections 3.3 and 4.3, and

When the Quarry Shopping Center is rammed down our throats by the city, the retail space at Oak Knoll will house crime magnet businesses like an all night laundry, beeper stores and check cashing outlets.

O-1

The FLAW IS THAT RETAIL SPACE BE INCLUDED IN THE REUSE PLAN

The Oak Knoll Neighbors do not want it in our residential neighborhoods

2. HOW DID THIS FLAW BECOME PART OF THE BASE REUSE PLAN?

After two years of attending CAG (Community Action Group) and OBRA (Oakland Base Reuse Authority) meeting it became excruciatingly clear that members of OBRA headed by Mr. Paul Nahm and former Oakland City Manager Mr. Henry Gardner were at every turn overtly and covertly blocking any attempt by Oak Knoll neighbors to participate in the base conversion process as require by the Federal Base Closure Act.

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These individuals along with the Mayor, Mr Elihu Harris - OBRA member in an arrogant condescending manner treated the Oak Knoll neighbors with utter destain.

O-2

At as a subsequent televised OBRA meeting regarding another base closure, Mr. Henry Gardner warned OBRA members that " they would pay as a terrible price for what they had done to the Oak Knoll Neighbors"

After as a visit to Theresa Hughes & Associates , I was informed by here office that because they were being funded by the city too create alternative uses for the base property, that Teresa Hughes and Associates would only provide alternatives that would be cost effective to the city and produce revenue to the city and GET THIS, they would not even consider the social consequences to the citizens and taxpayers of Oakland.

In my opinion, not only did our over paid govt. officials and consultants do as a far less than mediocre job, they betrayed the public trust.

generally recommends adequate mitigation for significant impacts in Section 4.3. Further speculation regarding uncertain future trends in local crime would not enhance the ability of decisionmakers to make an informed decision regarding reuse, and is therefore not included.

Response to Comment O-2. Comments noted. Social consequences have been considered in this EIS/EIR. Please see Sections 3.2, 4.2, and 5.6 of the EIS/EIR. The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states the following:

> The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group.

The purpose of this EIS/EIR is to evaluate the environmental impacts associated with reuse. Background information regarding the OBRA reuse planning process has been provided so that decision-makers will be informed regarding the process that was used in developing the alternatives. The Oak Knoll Neighbors had a substantial role in developing the alternatives. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak Knoll Neighbors. Further analysis of the procedural adequacy of the reuse planning process addresses issues that are not

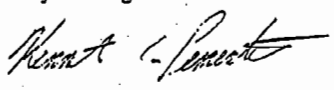
O-2 THAT WAS HOW THE MAJOR FLAWS BECAME PART OF THE BASE REUSE ALTERNATIVE PLANS

O-3 3. The negative impact of devaluing our property values and increased criminal activity of this major flaw can be overcome by as a simply cost effective decision NOT to include retail space in the plan. The OAK KNOLL NEIGHBORS DON'T WANT RETAIL INCLUDED IN THE BASE REUSE PLAN.

CONCLUSION OF ORAL PRESENTAION

If you require any additional information please contact me directly.

Very best regards



Kenneth C. Pementell - Former President of Sequoyah Heights Homeowners Assoc.
19 Heritage
Oakland, CA. 94605-4606

related to the analysis of environmental impacts and therefore is beyond the scope of analysis in the EIS/EIR.

Response to Comment O-3. Comment noted. Please see response to Comment O-2.

October 11, 1995

Mr. Gary Munekawa
Code 1852GM
Engineering Field Activity West
Naval Facilities Engineering Command
900 Commodore Drive
Sam Bruno, CA 94066-5006

RE: EIS/EIR OAK KNOLL HOSPITAL REUSE PLAN
DELETION OF ALL RETAIL SPACE FROM THE PLAN

After attending and speaking at a recent meeting at Oak Knoll Hospital, and conversations with Mr. Barry Cromarte, Principle Planner-Military Base Conversion Unit-City of Oakland Base Reuse Authority, I am writing this letter to involve myself in the reuse selection process.

I am strongly requesting that ALL RETAIL SPACE CONSIDERATIONS BE DELETED FROM THE REUSE PLAN.

For those important people who may not have lived in or know much about Oakland and will make decisions concerning the reuse plan, I offer the following background and preface for my closing comments.

As a native, long time resident of Oakland and former president of the Sequoyah Heights Homeowners Association, I have seen the crime, the poverty, the violence and disgusting uncivilized behavior spread like an uncontrollable social cancer beginning in the 1950's from downtown Oakland along the north-south corridor streets of MacArther Blvd., Foothill Blvd Bancroft and E. 14th Street, all the way to the city of Hayward and along the east-west corridor streets of 23rd Ave., Park Blvd, 35th Ave., High Street. 73RD AVENUE AND 98TH AVENUE.

Just a few blocks below the OakKnoll Hospital on 73 AVENUE is a large defunct shopping center called EastMont Mall. The major tenants moved away because of the crime and violence. The customers and many employees were "robbing the place blind". It has become one of the most crime ridden areas in the City of Oakland. A POLICE SUBSTATION has taken over part of the shopping center.

Just a few blocks below the OakKnoll Hospital on 98TH AVENUE is a small retail area where a recent armed robbery took place at the entrance to Knowland park. The liquor store and gas station (which also sells liquor) are problem retail outlets.

At Ridgemont Plaza, a new retail strip center adjacent to OakKnoll on Keller Ave. an armed robbery to place JUST 30 DAYS AFTER THE ROUND TABLE PIZZA OPENED IT'S DOORS. It has been robbed twice since that time.

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Attachment – no response required

Robberies have occurred at the OakKnoll Market on Mountain Blvd. only a few thousand yards from the entrance to OakKnoll.

Just one day after the recent OakKnoll meeting took place, a robbery took place at a retail store next to a freeway onramp. Someone died in that robbery. A woman was assaulted by a man with knife just a few blocks above the Montclair retail district.

I could go on and on. The point I am making here is that OakKnoll facility has acted as a buffer zone for the surrounding residential properties. It doesn't take a rocket scientist to see the direction in which this crime trend is heading and the opportunity that retail space provides for the scumbags of our city.

My intention in writing this letter is not to offend any of the people involved in deciding whether retail space should be included or not included in the reuse plan, but given the background regarding the link between violent crime and retail space ,the following must be said in favor of having retail space considerations removed from the base reuse plan:

GIVEN THE FACTS, THE REMOVAL OF RETAIL SPACE CONSIDERATION FROM THE BASE REUSE PLAN MUST BE IMPLEMENTED. IT IS THE DUMBEST, NO THE MOST APPALLINGLY STUPID AND IGNORANT IDEA TO HAVE RETAIL SPACE INCLUDED IN THIS PLAN.

Please contact me to discuss this matter.

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Very best regards

Kenneth C. Pementell
19 Heritage
Oakland, CA. 94605-4606

CC Mr. Barry Cromarte - Principal Planner, Military Base Conversion Unit
Mr. Paul Naham - Oakland Base Reuse Authority
Mr. John Kennedy - Head Environmental Planning - EFA West
Ms. Juanita Buda - Head Planning Dept. Oakland Naval Mediacal Faciltity

Attachment – no response required

Kenneth C. Pementell
19 Heritage
Oakland, CA 94605-4606

June 11,1996

William J.Perry, Secretary of Defense
Department of Defense
3300 Defense Pentagon - Room ID - 760
Washington, D.C. 20301-3300

RE: Oak Knoll Navel Military Base Closure - Petition For Writ of Mandate
Superior Court of the State of California
County of Alameda - Dept 81
Honorable Judge Sandra Marguiles
Filed April 9, 1996 - Case No. 765825-1

Attachment – no response required

601

Dear Mr. Perry,

As a model for the nation regarding the closure of military bases and their reuse in the private sector, I am outraged at the process by which our local govt. officials have conducted themselves. Our local govt. officials (OBRA - Oakland Base Reuse Authority) has squandered several hundreds of thousands of dollars paid to incompetent local individuals and a former city manager intent on excluding the public from our lawful right to participate in the base reuse process.

Oak Knoll Military Base is completely surrounded by residential neighborhoods, with upscale housing worth about a billion dollars in property values. On March 28, 1996, the Local Base Reuse Authority, in a surprise vote (not on the official agenda) included two (2) Non- Profit organizations in the Base Reuse Plan

We question the integrity of these non-profit organizations as we have evidence that they have illegally lobbied our local officials and their inclusion in the base reuse plan will undermine the ability of private developers to produce a stable local tax base for the area..

Our local Oakland Base Reuse Authority has been so remise in their responsibilities as to participate in an illegal vote to build an elementary school for one of the non-profit organizations directly over the Hayward earthquake fault which is in direct conflict of our state laws .

After more than two years of local politicians sucking up our tax dollars and being totally dissatisfied with the seven (7) members of the Oakland Base Reuse Authority and its Executive director Mr. Paul Nahm, we, the private citizens living adjacent to the Oak Knoll property are demanding that the Federal Govt. (Department of Defense) step in and intervene with a review of our petition. We respectfully request that you contact the Chair of the Oakland Base Reuse authority, our Mayor Mr. Elihu Harris on our behalf.

I cannot over emphasize the urgency of your intervention in this matter as I fear that the local officials have run amuck with confusion and greed regarding closure of the many military bases in the San Francisco bay area.

Please acknowledge the receipt of this letter regarding the enclosed Amended Petition for Writ of Mandate

Respectfully submitted.

Kenneth C. Pementell

encl: Amended Writ of Mandate Petition

CC: William Clinton - President of the United States of America

Attachment – no response required

April 24, 1996

Oakland Base Reuse Authority
C/O Paul Nahm
1333 Broadway - 9Th Floor
Oakland, CA. 94612

RE: Draft Reuse Plan

Dear Members of the Oakland Base Reuse Authority

For over two years , very large numbers of Oak Knoll Neighbors (A coalition of over twelve neighborhood associations consisting of over 6500 families) have been attending CAG (Community Action Group) and OBRA (Oakland Base Reuse Authority) meetings making our citizen demands on how redevelopment of the Oak Knoll Naval Hospital facility would best benefit the city and the surrounding neighborhoods. Our demands have been made excruciatingly clear to our local government officials.

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We feel that these same government officials have, in an arrogant and condescending manner, deceived and intentionally mislead the citizens of Oakland in the base reuse process with secret meetings and other violations of the law as described in our lawsuit filed in Alameda County on April 9, 1996 with the Superior Court of the State of California petitioning the court for a Writ of Mandate (CASE NO. 765825-1)

This lawsuit maintains that the Oakland Base Reuse Authority in its utter disdain for the taxpayers and citizens of Oakland acted in a manner that constitutes the following: Violation of the Brown Act, Abuse of Power, Conflict of Interest, Violation of the Fair Records Act, The Freedom of Information Act, Illegal Lobbying and denial of Due Process of Law to the Oak Knoll Neighbors

This letter is to formally request that OBRA void the Draft Reuse Plan that was illegally approved by OBRA on March 28, 1996 and reinstate the Proposed Reuse Plan of March 11, 1996 along with the items listed in the Letter from Oak Knoll Neighbors to the Members of OBRA dated April 17, 1996 (Copies of both plans and the Oak Knoll letter enclosed).

Attachment - no response required

In addition, if the members of OBRA truly believe the orchestrated charade that took place at the April 22, 1996 meeting in which government- funded members of these non-profit groups masqueraded as Oak Knoll neighbors voicing support for their own cause, then without a doubt, the members of OBRA are the most incredibly stupid people on the planet or are involved in the allegations listed in our lawsuit.

Finally, we are making a formal public request to our Mayor - Elihu Harris and our City Manager - Craig Kocian for a full and relentless investigation of the improprieties alleged in our lawsuit. We request that the severest of actions be taken against those individuals who would so blatantly abuse the public trust.

Regards,

Kenneth C. Pementell - Former President of Sequoyah Heights Homeowners Assoc.
19 Heritage
Oakland, CA 94605-4606

CC: Federal Communications Commission
Mayor Elihu Harris
Craig Kocian
Natalie Bayton
Dick Spees
Dezi Woods-Jones
Nate Miley
Eugene Leong
Mayor Ralph Appezzato
Mary King
Sandre Swanson
Thordie Ashley
Laurie Dreyer
Oakland Tribune
Montclarion

Attachment – no response required

Planning and Management, who will address the District's concerns with regard to impact and mitigation. Thank you.

CHAIRMAN DE LUCA: Thank you.

Mr. Dias.

MR. DIAS: Good evening. I would like to thank you --

CHAIRMAN DE LUCA: Please give us your name, you are being recorded.

MR. DIAS: My name is Robert Dias, I am the Assistant Superintendent, Facilities Planning and Management, Oakland Unified School District.

CHAIRMAN DE LUCA: Thank you.

MR. DIAS: I'd like to thank you for this opportunity to address the impact of this project on the Oakland Unified School District.

As you know, on the Draft Combined Environmental Impact Statement and Environmental Impact Report for the disposal and reuse of the NMCO, including the preferred use alternative selected by OBRA, identifies the impact of the preferred Reuse Plan on schools as a significant mitigable impact. We agree with this analysis, and in fact the District's own analysis indicates that this impact may be even greater than the

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P-1

Response to Comments

Response to Comment P-1. [Note to Readers]: Comment P-1 represents the commentor's verbal presentation during the public hearing of comments presented in Comments H-1 to H-9. Please see the responses to Comments H-1 through H-9. In addition, please see responses to Comments I-1 through I-16 and accompanying revised analysis of the impacts of reuse on schools, which addresses school overcrowding. These responses provide further clarification regarding these socioeconomic issues.

The responsibilities of the federal government are presented in Section 1.3 of the Draft EIS/EIR. Those responsibilities do not extend to mitigation for impacts resulting from reuse.

impact identified in the EIS/EIR.

The District disagrees emphatically, however, with the conclusion that the proposed mitigation measure would reduce this impact to insignificance. That mitigation measure places the burden of housing students generated by this project on the District; a District already stretched beyond its resources to accommodate its current students, class-size reduction in the elementary schools, and anticipated further growth through the 25 years during which the impact is measured. To mitigate these impacts, the District is in the process of reconfiguring its schools and has instituted year-round schooling at every feasible school.

P-1

The District respectfully requests a replacement of the proposed inadequate mitigation measure with the following mitigation measures:

A new permanent elementary school be provided for grades K-5, paid for and on land conveyed to the District by the federal government;

Permanent additions be provided at the middle and high school levels affected to house the number of students estimated to be generated

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by the Reuse Plan, paid for by the federal government. If additional land is required in order to expand facilities at these grade levels, that additional land be provided adjacent to the schools to accommodate the additional facilities, also paid for by the federal government.

Before the approval of any contract or permit to participate in the Reuse Plan, each developer be required to enter into an agreement with the School District to fully mitigate the impact on the District of new development pursuant to the Reuse Plan.

The preferred reuse alternative, dubbed the Maximum Capacity Alternative for the development of NMCO recommends, among other things, the development of 550 units of single- and multi-family housing. The EIS/EIR concludes that the Maximum Capacity Alternative will have significant and mitigable impacts on schools.

According to the Draft EIS/EIR, all schools serving the NMCO area were at or near capacity as of 1995. In fact, the entire School District was at 97.5 percent of capacity during the 1995-96 school year. Within ten years, enrollment is expected to increase by approximately 23.5

P-1

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percent without the NMCO Reuse Plan. Enrollment would then exceed current capacity by approximately 20 percent.

