



**FINAL  
PHASE I SUPPLEMENTAL ENVIRONMENTAL BASELINE SURVEY  
DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA**

April 21, 1997

**Department of the Navy  
Engineering Field Activity West  
San Bruno, California 94066-2402**



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**COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY (CLEAN II)**  
Northern California and Central California, Nevada, and Utah  
Contract No. N62474-94-D-7609  
Contract Task Order No. 094

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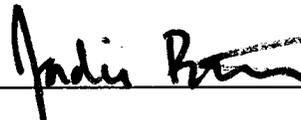
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**April 21, 1997**

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## ABBREVIATIONS AND ACRONYMS

ACM	Asbestos-Containing Material
AR	Administrative Record
AST	Aboveground Storage Tank
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BEC	BRAC Environmental Coordinator
bgs	Below Ground Surface
BRAC	Base Closure and Realignment Act of 1988 and Defense Base Closure and Realignment Act of 1990, collectively
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CLEAN	Comprehensive Long-Term Environmental Action Navy
DTSC	Department of Toxic Substances Control, California Environmental Protection Agency
DOD	Department of Defense
DODHF	Department of Defense Housing Facility
EBS	Environmental Baseline Survey
ECP	Environmental Condition of Property
EFA-West	Engineering Field Activity, West (formerly WESTDIV)
EIS	Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
GSA	General Services Administration
HAAF	Hamilton Army Airfield
IRP	Installation Restoration Program
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PCB	Polychlorinated Biphenyl
pCi/L	Picocuries Per Liter
ppm	Part Per Million

## ABBREVIATIONS AND ACRONYMS

(CONTINUED)

PRC	PRC Environmental Management, Inc.
PWC	Public Works Center
RA	Remedial Action
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Re-authorization Act of 1986
SEBS	Supplemental Environmental Baseline Survey
SVOC	Semi-Volatile Organic Compound
TPH	Total Petroleum Hydrocarbons
U&A	Uribe & Associates
USC	United States Code
UST	Underground Storage Tank
VOC	Volatile Organic Compound

## EXECUTIVE SUMMARY

In 1993, the U.S. Navy designated the Department of Defense Housing Facility Novato (DODHF Novato) in Marin County, California for closure under the Base Realignment and Closure Act of 1990 (BRAC). The goal of the BRAC program is to transfer property and facilities of closing installations to the community as expeditiously as possible and with minimal impact on the local economy. To facilitate the BRAC transfer, the U.S. Navy has initiated the Environmental Baseline Survey (EBS) process to assess, determine, and document the environmental condition of the BRAC installation properties.<sup>1</sup> The Final Basewide EBS/Community Environmental Response Facilitation Act Report (Basewide EBS) was completed in October 1995 (ERM-West, Inc. 1995a). This Supplemental EBS reflects the condition of the property at DODHF Novato as of April 21, 1997 and provides additional data and investigation results gathered subsequent to the completion of the Basewide EBS.

The Basewide EBS report identified 129 distinct parcels at DODHF Novato. Of these 129 parcels, 125 parcels were determined to be Navy property and four parcels were determined to be non-Navy property (ERM-West, Inc. 1995a).<sup>2</sup> Subsequent to the completion of the Basewide EBS report, two of the Navy-owned parcels (Parcels 65 and 105) were each divided into two separate parcels, creating a total of two additional parcels and bringing the total number of Navy-owned parcels at DODHF Novato to 127. Of the 127 Navy-owned parcels at DODHF Novato, the California Department of Toxic Substances Control (DTSC) concurred that 34 parcels were "uncontaminated" pursuant to Comprehensive Environmental Response Compensation and Liability Act Section 120 (h)(4). As such, these parcels are environmentally suitable to transfer. In addition, 18 parcels were proposed to DTSC as eligible for transfer in the EBS (ERM-West, Inc. 1995a). These parcels are listed in Chapter 5 of this document. The remaining parcels were classified as BRAC Area Type 7 (parcels requiring additional information) in the Basewide EBS.

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<sup>1</sup> Through the EBS process, the U.S. Navy meets the requirements of the Community Environmental Response Facilitation Act of 1992 (CERFA); this act requires the identification of uncontaminated property at Department of Defense installations that are being closed under BRAC.

<sup>2</sup> Two parcels (Parcels 52 and 62) were determined to belong to the Army, one parcel (Parcel 123) was determined to be property of Marin County, and one parcel (Parcel 129) was determined to belong to the Southern Pacific Railroad. These parcels have since been excluded from the EBS efforts.

The purpose of this Supplemental EBS is to document the additional investigation of parcels classified as BRAC Area Type 7, to evaluate the environmental condition of property of parcels, and to assess whether the parcels are appropriate for reuse in their current state.

Based on the analysis of existing information concerning DODHF Novato, each parcel was classified in the Basewide EBS as one of seven area types according to the BRAC Cleanup Plan Guidebook: BRAC Area Types 1 through 7 (U.S. Navy 1995). However, based on changes in the Appropriations Act of 1997, the Department of Defense renamed the BRAC Area Types as the Environmental Condition of Property (ECP) Area Types and revised the definition of "uncontaminated" property. The 1997 Appropriations Act allows for ECP Area Types 1 through 6 to be transferable if certain conditions are met.

This Supplemental EBS contains additional information to support the classification of 124 of the parcels as ECP Area Types 1 through 6 (3 parcels are still ECP Area Type 7). Based on the findings of the Basewide EBS, the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, and this Supplemental EBS, Table ES-1 presents the parcel classifications. 12 parcels remain ECP Area Type 6, where investigation and remediation are on-going, and 3 parcels remain classified as ECP Area Type 7, where further investigation is required.

The information contained in this Supplemental EBS, as well as the Limited EBS (ERM-West, Inc. 1994), the Basewide EBS (ERM-West, Inc. 1995), and the Final Sampling Workplan (ERM-West, Inc. 1996) was used to support a Finding of Suitability to Transfer (FOST) for 87 of the 127 parcels at DODHF Novato. Parcels not included in the Phase I FOST will be transferred under separate FOSTs to be completed at a late date. A FOST will not be prepared for the parcels to be transferred to the Coast Guard (28 parcels and 2 portions of parcels), but the parcel information is available in this Supplemental EBS. The 3 parcels listed as ECP Area Type 7 are in the Capehart Housing area. Of the 12 parcels listed as ECP Area Type 6, one is a parcel with follow-up sampling to be conducted, and eleven are parcels having storm drains which will be cleaned in June, 1997. These 15 parcels will be included in additional FOSTs to be prepared when appropriate.

**Table ES-1  
Summary of Parcel ECP Classifications**

Parcel Number	ECP Area Type	Concerns	Notes
1	2-3	phenol 0.7 mg/kg; TPH-mo 11 mg/kg;	phenol is a lab contaminant
2	6	acetone 0.07 mg/kg; TPH-mo 470 mg/kg; possible impact from TCE spill on parcel 4; arsenic 11.8 mg/kg	acetone is a lab contaminant TPH-mo < FSC; slightly impacted by TCE; concentrations of arsenic within regional background
3	1		
4	6	TCE 670 mg/kg in soil; TPH-g 14,000 mg/kg	future removal action or risk assessment necessary
5	1		
6	1	possible impact from TCE spill on parcel 4	parcel is not impacted by TCE spill according to recent UST report
7	1		
8	6	catch basin requires remediation; metals 10 to 30 times background; TPH-14,000 mg/kg	catch basin will be cleaned
9	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from parcel 8
10	1		
11	1	acetone 0.1 mg/kg	acetone is a lab contaminant
12	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from parcel 8
13	1		
14	1		
15	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from parcel 8
16	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from parcel 22
17	2-7	downgradient from Parcel 29 MTBE plume	UST spill requires further investigation
18	2-6		UST spill requires further investigation
19	2-6	barium 409 mg/kg	concentrations of barium within regional background; UST spill requires further investigation
20	2-7	MTBE plume not bounded on Parcel 20	UST spill requires further investigation
21	6	storm drain requires cleaning; mercury 0.42 mg/kg in soil	storm drain will be cleaned; concentrations of mercury within regional background
22	6	catch basin requires remediation; acetone 0.08 mg/kg	storm drain will be cleaned; acetone is a lab contaminant
23	2-3	barium 392 mg/kg; TPH-mo 510 mg/kg; acetone 0.07 mg/kg	concentrations of barium within regional background; TPH is very near FSC; acetone is a lab contaminant
24	2-6	acetone	acetone is a lab contaminant; former UST on site closed; UST on parcel 24 requires further investigation
25	2-6	acetone	acetone is a lab contaminant; UST spill requires further investigation
26	1		
27	1		
28	6	storm drain requires cleaning	storm drain will be cleaned

**TABLE ES-1 (continued)**  
**Summary of Parcel ECP Classifications**

Parcel Number	ECP Area Type	Concerns	Notes
29	6	barium 551 mg/kg; storm drain requires cleaning	concentrations of barium within regional background; UST spill requires further investigation; storm drain will be cleaned
30	2-3		low levels of fuel contamination
31	1		
32	1		
33	1		
34	1		
35	1		
36	1		
37	1		
38	1		
39	1		
40	1		
41	1		
42	3	phenol 0.4 mg/kg; lead 106 mg/kg	phenol is a lab contaminant; no further work planned because lead is most likely a result of the unconventional building demolition
43	1		
44	1		
45	1		
46	1		
47	1		
48	1		
49	1		
50	1		
51	1		
52	Army		
53	1		
54	2-6	TPH-mo 610 mg/kg	Follow-up sampling will be conducted and low-level SVOC analysis will be used
55	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from sample location SS-4
56	1		
57	1		
58	1		
59	1		
60	1		
61	1		
62	Army		
63	1		
64	6	storm drain requires cleaning	storm drain will be cleaned because it is downgradient from sample location SS-4
65B	7	storm drain requires cleaning; lead detected in soil around housing at concentrations above 400 mg/kg	storm drain will be cleaned; lead-based paint issue outstanding
65A	1		

**TABLE ES-1 (continued)**  
**Summary of Parcel ECP Classifications**

Parcel Number	ECP Area Type	Concerns	Notes
66	2-3	TPH-d and TPH-mo 310 mg/kg; non-residential Pb-based paint issue	TPH-mo < FSC; Pb-based position paper resolved issue
67	2-3		
68	1		
69	1	change ECP type to reflect new criteria	only stored pool chemicals, no releases have been detected
70	1		
71	1		
72	1		
73	7	lead detected in soil around housing at concentrations above 400 mg/kg	lead-based paint outstanding issue
74	1		
75	1		
76	7	lead-based paint - Capehart	lead-based paint outstanding issue
77	1		
78	1		
79	1		
80	1		
81	1		
82	1		
83	1		
84	1		
85	2-6		UST spill requires monitoring (1 to 2 years)
86	1		
87	1		
88	1		
89	1		
90	1		
91	1		
92	1		
93	1		
94	1		
95	1		
96	1		
97	1	change parcel designation to reflect the data	ECP type was based on visual observations that could not be confirmed by sampling data
98	1	change parcel designation to reflect the data	ECP type was based on visual observations that could not be confirmed by sampling data
99	1	change parcel designation to reflect the data	ECP type was based on visual observations that could not be confirmed by sampling data
100	1		
101	1		
102	1		
103	1		
104	2-6	UST site	UST closure pending

**TABLE ES-1 (continued)**  
**Summary of Parcel ECP Classifications**

Parcel Number	ECP Area Type	Concerns	Notes
105B	6	lead, arsenic, pesticides and TPH above FSC	follow-up sampling will be conducted and low-level SVOC analysis will be used
105A	1		
106	1		
107	1		
108	1		
109	1		
110	1		
111	1		
112	1		
113	1		
114	1		
115	1		
116	1		
117	1		
118	1		
119	1		
120	1		
121	1		
122	1		
123	Marin City		
124	1		
125	1		
126	2-3	TPH-mo 16 mg/kg	TPH < FSC
127	1		
128	1		
129	RR		

Notes:

 Parcels with written Agency Concurrence

- FSC            Final Screening Criteria
- MTBE        Methyl-tributyl-ether
- mg/kg       Milligrams per kilogram
- RR           Railroad
- SEBS        Supplemental Environmental Baseline Survey
- SVOC        Semivolatile Organic Compounds
- TPH-mo     Total Petroleum Hydrocarbons Motor Oil Range Organics
- TPH-d       Total Petroleum Hydrocarbons Diesel Range Organics
- TPH-g       Total Petroleum Hydrocarbons Gasoline Range Organics
- TCE          Trichloroethene
- UST          Underground Storage Tank

## 1.0 INTRODUCTION

The U.S. Navy has designated the Department of Defense Housing Facility Novato (DODHF Novato) in Marin County, California for realignment and closure under the Base Realignment and Closure Act of 1990 (BRAC). The goal of the BRAC program is to transfer property and facilities of the closing installations to the community as expeditiously as possible, and with minimal impact on the local economy. To facilitate BRAC, the Navy has initiated the Environmental Baseline Survey (EBS) process to assess the environmental concerns associated with BRAC installations. Through the EBS process, the Navy will also meet the requirements of the Community Environmental Response Facilitation Act of 1992 (CERFA) which requires the identification of uncontaminated property at Department of Defense (DOD) installations that are being closed under BRAC.

An EBS is a fence-to-fence environmental survey of an installation incorporating literature reviews, agency file reviews, site walks, interviews with employees, and aerial photograph reviews. The purpose of the EBS is to collect data and document current environmental conditions. This information is used to identify parcels that offer the greatest opportunities for expedited reuse and redevelopment. The Final Basewide EBS/Community Environmental Response Facilitation Act Report (Basewide EBS) was completed in October 1995 (ERM-West, Inc., 1995a).

The Basewide EBS report identified 129 distinct parcels at DODHF Novato. Of these 129 parcels, 125 parcels were determined to be Navy property and four parcels were determined to be non-Navy property (ERM-West, Inc. 1995a).<sup>3</sup> Subsequent to the completion of the Basewide EBS report, two of the Navy-owned parcels (Parcels 65 and 105) were each divided into two separate parcels, creating a total of two additional parcels and bringing the total number of Navy-owned parcels at DODHF Novato to 127. Parcel 65 has been divided into 65A and 65B, and Parcel 105 has been divided into 105A and 105B.

This Phase I Supplemental Environmental Baseline Survey (Supplemental EBS) presents additional data and investigation results gathered since the completion of the Basewide EBS (ERM-West, Inc. 1995a). Using this new information, 74 parcels at DODHF Novato have been reclassified as eligible for transfer. Prior to this effort 52 Parcels were found to be eligible for transfer. Currently, three parcels have not

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<sup>3</sup> Two parcels (Parcels 52 and 62) were determined to belong to the Army, one parcel (Parcel 123) was determined to be property of Marin County and one parcel (Parcel 129) was determined to belong to the Southern Pacific Railroad. These parcels have since been excluded from the EBS efforts.

been classified as eligible for transfer (two parcels previously identified as eligible for transfer have been re-evaluated as ineligible).

## **1.1 FACILITY BACKGROUND**

The DODHF Novato property is located on the eastern edge of the city of Novato, in Marin County, California, approximately 25 miles north of San Francisco and adjacent to San Pablo Bay (Figure 1-1). This property was originally part of Hamilton Army Airfield (HAAF). The original airfield was comprised of 927 acres and was constructed between 1932 and 1935 as the first west coast U.S. Army Corps facility. Its mission was to train fighter and bomber pilots. The installation also provided aircraft maintenance and repair and was a process point for combat crews. In 1947, the installation was transferred to the U.S. Air Force and was renamed Hamilton Air Force Base. The base increased in size in the 1950s, and with the addition of housing areas to the west of the airfield, the installation reached a size of 2,184 acres in 1964 (PRC 1996).

From 1950 through 1964, the installation was used for air defense training (fighter squadrons). In 1974, the U.S. Air Force deactivated the installation and began to transfer excess U.S. Air Force property; the residential housing portion was transferred to the U.S. Navy in 1975 as DODHF Novato (Figure 1-2) and the remaining property was transferred to various federal agencies including the General Services Administration (GSA), the U.S. Army, and the U.S. Coast Guard. DODHF Novato consists of approximately 554 acres and includes 1,495 inhabitable housing units for military personnel and their dependents (ERM-West, Inc. 1995a). The BRAC commission report recommended closure of HAAF and DODHF Novato in 1993.

## **1.2 ENVIRONMENTAL COMPLIANCE**

The preparation of an EBS constitutes the first step in the process of evaluating parcels of real property for transfer. Based on CERFA and the DOD guidance on CERFA, an EBS compiles known environmental information and provides a "snap shot" of the environmental condition of the property at closure. The Basewide EBS for DODHF Novato was completed in October, 1995 by ERM-West, Inc. (ERM-West, Inc. 1995a).

Prepared concurrently with the EBS, the BRAC Cleanup Plan (BCP) documents the progress of on-going remedial activities and is updated annually. The most recent revision of the BCP for DODHF Novato

was completed in February 1997 (PRC Environmental Management, Inc. [PRC] and Uribe & Associates [U&A] 1997a). Preparation of the BCP is mandated by BRAC along with the establishment of a BRAC Cleanup Team (BCT) that is responsible for overseeing and monitoring the status of the base with respect to environmental compliance. The BCT is composed of the Navy BRAC Environmental Coordinator (BEC) and representatives of the California Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC) and Region IX of the United States EPA.

Both CERFA and the DOD guidance on the implementation of CERFA, state that identification of uncontaminated parcels is not considered complete until state agency or EPA concurrence is obtained. The parcels for which the BCT concurs and are which not planned to be part of a federal-to-federal transfer (i.e., to the Coast Guard) will be included in a Finding of Suitability to Transfer (FOST) and will be available for immediate transfer upon signature of the FOST by the Navy. At DODHF Novato, there are parcels which are planned to be transferred both by FOST and by federal-to-federal transfer.