The Draft EIS/EIR concludes that the Maximum Capacity Alternative would generate approximately 805 students annually by the year 2020. The housing proposed in the NMCO Reuse Plan would generate approximately a 22.4-percent increase over 1994 enrollment in the Oak Knoll study area schools. Thus the NMCO Reuse Plan creates a significant cumulative impact.

The District will need facilities, staff and programs to accommodate the cumulative District-wide impact of the students generated by this Reuse Plan, other District growth and expanding class-size reduction. While state and local funding supports the District's operational costs, no funding exists for the provision of classrooms and related facilities to house these anticipated students.

P-1

The District therefore requests the stated mitigation measure be replaced by mitigation measures providing for land for a new elementary school site and financial support for additional school facilities to accommodate students

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generated by this project and other District growth.

According to the distribution of students by grade level provided by the District recently prepared developer fee justification study, after reuse, annually an additional 483 students will require elementary facilities, 145 will require middle-school facilities and 177 will require high-school facilities.

For each new student generated by this Reuse Plan, the District -- District's recently prepared development -- developer fee justification study projects the cost of housing to be approximately 34.9 thousand dollars for new facilities. The cost of housing all students generated by the Reuse Plan in new facilities appropriate to the grade level would be approximately 29.9 million dollars.

For reconstructed facilities, the student cost of housing would be approximately 12,000. For modular portable classroom facilities the cost would be approximately 5,000 per student, not including the cost of land on which to locate these portable classrooms and of multipurpose rooms and other adjunct facilities. The use of

P-1

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portable classrooms is only a viable option as a solution for short-term facility needs. Portable classrooms are temporary buffers to accommodate cyclical patterns of enrollment, growth and decline. Since long-term enrollment projections indicate steady increase in enrollment, provisions must be made for permanent facilities.

MR. BRYANT: The speaker's time is expired.

CHAIRMAN DE LUCA: That's all right, I believe the previous speaker ceded part of her five minutes for Mr. Dias. So continue, please.

P-1 MR. DIAS: Thank you.

The elementary-school students generated by the Reuse Plan are sufficient to require an entire new elementary school, one for which the District has no funding. An elementary school requires 10 acres by state standards. The cost to obtain a site and build a new elementary school in or near the Oak Knoll study area is estimated at 16.7 million dollars.

This would accommodate only 60 percent of the students generated by the Reuse Plan, with the secondary students requiring an additional facilities at the appropriate grade levels. When

class-size reduction in the District is implemented beyond the first-grade level, the anticipated impact of the Reuse Plan at the elementary-grade level will be even greater.

The most viable site for a new elementary school is within the boundaries of the NMCO. Because of the absence of undeveloped space in Oakland, any other site could involve expensive negotiations or even eminent domain.

Additional students at the middle- or high-school levels will require additions to the existing schools at those levels. Additions to those schools will only be feasible if space on the existing sites allows for expansion. If not, additional space near these facilities would have to be acquired to accommodate the increased student load.

P-1

Busing is not a viable option for the District, because of its impact on the educational process of students in the District, the opposition of parents and the cost.

The mitigation measure in the Draft EIS/EIR makes financing and construction of new facilities to accommodate students generated by the Reuse Plan a District responsibility. Since

the City will want to expedite the economic advantages of proceeding with the Reuse Plan when a developer or developers are selected, it is important that the City Council make the commitment now to mitigate this Reuse Plan sufficiently. In light of California case law requiring developers to mitigate the impact of new development on school facilities, the District urgently requests that the City Council require as a mitigation measure that a prerequisite to all new development, residential and/or commercial, be that the District and the developers enter into agreements to fully mitigate the remaining impact of new development on school facilities. P-1

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The District also requests that financing of construction and the conveyance of land to the District for an elementary school within the residential portion of the reuse-plan area be added as a mitigation measure. It also requests that financing of additions at the middle- and high-school levels be added. These mitigation measures must be adopted now in order to accommodate students generated by the Reuse Plan. This is a responsibility of the federal

government and must be included in the EIS. It is also a responsibility of the City as a lead agency for the EIR. The District may not have another opportunity to present its needs to the City and have them imposed on new developers. P-1

We thank you for your attention on this urgent matter.

CHAIRMAN DE LUCA: Thank you, Mr. Dias.

Did you wish that the written portion of your oral presentation be introduced into the record?

MR. DIAS: Yes, please.

CHAIRMAN DE LUCA: Thank you.

MR. DIAS: Thank you, sir.

CHAIRMAN DE LUCA: No questions for Mr. Dias? Call the next speaker, please.

MR. BRYANT: Kenneth C. Pementell, followed by Laurie Dreyer. And the speaker following Laurie Dreyer, Gaile Hofmann, says she would like to give her time to Laurie Dreyer.

CHAIRMAN DE LUCA: Okay.

MR. PEMENTELL: Good evening, everyone. My name is Kenneth Pementell, former president of the Sequoya Heights Homeowners Association.

I have two comments I'd like to make before beginning my presentation. The first is that, as Oak Knoll neighbors, we are certainly going to miss the Navy. You were both good friends and good neighbors to us all, and we wish you were going to stay. P-2

Secondly, I'd like to point out for members of the press and for the record, Chairman De Luca's early comment in which he stated that he would like to limit the input of individuals speaking, and if it was up to him he wouldn't allow even the five minutes that the Navy would allow, but he would bring it down to a two-minute time frame, this has been the situation we have been up against with the City over the last two-and-a-half years, so I just thought I'd bring that to everyone's attention. P-3

I'm here tonight to inform the Department of the Navy of some major flaws in the current base Reuse Plan, in the effect that it will have on our neighborhoods, and what cost-effective ways we can use to solve those problems. P-4

The major flaw in the reuse plan is the inclusion of retail space in these heavily residential neighborhoods. There's a P-5

Response to Comment P-2. Comment noted. Thank you.

Response to Comment P-3. Comment noted. The Chairman retained discretion regarding allowable times for speakers.

Response to Comment P-4. Comment noted. Your attendance is appreciated.

Response to Comment P-5. The scope of the land use analysis in the EIS/EIR is to evaluate the environmental consequences of Navy disposal and subsequent reuse impacts on existing land use conditions. Navy disposal is a transfer of title and does not affect existing land use conditions. Section 3.1 of the EIS/EIR adequately characterizes land uses surrounding the NMCO site. Section 4.1 of the EIS/EIR evaluates reuse impacts of the preferred alternative (Maximum Capacity Alternative), as presented in the Final Reuse Plan (OBRA 1996). Section 2, Subsection V, and Section 3, Subsection VII, of the Final Reuse Plan (OBRA 1996) provide overviews of the community reuse planning process and the reasoning used to develop the land use mixes in the preferred alternative.

We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA.

well-documented -- documented link between crime and retail space in the City of Oakland. In the Rockridge district, the College district, Grand Avenue, Lakeshore, Fruitvale, Castlemont, Dimond and Laurel, and only a few blocks away in our Eastmont Mall district, which is nearby.

Just a few blocks away from Oak Knoll Hospital, on 73rd Avenue, is a large, defunct shopping center called Eastmont Shop Mall. The tenants -- the major tenants moved away because of huge levels of crime and violence. The customers and many employees were robbing the place blind. It has become one of the most crime-ridden areas in the City of Oakland. The crime and violence was so bad, in fact, that the City of Oakland had to put a police substation on the site to protect the residents from the uncivilized behavior of the criminals.

P-6

Just a few blocks south of the main gate of the Oak Knoll Hospital, near 98th Avenue and Mountain Boulevard, is a small retail area where a recent armed robbery took place at the entrance to Knowland Park. The criminals were so brazen, that they robbed the Ranger Station at the entrance to the park. The liquor store and the

Response to Comment P-6. CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An EIS/EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes. (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental impact under CEQA. California courts have not considered crime as an environmental impact. For example, In Baird v. County of Contra Costa, 32 Cal. App. 4th 1464, 1470, fn 2, 38 Cal. Rptr. 2d 93 (1995), a petitioner's "claim of increased crime problems" from a project "is not a proper subject of CEQA inquiry," based on the reasoning found in Cal. Pub. Res. Code, §§ 21000, et. seq.; Guidelines, § 15131(a). Similarly, "The economic impact on small businesses and property values" did not trigger CEQA in Citizens Action to Serve All Students v. Thornley, 222 Cal. App. 3d 748, 757-758, 272 Cal. Rptr 83 (1990). Crime is not recognized as either a NEPA or a CEQA environmental issue, and is therefore not analyzed in the EIS/EIR.

NEPA analysis of these indirect effects (40 CFR § 1508.8(b)) with respect to the appropriate regional and local contexts (40 CFR §1508.27[a]) and a balanced consideration of the adverse nature, public health and safety implications, geographic and ecologically critical areas involved, likely future controversy, uncertain or unknown risks, precedential inference, and related measures of the

gas station, which also sells liquor, are problem retail outlets.

At Ridgemont Plaza, a new retail strip adjacent to the Oak Knoll complex on Keller Avenue, an armed robbery took place just 30 days after a Round Table pizza parlor opened its doors. It has been robbed twice since their opening. And between the time that I wrote this letter and my arrival here, there was another armed robbery at that same complex in the copy shop on Keller Avenue north of the Oak Knoll property.

P-6

And I could go on and on, but the point I'm trying to make here is that the Oak Knoll Naval facility has acted as a buffer zone surrounding those residential properties, insulating them from crime that follows retail establishments in the City of Oakland. We will miss you. It doesn't take a rocket scientist to see which way crime is heading and the opportunity that retail space provides for the scumbags of our city.

P-7

Conspicuously absent from the OBRA records is the city's grandiose plan to put an Eastmont Mall-style shopping center just a few blocks north of the Oak Knoll property at the Leona

P-8

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intensity of these indirect effects does not warrant identifying them as significant (40 CFR § 1508.27[b]).

Response to Comment P-7. Comment noted. Thank you. Please see response to comments P-5 and P-6.

Response to Comment P-8. Comment noted. Thank you. Please see response to comments P-5 and P-6.

quarry on Mountain Boulevard. When the Quarry Shopping Center is rammed down our throats by the City, the retail space at Oak Knoll will house crime-magnet businesses like all night laundries, beeper stores and check-cashing outlets.

P-8

The flaw in this plan is that retail space is included in the plan. The Oak Knoll Neighbors do not want our residential neighborhoods involved in any additional retail space.

Secondly, how did this flaw become part of the Reuse Plan? After two years of attending CAG and OBRA meetings, it became excruciatingly clear that the members of OBRA, headed by Mr. Paul Nahm and former Oakland City Manager Henry Gardner, were at every turn overtly and covertly blocking any attempt by Oak Knoll neighbors to participate in the base conversion process as required by the Federal Base Closure Act.

P-9

MR. BRYANT: Speaker's time has expired.

CHAIRMAN DE LUCA: Would you please wrap it up, Mr. Pementell?

MR. PEMENTELL: Give me just a moment to recoup here, and I will, yes.

One final comment: At a subsequent televised OBRA meeting regarding the OBRA base

P-10

Response to Comment P-9. The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states that "The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group."

The purpose of this EIS/EIR is to evaluate the environmental impacts associated with reuse. Background information regarding the OBRA reuse planning process has been provided so that decision-makers will be informed regarding the process that was used in developing the alternatives. The Oak Knoll Neighbors had a substantial role in developing the alternatives. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak Knoll Neighbors. Further analysis of the procedural adequacy of the reuse planning process addresses issues that are not related to the analysis of environmental impacts and therefore is beyond the scope of analysis in the EIS/EIR.

Response to Comment P-10. Comment noted.

closure, Mr. Henry Gardner warned the OBRA members that they would pay a terrible price for what they had done to the Oak Knoll neighbors. My point to the Navy is, we're sorry you're leaving, but we cannot overemphasize the neighborhood's desire to have retail space eliminated from this project.

P-10

CHAIRMAN DE LUCA: Thank you, Mr. Pementell. As much as you were reading your speech, perhaps you may want to introduce that also into the record.

MR. PEMENTELL: Yes, I have done also. I have personally given a copy to Mr. Gary Munekawa.

P-11

CHAIRMAN DE LUCA: I believe you want to give is to Mr. Bryant. He's the secretary of the Commission. Then we'll know that it will be introduced into the record and made part of the record. Thank you.

MR. PEMENTELL: Yes, I'll do that.

CHAIRMAN DE LUCA: Also, I'd like to take this opportunity to make a correction that during the presentation by Mr. Pomeroy, reference was made to the fact that the Leona Quarry was under construction. It is not under construction. It

P-12

Response to Comment P-11. Record entries noted and addressed in responses to comments O-1 through O-3.

Response to Comment P-12. Correction noted. Site clearing, not construction, was being done at the Leona Quarry site.

P-12

was a site clearing.

Thank you, Mr. Pomeroy. Thank you, Mr. Pementell. The next speaker, please.

MR. BRYANT: Chair De Luca, would you like -- this is Laurie Dreyer, I believe. Would you like me to allow her two five-minute slots?

CHAIRMAN DE LUCA: I believe someone also receded her time.

MS. DREYER: I'll try to make it quicker. If you can listen quickly, I can talk quickly.

CHAIRMAN DE LUCA: Throughout the testimony what we are seeing is new information, not repetitive information. Therefore, to the extent that any speaker has anything new to add, we certainly welcome. But we don't want to be repetitive, the same thing over and over again. We're trying to learn what's going on, and that's the only way we'll learn. Thank you.

MS. DREYER: My attempt is specifically to address those issues that I think were flawed in the analysis.

CHAIRMAN DE LUCA: Very good. Thank you.

MS. DREYER: My name is Laurie Dreyer. I'm the president of Oak Knoll Neighbors, Mr. Pementell mentioned that name. Oak Knoll

Neighbors is a consortium of twelve different neighborhood organizations that surround the Oak Knoll Naval Base. These are neighborhoods that go down to the MacArthur Boulevard area all the way up to Skyline and across the entire section; they completely surround the Naval Base. We have been banding together for about two years now to try to have a positive impact on this process. And we are acronym junkies now.

P-13

I'd like to address four primary issues. One is that the report implies that the neighborhoods did agree to the plan. This is absolutely flawed. The immediate vicinity around the Naval Base absolutely was not in favor of the Maximum Capacity Alternative. Eleven hundred signatures were put in from the immediate vicinity, not just anybody who lives in Alameda County, and it's interesting to note in the EIS/EIR report that City policy actually looks at two regions of influence. There is the region of influence by base closure process of Alameda County, but there is the far more direct region of influence of those who live around the site.

P-14

My home appears on every map I have ever seen in this whole process. So I know what I'm

P-15

Response to Comment P-13. Comment noted. The Oak Knoll Neighbors have had major impacts on the process.

Response to Comment P-14. The "preferred alternative" designation refers to OBRA's preference of the Maximum Capacity Alternative for reuse planning purposes. We apologize for any implications regarding preferences of the local neighborhoods or that would purport to speak for the representatives of those neighborhoods.

The "Establishing the Region of Influence" subsection in Section 5.6 was revised with the following text:

> The City of Oakland and the Oak Knoll study area have been established as the relevant region of influence for analyzing environmental justice issues. Detailed analysis focuses on the Oak Knoll study area using data from census tracts adjoining NMCO. The nature of the impacts associated with disposal and reuse, if any, would generally occur at the neighborhood level within the immediate vicinity of NMCO.

Response to Comment P-15. Comment noted. The Navy and the City of Oakland respect the quality of life concerns expressed by local residents.

talking about. I live right on the Base. I'd like to agree with Mr. Pementell, the Navy has been very good -- they have been very good neighbors, when there have been issues they have been extremely responsive.