### **1.3 EBS PROCESS AT DODHF NOVATO**

During the EBS process, DODHF Novato was divided into parcels for ease of data collection and evaluation. Each parcel was assessed separately to identify the specific environmental concerns potentially present at that parcel. Based on the analysis of existing information concerning DODHF Novato, each parcel was classified into Environmental Condition of Property (ECP) Area Types 1 through 7, in accordance with the 1997 Appropriations Act. ECP Area Types 1 through 6 are transferable if the following conditions are met:

- The property is suitable for the intended use
- The intended use is consistent with protection of human health and the environment
- Adequate notice has been given to the transferee
- The transfer will not substantially delay necessary response action
- Response action assurances are given [ Comprehensive Environmental Response Compensation and Liability Act (CERCLA) Section 120(h)(3)

The Defense Appropriations Act of 1997 amends category definitions previously referred to in the Basewide EBS as "CERFA categories" or "BRAC Area Types." The principal changes made to the classification scheme are:

- Past storage of chemical substances on site no longer affects the ECP classification if no evidence of release to the environment is present.
- Parcels in which only petroleum hydrocarbons have been released to the environment are considered ECP Area Type 2 and may be transferable.

A description of the seven ECP Area Type classifications is presented below:

**ECP Area Type 1, Areas where no release or disposal (including migration) has occurred.** This Area Type includes parcels where no hazardous substances or petroleum products were released into the environment or disposed on site property. These areas are free of contamination and are eligible for transfer by deed. Storage of hazardous substances or petroleum products may have occurred, but no evidence of release or disposal was identified.

**ECP Area Type 2, Areas where only release or disposal of petroleum products has occurred.** This Area Type includes parcels where only release or disposal of petroleum products has occurred. These areas are eligible for transfer by deed.

Subcategories have been created for ECP Area Type 2 at DODHF Novato to more clearly categorize parcels where petroleum hydrocarbons have been detected. These subcategories, which loosely mirror ECP Area Types 3 through 7, are defined as follows:

- ECP Area Type 2-3: This Area Type includes parcels where release of petroleum hydrocarbons has been detected, but detected concentrations are below action levels.
- ECP Area Type 2-4: This Area Type includes parcels where petroleum hydrocarbon contamination has been detected, and remediation activities have been completed.
- ECP Area Type 2-5: This Area Type includes parcels where petroleum hydrocarbon contamination has been detected, and remediation activities are underway.
- ECP Area Type 2-6: This Area Type includes parcels where petroleum hydrocarbon contamination has been detected, and remediation activities have not yet been initiated.
- ECP Area Type 2-7: This Area Type includes parcels where impact by petroleum hydrocarbons is not known, and no impact by other potential contaminants is identified.

**ECP Area Type 3, Areas of contamination below action levels.** This Area Type includes parcels where investigation results indicate that hazardous substances have been released, but are present in

quantities that require no response action to protect human health and the environment. This area type includes parcels where concentrations of hazardous substances are below defensible detection limits, or are above detection limits, but below action levels.

**ECP Area Type 4, Areas where all remedial action has been taken.** This Area Type includes parcels where investigation results indicate that hazardous substances are known to have been released on the property, but all remedial actions necessary to protect human health and the environment, with respect to any hazardous substance remaining on the property, have already been taken to meet the provisions of CERCLA 120 (h)(3). "All remedial action has been taken" means the remedial investigation is completed, and the remedy is installed under a regulatory-approved program which has been demonstrated to EPA to be operating properly and successfully.

**ECP Area Type 5, Areas of known contamination with removal and/or remedial action under way.** This Area Type includes parcels where the presence of sources or releases of hazardous substances is confirmed based on the results of sampling and analysis. By definition, this area type contains contamination above action levels. Additionally, remedial systems are partially or entirely in place, but have not yet been fully demonstrated.

**ECP Area Type 6, Areas of known contamination where required response actions have not yet been implemented.** This Area Type includes parcels where investigation results confirm the presence of sources or releases of hazardous substances. By definition, this area type contains contamination above action levels. Additionally, required remedial systems have not yet been selected or implemented for these parcels.

**ECP Area Type 7, Areas that are unevaluated of that require further evaluation.** This Area Type includes parcels where investigation results indicate that the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is suspected, but is not well characterized. Parcels in this category have data gaps that require additional physical inspection, site history investigation and/or sampling. Examples of parcels that fall into this category at DODHF Novato include parcels that have outstanding evaluation of lead-based paint hazards, or potential contaminant migration from neighboring sites of concern.

The Basewide EBS, completed in October 1995, designated 34 Navy-owned parcels at DODHF Novato as eligible for transfer with formal concurrence from the DTSC. An additional 18 parcels were also designated as eligible for transfer in the Basewide EBS, but have not yet received formal concurrence.

The remaining 75 parcels were classified as ECP Area Type 7, requiring additional investigation. Since the completion of the Basewide EBS, sampling and further investigation has provided the basis for reclassifying 74 of the 75 parcels as transferable. In total, 124 parcels are ready for transfer based on the information included in the Basewide EBS and this Phase I Supplemental EBS. Three parcels (Parcel 65B, 73 and 76, Capehart Housing) remain an ECP Area Type 7, requiring further investigation.

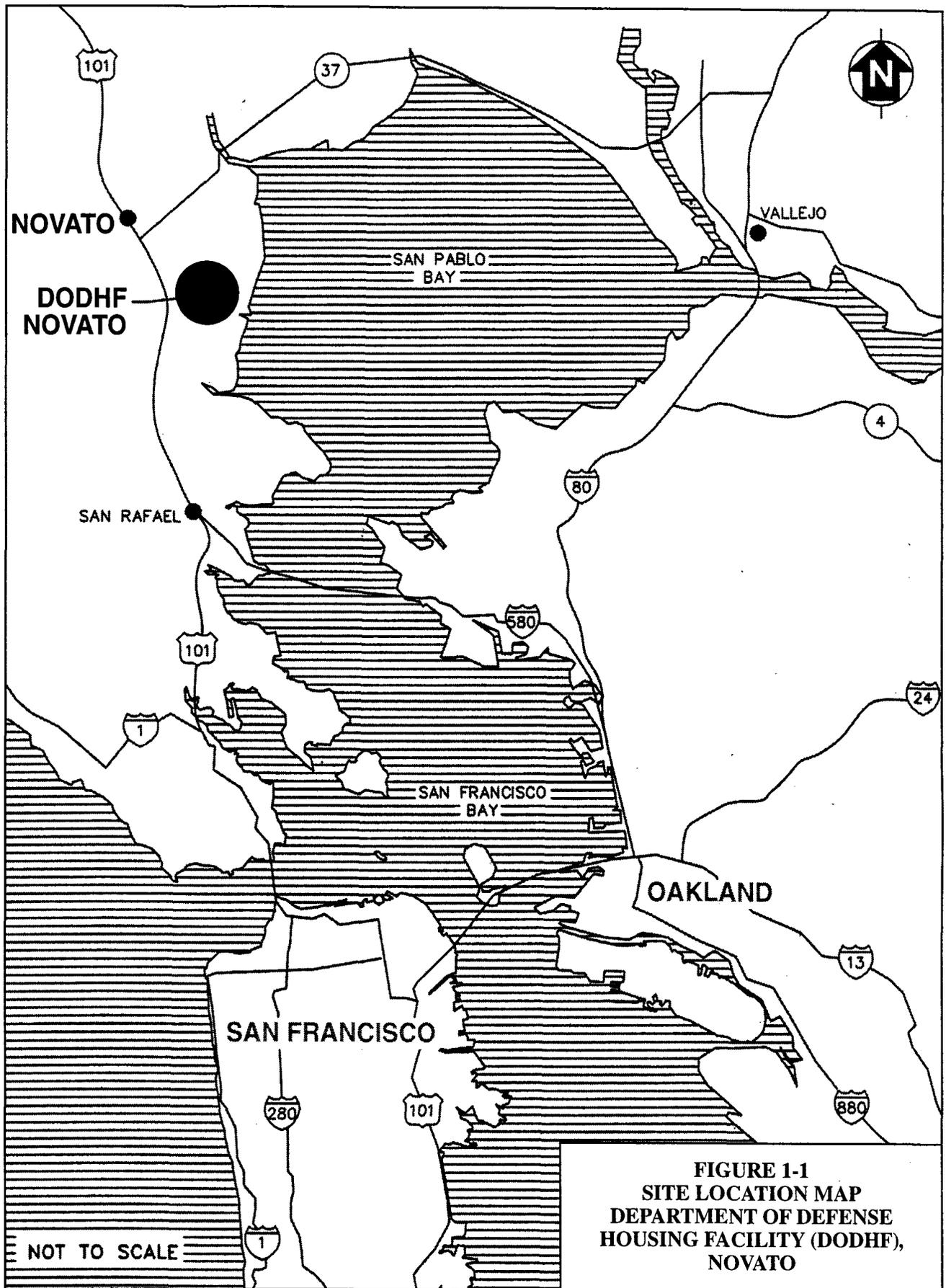
#### **1.4 PURPOSE AND OBJECTIVE OF THE SEBS**

The purpose of the Supplemental EBS is to summarize information collected to date, as well as to provide an updated parcel classification for each parcel at DODHF Novato. The objectives of this Supplemental EBS are:

- To reclassify parcels based on recently acquired information, sampling and/or investigations into the most current ECP Area Type classification
- To provide sufficient information to support a FOST for parcels deemed eligible for transfer based on recently acquired information, sampling and/or investigations, including any necessary restrictions