Flaws in the process that I think are important and neglected in the EIS/EIR process, I don't know where you would have included them, include that there's a group called the Community Advisory Committee that was a part of the base closure process that met for over two years. There was never a chair, there was no process, there were no voting guidelines. In fact, the neighborhoods were told -- after two years of being told that they could vote as members of the Community Advisory Committee, they were then told they couldn't vote. And in the end there was no vote.

So to imply that the people in the immediate vicinity agreed with this plan is -- is flawed.

With all due respect to Mr. Blair, he came in at the very end of the process, and I don't think he was ever privy to some of the problems, process problems, that we brought up repeatedly

Response to Comment P-16. Comment noted. Respondent lives very near to the base.

Response to Comment P-17. Comment noted. The Navy is proud of its past relations with local residents.

Response to Comment P-18. The "preferred alternative" designation refers to OBRA's preference of the Maximum Capacity Alternative for reuse planning purposes. We apologize for any implications regarding preferences of the local neighborhoods or that would purport to speak for the representatives of those neighborhoods.

The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states that "The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group."

Response to Comment P-19. The purpose of this EIS/EIR is to evaluate the environmental impacts associated with disposal and reuse. Background information regarding the OBRA reuse planning process has been provided so that decision-makers will be informed regarding the process that was used in developing the alternatives. The Oak Knoll Neighbors had a substantial role in developing the alternatives. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak

in every public forum at OBRA. I think the EIS/EIR needs to respond to that, and it fails to do so.

P-19

There was also direct conflict of interest on CAG, specific PBC applicants were brought in by one group in CAG and told how to lobby. The other twelve PBC applicants were not given this, and if you went and interviewed them, you'd hear a remarkable story of who got the influence, who got the aid and who didn't. It was a very much off imbalance. It was an unfair advantage, and no one ever addressed it.

P-20

One of the groups also failed to meet for over four months, and in fact when the entire process was over, there was still no chair, still no vote and still no consensus. I would like you to reanalyze that.

P-21

I think it also fails to address specific base closure issues. The fact that PBC applicants, one of whom is Oakland Parks and Recreation, who's getting more than the 14.6 acres that Mr. Blair mentioned, that's the -- only the part they're getting in the 40-acre region.

P-22

What is a public benefit applicant and how

P-23

Knoll Neighbors. Further analysis of the procedural adequacy of the reuse planning process addresses issues that are not related to the analysis of environmental impacts and therefore is beyond the scope of analysis in the EIS/EIR.

Response to Comment P-20. Comment noted. Please see response to Comment P-19.

Response to Comment P-21. Comment noted. Please see response to Comment P-19.

Response to Comment P-22. Comment noted. Please see response to Comment P-19.

did that process work? And the fact that there's a 30-year rule that that land use can't change for 30 years. I think this is something you need to address. Of the different public benefit applicants who have been given land, what is the likelihood that their use of that land will in fact be needed or will continue for 30 years, or be funded for 30 years. There are both short-term and long-term implications of that. The plan fails to address those. P-24

I think the plan also needs to consider that this is one of the few sites, if not the only -- we're still looking to see if there's another -- that's completely surrounded by R-30, single-family residences, unlike any other base closure in the country. Other base closures are primarily giving their public benefit applicants' land to parks and universities, for a very good reason. If in 30 years we're still not educating people, we're in big trouble as a society, and hopefully the use for parks and active recreation aren't going to go away; it's pretty logical. P-25

I think you need to look at the property values. The plan fails to do that. We have been addressing that repeatedly. At other base P-26

Response to Comment P-23 and P-24. Methods of conveyance are discussed in Section 1.3.2 of the EIS/EIR. It has been revised as follows: following base closure, environmental remediation, and completion of NEPA requirements, the Navy may transfer property to other federal agencies or convey property to state, local, or private entities. Federal law provides for a variety of conveyance methods to implement Navy property disposal decisions after completion of the NEPA process.

The scope of the analysis in the EIS/EIR is to evaluate the environmental consequences of Navy disposal and subsequent reuse impacts on existing conditions. Navy disposal is a transfer of title and does not affect existing land use conditions. Section 3.1 of the EIS/EIR adequately characterizes land uses surrounding the NMCO site. Section 4.1 of the EIS/EIR evaluates reuse impacts of the preferred alternative (Maximum Capacity Alternative) as presented in the Final Reuse Plan (OBRA 1996). Section 2, Subsection V, and Section 3, Subsection VII of the Final Reuse Plan (OBRA 1996) provide overviews of the community reuse planning process and the reasoning used in developing the land use mixes in the preferred alternative. Page 4-2 of the EIS/EIR explains the following:

> For every issue area evaluated in this EIS/EIR, impacts of disposal and of each alternative, including the No Action Alternative, are projected to the year 2020. The year 2020 was chosen as when the final reuse plan would be fully implemented. It is anticipated that all aspects of the final reuse plan would be in place by 2020. Complete implementation of each alternative is assumed in the analysis of impacts.

closures, there isn't the contingency of property right up on the base. There are still being devalued properties in other base closures around the county. What's the specific impact here, P-26 given that the homes come right up on the edge? This isn't an industrial park, it isn't a port, it isn't an airport, it's smack in the middle of Residential City, USA. What's that impact? I don't see it in the report.

There are also some current interim problems. I'd like to compliment Mr. Gee, who was very receptive to the fact that some of the Navy personnel the other night were chasing each other around the Base in their automobiles, screeching around. I would invite you to go look at the tire marks that were left. When a number P-27 of us called -- other people have called, to ask, gee, what's going on? They said, well, this is an exercise that we're performing, to which we responded, at eleven or twelve o'clock at night? This never happened when the Navy was there, and I hope it will not continue because it's certainly what I would consider a negative impact in the interim process.

When we called OPD, they said, gee, can you

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Response to Comment P-25. This EIS/EIR analyzes potential impacts from disposal and reuse at the NMCO site. The OBRA 1996 Final Reuse Plan is the basis for the analysis of reuse impacts. Reuse plans at other sites would only have bearing on this environmental analysis if their environmental impacts, in combination with reasonably foreseeable reuse impacts at NMCO, could result in significant cumulative impacts. Chapter 5 analyzes cumulative impacts.

Response to Comment P-26. CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An EIS/EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental act under CEQA. We realize that the chance that property values could decline is unappealing to local residents. However, local and regional property values change in response to several factors. Changes in property values produce no physical impacts and are not considered as environmental impacts for purposes of NEPA or CEQA. Property values are not physical changes that may be forecast from changes in land use and ownership and are therefore not analyzed because the information supporting such an analysis is lacking, is based on conjecture, and is not reasonably foreseeable (40 CFR, § 1502.22[b][1]). CEQA Guidelines, § 15145, says that "If, after thorough

give us the make of the car? Not really. We're not supposed to go on the base. It's 182 locked-up acres. Am I supposed to trail down there with a flashlight and try to figure out --

P-27 to run after a car to try to figure out what the license plate is? Hello? I would appreciate it if someone could address this. I realize we're early on in the process, but this is not making us feel real good. Please consider it.

Region of influence: City policy says they will always give more emphasis to the region of influence in the neighborhood. In fact, I would like to attract your attention to a document you already should have from the City of Oakland by Mr. Kochan, because we're not the only neighborhood to complain about certain

P-28 developments in the City of Oakland's, and to imply that we are would really be a mistake. Oakland has attracted more residential care facilities and types of facilities like that than any other area or city in the County of Alameda.

The document I'm referring to is a report. It was to the City Manager, attention Mr. Craig Kochan. It was from the Community and Economic Development Agency, it was prepared October 15th,

investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion, and terminate discussion of the impact" (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15145 [Office of Planning and Research 1995]).

NEPA analysis of these indirect effects (40 CFR, § 1508.8[b]) with respect to the appropriate regional and local contexts (40 CFR, § 1508.27[a]) and a balanced consideration of the adverse nature, public health and safety implications, geographic and ecologically critical areas involved, likely future controversy, uncertain or unknown risks, presidential inference, and related measures of the intensity of these indirect effects does not warrant their identification as significant (40 CFR, § 1508.27[b]).

Response to Comment P-27. The situation referred to in this comment has been resolved by the Navy caretaker site ofice. The Navy apologizes for any disturbance to neighbors of the NMCO site.

Response to Comment P-28. The "Establishing the Region of Influence" subsection in Section 5.6 was revised with the following text:

> The City of Oakland and the Oak Knoll study area have been established as the relevant region of influence for analyzing environmental justice issues. Detailed analysis focuses on the Oak Knoll study area using data from census tracts adjoining NMCO. The nature of the impacts associated with disposal and reuse, if any, would generally occur at the neighborhood level within the immediate vicinity of NMCO.

1996. I think the Planning Commission is well aware of its presence, and I think that document needs to be a part of the EIS/EIR, because that is in fact something that the City of Oakland now has an obligation to consider. P-28

Building trends: Real failure here. Sorry, guys. You misnamed neighborhoods, you leave neighborhoods out, you didn't look at Ridgemont. Oak Knoll Heights, which is directly across from the entrance on Mountain Boulevard, is not even mentioned in the report. They have more impact than anybody. They are only a street front away from the major entrance to the facility. P-29

Things are not mentioned properly in the report. It shows us a failure to understand the community. P-30

What is of far more concern is you failed to understand the building trends in the community. You are selective and flawed when you look at the Skyline Apartments, and the Ridgemont and Skyline apartments which are now condominiums, and ignore all the single-family home development in the area, and further ignore the fact that 80 percent of the area is P-31

Other comments noted. Reports referring to the density of residential care facilities were considered by OBRA during the reuse planning process.

Response to Comments P-29 and P-30. Neighborhood labeling relied on the Existing Conditions Report (Theresa Hughes & Associates 1994). We apologize if minor errors in boundaries were replicated in the EIS/EIR. However, the boundaries as presented are sufficiently accurate to support informed CEQA decision-making for environmental and socioeconomic issues in the EIS/EIR that materially depend on neighborhood boundaries. A separate account would not materially improve the ability of the EIS/EIR to support such decisions.

Response to Comment P-31. Please see response to Comment P-28.

single-family homes, if not more.

The trend is toward single-family homes, not high-density apartments. Not high-density anything. If you look at where the property values have fallen in our zip code it has been in apartments and condominiums. Again, let's think about the other impacts and whether that makes sense.

P-31

The last impact is lack of knowledge. You failed to address certain factors, because you simply didn't know what the final plan was going to include. I think you need to go back and do a very serious analysis of, now that there is a Maximum Preferred Alternative and every last acre has been assigned, what are the impacts specific to that final decision?

P-32

The last impact, and you know under federal law if the federal government -- apparently if you do something that drops property values beyond a certain extent, that that is definitely an impact too. What is the impact on our property values? You know. Sorry if that sounds horrible, but every dime I have is in my house, and when you tell me that you're potentially threatening the value of my house, I tend to take

P-33

Response to Comment P-32. A specific final design has not been determined. This EIS/EIR fulfills its purpose of providing a programmatic analysis of potential environmental impacts. Program EIS/EIRs may be prepared on a series of actions that can be characterized as one large project and are related as follows:

- Geographically;
- As logical parts in the chain of contemplated actions;
- In connection with the issuance of rules, regulations, plans or other general criteria to govern the conduct of a continuing program; or,
- As individual activities, carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

Response to Comment P-33. Please see response to Comment P-28.

that fairly personally, and I think everybody in our community does.

We are submitting to you this evening, and I have given a copy to Mr. Munekawa already, a 13-page request for additional information. It more or less addresses what we consider to be flawed analysis or complete absence of information in the report. So it is not repetitive, and I would appreciate your consideration of these factors. Thank you.

CHAIRMAN DE LUCA: Thank you. If that's your extra copy, would you kindly give it to Mr. Bryant for our record? Thank you.

MS. DREYER: Can you give me a piece of paper showing receipt of this?

CHAIRMAN DE LUCA: It's read into the record.

MS. DRYER: So it's on television; report went in. Sorry, but the City of Oakland has lost quite a few things.

CHAIRMAN DE LUCA: Thank you. No questions for the speaker. Would you kindly call the next speaker.

How many more speakers do we have, Mr. Bryant, so we'll be able to allocate a time?

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Response to Comment P-34. Comments in that 13-page submittal have been addressed in responses to comments K-1 through K-37.

Response to Comment P-35. Comment noted. Please see responses to comments K-1 through K-37.

MR. BRYANT: We have seven more speakers.

CHAIRMAN DE LUCA: Okay. Would you kindly call two at a time, so they'll be ready?

MR. BRYANT: I assume that Gaile Hofmann is not going to speak.

CHAIRMAN DE LUCA: That is correct. She has ceded her time to the previous speaker.

MR. BRYANT: Louis Hal followed by Sandra Marburg.

CHAIRMAN DE LUCA: Thank you.

MR. HAL: My name is Louis Hal. I'm a member of the community surrounding the Oak Knoll Base, Sequoya Hills Homeowners Association, just at the top of the ridge behind the Oak Knoll Base. I'm a member of the board of directors, and I'm also vice-chair for the Hill Area Coalition, which is comprised of about 2,500 -- I mean, 25 homeowners associations in the South Oakland Hills. I'm also chairperson for the Commission on Aging for the City of Oakland, and I also sit on a Commission on Aging for the County of Alameda.

CHAIRMAN DE LUCA: Your presence is well known to this commission. Welcome.

MR. HAL: When I speak, what I want to

speak about is seniors in this area. This is one thing I'm a champion for seniors.

CHAIRMAN DE LUCA: I am too.

MR. HAL: In the five tracts immediately adjacent to the Base, over 4,000 seniors who are 65 years and older, and they go up as high as 85 and above. And I have been all through this process, campaigning for a senior center to be put at Oak Knoll, which is very much needed in the Hill area. We don't have one there.

And in doing that, I also have been very much opposed to putting this Seneca group in there, because seniors and disgruntled or dysfunctional teen -- kids don't mix. We have senior centers located -- we have at least one senior center located adjacent to what we call a large for these kind of people here in the City of Oakland. We have to post guards around this thing, and it also affects the people attending the thing.

The other thing is that the demographics of the area around the base has 56 percent of the people there African American, and these are upscale people. You're not talking about the low-income people. These are the higher echelon

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Response to Comment P-36. The purpose of this EIS/EIR is to evaluate the environmental impacts associated with reuse. In meeting that purpose, background information regarding the OBRA reuse planning process has been provided so that decision-makers will be informed regarding the process that was used in developing the alternatives. This background information indicates that the Oak Knoll Neighbors had a major role in developing the alternatives. Throughout the reuse planning process, several changes were made to the land use mixes in the alternatives in direct response to comments by the Oak Knoll Neighbors. Further analysis of the procedural adequacy of the reuse planning process addresses issues that are not related to the analysis of environmental impacts and therefore is beyond the scope of analysis in the EIS/EIR.

Response to Comment P-37. CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An [EIS/]EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes. (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental impact under CEQA. California courts have not considered crime as an environmental impact. For example, In Baird v. County of Contra Costa, 32 Cal. App. 4th 1464, 1470, fn 2, 38 Cal. Rptr. 2d 93 (1995), a petitioner's "claim of increased crime problems" from a project "is

people, and you wouldn't dare put this kind of facility in the middle of a community that was upscale and predominantly Caucasian. It's just totally wrong for what you're doing to us. Meaning us African Americans, to put this kind of facility in there.

You wouldn't do it in Piedmont, because they wouldn't have it there. You wouldn't do it in Montclair, but you feel that since we are who we are, and we are always subject to taking the short end of the stick, that these groups can come in, right in the middle of our community, and establish this quasi-prison for kids, who we know for a fact, because we have information, that these kids run away. Now, when they run away they're not going out to do good things when they run away from these places.

We at this community, I just gave you the ages of the people who are sixty-five and older, but this is a community growing old in place, you know, and the people, the houses are so expensive that young people in their early -- in their late twenties and early thirties, they can't afford to buy in this community. So when they buy in this community, they have already been a homeowner

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not a proper subject of CEQA inquiry," based on the reasoning found in Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131(a). Similarly, "The economic impact on small businesses and property values" did not trigger CEQA in Citizens Action to Serve All Students v. Thornley, 222 Cal. App. 3d 748, 757-758, 272 Cal. Rptr 83 (1990). Crime is not recognized as either a NEPA or a CEQA environmental issue and therefore is not analyzed in the EIS/EIR.

Although local experience regarding existing crime rates is an important consideration, there is no reasonable basis for assuming that increased crime will unavoidably result upon reuse. Crime may increase or decrease locally. This EIS/EIR has analyzed the need for police services in Volume I, Sections 3.3 and 4.3, and generally recommends adequate mitigation for significant impacts (Volume I, Section 4.3). Further speculation regarding uncertain future trends in local crime would not enhance the ability of decisionmakers to make an informed decision regarding reuse, and is therefore not included.

NEPA analysis of these indirect effects (40 CFR, § 1508.8[b]) with respect to the appropriate regional and local contexts (40 CFR, § 1508.27[a]) and a balanced consideration of the adverse nature, public health and safety implications, geographic and ecologically critical areas involved, likely future controversy, uncertain or unknown risks, precedential inference, and related measures of the intensity of these indirect effects does not warrant their identification as significant (40 CFR, § 1508.27[b]).

Response to Comment P-38. The analysis of environmental justice issues is a federal requirement accompanying NEPA analysis of federal actions. It is important to remember that Navy property disposal is the only federal action being

once, and when they move in, so they're in their late forties, fifties. You know, I was one of the lucky ones to move in 30 years ago, when the prices was, quote, cheap. But now I couldn't afford to buy there. And a lot of my neighbors couldn't afford to buy there, because we moved in early. And so we are aging in place, my street is becoming almost a retirement community.

And when I walk through the community and ask people what they would like to see done at Oak Knoll, and I tell them I'm trying to get you a senior center down there, so we can have someplace to go and socialize with each other and have a program for seniors, they are enjoying that opportunity. They will enjoy that opportunity.

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They also, some of them, say, when I tell them that Seneca will be there, they say, well, at my age, I hate to move, but I think I will have to move. And this is wrong, this is wrong to thrust this kind of a facility right in the middle of our facility. And not only do we have black people not wanting this facility, there are a lot of Caucasians, the few that are there, which is about 43 percent or so that are there,

analyzed in the EIS/EIR. Analysis of direct impacts related to issues of environmental justice are therefore limited to Navy property disposal, but indirect impacts extend to the environmental impacts of projects initiated by those taking title to the property.

Section 3.2.5 has been revised to more clearly state the environmental analysis requirements of NEPA in relation to the requirements of the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.*

> On February 11, 1994, President Clinton issued the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations.* This order requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is *required* (emphasis added), by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, *whenever feasible*, (emphasis added) should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities.

Section 5.6 has been revised to more clearly state the environmental analysis requirements of NEPA is relation to the requirements of the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income*

P-39 they don't want them there.

MR. BRYANT: The speaker's time is expired.

MR. HAL: So we appreciate you doing something about this, because --

P-40 CHAIRMAN DE LUCA: Thank you.

MR. HAL: -- we cannot have it.

CHAIRMAN DE LUCA: Thank you very much for your testimony. Next speaker, please.

MR. BRYANT: Sandra Marburg, followed by Thordie Ashley.

MS. MARBURG: Hello, I'm Sandra Marburg, and I'm on the planning committee of Oak Knoll Neighbors, the coalition of twelve different residential groupings, about 4,000 households in our group. I'm also a board member of Sequoya Highlands, and have been very active in creek cleanup and street cleanups in my area.

I wanted to talk on just three basic issues very quickly. One is biological resources, the second one is earthquake hazards and the third one concerns the riparian corridor.

P-41 In reviewing the EIR/EIS, we were somewhat concerned about what appeared to be a superficial analysis of, for example, the potential for

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Populations. The following text has been inserted in Section 5.6:

> As discussed in Section 3.2.5, the *Executive Order on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations* requires that "Each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions including effects on minority communities and low-income communities, when such analysis is *required* (emphasis added), by the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et. seq. Mitigation measures outlined or analyzed in an environmental assessment, environmental impact statement, or record of decision, *whenever feasible*, (emphasis added) should address significant and adverse environmental effects of proposed Federal actions on minority communities and low-income communities."

As further clarification, the following headings and text was added as Section 5.6.2:

5.6.2 Potential For Disproportionate Environmental Impacts On Minority Communities And Low-Income Communities

Navy Disposal. Navy property disposal is simply a transfer of property title and would result in no environmental impacts. No significant and adverse environmental impacts or disproportionate environmental impacts on minority and low-income communities would occur as a result of the Navy property disposal. Disposal is summarized in the Executive Summary and Table ES-1 of the EIS/EIR, and is described in detail in Chapter 4.

endangered annual plants, particularly flowering plants at the site. Not only that, we didn't find a great effort to find red-legged frogs, and we felt that the description of the effort to find the Alameda striped racer, it appeared to be on an overcast day, did not seem propitious for finding evidence of the striped racer. We also have materials from the State Department of Fish and Game, which suggest that a much more comprehensive survey for the Alameda striped racer would have been necessary, with certain kind of traps and various repeat site visits and so forth, and so we felt that perhaps that part was a bit done superficially.

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Also with regard to biological resources, I noted that I thought the tree assessment was very poorly done. There is, for example, through the CAG process, I pointed out there's one magnificent historic oak, which is near a portion of the riparian habitat. This oak must be at least six or eight feet in circumference, and you can even see it on an air photo. It wasn't mentioned. So that, to me, was an index that there wasn't a deep effort to find trees, particularly oaks, that are significant to the

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No Action Alternative. Retaining the property indefinitely under the No Action Alternative would result in no environmental impacts. No significant and adverse environmental impacts, or disproportionate environmental impacts on minority and low-income communities would occur as a result of the No Action Alternative. The No Action Alternative is described in detail in Chapter 2 and is analyzed for environmental consequences in Chapter 4 of the EIS/EIR.

Community Reuse Alternatives. The only significant and unmitigable environmental impacts produced by the community reuse alternatives is for air quality. Motor vehicle traffic trips associated with community reuse alternatives for NMCO may exceed one or more Bay Area Air Quality Management District air emission thresholds as shown in Table 4-31. The region of influence for ozone precursors and secondary particulate matter (PM_{10}) is the entire San Francisco Bay Area as discussed in Section 4.10, because these pollutants are produced by secondary chemical reactions in the atmosphere and occur over a large area. In addition, vehicle traffic is a geographically dispersed source of dilute PM_{10} emissions. Minority communities and low-income communities would not be disproportionately impacted by this regional air quality impact.

All significant and mitigable environmental impacts identified in the EIS/EIR are associated with implementing the different community reuse alternatives. If the mitigation measures associated with the community reuse alternatives are implemented as described in the EIS/EIR, no significant and adverse environmental impacts would

City of Oakland. Oaks are protected in Oakland.

And using that just as a thumbnail sketch, I thought that overall the whole issue of the reuse of this property is going to resolve -- revolve around a massive bulldozing, probably, and a lot of relocation, and the neighbors have expressed their concerns about preservation of trees all through the process. And so we want specific specimen trees to be identified very early in the process, and to make an effort to make sure they're preserved.

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I also, then, the second area, I wanted to talk a little bit about earthquake hazards. We felt that the EIS/EIR trivialized all the conflicting studies that are extant today regarding the potential for active faults on the site. We realize the USGS has recently considered the fractures that go through the site to be basically dormant. But there are lots of studies, not more than ten or twenty years old, from the USGS, which did suggest that there were faults that could be active on that site.

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With that in mind, we're concerned with all the potential connection for seismic activity and fire hazards. It's very likely that if there

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affect disproportionately minority communities or low-income communities.

Response to Comment P-39. Please see responses to comments P-36, P-37, and P-38.

Response to Comment P-40. Comment noted. OBRA considered many issues and concerns regarding a senior center and regarding the Seneca Center. Please see Sections 1.6 (Public Involvement Process) and 2.1 (Development of Alternatives).

Response to Comment P-41. A 90-day spring survey was conducted for the Alameda whipsnake, also known as the Alameda striped racer, in accordance with methods of the California Department of Fish and Game. No Alameda whipsnakes were found. The survey report is presented in Appendix F of Volume II of the EIS/EIR and is referenced in Section 3.6.4 of the EIS/EIR. Figure 4 of Appendix F shows a schematic of the trapline and photographs of the funnel trap. A detailed description of the traplines and traps is presented in the Methods section of Appendix F.

A detailed sensitive species survey consisting of a rare plant assessment and a survey for sensitive wildlife species was conducted at NMCO. The entire survey report is presented in Appendix B of Volume II of the EIS/EIR and is referenced in EIS/EIR Section 3.6.4.

The sensitive species survey in Appendix B of the EIS/EIR notes that the closest known observation for red-legged frog was recorded in the 1940s, approximately seven miles north of the site and that the species is unlikely to inhabit NMCO because suitable habitat does not exist on the facility.

Response to Comment P-42. A tree study was conducted to estimate trees protected under the City of Oakland Tree Ordinance (Article 6, Section 7-6) at NMCO. The study report is in Appendix E of Volume II of the EIS/EIR. The ordinance protects coast live oaks with a diameter breast height (dbh) of four inches or larger and any other tree, except eucalyptus and Monterey pine, with a dbh of nine inches or larger. There is no reference in the ordinance to "historic" trees. In this program level document, it would be speculative to determine which specific trees may be affected by development. In accordance with CEQA Guidelines, § 15145, if a particular impact is too speculative for evaluation, the agency should note its conclusion and would discuss the topic no further. Mitigation 2 under Section 4.6.3 states that when a specific site plan for development of the area is presented to the City of Oakland, the applicant would have to conduct a site-specific survey of which trees to remove and would have to comply with all other requirements of the ordinance, including obtaining tree removal permits.

Response to Comment P-43. The seismic hazard associated with a small branch fault or fault sliver that passes through the site would be largely related to differential ground movement affecting buildings directly adjacent to or over the fault trace. Under the Alquist-Priolo Earthquake Fault Zone Act, the state of California identifies zones containing recently active faults so that local planning agencies can prohibit or limit building within those zones. The California Division of Mines and Geology collects and analyzes data from a variety of sources, including studies for development projects prepared by geotechnical consultants, geologic reports prepared by the US Geological Survey and others, and in-house field studies by the California Division of Mines and Geology. Earthquake fault zone maps are then prepared, based on the results of these studies. The reports and

were an earthquake there would be a real problem on this site concerning circulation, egress and ingress. And given the presence of road pattern, which is -- anybody who's visited, it's totally unmanageable for any kind of development you're talking about, it's difficult in the public to really consider what is it going to be, this potential safety hazard of a likely earthquake fault movement in that area? And fire hazard, because we have had lots of arson events already in that area in the last few months, and we will have for many years.

P-44 So we feel that, then, we have to have a deeper knowledge of not only what are reservoir capacities in the area, we have a lot of eucalyptus as you well may know, in the Lake Chabot area. So the whole issue of fire hazards in that area is extreme, and I think it was totally underevaluated, in particularly with regard to earthquakes. Also, with regard to earthquakes, if you minimize the earthquake fault there, you may not be appropriate -- looking at the appropriate building standards, and also with Seneca, which is -- has a lock-down, 24-hour involuntary center.

studies on which these maps are based are available for public review and were reviewed to prepare the EIS/EIR. The state considers faults that show evidence of activity within the past 11,000 years to be recently active and included those faults under the Alquist-Priolo Act. Faults that are older could rupture in the future, but the probability is lower or the recurrence interval is greater for rupture on these older faults. A fault identified as "segment H" and thought to be a strand of the Hayward Fault has been mapped along the southwest edge of NMCO. Recent geologic studies indicate that segment H has not been active during the past 11,000 years; therefore, there is no regulatory prohibition against building along this fault. Although the hazard of a surface rupture on the site is small, the hazard associated with ground shaking due to a large earthquake on the Hayward Fault is significant. The hazards associated with ground shaking represent the principal seismic hazard for the site. These hazards would be addressed in part by designing buildings to meet the current seismic code. Additionally, the hazards associated with a large earthquake could include broken utility lines leading to increased risk of fire, delayed response by overburdened emergency services, and impaired access to some areas of the site. The project would address these issues in a way consistent with local and regional emergency planning.

Response to Comment P-44. Please see responses to Comment P-43. The comment relates primarily to providing emergency services following an earthquake. We do not think that the earthquake hazard at the site has been minimized in the EIS/EIR. However, there are few locations within the San Francisco Bay Area that would not be significantly impacted by a large earthquake on a nearby active fault.

We're very, very concerned about what that would mean in terms of liability, if you have an earthquake occur and you have the Navy perhaps even liable for having transferred the property with full knowledge there was a potential seismic
P-44 hazard, and that's the reason they're not putting a hospital, but allowing for a public benefit conveyance which involves children who are involuntarily remanded to the site. So we think you should really look at that very, very seriously about that, the seismic potential.

The third issue I wanted to raise was briefly about the riparian corridor. Here we had a few questions about the number of bridges that were beginning to be contemplated, the kind of roadways that would go across the riparian
P-45 corridor to ease the circulation internal to the Base, but we also had some concerns about the ranking of the various development scenarios in terms of the water quality downstream. It seems obvious that if there is a golf course, which has heavy uses, generally, of pesticides and also fertilizers, and a large number of residences and also this mixed use development, there are going to be serious consequences in terms of water

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Response to Comment P-45. If specific site designs include bridges, they will be addressed at that stage of reuse development. The restricted access buffer zone is intended to be a permanent zone of protection through reuse plan implementation and is intended to be incorporated into later specific plan development proposals. The second sentence of each Mitigation 1 in Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 was modified to read as follows:

> Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor.

Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 of the EIS/EIR were revised to read as follows:

> A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone.

Section 4.6.8 has been changed to read as follows:

> To the fullest extent legally required, the proposed 50-foot wide restricted access corridor for Rifle Range Creek may be expanded, as necessary, to account for the protection of wetlands and important upland drainage areas as such areas may be affected by subsequent development proposals. Although no upland drainage areas have been identified, subsequent development proposals will need to address this issue if legally required to do so.

quality downstream, so we --

MR. BRYANT: The speaker's time is expired.

CHAIRMAN DE LUCA: Wrap it up.

MS. MARBURG: So we very much wanted that to be elucidated further.

CHAIRMAN DE LUCA: Thank you so much. Any questions for the speaker? If not, call the next one.

MR. BRYANT: Thordie Ashley, followed by William McFerren.

MS. ASHLEY: Good evening, Mr. De Luca and other Planning Commissioners.

CHAIRMAN DE LUCA: Good evening, ma'am.

MS. ASHLEY: I am Thordie Ashley, I'm an Oak Knoll Neighbor and this might sound redundant. I do have the census tract from 1990 that I will give to this gentleman here, because it breaks down the ethnicity, and it also breaks down the age, the ownership and the tenants of the people surrounding Oak Knoll, especially. That's the compliments of the Census Bureau.