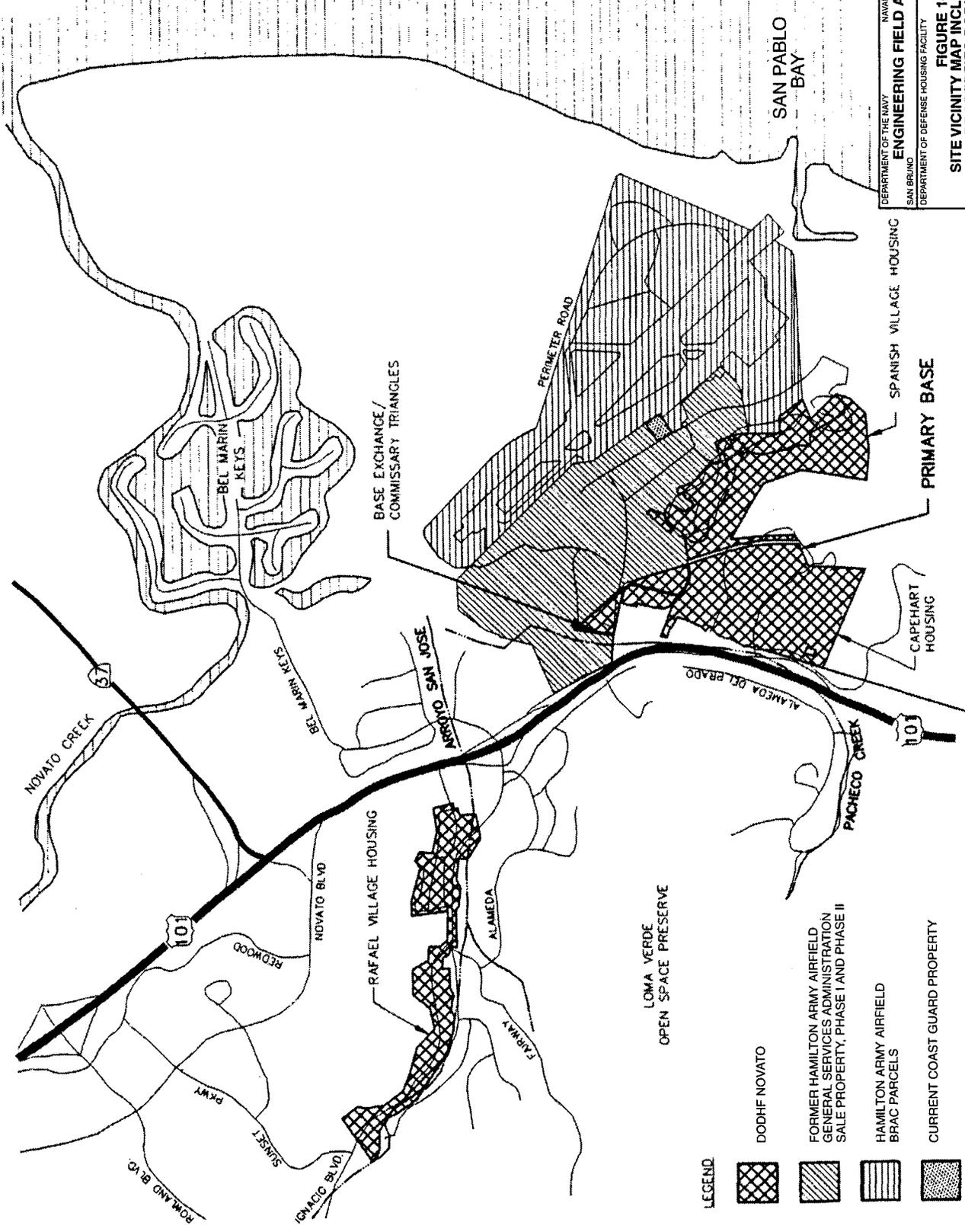
#### **1.5 ORGANIZATION OF THE SUPPLEMENTAL EBS**

This Supplemental EBS summarizes the methodology and screening process to reclassify the parcels (Section 2), provides a summary of parcels classified as CERFA eligible in the Basewide EBS (Section 3), and provides a summary of parcel specific information used for reclassification for parcels (Section 4). Insert Fig 1-1



**FIGURE 1-1**  
**SITE LOCATION MAP**  
**DEPARTMENT OF DEFENSE**  
**HOUSING FACILITY (DODHF),**  
**NOVATO**

200-21 Fig 1-1 8/1/96 FH/FC



- LEGEND**
-  DODHF NOVATO
  -  FORMER HAMILTON ARMY AIRFIELD GENERAL SERVICES ADMINISTRATION SALE PROPERTY, PHASE I AND PHASE II
  -  HAMILTON ARMY AIRFIELD BRAC PARCELS
  -  CURRENT COAST GUARD PROPERTY
  -  CREEK

DEPARTMENT OF THE NAVY  
**ENGINEERING FIELD ACTIVITY WEST**  
 SAN BRUNO CALIFORNIA  
 DEPARTMENT OF DEFENSE HOUSING FACILITY  
 NOVATO, CALIFORNIA

**FIGURE 1-2**  
**SITE VICINITY MAP INCLUDING OFF-SITE PROPERTIES DODHF, NOVATO**

SIZE: **A**  
 CODE BENT NO.:  
 NAVFAC DRAWING NO.:  
 CONECT CONTR. NO.:  
 SCALE: AS NOTED  
 SHEET: OF

## **2.0 EBS SCREENING LEVEL ACTIVITIES**

Information used to reclassify ECP Area Type 7 parcels at DODHF Novato was gathered through the following activities: 1) additional literature reviews, 2) additional interviews, 3) site walks, 4) a geophysical survey, and 5) a soil and sediment sampling program as described by the EBS Final Sampling Workplan (ERM-West, Inc. 1996).

### **2.1 CHARACTERIZATION ACTIVITIES**

#### **2.1.1 Soil Sampling**

The Final Sampling Workplan for DODHF Novato was prepared by ERM-West, Inc. in January 1996 and was based on the findings presented in the Basewide EBS. The Final Sampling Workplan, approved by the BCT, provided detailed guidance for the collection of surface and subsurface soil samples (ERM-West, Inc. 1996) and was designed to provide an initial screening of parcels identified in the Basewide EBS as ECP Area Type 7 (ERM-West, Inc. 1995a). Many of these parcels had small data gaps (i.e., potential contamination from adjacent parcels, or unevaluated adverse uses), but in most respects, appeared to be eligible for transfer. The sampling program focused on these data gaps in an effort to expedite the transfer of property. Sampling activities were conducted in February 1996, and the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* was completed in April 1997 (PRC and U&A 1997b).

#### **2.1.2 Sewer Sediment Sampling**

As part of the screening level sampling program, storm and sanitary sewer sediment samples were collected from designated locations around the facility. According to the Final Sampling Workplan, analytical results from the sewer sediment samples were to be used to identify constituents deposited by the waste stream. Samples collected from the sanitary sewer system had detected concentrations of a number of contaminants. Information on the integrity of the sewer lines was then to be compiled and analyzed. If the sewer lines were found to be cracked or broken, the contaminants detected in the sediment would be suspected of having migrated into soils outside the sewer conduits. Follow-up soil sampling near sewer line breaks would then be conducted. These soil samples would be analyzed for constituents detected in previous sewer sediment samples.

A study of the sanitary sewer system (Bechtel 1985) confirmed the integrity of the sewer lines at DODHF Novato and recommended no repairs or construction. The study included field inspections, interviews, and literature reviews. Based on this report, contaminants detected in sediment samples collected from inside the sanitary sewer system are not suspected of leaking into surrounding soils. In addition, there is a low probability of heavy industrial discharges into the sewer lines. As a result, additional soil sampling adjacent to the sanitary sewer lines at DODHF Novato is not planned (PRC and U&A 1997b).

Standard operating procedures for storm sewer inspection and maintenance were also reviewed and a discussion is included in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b). These procedures described pump and storm drain maintenance schedules, periodic cleaning, and inspections. Based on the review of the standard operating procedures, contaminants are not suspected of leaking from the conduits into surrounding soils. However, based upon the detected concentrations of constituents in the storm sewer sediment samples, the Navy is planning to clean selected storm drain lines where contaminant concentrations were detected.

### **2.1.3 Asbestos and Lead-Based Paint**

Based on the date of construction of many buildings at DODHF Novato, asbestos-containing materials and lead-based paint are expected to exist at the facility. Asbestos abatement on the facility has been completed and, as such, no asbestos hazards remain on site. The soil data collected for lead-based paint from housing units (not including Capehart Housing) were below the 400 milligrams per kilogram (mg/kg) action level developed by Housing and Urban Development (HUD).

#### **2.1.3.1 Asbestos Surveys**

Asbestos is regulated by the EPA under 40 CFR 61 Subpart M- the National Emission Standard of Hazardous Air Pollutants, National Emission Standard for Asbestos, as well as by the Federal Occupational Safety and Health Administration (OSHA), 29 CFR 1926.1101. The Navy Asbestos Management Program promulgated in Naval Instructions (OPNAVINST) 5100.23 D, was established in 1986 as a mandatory program for the inventory, assessment, and abatement of asbestos. DOD policy states that the presence of asbestos does not affect ECP classifications. However, the presence of asbestos and its condition must be disclosed prior to lease or transfer of a given property, and damaged, friable, asbestos-containing materials must be abated (OPNAVINST 5100.23D).