The Navy failed to recognize the implied environmental racism against the protected group of people, in their EIS and EIR. I notice across

Please see Section 4.7.3 of the EIS/EIR. Applicable state and federal laws, regulations, and standards intended to control the volume and timing of nonpoint source pollutants will apply.

Response to Comment P-46. Comment noted. Thank you for the report.

Response to Comment P-47. No significant and adverse environmental effects on minority and low-income communities would occur from implementing any of the alternatives in the EIS/EIR, provided the mitigation measures in the EIS/EIR are followed.

the board, with environmental justice, the matter was completely white, it was black, then someone said that we were equally protected here in some way with the Oak Knoll census, there's 56 percent
P-47 African Americans of upper middle class up to being very rich, and there's 34 percent Caucasians, 8 percent Asians, and 2 percent of the others.

Now, is the United States government going to divide our group of protected human beings -- which we are protected -- a protected group of people, into class and into caste and into
P-48 income? Because you talked about low-income minority, I'm not a minority, I'm an African-American. I'm an American of African descent, and I resent that statement. But are you going to divide us into class and caste groups here? That is wrong.

Now, with the inclusion of Seneca, that's a violation of my civil rights, and it's also a violation of other ethnic groups of their fair
P-49 housing rights, because the fair housing rights grants the right of reasonable accommodations, not an unreasonable accommodation of certain groups such as Seneca. Now, Seneca wants

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Response to Comment P-48. Please see response to Comment P-47.

Response to Comment P-49. CEQA requires that economic or social effects of a project shall not be treated as significant effects on the environment. An [EIS/]EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes (Cal. Pub. Res. Code, §§ 21000, et seq.; Guidelines, § 15131[a]).

This requirement means that there must be a direct physical change in order for that change to be analyzed as a potential environmental impact under CEQA. California courts have not considered the "social characteristics of the prospective customers of the agency [proposing a new unemployment insurance office]" as an element for consideration in determining whether an [EIS/EIR] will be necessary City of Orange v. Valenti, (37 Cal. App. 3d 240, 249, 112 Cal. Rptr. 379 [1974]). The characteristics of the Seneca population are therefore not an environmental issue and are not analyzed in the EIS/EIR.

We realize that the nature of the Seneca population is a controversial local issue. However, the City of Oakland feels that supporting assistance to troubled children under the age of 12 serves a valuable socioeconomic purpose. Children are an important resource deserving of support. Speculation regarding any alleged criminal tendencies of these children would be prejudicial. We have chosen to avoid prejudice in the reuse planning process against any group.

segregated facilities. They want their kids to be able to swim and use the baseball fields, the football fields, at certain times that will be closed to the public.

I'm a taxpayer, I'm a senior citizen, I have a right to go up there, and other kids throughout the nation -- throughout the region or throughout the world have a right to come there and swim, just because Seneca's children are so emotionally disturbed that they cannot fit in with the so-called normal society. Now, the federal and state Fair Housing Acts do not provide any disabled person, such as the Seneca kids, with preferential treatment. Instead it provides equal opportunity at a level playing field.

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Now, you need to look at Case No. 90C524-S, it's the United States of America vs. the Village of Marshal. It is not realistic to even expect that professional African-Americans, who have worked hard and who have succeeded and who surround Oak Knoll with 56 percent, to accommodate Seneca and allow them to come in and devalue the property. My family alone owns more than $800,000 worth of property that we have

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NEPA analysis of these indirect effects (40 CFR, § 1508.8[b]) with respect to the appropriate regional and local contexts (40 CFR, § 1508.27[a]), and a balanced consideration of the adverse nature, public health and safety implications, geographic and ecologically critical areas involved, likely future controversy, uncertain or unknown risks, precedential inference, and related measures of the intensity of these indirect effects does not warrant their identification as significant (40 CFR, § 1508.27[b]).

Response to Comment P-50. United States v. Village of Marshall, Wisconsin, 787 F, Supp. 872 (W.D. Wis. 1991), held that a village's refusal to grant an exception to a state law spacing restriction for group homes constituted handicap (mental illness) discrimination under the Fair Housing Act. If the "troubled youth facility" proposed for NMCO could be called housing for the handicapped, this case would indicate that the City of Oakland is required to "reasonably accommodate" such a facility.

worked for many years, and to have someone like Seneca to come in and devalue our property, that is also illegal.

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Now, on the other hand was the utilities. What about the PG&E? You don't address the utilities at all. Is it going to be that PG&E is going to be the only bidder for the Oak Knoll hookups? And can Seneca and UIN, there's two PBC's that you include, can they afford the cost of the hookups? Will that cost be shifted to the taxpayers, which is also illegal? Now, you have a federal case in San Francisco where Louis Raney, the attorney for San Francisco, filed against the National Park Service, the United States government and PG&E, that case is pending now. It's many issues in here that's very flawed.

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But the thing that I'm most concerned with is the African-Americans who have worked very hard to maintain their property, to gain the property, to maintain to pass to other heirs; that all of a sudden someone like Seneca can just walk in and be included, because the law and Ron Dellums said they should be.

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CHAIRMAN DE LUCA: Thank you, ma'am.

Response to Comment P-51. Analysis of potential utility bidders and the affordability of services are not environmental issues and are not analyzed in the EIS/EIR. Please see Sections 3.12 and 4.12 of the EIS/EIR regarding utilities setting and impacts analyses, respectively.

Response to Comment P-52. Comment noted. Please see response to Comment P-49.

For the record, the census tract report that you introduced to us was prepared by the Oakland Planning Commission.

MS. ASHLEY: Thank you very much.

MR. BRYANT: William McFerren, followed by Hazel Houston.

MR. McFERREN: Yes, my name is Williams McFerren, I was a member of the CAG, or the neighborhood organization. We have been holding meetings with -- for the last two years we have spent hundreds of hours inputting the neighborhood organization's comments into this report, which was totally ignored at the end of the meeting, and I was very disappointed in that.

CHAIRMAN DE LUCA: Which part was that, sir?

MR. McFERREN: What was that?

CHAIRMAN DE LUCA: Which part did you say was ignored?

MR. McFERREN: The neighborhood input. The EIS/EIR depended a lot on the report from Teresa Hughes & Associates and from the OBRA board. This was, for lack of a better word, constructive railroading. They railroaded the neighborhood,

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Response to Comment P-53. Comment noted. Authorship noted.

Response to Comment P-54. The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Section 2.1 of the EIS/EIR, in referring to the meetings held by OBRA, states that:

> The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group.

Response to Comment P-55. Please see response to Comment P-54.

they tried to guide the neighborhood into certain directions. When we failed to go in that directions they overlooked our input, they used the word "consensus" a lot all the way through their planning, and trying to get us to agree to a vote at the end, and which we were not allowed to vote on, and we were very disappointed in that.

P-55

Also, I'd like to address the socioeconomic impact. When we brought this up as -- as the use of this plan, how it would impact the neighborhood at large, we were told that that was not part of their planning. That they could not take in the impact of the neighborhood, surrounding neighborhoods, into the use of this plan. That this would have to be total -- totally separate from the impact.

P-56

As Mr. De Luca, a member of the planning board, knows, that we have been working on the Toler Heights Citizens Council for the last five years on developing MacArthur Boulevard. The retail that they are looking to put in this plan, we would love to have on MacArthur Boulevard. And we believe that if retail is put up there, it would adversely affect any development of retail

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Response to Comment P-56. Socioeconomic impacts are addressed in Sections 3.2 and 4.2 of the EIS/EIR. The Establishing the Region of Influence subsection in Section 5.6 was revised by adding the following text:

> The City of Oakland and the Oak Knoll study area have been established as the relevant region of influence for analyzing environmental justice issues. Detailed analysis focuses on the Oak Knoll study area using data from census tracts adjoining NMCO. The nature of the impacts associated with disposal and reuse, if any, would generally occur at the neighborhood level within the immediate vicinity of NMCO.

Response to Comment P-57. Comment noted. The City of Oakland has given substantial weight to the opinions of the local citizens. Section 2.1.1 of the EIS/EIR provides a thorough review of the OBRA reuse planning process. Page 2-3 of the EIS/EIR, in referring to the meetings held by OBRA, states the following:

> The neighborhood associations in the immediate area surrounding NMCO played a major role in developing the alternatives. Participating neighborhoods adjacent to or near NMCO are shown in Figure 2-1. An umbrella group for the neighborhoods, Oak Knoll Neighbors, is represented on OBRA's subcommittees and on the Community Action Group.

on MacArthur Boulevard. We were told that they cannot take that into consideration.

They also totally ignored the planned retail development less than a mile and a half away at Edwards Avenue. When at the last meeting, when this was brought up, she said she was unaware of any retail going in at Edwards Avenue. Everyone in the world knows -- that lives in Oakland, that they are planning this retail development at the -- but Theresa didn't know anything about it, and it was totally eliminated from the plan. P-57

Also, we would like to discuss the impact of the -- the -- not so much the Seneca, but the -- the overabundance of the public services that are provided in this area. At the present time, between the San Leandro line and 73rd Avenue, there are 68 different types of halfway houses; there are drug rehab centers, alcohol rehab centers, youth hospice, that we could find within the City of Oakland. There's 68. This is the only area that don't have -- that is not inundated by some type of social or public benefit conveyance. P-58

Now, they're saying that this area is

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Response to Comment P-58. Please see responses to Comment P-57.

devoid of it, we need to further inundate this area with public use, with the public conveyance, and we just feel this is the last area within this district that is salvageable. We are a -- that's an upper -- a middle class, upper middle class area, the only one in the 7th District. If you go anywhere out of the 7th District, it is devastated, and this is where we are planning to build -- rebuild our neighborhood, and they're saying we can't take that into consideration. We feel that this is flawed in the EIS/EIR and that Theresa Hodges, Henry Gardner and other political people that were on the board have other agendas whereby the neighborhood had no input into.

P-58

Thank you very much.

CHAIRMAN DE LUCA: Any question for the speaker? Thank you.

MR. BRYANT: Hazel Houston, followed by Russell Moran.

MS. HOUSTON: Good evening representatives of the City and Navy. My name is Hazel Houston, I represent Golden Gate Audubon Society, and also as an individual. I live in Oakland, in Sheffield Village. I read your environmental report, and I notice that there are a number of

P-59

Response to Comment P-59. The EIS/EIR concluded that there would be no impacts to sensitive species, including the Alameda whipsnake. A 90-day spring survey was conducted for the Alameda whipsnake, also known as the Alameda striped racer, in accordance with methods of the California Department of Fish and Game. No Alameda whipsnakes were found. The survey report is presented in Appendix F of Volume 2 of the EIS/EIR and is referenced in Section 3.6.4 of Volume 1 of the EIS/EIR. Figure 4 of Appendix F shows a schematic of the trapline and photographs of the funnel trap. A detailed description of the traplines and traps is presented in the Methods section of Appendix F. The US Fish and Wildlife Service (Comment C-1) has concurred that no additional Endangered Species Act consultations are required. A detailed sensitive species survey consisting of a rare plant assessment and a survey for sensitive wildlife species was conducted at NMCO. The entire survey report is presented in Appendix B of Volume II of the EIS/EIR and is referenced in EIS/EIR Section 3.6.4. The sensitive species survey in Appendix B of the EIS/EIR notes that the closest known observation for red-legged frog was recorded in the 1940s, approximately seven miles north of the site, and that the species is unlikely to inhabit NMCO because suitable habitat does not exist on the facility.

California species of special concern, they are mentioned, they are not addressed further in the future plans.

P-59

I also quote one particular sentence that stood out at me like it was in bold, in Section 3-51, paragraph 4, last sentence, and I quote, "The riparian corridor is an important habitat, providing nesting and foraging opportunities for a wide variety of bird species." The plants were addressed and also the plants that feed the birds and the trees that the birds nest in and other spaces.

P-60

I urge that any plan that you select has as much open space and saves as much riparian space and trees as possible, because while I realize that there needs to be low-cost housing, and I sympathize with safe, low-cost housing, and other facilities, I realize that as it gets more dense, you bring in more cats, and they eat more birds, and so that is another concern of ours. The higher the density, the more potential for a less livable habitat.

So we hope you will make a good selection, and thank you very much.

CHAIRMAN DE LUCA: Thank you, ma'am. Any

Response to Comment P-60. The restricted access buffer zone is intended to be a permanent zone of protection through reuse plan implementation and to be incorporated into later specific plan development proposals. The second sentence of each Mitigation 1 in Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 was added to state the following:

> Establish a permanent 50-foot wide restricted access buffer zone to protect the Rifle Range Creek corridor.

Sections 4.6.3, 4.6.4, 4.6.5, and 4.6.6 of the EIS/EIR were revised to state the following:

> A qualified biologist shall develop a detailed habitat restoration plan for restoration activities in Rifle Range Creek, its tributaries, and the surrounding riparian corridor that includes ongoing maintenance of this buffer zone.

Section 4.6.8 has been changed to read as follows:

> To the fullest extent legally required, the proposed 50-foot wide restricted access corridor for Rifle Range Creek may be expanded, as necessary, to account for the protection of wetlands and important upland drainage areas as such areas may be affected by subsequent development proposals. Although no upland drainage areas have been identified, subsequent development proposals will need to address this issue if legally required to do so.

questions for the speaker?

Mr. Moran, I believe you're next.

MR. BRYANT: Russell Moran, followed by John Moran.

CHAIRMAN DE LUCA: Thank you.

MR. RUSSELL MORAN: Yes, my name is Russell Moran.

CHAIRMAN DE LUCA: Remember your five minutes, Mr. Moran.

MR. RUSSELL MORAN: Yes, I have five minutes.

CHAIRMAN DE LUCA: Thank you.

MR. RUSSELL MORAN: Commissioner and representatives of the Navy, and ladies and gentlemen of the public.

When I was going through this rather lengthy two-volume work -- I was at the Montclair library being shushed out by the librarian because it was late -- I couldn't help but, as a former retired school teacher, and Mr. De Luca reminded me tonight by saying he's in a learning process, I find a typo. It's on Page 3, second Volume A 17, and the reason I found it, I think, is because I was looking for the word "homeless" throughout all two volumes and there they have it

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Response to Comment P-61. The typographical error has been corrected.

"moneyless housing." So you might want in the final draft change that to "homeless housing."

Now, I have been a latecomer in this, because I have been busy on another homeless problem here on 21st and Telegraph Avenue, so I have only attended one meeting with the base reuse. There I distinctly remember that a speech being given that the Congress in its infinite wisdom had set aside or required what they call a homeless component. They had a map there and I think 6 acres, if my memory is correct, was going to be given to the homeless.

Apparently, sometime after that there was some type of hat trick, you know, where the City worked a deal where they paid -- provided two million dollars for the homeless to be administered, I believe, through the Homeless Collaborative, and then the City would take that land that they were going to originally be for the homeless, it would sell it and perhaps recoup the two million it was giving. Maybe one of the few deals the City will make money, two-and-a-half -- 6 acres of land may be well worth two million there.

Now, I think the EIS and EIR is flawed in

Response to Comment P-62. See response to comment K-28.

Response to Comment P-63. Please see response to Comment P-62.

P-64 one respect, it's a well written document, I think the people should be congratulated for it. But as far as the homeless concern, you cannot deal effectively with the impact of transferring homeless that might have been accommodated in the tract that the Congress had insisted this component of 6 acres, until we know where they're going. The first indication was they're going Downtown Oakland, right in the area I have been fighting over for one year. Today I learn from Paul Nahm that they're planning to put them over in the Alameda Naval Base. They're going to

P-65 create some facilities there. There's some concern even there that if they're too densely populated, that it might bring about the very same problem I brought to the Commission, that you shouldn't have a homeless shelter right next to Sears and Roebuck and expect to have a viable downtown.