The industrial buildings (50 buildings) at DODHF Novato were investigated in September 1995 as part of an asbestos survey conducted by the San Francisco, Public Works Center (PWC). Abatement of damaged, friable asbestos-containing materials found in those buildings has been completed. The residential buildings at DODHF Novato were investigated in 1995 by PWC, Norfolk, Virginia. The survey recommended no immediate abatement actions for any identified asbestos-containing material in the residential buildings (PWC 1996a).

### **2.1.3.2 Lead-Based Paint Surveys of Residential Structures**

The applicability of lead-based paint regulations to BRAC residential structures is a function of (1) the date of property transfer, and (2) the date the building was constructed. BRAC residential property that will be transferred must comply with certain provisions of the Federal Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of P.L. 102-550), as codified in 42 United States Code Section 4822. These provisions are applicable to housing constructed before 1978.

Housing constructed before 1960 must be inspected for lead-based paint and lead-based paint hazards. Any identified paint hazard must be abated. The results of the lead-based paint inspection will be provided to prospective purchasers or transferees of BRAC property identifying the presence of lead-based paint and lead-based paint hazards on a surface-by-surface basis and a description of the abatement measures taken. In addition, prospective transferees must be provided with a lead hazard information pamphlet and the contract for transfer must include a lead warning statement. This inspection and abatement will not be required when the building will be demolished by the transferee and the transfer document prohibits occupation of the building prior to the demolition; the building is scheduled for non-residential use; or if the building is scheduled for residential use, and the transferee conducts renovation consistent with all local, state, and federal regulations pertaining to lead-based paint (DOD 1994).

The lead-based paint surveys conducted by PWC in September 1995 on the Spanish Housing area (Parcel 105A) and Raphael Village (Parcel 125) found lead-based paint in soil and recommended the implementation of an operations and maintenance plan for these areas until the identified lead-based paint is abated (PWC 1996b). However, the Rafael Village housing will be demolished and the Spanish Housing area is part of a federal-to-federal transfer, so no lead-based paint abatement is planned in these areas.

Housing constructed between 1960 and 1978 must be inspected for lead-based paint and lead-based paint hazards. The results of the lead-based paint inspection will be provided to prospective purchasers or transferees of BRAC property identifying the presence of lead-based paint and lead-based paint hazards on a surface-by-surface basis. There is no federal lead-based paint hazard abatement requirement for such property. However, prospective transferees must be provided with a lead hazard information pamphlet and the contract for transfer must include a lead warning statement. This inspection will not be required when the building will be demolished by the transferee and the transfer document prohibits occupation of the building prior to the demolition; the building is scheduled for non-residential use; or if the building is scheduled for residential use and the transferee conducts renovation consistent with all local, state, and federal regulations pertaining to lead-based paint (DOD 1994). The survey conducted by PWC in September 1995 on the Capehart Housing area (Parcels 65B, 73 and 76) found lead-based paint in soil, and recommended no immediate abatement actions, but does recommend implementation of an operations and maintenance plan for the area until the identified lead-based paints abated (PWC 1996b).

On the basis of the federal policies outlined above, the Knolls (in Parcel 67) and Hillside (Parcel 65A) housing units discussed in this Supplemental EBS are exempt from lead-based paint testing because they were built after 1978. However, each residential housing area was surveyed for lead-based paint in 1995 by PWC. The Knolls housing area was found to have lead in soil below action levels; the Hillside housing area was found to have lead in soil below background concentrations.

### **2.1.3.3 Lead-Based Paint Surveys of Non-Residential Structures**

At the request of the EPA and DTSC, the Navy conducted a visual survey of non-residential structures to evaluate the potential of lead-based paint releases to soil. The Assessment Report of Non-residential Buildings for Potential Soil Lead Hazards from Lead-Based Paint at The Department Of Defense Housing Facility (DODHF) Novato, California (EFA West 1997) discusses the current status of non-residential structures with respect to lead-based paint release potential. This evaluation reviewed non-residential structures and identified a number of factors which significantly reduce or eliminate the potential for lead from lead-based paint release to soil. These include:

- Building will be demolished
- Building is of the Spanish Housing vintage
- Built after 1978

- Impervious barrier around structure
- Paint is currently in good condition or no paint chips noticed on ground

Two parcels (12 and 13) had structures which did not fit into one or more of the assessment categories. The structures had only minor amounts of paint chips on ground, and the paint condition was otherwise good. The other structures evaluated had a reduced or eliminated potential lead-based paint release to soil based on one or more of the categories. The evaluation is included as Appendix A of this Supplemental EBS.

#### **2.1.4 Site Walks**

The BCT surveyed the site on several occasions in February and March 1996 and made several changes to the Final Sampling Workplan based on site observations. These observations are included in the Site Characterization sections as they apply to specific parcels in Section 4. In this document these site walks are referred to as "BCT site walks" In contrast, "Basewide EBS site walks" pertain to the site surveys conducted by ERM-West, Inc. from 1993 to 1995 during the initial EBS data-gathering process.

#### **2.1.5 Additional Investigations**

In order to resolve other outstanding questions, additional field investigation was proposed. In an effort to establish the presence or absence of the suspected underground storage tank (UST) at Parcel 59, a geophysical magnetic survey was performed around the exterior of Building 504 located on Parcel 59. An anomaly consistent with the presence of a shallow UST was identified. Further investigation was performed by vacuum excavation to confirm whether an UST had caused the magnetic variation documented by the magnetometer. No evidence of any UST was encountered in the excavation. Upon further investigation, a storage tank suspended from the ceiling was discovered in the boiler room. The tank was the approximate size of a 275-gallon tank and appeared to be connected to a boiler. It was therefore concluded that no UST exists within the external periphery or vicinity of Building 504, but an aboveground storage tank (AST) was observed. Further details of the survey are included in the Environmental Baseline Survey Sampling and Analysis Screening Level Report (PRC and U&A 1997b).

#### **2.1.6 Literature Reviews**

Several investigation reports have been completed for various programs (including the UST and lead-based paint programs) since the EBS was finalized. These reports have been reviewed to evaluate the

current environmental condition of the parcels for this Supplemental EBS. The new information was used to reclassify parcels accordingly.

Additional background information can be found in the following reports:

- *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, PRC and U&A, April 1997b.
- *Base Realignment and Closure Cleanup Plan, Revision 03 for Department of Defense Housing Facility, Novato*, PRC and U&A, February 1997a.
- *Base Realignment and Closure Cleanup Plan, Revision 02 for Department of Defense Housing Facility, Novato*, PRC, March 1996.
- *The Final Sampling Workplan for DODHF Novato*, ERM-West, Inc. January 1996.
- *The Environmental Baseline Survey/Community Environmental Response Act Report for DODHF Novato*, ERM-West, Inc. October 1995a.
- *The Limited Environmental Baseline Survey/CERFA Report for DODHF Novato*, ERM-West, Inc. November 30, 1994.
- *(Master Plan Department of Defense Housing Facility)*, Naval Facilities Engineering Command, Western Division, September 1986.

### 2.1.7 Screening Criteria

Screening criteria were developed, in conjunction with the BCT, to assist in the evaluation of analytical results obtained from various parcels. Background concentrations in soil were used as screening criteria for inorganic compounds. The Hamilton Army Airfield GSA Phase I Sale Area Cleanup Goals were used as screening criteria for organic compounds detected in soil at DODHF Novato. When no GSA Phase I Sale Area cleanup goals were available, the EPA's preliminary remediation goals (PRGs) were used. No groundwater samples were collected at DODHF Novato during the EBS sampling and analysis program due to the limited potential for sites in EBS program to have impacted groundwater as discussed in the Final Sampling Workplan (ERM West 1996a). The *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997) lists the final screening criteria for constituents detected at DODHF Novato and discusses these criteria in detail. Parcels where analytical results indicate concentrations of constituents below the final screening criteria are considered eligible for reclassification to ECP Area Types 1, 2, 3, or 4.

### **2.1.8 Review of Pesticide Usage**

Pesticides, insecticides, herbicides, termiticides and rodenticides were applied at DODHF Novato on an as-needed basis by either trained personnel from the PWC San Francisco pest control department or by contractors. Personnel from both PWC San Francisco and contractors were trained and licensed in the proper and legal application of the pesticides. Pesticides, insecticides, herbicides, termiticides and rodenticides were applied following the manufacturer's directions and in accordance with the installations annually approved Pest Management Plan. Based on a summary of pesticide usage information, which is included in Appendix B, it appears that pesticides were not used extensively at DODHF Novato.

### 3.0 PARCELS NOT REQUIRING ADDITIONAL INVESTIGATION IN BASEWIDE EBS

This section summarizes the parcels identified in the Basewide EBS as not requiring additional investigation. Table 5-1 presents the parcels and summarizes the potential issues of concern that were resolved through literature searches, site walks, and interviews. Figures 3-1 and 3-2 depict the ECP classification for each parcel, both those listed in Section 3.0 and Section 4.0.

#### 3.1 PARCELS WITH FORMAL DTSC CONCURRENCE

The following 34 parcels have received written DTSC concurrence as BRAC Area Type 1 and revised to ECP Area Type 1.

CERFA-ELIGIBLE PARCELS (FORMAL DTSC CONCURRENCE)				
10	37	48	79	118
27	38	49	82	119
31	39	51	94	120
33	40	53	100	125
34	45	75	106	127
35	46	77	109	128
36	47	78	113	

Parcels 35, 36, 37, 45, 46, 47, 82, 94, 106, 109, 113, and 128 were identified as potential sources of non-residential lead-based paint releases to soil. Appendix A contains an evaluation of the potential for lead release to the environment from lead-based paint on non-residential buildings at DODHF Novato. No further evaluation of lead-based paint is required for structures on these parcels.

#### 3.2 PARCELS PROPOSED FOR CONCURRENCE IN BASEWIDE EBS

Section 5 of the Basewide EBS provides parcel summary descriptions for parcels recommended as CERFA-eligible (ERM-West, Inc. 1995a). The Basewide EBS classified these parcels as either BRAC Area Type 1 or 2. This Supplemental EBS reclassifies each of these parcels as ECP Area Type 1. The

following parcels and the corresponding BRAC Area Types were proposed for transfer in the Basewide EBS, but have not yet received official concurrence from the DTSC:

13 (BRAC Area Type 1)	60 (BRAC Area Type 1)	117 (BRAC Area Type 1)
26 (BRAC Area Type 1)	73 (BRAC Area Type 1)	69 (BRAC Area Type 2)
32 (BRAC Area Type 1)	74 (BRAC Area Type 1)	83 (BRAC Area Type 2)
41 (BRAC Area Type 1)	76 (BRAC Area Type 1)	102 (BRAC Area Type 2)
44 (BRAC Area Type 1)	101 (BRAC Area Type 1)	116 (BRAC Area Type 2)
57 (BRAC Area Type 1)	103 (BRAC Area Type 1)	124 (BRAC Area Type 2)

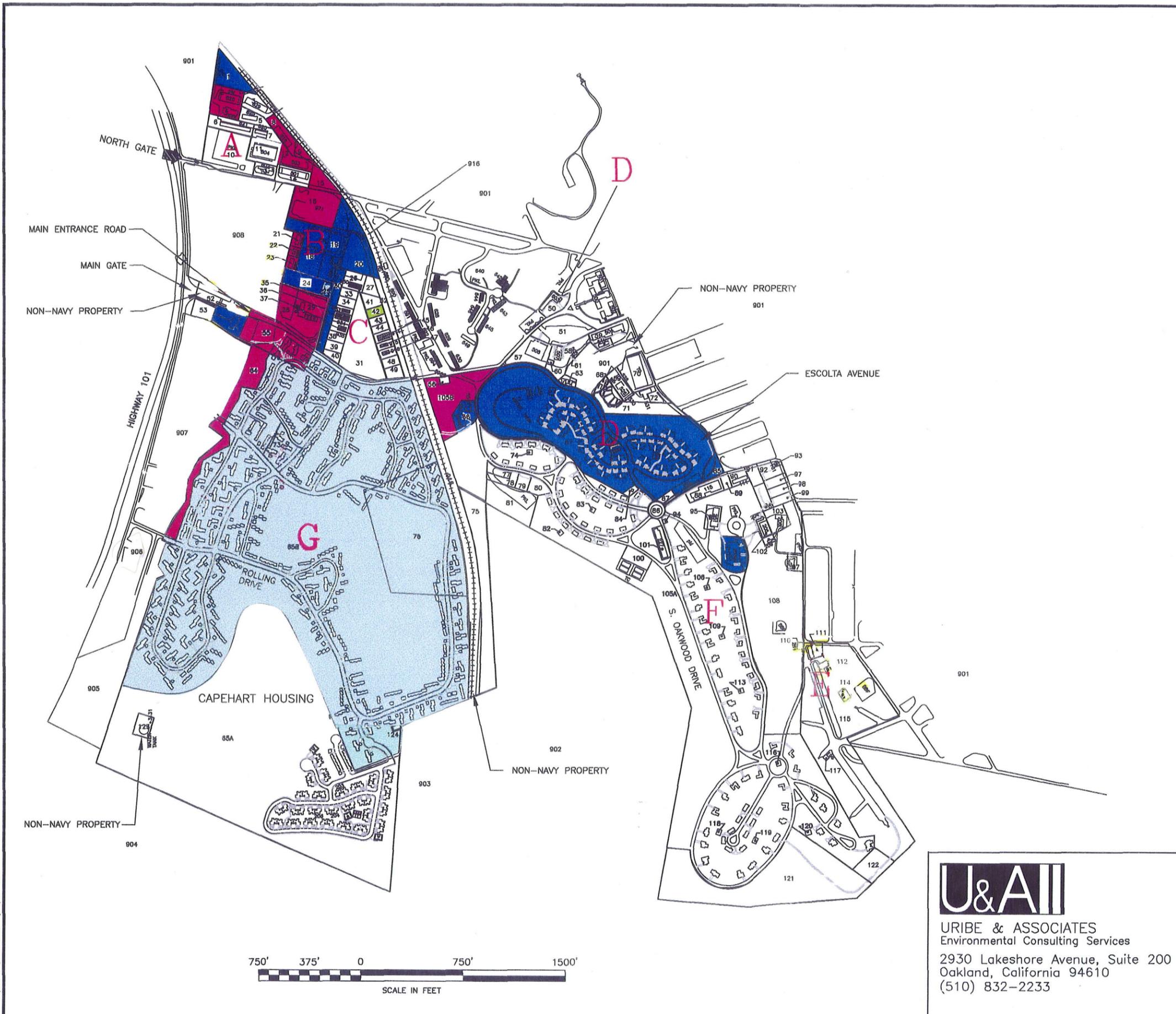
Parcels 73 and 76 are part of the Capehart Housing area and are discussed with Parcel 65B in Section 4. These parcels are all categorized as ECP Area Type 7, pending resolution of the Capehart Housing issues.

Parcels 26, 57, 69, 74, 83, 101, 102, 103, and 116 were identified as potential sources of non-residential lead-based paint releases to soil. Appendix A contains an assessment of the potential for lead release to the environment from lead-based paint on non-residential buildings at DODHF Novato. No further evaluation of lead-based paint is required for structures on these parcels.

**TABLE 3-1: SUMMARY OF PARCELS IDENTIFIED IN THE BASEWIDE EBS AS ELIGIBLE FOR TRANSFER**

Parcel #	SEBS ECP Area Type (March 1997)		Basewide EBS BRAC Area Type (Fall 1993)		Official Agency Concurrence	Chemical Storage and Use	Drainage	Contamination Issues		Factors	Comments	
						Chemical Storage Hazardous Waste Generation and/or Storage Oil-filled Transformer/Switch (not PCB tested) PCB-Contaminated Transformer Ordnance Storage or Use Current, Former, and/or Potential UST Current or Former AST Potentially Contaminated Storm Drain Potentially Contaminated Sanitary Sewer Lead Release Issues (Paint, Shooting Range, etc.) Friable Asbestos Pesticide Use and/or Storage (Non-Routine) Known or Suspected UST; No Additional Information Known Contamination, Not Under Investigation Investigation Currently Underway Potential Contamination Migration Onto Parcel Documented Spills/Incidents (No Approved Cleanup) Documented Spills/Incidents (Approved Cleanup) Significant Staining Observed Unconventional Building Demolition Potential Historical Adverse Use Potential Lead-Based Paint Known or Potential Asbestos-Containing Materials Radon Exceeding EPA Action Level						
<b>ZONE A</b>												
10					★							Bldg disappeared in 1950s
13							✓			✓		
<b>ZONE C</b>												
26					★			✓		✓		
27					★							
31					★							
32						✓						Parking lot Makeshift culvert
33					★							
34					★							
35					★			✓		✓		
36					★			✓		✓		Day care
37					★			✓		✓		Day care
38					★							
39					★							
40					★							
41												
44												
45					★			✓		✓		
46					★			✓		✓		
47					★			✓		✓		Former warehouse
48					★							
49												
<b>ZONE D</b>												
51					★							
57										✓		
60										✓		
69				2		✓	✓	✓				Stored pool treatment chemicals
<b>ZONE E</b>												
117										✓		Former golf shed, relocated
<b>ZONE F</b>												
74								✓		✓		
75					★							
77					★							Minor building debris
78					★							Minor building debris
79					★							Concrete pad from building demo.
82					★			✓		✓		Utility vault
83				2		✓	✓	✓		✓		Utility vault; Inactive transformer
94					★			✓		✓		Utility vault
100					★			✓				
101						✓		✓		✓		Day care
102				2		✓		✓		✓		Stored pool treatment chemicals
103								✓		✓		
106					★			✓		✓		Utility vault
109					★			✓		✓		Utility vault
113					★			✓		✓		Utility vault
116				2		✓	✓	✓		✓		Utility vault; Inactive transformer
118					★			✓		✓		Utility vault
119					★			✓		✓		Utility vault
120					★			✓		✓		Utility vault
<b>ZONE G</b>												
53					★			✓				
124				2		✓	✓	✓				Diesel generator (san. sewer pump stn.)
<b>ZONE H</b>												
125					★					✓		Housing
127					★			✓		✓		House disappeared
128					★			✓		✓		Former warehouse