So I think in the final document, you should have more discussion on the homeless element. I don't necessarily say they should be there, but follow Peter Smith's statement, that the homeless, there should be no longer any further Section 8 housing in the flatlands of

Response to Comment P-64. Comment noted. Thank you.

Response to Comment P-65. Please see pages 27 through 31 of the document, titled Naval Medical Center Oakland, Final Reuse Plan, Prepared by OBRA, that reviews the homeless negotiating team process. This Final Reuse Plan was not available when the Draft EIS/EIR was circulated but does provide additional information regarding homeless accommodations. Descriptions of reuse alternatives are the same as those analyzed using the Draft Final Reuse Plan (OBRA 1996).

Oakland. They should be distributed throughout Oakland and possibly throughout the County. The downtown flatlands are fully impacted, it's
P-65 contrary to state law, it's contrary to every fundamental basis of equity to shove these problems on our neighborhoods downtown, because we have neighborhoods there. They're residential people, working people. Thank you.

CHAIRMAN DE LUCA: Thank you, Mr. Moran.

MR. BRYANT: The last speaker is John Moran.

MR. JOHN MORAN: Yes, I'm John Moran, and I happen to live in the neighborhood of the Oakland Naval Hospital. As a matter of fact, during World War II, I was in the hospital, suffering --
P-66 recouping from some wounds that I received in a kamikaze attack. But what I would like to talk about, and I want to congratulate the group here and the Planning Commission, the others, for having this public hearing and having the public involvement in this facility. And we also have the advantage of having an Environmental Impact Report.

And I'd like to contrast this between the

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Response to Comment P-66. Comment noted. Your military service, attendance, and gratitude for the public hearing are appreciated.

City of Oakland's actions in promoting a large homeless shelter in the downtown area, which is the conversion of the Hamilton Hotel into a homeless shelter. In that particular instance, we have no public hearings, we have no public involvement, we have no Environmental Impact Report. All we have is secrecy. We have secrecy which is pervasive throughout the Oakland administration and the Oakland departments. Apparently, Russell Moran and John Moran are two pariah, various departments throughout the City have been advised that if we call --

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CHAIRMAN DE LUCA: Mr. Moran, would you please get back to the topic. Thank you.

MR. JOHN MORAN: I'm talking about the topic. We're talking about a question of procedures here, Mr. De Luca. We're talking about the actions of the City of Oakland. On the one hand, they come up with a beautiful Environmental Impact Report and public hearings; on the other, they do everything under the table. And that's what I'm referring to. And when you attempt to bring these things to the light, you're shuffed off, just like you're trying to cut me off here right now. You don't

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Response to Comment P-67. Comment noted. Please see response to Comment P-65.

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want to hear what I have to say. It's as simple as that. Because you're one of the instigators in the whole thing yourself.

Thank you.

CHAIRMAN DE LUCA: Thank you, Mr. Moran.

Are there any other speakers or any other questions that need to be addressed at this time?

I want to thank each and every one of you for participating in this public hearing. You can contact us at the address shown here, which are also indicated on the handouts that have been picked up, or can be picked up.

For the record, I also like to make a statement that the EIR/EIS was not prepared by the Planning Commission. It is a document that was prepared in evaluating the entire site. The City of Oakland intends to use this program EIR/EIS for all projects' approval required to implement the reuse plan.

I beg your pardon?

MS. MARBURG: I had one question. You asked for questions and I wasn't fast enough.

CHAIRMAN DE LUCA: Is this a follow-up to

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your testimony, ma'am?

MS. MARBURG: Well, it's actually a very relevant question. If we send a letter to the address here for the Navy, will it also come to the individual and to this committee?

CHAIRMAN DE LUCA: Yes, it will be part of the overall record as a joint program.

MS. MARBURG: All right.

CHAIRMAN DE LUCA: It is an EIR/EIS for the benefit of the Navy as well as for the City. I made the statement that the City of Oakland intends to use this program, EIR/EIS, for all projects' approval required to implement the reuse plan.

MS. MARBURG: I only ask that question because earlier you had said that we needed to give the documents today to make sure that you receive them. So just one copy to this place will actually serve the whole process?

CHAIRMAN DE LUCA: Thank you.

MR. BRYANT: Would you identify yourself, please?

MS. MARBURG: I'm Sandra Marburg, and I spoke earlier.

CHAIRMAN DE LUCA: Thank you very much.

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MR. JOHN MORAN: Mr. De Luca, can I make one further comment?

CHAIRMAN DE LUCA: Certainly, Mr. Moran.

MR. JOHN MORAN: Yes. Seeing that I probably didn't use my full five minutes, but you told me to get to the point and be relevant. Now I happen to live in that neighborhood, and yet during the last several years only by hearsay have I heard one single thing about this retail development that's to be put at the end of Edwards Avenue. There's been nothing in the newspapers. P-68

CHAIRMAN DE LUCA: Thank you, sir.

If there are no further comments, this hearing is now closed. Remember that written comments can still be submitted up to and including November 27th. We wish to thank you for your participation.

MR. BRYANT: There is one additional item on the agenda.

CHAIRMAN DE LUCA: Yes, the open forum. I will not forget, Mr. Bryant.

The Commission will now entertain any questions or any items that have not been put on

Response to Comment P-68. The scope of the land use analysis in the EIS/EIR is to evaluate the environmental consequences of Navy disposal and subsequent reuse impacts on existing land use conditions. Navy disposal is a transfer of title and does not affect existing land use conditions. Section 3.1 of the EIS/EIR adequately characterizes land uses surrounding the NMCO site. Section 4.1 of the EIS/EIR evaluates reuse impacts of the preferred alternative (Maximum Capacity Alternative), as presented in the Final Reuse Plan (OBRA 1996). Section 2, Subsection V, and Section 3, Subsection VII of the Final Reuse Plan (OBRA 1996) provide overviews of the community reuse planning process and the reasoning used in developing the land use mixes in the preferred alternative. Examination of retail development's inferences regarding property values is not appropriate in the EIS/EIR.

the agenda. We are now in open forum. If there are any speakers in open forum, please come to the podium, identify yourself, and let us know what is the subject of your proposal or presentation. Thank you.

MR. BERRICK: Good evening. Members of the --

CHAIRMAN DE LUCA: Are you speaking under open forum? We are in open forum now.

MR. BERRICK: I am, because I think it's more general than the EIS/EIR, if I may. My name's Ken Berrick. I'm the president of the Seneca Center for Children and Families, and I did want to clarify a few things that weren't in the EIS/EIR, but came up in testimony.

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One was that it came up that this is a locked facility. I just wanted to clarify for the members of the Commission, that's not accurate. This is not a locked facility. In

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fact, it's not even a residential facility, with the exception of one component that's for up to 15 beds for residential.

The second area was the idea that this was a mini-prison. We don't work with wards of the court, Seneca works with kids who are emotionally

Response to Comment P-69. Comment and clarifications noted and appreciated.

disturbed, primarily children under 12, although we do have some older children. And I did want to clarify that this is not a juvenile detention facility. It's a facility for troubled kids.

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CHAIRMAN DE LUCA: Thank you, Mr. Berrick. Would you kindly complete the card that was just given to you, so that becomes part of our record? Also, that will serve as a notification to you for any future proceedings.

MR. BERRICK: Thank you.

CHAIRMAN DE LUCA: Thank you very much. After you complete it, please give it back to Mr. Bryant.

UNKNOWN SPEAKER: Mr. De Luca, since this is open forum, Kenneth Berrick, the former speaker, failed to tell the public and to you, that they get from five to ten thousand dollars per month per child for their care, and that they only pay $1,250 a month to the person who takes care of them, and we are here with people talking about public schools, our public school kids only get $4,000 per year to educate. Yet Kenneth Berrick gets five to ten thousand dollars per month per child, and I want the public to know that.

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Response to Comment P-70. Comment noted. This response does not question or confirm the accuracy of these figures, but merely accepts the comment as part of the record.

CHAIRMAN DE LUCA: Thank you, ma'am. Anybody else under open forum? If not --

MR. RUSSELL MORAN: Yes, I would like just one moment --

CHAIRMAN DE LUCA: Would you kindly identify yourself again for the record?

MR. RUSSELL MORAN: Russell Moran. I'm sorry, Russell Moran, Oakland businessman, property owner. One of the earlier speakers, a young woman sitting over in the corner, made it a point to go to the microphone and get on the TV to make sure that her record would get in to the City because it might get lost. She said that records sometimes get lost.

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I have just one little advice for her, unsolicited, that if you lose something, for example, they lost the plans of the Hamilton Hotel for ten months, I appeared before this illustrious and distinguished Commission and I begged you, implored you to use your influence in your office to find those plans, and lo and behold, two weeks later they have appeared, and they're very relevant and very helpful, and I want to say to you tonight that the big box, what they call a penthouse measured on the plans,

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Response to Comment P-71. Comment noted. Your attendance is appreciated.

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although I haven't seen the plans, they've been withheld from me to ten months, the penthouse has been removed from the building, it's down. So there's eight more to go. Eight more changes in the exterior of the building to meet the federal as well as the local laws. So thank you very much.

CHAIRMAN DE LUCA: Thank you, Mr. Moran. You're always appreciated, have a pleasant evening, sir.

MR. RUSSELL MORAN: Good evening.

CHAIRMAN DE LUCA: Thank you. If there are no other speakers, no other items, I close the public hearing. Thank you for your participation. Good night.

(At 8:30 p.m. the foregoing hearing was adjourned.)

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STATE OF CALIFORNIA)
) ss.
COUNTY OF CONTRA COSTA)

I, DANA M. FREED, a Certified Shorthand Reporter for the State of California do hereby certify:

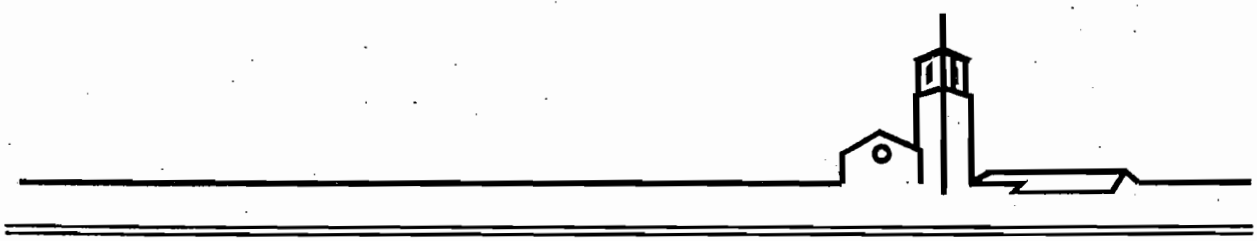
That said public hearing was taken before me at said time and place, and was taken down in shorthand by me, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed into typewriting, and that the foregoing transcript constitutes a complete, true, and correct report of said hearing and of the proceedings which took place;

That I am a disinterested person to the said action.

IN WITNESS WHEREOF, I have hereunder subscribed my hand on the 1st day of December, 1996.

Dana M. Freed

DANA M. FREED, CSR NO. 10602
State of California



RESPONSE TO COMMENTS ON CALIFORNIA ENVIRONMENTAL QUALITY ACT RECIRCULATION OF NEW SIGNIFICANT INFORMATION REGARDING FINE PARTICULATE MATTER (PM_{10})

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CITY OF OAKLAND

1330 BROADWAY, 2ND FLOOR · OAKLAND, CALIFORNIA 94612

Community and Economic Development Agency
Zoning

(510) 238-3911
FAX (510) 238-4730
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September 19, 1997

CASE FILE NO: ER96-32

To: All Interested Persons

The U.S. Navy and the City of Oakland released a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for public review on October 11, 1996, on the Disposal and Reuse of the Naval Medical Center Oakland (NMCO), formerly known as the Oak Knoll Naval Hospital, located on Mountain Boulevard near Keller Avenue in the City of Oakland. A joint public hearing with the U.S. Navy and the City of Oakland City Planning Commission was held on November 13, 1996 at which public testimony was taken. The public comment period ended on December 2, 1996.

During the public comment period, fourteen letters were received. A letter dated November 27, 1996, was received from the Bay Area Air Quality Management District stating that the air quality analysis in the Draft EIS/EIR did not estimate project emissions of fine particulate matter less than 10 microns is size (PM10). The District requested that the PM10 emissions be calculated for the EIS/EIR project alternatives and compared against the District's recommended CEQA significance threshold of 80 pounds per day. This analysis has been completed and shows that all alternatives for reuse of the NMCO property will exceed the District's significance threshold for PM10 air emissions. Air emissions under the No Action alternative would not exceed 80 pounds per day, but would require the property to remain in caretaker status under Navy control. These PM10 emissions are the result of increased traffic associated with the reuse of NMCO as compared to the No Action alternative.

The City of Oakland has evaluated this increase in PM10 emissions and has determined it is an unavoidable impact which cannot be mitigated. The California Environmental Quality Act Guidelines, Section 15088.5 require that if new significant information is included in an EIR after the public review, period has ended, that the lead agency is required to recirculate the new, significant information prior to issuing a final EIR. This section further specifies that only the significant new information need be recirculated.

The City of Oakland is requesting your comments on the recirculated

Draft EIR PM10 analysis section which is available at the address below. The California Environmental Quality Act Guidelines require a 45-day public comment period on this new information. The review period will end on November 4, 1997. The City of Oakland will respond to these comments and all other comments received on the DRAFT EIR, in the Final EIS/EIR, which is expected to be released in late Fall 1997. The Final EIR will be available for public comment prior to final action on the project.

Please send your comments to Anu Raud, Environmental Review Coordinator, 1330 Broadway, 2nd floor, Oakland, CA 94612 or call her at (510) 238-6346. Thank you.

Sincerely,

WILLIE YEE, JR.
Environmental Review Officer

Attachment A

cc: Gary Munekawa
Jane Steven

FMC7 USNAVY.AR

Attachment A

Additional Air Quality Impact Information to be added to Section 4.10 of the Final Environmental Impact Report for the Reuse of the Naval Medical Center Oakland

4.10 AIR QUALITY

This Air Quality section provides new information related to air quality impacts from traffic-related air emissions of particulate matter less than 10 microns in size (PM_{10}). These PM_{10} air emissions will result from the increased traffic associated with the reuse of the Naval Medical Center Oakland (NMCO), as compared to retaining NMCO in a closed, caretaker status under the No Action Alternative. All other air quality analyses were previously provided in Draft Environmental Impact Report for the Disposal and Reuse of NMCO. This information has been completed by the same preparers as the Draft Environmental Impact Report. The additional information is provided here for public comment and will be incorporated into the Final Environmental Impact Report. The Final Environmental Impact Report will be available for public comment prior to the City of Oakland issuing a Notice of Determination on its decision regarding NMCO.

4.10.1 Significance Criteria

Air quality impacts are judged to be significant if project implementation would directly or indirectly:

- Produce emissions that would cause or contribute to a violation of state or federal ambient air quality standards;
- Cause pollutant emissions in excess of Bay Area Air Quality Management District (BAAQMD) impact significance thresholds (80 pounds per day for PM_{10}); and
- Conflict with specific Air Quality Management Plan policies or programs.