Source: Final Basewide Environmental Baseline Survey DODHF Novato (ERM-West, Inc. 1995)  
 ✓ indicates potential issue of concern which has been resolved through literature searches, site walks, interviews or investigations  
 A blank box indicates that the parcel is not affected by this criterion



**LEGEND**

- ECP AREA TYPE 1
- ECP AREA TYPE 2
- ECP AREA TYPE 3
- ECP AREA TYPE 6
- ECP AREA TYPE 7
- 124 = PARCEL NUMBERS
- PARCEL BOUNDARY

**ABBREVIATIONS**

- PKL - PARKING LOT
- BBF - BASEBALL FIELD
- WP - WADING POOL
- CR - CONCRETE RAMP
- STP - SEWAGE TREATMENT PLANT
- TC - TENNIS COURT
- CF - CONC. FOUNDATION
- RS - RAILROAD STATION



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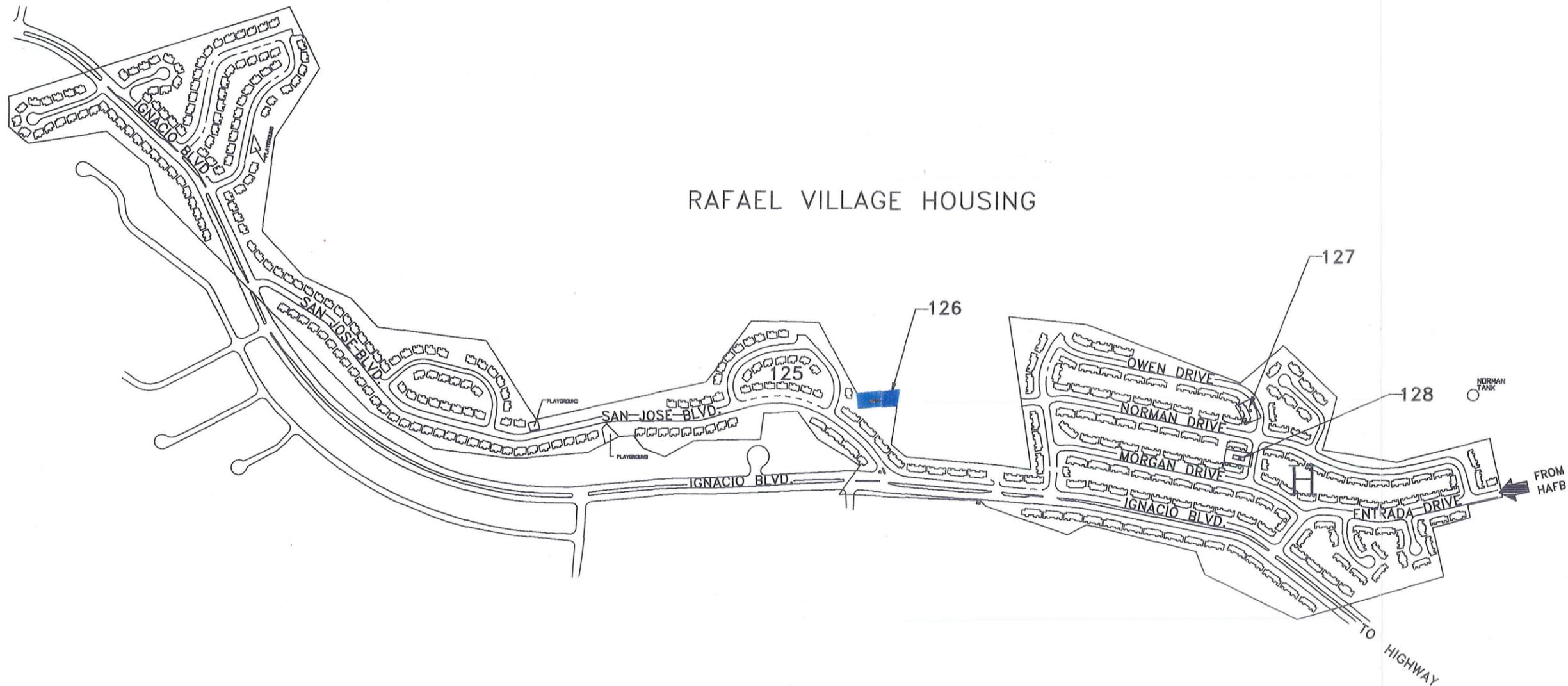
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND  
 SAN BRUNO **ENGINEERING FIELD ACTIVITY WEST** CALIFORNIA  
 DEPARTMENT OF DEFENSE HOUSING FACILITY NOVATO, CALIFORNIA

**FIGURE 3-1**  
**ENVIRONMENTAL CONDITION OF PROPERTY**  
**AREA TYPE CLASSIFICATION MAP**

SIZE	NAVAFAC. DRAWING NO.
<b>B</b>	<b>00002</b>
SCALE	CONST. CONTR. NO.
AS SHOWN	SPEC.
SHEET 1 OF 1	

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# RAFAEL VILLAGE HOUSING



- LEGEND**
- ECP AREA TYPE 1
  - ECP AREA TYPE 2
  - 124 = PARCEL NUMBERS
  - PARCEL BOUNDARY



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DEPARTMENT OF THE NAVY		NAVAL FACILITIES ENGINEERING COMMAND	
SAN BRUNO		ENGINEERING FIELD ACTIVITY WEST CALIFORNIA	
DEPARTMENT OF DEFENSE HOUSING FACILITY		NOVATO, CALIFORNIA	
<b>FIGURE 3-2</b>			
<b>ENVIRONMENTAL CONDITION OF PROPERTY AREA TYPE CLASSIFICATION MAP</b>			
SIZE	NAVFAC. DRAWING NO.	CONST. CONTR. NO.	
<b>B</b>	<b>00002</b>		
SCALE	SPEC.	SHEET	1 OF 1
AS SHOWN			

#### 4.0 PARCELS REQUIRING ADDITIONAL INVESTIGATION IN BASEWIDE EBS

This section describes the 75 parcels at DODHF Novato that were classified as ECP Area Type 7 in the Basewide EBS. 74 of the parcels are now reclassified as ECP Area Types 1 through 6, and are therefore suitable for transfer, based on site investigations, site walks, and literature reviews. The information included in each Site Characterization section has been taken from the Basewide EBS (ERM-West, Inc. 1995a). Information in each Site Investigation Activities section has been compiled from site walk field notes, UST investigation reports, the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b) and the other sources discussed in Section 2. Table 4-1 provides a summary of parcel reclassifications and includes the environmental issues identified in the Basewide EBS for each parcel. Table 4-2 is a list of the USTs identified at DODHF Novato. Figures 3-1 and 3-2 depict the revised classifications for each parcel. For consistency with the previous reports and for ease of reading, parcels suitable for transfer are grouped by zones in this Supplemental EBS, as listed below:

- Zone A: Commissary Triangle
- Zone B: Navy Exchange
- Zone C: Air Force Triangle
- Zone D: Knolls Housing and Recreation Area
- Zone E: Former Runway and Recreation Area
- Zone F: Spanish Housing
- Zone G: Capehart Housing
- Zone H: Rafael Village