Table 4-30 summarizes the traffic-related PM_{10} air quality impacts of the alternatives. Table 4-31 summarizes the estimated daily emissions of PM_{10} for the various alternatives (including the No Action Alternative). The table also shows estimated PM_{10} emissions that occurred under preclosure activity levels (an operational base). The 1994 Bay Area Clean Air Plan which is the current BAAQMD air plan, is based on land use and transportation patterns that existed in the early 1990's. Because most military installations are accounted for in the air quality plan as active facilities, the preclosure activity scenario provides a useful basis for judging the extent to which reuse alternatives cause increases or decreases in traffic-related emissions. For purposes of this analysis, we have compared the PM_{10} air emissions to a closed facility, and identified that PM_{10} emissions exceed the 80 pounds per day significance threshold. If

the air emissions are considered in relation to preclosure conditions, these PM_{10} emissions would be below the BAAQMD significance threshold of 80 pounds per day for all alternatives except the Maximum Capacity Alternative and Single Use Campus Alternative.

Table 4-30
Summary of Air Quality Impact Determinations

IMPACT ISSUES	NAVY ACTIONS		ALTERNATIVES			
	Navy Disposal	No Action Alternative	Maximum Capacity Alternative	Mixed Use Village Alternative	Single Use Campus Alternative	Residential Alternative
Traffic-related PM_{10} emissions	○	◐	●	●	●	●

LEGEND:

Level of Impact

● - Significant and not mitigable
◑ - Significant and mitigable
◐ - Nonsignificant
○ - None

Table 4-31
Estimated Air Emissions

Alternative	Estimated Daily Trips	Estimated Daily VMT	Estimated Emissions (pounds/day) PM_{10}	Net Increase Over Preclosure Conditions (pounds/day) PM_{10}
Preclosure Activity	4,804	74,904	151	None
No Action	150	1,649	3	None
Maximum Capacity	10,725	117,868	237	86
Mixed Use Village	10,070	110,669	222	71
Single Use Campus	13,840	152,102	306	155
Residential Option 1	6,815	74,897	150	None
Residential Option 2	8,730	95,943	193	42

Notes: PM_{10} = inhalable particulate matter (threshold = 80 lbs/day)
VMT = vehicle miles traveled

Vehicle trip estimates assume that morning and afternoon peak hour trips account for 20 percent of daily trips.
VMT estimate assumes an average trip distance of about 11 miles for reuse alternatives and 15.6 miles for preclosure activities.
Vehicle emission rates calculated with the EMFAC7F emission rate model for the year 2010.
PM_{10} emission rates include a resuspended roadway dust component (0.69 grams per vmt) as recommended by BAAQMD (1996).
Net emission changes are based on a comparison to preclosure activity levels.

4.10.2 Maximum Capacity Alternative

Significant Impacts

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates in Table 4-31, traffic associated with the Maximum Capacity Alternative would generate PM_{10} emissions above the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Maximum Capacity Alternative would result in a net increase of approximately 86 pounds per day of PM_{10} emissions compared to preclosure PM_{10} emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

4.10.3 Mixed Use Village Alternative

Significant Impacts

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Mixed Use Village Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Mixed Use Village Alternative would result in a net increase of approximately 71 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Mixed Use Village Alternative already incorporates a general consideration of the number of trips

that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

4.10.4 Single Use Campus Alternative

Significant Impacts

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates presented in Table 4-31, traffic associated with the Single Use Campus Alternative would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Single Use Campus Alternative would result in a net increase of approximately 155 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Single Use Campus Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

4.10.5 Residential Alternative Significant Impacts

Significant Impacts

Traffic-Related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates

presented in Table 4-31, traffic associated with the Residential Alternative (Option 1 or Option 2) would exceed the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Residential Alternative (Option 2) would result in a net increase of approximately 42 pounds per day of PM_{10} emissions compared to PM_{10} emissions from previous use (preclosure activity) of this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Residential Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions form vehicle traffic.

4.10.6 No Action Alternative

Nonsignificant Impacts

Traffic-related PM_{10} Emissions. As indicated in Table 4-31, the No Action Alternative would generate only minor amounts of vehicle traffic and PM_{10} emissions are below the BAAQMD threshold.

Reference

Bay Area Air Quality Management District. 1996. BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans. San Francisco, California. April 1996.

Letter AA

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
600 Harrison Street, Suite 515
San Francisco, California 94107-1376

October 29, 1997

ER 97/551

Ms. Anu Raud
Environmental Review Coordinator
1330 Broadway, 2nd Floor
Oakland, CA 94612

Dear Ms. Raud

AA-1 The Department of the Interior has reviewed the Draft Environmental Impact Statement (EIS) for the Disposal and Reuse of the Naval Medical Center Oakland (NMCO), Alameda County, California and has no comments to offer.

Thank you for the opportunity to comment on this document.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc: Director, OEPC (w/orig. incoming)
Regional Director, FWS, Portland

Response to Comments

Response to Comment AA-1. Comment noted. Thank you.

Letter BB

State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

PETE WILSON
GOVERNOR

PAUL F MINER
ACTING DIRECTOR

November 3, 1997

ANU RAUD
CITY OF OAKLAND/U.S. NAVY
1330 BROADWAY 2ND FLR
OAKLAND, CA 94612

Subject: NAVAL MEDICAL CENTER FOR OAKLAND SCH #: 95103035

Dear ANU RAUD:

BB-1 The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

Antero A. Rivasplata

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

Response to Comments

Response to Comment BB-1. Comment noted. Thank you.

Notice of Completion

Form A

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

See NOTE below

SCH # 95 103035

Project Title: Naval Medical Cntr. Oak Knoll - Base Closure

Lead Agency: City of Oakland (U.S. Navy) Contact Person: Ann Ravel

Street Address: 1330 Broadway 2nd Flr. Phone: (510) 238-6346

City: OAKLAND Zip: 94612 County: Alameda

Project Location

County: ALAMEDA City/Nearest Community: OAKLAND

Cross Streets: MOUNTAIN BLVD ; ~~MACARTHUR~~ KELLER Zip Code: _____ Total Acres: 180 acres

Assessor's Parcel No. _____ Section: _____ Twp. _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: I-580 Waterways: _____

Airports: _____ Railways: _____ Schools: _____

Document Type X Recirculated Draft EIR

CEQA: ☐ NOP ☐ Supplement/Subsequent ☐ NEPA: ☐ NOI ☐ Other: ☒ Joint Document
☐ Early Cons ☐ EIR (Prior SCH No.) ☐ EA ☐ Final Document
☐ Neg Dec ☒ Other Draft EIS ☒ Draft EIS ☐ Other _____
☒ Draft EIR ☐ FONSI

Local Action Type

FILED
SEP 18 1997
STATE CLEARINGHOUSE

☐ General Plan Update ☐ Specific Plan ☒ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☒ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☒ Land Division (Subdivision, Parcel Map, Tract Map, etc.) ☒ Other Base Re-use Plan

Development Type

☐ Residential:	Units _____	Acres _____	☐ Water Facilities:	Type _____	MGD _____
☐ Office:	Sq.ft. _____	Acres _____	Employees _____	☐ Transportation:	Type _____
☐ Commercial:	Sq.ft. _____	Acres _____	Employees _____	☐ Mining:	Mineral _____
☐ Industrial:	Sq.ft. _____	Acres _____	Employees _____	☐ Power:	Type _____ Watts _____
☐ Educational				☐ Waste Treatment:	Type _____
☐ Recreational				☐ Hazardous Waste:	Type _____
Golf Course				☐ Other:	_____

Project Issues Discussed in Document

☐ Aesthetic/Visual	☐ Flood Plain/Flooding	☐ Schools/Universities	☐ Water Quality
☐ Agricultural Land	☐ Forest Land/Fire Hazard	☐ Septic Systems	☐ Water Supply/Groundwater
☐ Air Quality	☐ Geologic/Seismic	☐ Sewer Capacity	☒ Wetland/Riparian
☐ Archeological/Historical	☐ Minerals	☐ Soil Erosion/Compaction/Grading	☐ Wildlife
☐ Coastal Zone	☐ Noise	☐ Solid Waste	☐ Growth Inducing
☐ Drainage/Absorption	☐ Population/Housing Balance	☐ Toxic/Hazardous	☒ Landuse
☐ Economic/Jobs	☐ Public Services/Facilities	☒ Traffic/Circulation	☐ Cumulative Effects
☐ Fiscal	☒ Recreation/Parks	☐ Vegetation	☐ Other _____

Present Land Use/Zoning/General Plan Use

Inst+National-Military; General Plan Zoning R-30-One Family Residential

Project Description

Disposal + Reuse of the former Naval Medical Center Oakland, The preferred reuse alternative is the Maximum Open-S Alternative which includes an expanded 9 hole golf course combined w/ residential development, mixed corporate commercial,

State Clearinghouse Contact: Mr. Chris Belsky (916) 445-0613

State Review Began: 9.18.97

Dept. Review to Agency 10.27

Agency Rev to SCH 10.31

SCH COMPLIANCE 11.3

Please note SCH Number on all Comments

95103035

Please forward late comments directly to the Lead Agency

AQMD APCD 2 (Resources: 9.20

Project Sent to the following State Agencies

X Resources		State/Consumer Svcs
___ Boating		___ General Services
___ Coastal Comm		Cal/EPA
___ Coastal Consv		___ ARB
___ Colorado Rvr Bd		___ CA Waste Mgmt Bd
___ Conservation		___ SWRCB: Grants
X Fish & Game # 3		___ SWRCB: Delta
___ Delta Protection		
___ Forestry		___ SWRCB: Wtr Quality
X Parks & Rec/OHP		___ SWRCB: Wtr Rights
___ Reclamation		X Reg. WQCB # 2
X BCDC		___ DTSC/CTC
X DWR		
___ OES		Yth/Adlt Corrections
___ Bus Transp Hous		___ Corrections
___ Aeronautics		Independent Comm
___ CHP		___ Energy Comm
X Caltrans # 4		___ NAHC
___ Trans Planning		___ PUC
X Housing & Devel		___ Santa Mn Mtns
___ Health & Welfare		X State Lands Comm
___ Drinking H20		___ Tahoe Rgl Plan
___ Medical Waste		___ Other: _____

Over for Comments Letter CC

CITY OF OAKLAND

1330 BROADWAY, 2ND FLOOR • OAKLAND, CALIFORNIA 94612

Community and Economic Development Agency
Zoning

(510) 238-3912
FAX (510) 238-4730
TDD (510) 839-6451

September 19, 1997

CASE FILE NO: ER96-32

To: All Interested Persons

The U.S. Navy and the City of Oakland released a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for public review on October 11, 1996, on the Disposal and Reuse of the Naval Medical Center Oakland (NMCO), formerly known as the Oak Knoll Naval Hospital, located on Mountain Boulevard near Keller Avenue in the City of Oakland. A joint public hearing with the U.S. Navy and the City of Oakland City Planning Commission was held on November 13, 1996 at which public testimony was taken. The public comment period ended on December 2, 1996.

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During the public comment period, fourteen letters were received. A letter dated November 27, 1996, was received from the Bay Area Air Quality Management District stating that the air quality analysis in the Draft EIS/EIR did not estimate project emissions of fine particulate matter less than 10 microns is size (PM10). The District requested that the PM10 emissions be calculated for the EIS/EIR project alternatives and compared against the District's recommended CEQA significance threshold of 80 pounds per day. This analysis has been completed and shows that all alternatives for reuse of the NMCO property will exceed the District's significance threshold for PM10 air emissions. Air emissions under the No Action alternative would not exceed 80 pounds per day, but would require the property to remain in caretaker status under Navy control. These PM10 emissions are the result of increased traffic associated with the reuse of NMCO as compared to the No Action alternative.

The City of Oakland has evaluated this increase in PM10 emissions and has determined it is an unavoidable impact which cannot be mitigated. The California Environmental Quality Act Guidelines, Section 15088.5 require that if new significant information is included in an EIR after the public review, period has ended, that the lead agency is required to recirculate the new, significant information prior to issuing a final EIR. This section further specifies that only the significant new information need be recirculated.

The City of Oakland is requesting your comments on the recirculated

Rec'd 10/1/97

- 2 -

Draft EIR PM10 analysis section which is available at the address below. The California Environmental Quality Act Guidelines require a 45-day public comment period on this new information. The review period will end on November 4, 1997. The City of Oakland will respond to these comments and all other comments received on the DRAFT EIR, in the Final EIS/EIR, which is expected to be released in late Fall 1997. The Final EIR will be available for public comment prior to final action on the project.

Please send your comments to Anu Raud, Environmental Review Coordinator, 1330 Broadway, 2nd floor, Oakland, CA 94612 or call her at (510) 238-6346. Thank you.

Sincerely,

WILLIE YEE, JR.
Environmental Review Officer

Attachment A

cc: Gary Munekawa
Jane Steven

180

FMC7 USNAVY.AR

CC-1

I read this letter carefully and haven't the slightest idea what it describes or what can/d be done about it. I wonder how many others feel the same way. (& my friends think I should go on Jeopardy!)

It would be foolish to secure the EIR under these circumstances

I've been to most of the meetings on the fate of Oak Knoll.

Rosselyn F Combs
4109 Fontaine court
Oakland 94605 Ca
635-4488

Response to Comments

Response to Comment CC-1. The recirculation letter describes air quality impacts. In response to the Bay Area Air Quality Management District's (BAAQMD) comment on the Draft EIS/EIR, impacts were assessed for fine particulate matter (PM_{10}), a type of traffic-related air emission. The attachment to the letter describes mitigation measures, such as reducing the frequency in which people use their cars through public transit and providing sidewalks and bicycle facilities. However, trip reduction programs are voluntary, rather than mandatory under current state law. The PM_{10} air emissions exceed the BAAQMD's thresholds, and cannot be reduced to a level that is less than significant. Because this is new significant information under the California Environmental Quality Act, the section was recirculated for public review. For further information, refer to Chapter 1 for the purpose of the EIS/EIR, and Section 4.10 for potential impacts related to air quality.

Letter DD

Oct. 30, 1997

Anu Raud
Environmental Review Coordinator
1330 Broadway, 2nd floor
Oakland, CA 94612

DD-1 Thankyou for the information on the Naval Medical Center Oakland. You request my comments: Has the idea of open space been considered? It could be used by walkers and hikers who wouldn't add to the airpollution problem.

Mrs. Eugene Rainbow

Mrs. Eugene Rainbow

822 Sugarpine Ave.
Sunnyvale, CA 94086

Response to Comments

Response to Comment DD-1. All of the reuse alternatives provide open space, ranging from 32 acres to 101 acres. Pedestrian trails would be provided in some of the open space areas along Rifle Range Creek and in the hills. Chapter 2 of the EIS/EIR provides a description of the alternatives.

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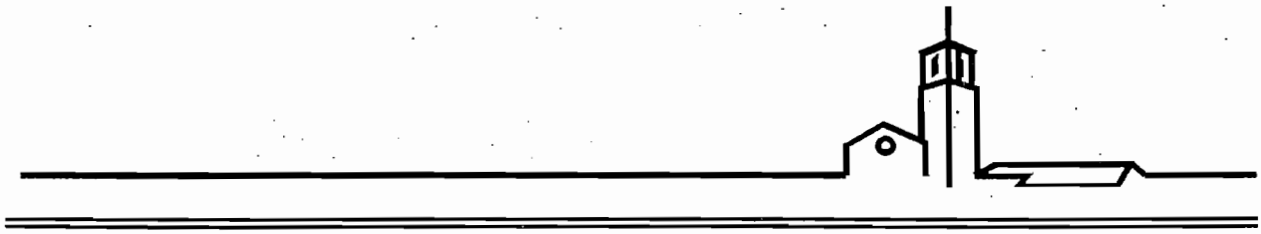

RESPONSE TO COMMENTS ON CALIFORNIA ENVIRONMENTAL QUALITY ACT RECIRCULATION OF NEW SIGNIFICANT INFORMATION REGARDING FINE PARTICULATE MATTER (PM_{10}) AND OZONE PRECURSORS

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CITY OF OAKLAND

1330 BROADWAY, 2ND FLOOR · OAKLAND, CALIFORNIA 94612

Community and Economic Development Agency
Zoning

(510) 238-3912
FAX (510) 238-4730
TDD (510) 839-6451

January 22, 1998

CASE FILE NO: ER96-32

To: All Interested Persons

Re: Revision to Air Quality Analysis
Oak Knoll Naval Hospital
Navy Medical Center Oakland

The U.S. Navy and the City of Oakland released a Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for public review on October 11, 1996, on the Disposal and Reuse of the Naval Medical Center Oakland (NMCO), formerly known as the Oak Knoll Naval Hospital, located on Mountain Boulevard near Keller Avenue in the City of Oakland. A joint public hearing with the U.S. Navy and the City of Oakland City Planning Commission was held on November 13, 1996 at which public testimony was taken. The public comment period ended on December 2, 1996.

Based on a comment from the Bay Area Air Quality Management District, detailed analysis of PM10 emissions was performed. The analysis disclosed significant and unavoidable impacts relating to PM10. Therefore, the air quality section was recirculated for further public comment. The recirculation period ended on November 4, 1997.

A further review of the environmental documents has identified another threshold that has been exceeded that was not identified in the previous documents. Specifically, it has been discovered that due to an arithmetic error, the calculation of air emissions under the Maximum Capacity Alternative (Table 4-31) were higher than previously estimated. The air quality analysis has been corrected. The original estimated emissions for ozone precursors were 77 pounds per day (lbs/day) of reactive organic compounds (ROG) and 148 lbs/day of nitrogen oxide (NOx) for the Maximum Capacity Alternative. This estimate has been revised to 94 lbs/day of ROG and 180 lbs /day of NOx emissions. Since the Draft EIR indicated that the NOx emissions were already above the significance threshold of 80 lbs/day, the revised air emission estimates did not change the conclusions that NOx emissions exceed BAAQMD significance criteria and could not be mitigated. However, the ROG emissions were below the significant threshold for the Maximum Capacity Alternative in the Draft EIR. The conclusion that emissions of ROG now exceed the 80 lbs/day BAAQMD threshold and cannot be

mitigated is the reason for recirculation of this information prior to release of a Final EIR.

The revised air quality analysis also estimated that PM10 emissions would be 289 pounds per day, a significant and unmitigable impact. The recirculated letter of September 16, 1997 estimated that PM10 emissions would be 237 pounds per day. Since the recirculated document indicated that PM10 emissions were already above the significance threshold of 80 pounds per day, the revised air emission estimates did not change the conclusions that PM10 emissions exceeded the BAAQMD significance criteria and could not be mitigated.

The City of Oakland has evaluated this increase in ozone precursor and PM10 emissions and has determined that they are unavoidable impacts which cannot be mitigated (see attachment A). The California Environmental Quality Act Guidelines Section 15088.5 require that if new significant information is included in an EIR after public review period has ended, that the lead agency is required to recirculate the new significant information prior to issuing a Final EIR. This section further specifies that only the significant new information need be recirculated.

The City of Oakland is requesting your comments on the recirculated Draft EIR air quality analysis section which is available at the address below. The California Environmental Quality Act Guidelines require a 45-day public comment period on this new information. The review period will end on March 12, 1998. The City of Oakland will respond to these comments and all other comments received on the Draft EIR, in the Final EIS/EIR. The Final EIR will be available for public comment prior to final action on the project.

Please send your comments to Anu Raud, Environmental Review Coordinator, 1330 Broadway, 2nd floor, Oakland, CA 94612 or call her at (510) 238-6346. Thank you.

Sincerely,

WILLIE YEE, JR.
Environmental Review Officer

Attachment A

cc: Gary Munekawa
Jane Steven

USNAVY.AR3

Attachment A

Additional Air Quality Impact Information to be added to Section 4.10 of the Final Environmental Impact Report for the Reuse of the Naval Medical Center Oakland

4.10 AIR QUALITY

This Air Quality section provides new information related to air quality impacts under the Maximum Capacity Alternative. All other air quality analyses were previously provided in Draft Environmental Impact Report for the Disposal and Reuse of NMCO and the CEQA recirculation of new significant information of September 19, 1997. This information has been completed by the same preparers as the Draft Environmental Impact Report. The additional information is provided here for public comment and will be incorporated into the Final Environmental Impact Report. The Final Environmental Impact Report will be available for public comment prior to the City of Oakland issuing a Notice of Determination on its decision regarding NMCO.

4.10.1 Significance Criteria

Air quality impacts are judged to be significant if project implementation would directly or indirectly:

- Produce emissions that would cause or contribute to a violation of state or federal ambient air quality standards;
- Cause pollutant emissions in excess of Bay Area Air Quality Management District (BAAQMD) impact significance thresholds (80 pounds per day for reactive organic compounds, nitrogen oxides, or PM_{10}); and,
- Conflict with specific Air Quality Management Plan policies or programs.

The significance criteria for physical air quality impact issues are set largely by the technical procedures used for the impact assessment. When dispersion modeling analyses are performed, the most appropriate impact significance criteria relate to the potential for causing or contributing to violations of federal or state ambient air quality standards. When dispersion modeling analyses are not performed, impact significance is evaluated in the context of appropriate emission thresholds (BAAQMD 1996). Table 4-30 summarizes the air quality impacts of the alternatives. Air emission increases are compared against a closed facility in caretaker status to determine significance. Air emissions based on previous use of NMCO are provided for comparison.

Table 4-30
Summary of Air Quality Impact Determinations

IMPACT ISSUES	Maximum Capacity Alternative
Traffic-related ozone precursor emissions	●
Traffic-related PM_{10} emissions	●

LEGEND:

Level of Impact

● - Significant and not mitigable
◑ - Significant and mitigable
◐ - Nonsignificant
○ - None

4.10.2 Maximum Capacity Alternative

Significant Impacts

Traffic-related Ozone Precursor Emissions

Impact 1: A significant and unmitigable impact would result from an increase in traffic-related ozone precursor emissions. Table 4-31 summarizes the estimated daily emissions of reactive organic compounds and nitrogen oxides for the Maximum Capacity Alternative. The Maximum Capacity Alternative would generate emissions above the BAAQMD significance threshold of 80 pounds per day for reactive organic compounds and nitrogen oxide emissions.

The Maximum Capacity Alternative would result in a net increase of approximately 40 pounds per day of reactive organic compounds and 68 pounds per day of nitrogen oxide emissions compared to preclosure emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected reactive organic compounds and nitrogen oxide emissions from vehicle traffic.

Table 4-31
Estimated Air Emissions

Alternative	Estimated Average Daily Trips	Estimated Daily VMT	Estimated Emissions (pounds/day) ROG	Nox	PM_{10}	Net Increase Over Preclosure Conditions (pounds/day) ROG	NOx	PM_{10}
Preclosure Activity	4,804	74,904	54	112	151	None	None	None
Maximum Capacity	13,090	143,859	94	180	289	40	68	138

Notes: ROG = reactive organic compounds
NOx = nitrogen oxides
PM_{10} = inhalable particulate matter
VMT = vehicle miles traveled
Vehicle trip, VMT, and emission estimates for a continuation of preclosure activity levels are based on estimated annual values (Radian corporation 1997), assuming 240 work days per year.
Preclosure scenario emission estimates have adjusted the original 2001 emission rates to reflect 2010 emission rates.
Vehicle trip estimates for reuse alternatives and the No Action Alternative are extrapolated from peak hour trip projections, assuming that 20 percent of daily trips occur during the morning and afternoon peak hour periods.
VMT estimates assumes an average trip distance of about 11 miles for reuse alternatives and 15.6 miles for preclosure activity.
Vehicle emission rates calculated with the EMFAC7F emission rate model for the year 2010.
PM_{10} emission rates include a resuspended roadway dust component (0.69 grams per vmt) as recommended by BAAQMD (1996).
Net emission changes are based on a comparison to preclosure activity levels since the current Clean Air Plan assumed an active facility.

Traffic-related PM_{10} Emissions

Impact: A significant and unmitigable impact would result from an increase in traffic-related PM_{10} emissions. As indicated by the emission estimates in Table 4-31, traffic associated with the Maximum Capacity Alternative would generate PM_{10} emissions above the BAAQMD significance threshold of 80 pounds per day for PM_{10} emissions.

The Maximum Capacity Alternative would result in a net increase of approximately 138 pounds per day of PM_{10} emissions compared to preclosure PM_{10} emissions from this facility (Table 4-31).

No Mitigation: The air emissions analysis for the Maximum Capacity Alternative already incorporates a general consideration of the number of trips that are reduced by transit use (five percent of total trips) and by linked trips (five percent of total trips). This reduction in trips slightly decreases the estimated volume of air emissions. New roadways within the NMCO site would include sidewalks and bicycle facilities according to City of Oakland standards, which also would decrease the estimated emissions slightly. Current state law effectively requires that trip reduction programs in the Bay Area be voluntary, rather than mandatory. Consequently, there are few mechanisms available to the City of Oakland to achieve significant additional reductions in projected PM_{10} emissions from vehicle traffic.

Letter AAA

State of California

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
1400 TENTH STREET
SACRAMENTO 95814

PETE WILSON
GOVERNOR

PAUL F MINER
DIRECTOR

March 10, 1998

ANU RAUD
CITY OF OAKLAND/U.S. NAVY
1330 BROADWAY 2ND FLR
OAKLAND, CA 94612

Subject: NAVAL MEDICAL CENTER FOR OAKLAND SCH #: 95103035

Dear ANU RAUD:

AAA-1 The State Clearinghouse submitted the above named environmental document to selected state agencies for review. The review period is closed and none of the state agencies have comments. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call at (916) 445-0613 if you have any questions regarding the environmental review process. When contacting the Clearinghouse in this matter, please use the eight-digit State Clearinghouse number so that we may respond promptly.

Sincerely,

ANTERO A. RIVASPLATA
Chief, State Clearinghouse

Response to Comments

Response to Comment AAA-1. Comment noted. Thank you.

Notice of Completion

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 916/445-0613

SCH # 95 103035

Project Title: Naval Medical Center Oak Knoll - Base Closure

Lead Agency: City of Oakland / U.S. Navy — Contact Person: Ann Rand

Street Address: 1330 Broadway 2nd Flr. — Phone: (510) 238-6346

City: OAKLAND — Zip: 94612 — County: Alameda

Project Location

County: ALAMEDA — City/Nearest Community: OAKLAND

Cross Streets: MOUNTAIN BLVD / KELLER — Zip Code: — Total Acres: 180 acres

Assessor's Parcel No. — Section: — Twp. — Range: — Base:

Within 2 Miles: State Hwy #: I-580 — Waterways: — Airports: — Railways: — Schools:

Document Type X Recirculated Draft EIR

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent ☐ EIR (Prior SCH No.) ☒ Other: Draft EIS

NEPA: ☐ NOI ☐ EA ☒ Draft EIS ☐ FONSI

Other: ☒ Joint Document ☐ Final Document ☐ Other

Local Action Type

☐ General Plan Update ☒ General Plan Amendment ☐ General Plan Element ☒ Community Plan ☐ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan ☒ Rezone ☐ Prezone ☒ Use Permit ☒ Land Division (Subdivision, Parcel Map, Tract Map, etc.) ☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☒ Other: Base Reuse Plan

Development Type

☒ Residential: Units — Acres

☒ Office: Sq.ft. — Acres — Employees

☒ Commercial: Sq.ft. — Acres — Employees

☐ Industrial: Sq.ft. — Acres — Employees

☐ Educational

☒ Recreational — Golf Course

☐ Water Facilities: Type — MGD

☐ Transportation: Type

☐ Mining: Mineral

☐ Power: Type — Watts

☐ Waste Treatment: Type

☐ Hazardous Waste: Type

☐ Other:

Project Issues Discussed in Document

☒ Aesthetic/Visual ☐ Agricultural Land ☐ Air Quality ☐ Archeological/Historical ☐ Coastal Zone ☐ Drainage/Absorption ☐ Economic/Jobs ☐ Fiscal ☐ Flood Plain/Flooding ☐ Forest Land/Fire Hazard ☐ Geologic/Seismic ☐ Minerals ☐ Noise ☐ Population/Housing Balance ☐ Public Services/Facilities ☒ Recreation/Parks ☐ Schools/Universities ☐ Septic Systems ☐ Sewer Capacity ☐ Soil Erosion/Compaction/Grading ☐ Solid Waste ☐ Toxic/Hazardous ☒ Traffic/Circulation ☐ Vegetation ☐ Water Quality ☐ Water Supply/Groundwater ☒ Wetland/Riparian ☐ Wildlife ☐ Growth Inducing ☒ Landuse ☐ Cumulative Effects ☐ Other

Present Land Use/Zoning/General Plan Use

Institutional-Military; General Plan. Zoning R-30-One Family Residential

Project Description

Disposal & Reuse of the former Naval Medical Center Oakland. The preferred reuse alternative is the Maximum Capacity Alternative which includes an executive 9-hole golf course combined w/ residential development, mixed corporate commercial.

State Clearinghouse Contact: Mr. Chris Belsky (916) 445-0613

State Review Began: 1.23.98

Dept. Review to Agency: 3.2

Agency Rev to SCH: 3.6

SCH COMPLIANCE: 3.9

Please note SCH Number on all Comments

95103035

Please forward late comments directly to the Lead Agency

AQMD/APCD 2 (Resources: 1/24)

Project Sent to the following State Agencies

X Resources
Boating
Coastal Comm
Coastal Consv
Colorado Rvr Bd
Conservation
X Fish & Game # 3
Delta Protection
Forestry
X X Parks & Rec/OHP
Reclamation
X BCDC
DWR
OES
Bus Transp Hous
Aeronautics
CHP
X Caltrans # 4
Trans Planning
Housing & Devel
Health & Welfare
Drinking H20
Medical Waste

State/Consumer Svcs
General Services
Cal/EPA
X ARB
CA Waste Mgmt Bd
SWRCB: Grants
SWRCB: Delta
SWRCB: Wtr Quality
SWRCB: Wtr Rights
X Reg. WQCB # 2
DTSC/CTC

Yth/Adlt Corrections
Corrections
Independent Comm
Energy Comm
X NAHC
PUC
Santa Mn Mtns
X State Lands Comm
Tahoe Rgl Plan
Other:

Letter BBB Rec'd 3-10-98 LL

March 3, 1998

City of Oakland
1330 Broadway, 2nd floor
Oakland, CA 94612

Re: Naval Medical Center Oakland

Case File No: ER96-32

To: Zoning Division

Attn: Anu Raud

This is in response to your letter of January 22, 1998, regarding the recirculated Draft EIR air quality analysis.

BBB-1 My opinion is still the same - the land would be best used by returning it to open space. In view of all the recent mudslides it seems it would be better undeveloped. Hiking and walking trails would be a good use.

Sincerely,

Mrs. Eugene Rainbow

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822 Sugarpine Ave.
Sunnyvale, CA 94086

Response to Comments

Response to Comment BBB-1. All of the reuse alternatives provide open space, ranging from 32 acres to 101 acres. Chapter 2 of the EIS/EIR provides a description of the alternatives.