**TABLE 4-1: SUMMARY OF PARCELS IDENTIFIED IN BASEWIDE EBS AS REQUIRING ADDITIONAL INFORMATION**

Parcel #	SEBS ECP Area Type (April 1997)	Basewide EBS BRAC Area Type (Fall 1993)	Chemical Storage and Use		Drainage	Contamination Issues				Factors		Comments							
			Chemical Storage	Hazardous Waste Generation and/or Storage	Potentially Contaminated Storm Drain	Lead Release Issues (Paint, Shooting Range, etc.)	Friable Asbestos	Pesticide Use and/or Storage (Non-Routine)	Known or Suspected UST; No Additional Information	Known Contamination, Not Under Investigation	Investigation Currently Underway		Potential Contamination Migration Onto Parcel	Documented Spills/Incidents (No Approved Cleanup)	Significant Staining Observed	Unconventional Building Demolition	Potential Historical Adverse Use	Lead-Based Paint	Known or Potential Asbestos-Containing Materials
<b>ZONE A</b>																			
1	2-3	7	✓	✓	✓														Sample results <fsc
2	6	7			✓						×	×							
3	1	7		✓	✓														Former dry cleaner, USTs
4	6	7		✓	✓						×								Former dry cleaner
5	1	7	✓		✓														Former maintenance shop
6	1	7	✓	✓	✓														Former maint. shop & equip. whse
7	1	7	✓	✓	✓														Storm drains to be cleaned
8	6	7	✓	✓	✓														Storm drains to be cleaned
9	6	7	✓	✓	✓														AST; Fmr supply warehouse; morgue
11	1	7	✓	✓	✓														Former supply warehouse
12	6	7	✓		✓														Former supply warehouse
14	6	7	✓		✓														BCT reviewed minor spill clean-up
15	2-4	7	✓		✓														
15	6	7	✓		✓														
<b>ZONE B</b>																			
16	6	7	✓	✓	✓														Storm drain cleaning
17	2-7	7	✓	✓	✓														Potential impact from Parcel 29 UST
18	2-6	7	✓	✓	✓						×	×							
19	2-6	7	✓	✓	✓						×	×							AST; Former auto maintenance/LUST
21	6	7	✓	✓	✓														No confirmation of Pesticide storage
22	6	7	✓	✓	✓														Former auto maintenance shop
23	2-3	7	✓	✓	✓														Former auto maintenance shop
24	2-4	7	✓	✓	✓						×	×							UST site closed, impact from Parcel 29
25	2-6	7	✓	✓	✓						×	×							Former auto maintenance
28	6	7	✓	✓	✓						×	×							Storm drain cleaning
29	2-6/6	7	✓	✓	✓						×	×							UST site, storm drain cleaning
<b>ZONE C</b>																			
20	2-7	7									×								from Parcel 29 USTs
30	2-3	7									×								from Parcel 29 USTs
42	3	7																	
43	3	7	✓																
<b>ZONE D</b>																			
50	1	7	✓																Potential pesticides removed with railroad spur
58	1	7	✓																
59	1	7	✓																UST not identified
61	1	7	✓																
63	1	7	✓																Housing
67	2-3	7	✓	✓	✓						✓	✓	✓	✓					UST release not identified
68	1	7	✓																
70	1	7	✓																
71	1	7	✓																
72	1	7	✓																
84	1	7	✓																Utility vault
85	2-6	7	✓								×	×							2 USTs removed (1 LUST)
87	1	7	✓																No use info for previous building
88	1	7	✓	✓	✓														UST not identified
89	1	7	✓																
90	1	7	✓																Washrack sign
91	1	7	✓																
92	1	7	✓																New asphalt
93	1	7	✓																Utility vault
96	1	7	✓																
97	1	7	✓																Staining not identified
98	1	7	✓																Staining not identified
99	1	7	✓																Staining not identified
<b>ZONE E</b>																			
107	1	7																	Baseball diamond
108	1	7																	B-ball diamond: Possible contam. fill
110	1	7	✓																Utility vault
111	1	7	✓																
112	1	7	✓																
114	1	7	✓																
115	1	7	✓	✓	✓														Waste oil container and sheen

**TABLE 4-1: SUMMARY OF PARCELS IDENTIFIED IN BASEWIDE EBS AS REQUIRING ADDITIONAL INFORMATION**

Parcel #	SEBS ECP Area Type (April 1997)	Basewide EBS BRAC Area Type (Fall 1993)	Chemical Storage and Use		Drainage	Contamination Issues					Factors		Comments						
			Chemical Storage	Hazardous Waste Generation and/or Storage	Potentially Contaminated Storm Drain	Lead Release Issues (Paint, Shooting Range, etc.)	Friable Asbestos	Pesticide Use and/or Storage (Non-Routine)	Known or Suspected UST; No Additional Information	Known Contamination, Not Under Investigation	Investigation Currently Underway	Potential Contamination Migration Onto Parcel		Documented Spills/Incidents (No Approved Cleanup)	Significant Staining Observed	Unconventional Building Demolition	Potential Historical Adverse Use	Lead-Based Paint	Known or Potential Asbestos-Containing Materials
<b>ZONE F</b>																			
56	1	7																	Picnic area latrine
66	2-3	7	✓	✓			✓												PCB transformer temporary storage
80	1	7																	Parking lot
81	1	7																	Indian ruins
86	1	7																	Possible UST fill pipes
95	1	7																	
104	2-6	7		✓						×									Spanish Housing
105A	1	7																	Follow-up sampling planned
105B	6	7	✓	✓		✓	×	×	×	✓				✓					Follow-up sampling planned
121	1	7																	
122	1	7																	
<b>ZONE G</b>																			
54	2-6	7	✓	✓			✓	✓			×								Follow-up sampling planned
55	6	7	✓			✓					×								
64	6	7				✓													Empty 55-gal drum in creek
65A	1	7																	Housing
65B	7	7		✓			×							×	✓				Capehart Housing
73	7	1		✓			×							×	✓				Capehart Housing
76	7	1		✓			×							×	✓				Capehart Housing
<b>ZONE H</b>																			
126	2-3	7	✓	✓							✓								Sample results < fsc

Source: Final Basewide Environmental Baseline Survey DODHF Novato (ERM-West, Inc. 1995).

✓ Indicates a potential issue of concern for parcel which has subsequently been resolved through literature searches, site walks, interviews or investigations.

× Indicates that an issue is not yet resolved, but is currently being studied.

□ A blank box indicates that the parcel is not affected by this criterion.

fsc Final screening criteria

TABLE 4-2

## UNDERGROUND STORAGE TANK INVENTORY

DODHF, NOVATO

Tank ID Number	Adjacent Buildings	Parcel Number	Tank Capacity (gallons)	Product Stored	Date Installed	Current Status	Comments	Future Actions
1	970	29	10,000	Unleaded gasoline	Unknown	Removed; further investigation underway	Passed 1990 tightness test	Corrective action, if necessary
2	970	29	10,000	Leaded gasoline	Unknown	Removed; further investigation underway	Passed 1990 tightness test	Corrective action, if necessary
3	970	29	10,000	Unleaded gasoline	Unknown	Removed; further investigation underway	Failed 1991 tightness test	Corrective action, if necessary
Waste Oil	970	29	Unknown	Waste oil	Unknown	Removed; further investigation underway	No test records found	Corrective action, if necessary
11A	None	85	10,000	Fuel oil	Unknown	Removed; investigation completed; groundwater monitoring ongoing	Residual contamination	Corrective action, if necessary
11B	None	85	10,000	Fuel oil	Unknown	Removed; investigation completed; groundwater monitoring ongoing	Residual contamination	Corrective action, if necessary
957	957	19	12,000	Gasoline	Unknown	Removed; investigation completed; remedial design underway	Residual contamination	Corrective action
972	972	24	2,000	Fuel oil	Unknown	Removed; investigation completed; groundwater monitoring ongoing	Residual contamination	Corrective action, if necessary
	827	4	Unknown	Gasoline	Unknown	Removed May 1996	Investigation underway	Corrective action, if necessary
	827	4	Unknown	Solvent	Unknown	Removed May 1996	Investigation underway	Corrective action, if necessary
	827	4	Unknown	Solvent	Unknown	Removed May 1996	Investigation underway	Corrective action, if necessary

Tank ID Number	Adjacent Buildings	Parcel Number	Tank Capacity (gallons)	Product Stored	Date Installed	Current Status	Comments	Future Actions
115	115	88	250	Fuel oil	Unknown	Not found	Previous removal suspected; no records found; geophysical survey conducted; no indication of UST	No further action proposed
201	201	95	Unknown	Fuel oil	Unknown	Not found	UST did not exist	Corrective action, if necessary
504	504	59	275	Gasoline	Unknown	Not found	UST did not exist	No further action proposed

## **4.1 ZONE A COMMISSARY TRIANGLE ZONE**

### **4.1.1 Parcel 1**

#### **4.1.1.1 Site Characterization**

Parcel 1 is located in of Zone A. A shed, approximately 1,000 square feet in size, was formerly on the parcel, but was demolished in the 1960s. No information is available regarding the use of the former building. Five unmarked barrels observed on the site during the Basewide EBS (ERM West 1996a) site walk, had been removed by January 1995. Surface stains, an inactive transformer, and ponded water with a sheen were observed in some areas of the parcel. No evidence of leakage from the transformer was observed. The sanitary sewer was identified as a potential source of contamination as a result of up-gradient industrial sources. Parcel 1 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.1.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study, therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

##### ***Significant Staining and Hazardous Materials Generation and Storage***

Significant staining and unmarked barrels were observed on the property during the Basewide EBS site walk. Soil sampling was conducted to assess potential impacts to the site from past uses.

In February 1996, three soil samples were collected from Parcel 1. The samples ranged in depth from the surface to 10 feet below ground surface (bgs). The samples were analyzed for semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals. Of the three samples collected in Parcel 1, one sample exhibited a concentration of 0.7 mg/kg phenol. This quantity is below screening criteria for phenol, and is a common laboratory contaminant. TPH as motor oil was also detected at a concentration below screening criteria. No other VOCs or

SVOCs were detected in the samples. No metals were detected at concentrations greater than background. No further sampling activities are required for this area (PRC and U&A 1997b).

#### **4.1.1.3 Parcel Reclassification**

Parcel 1 has been reclassified as ECP Area Type 2-3, since low concentrations of TPH were detected.

#### **4.1.2 Parcel 2/Building 828**

##### **4.1.2.1 Site Characterization**

Parcel 2 is located in the northwestern area of the base in Zone A. Building 828, constructed in 1943, was formerly located on Parcel 2 but was demolished between 1985 and 1991. Building 828 was approximately 9,000 square feet in size; however, no information on its use is available. Surface stains and ponded water with a sheen were observed on the parcel. In addition, the sanitary sewer line that traverses Parcel 2 is potentially a source of contamination as a result of up-gradient former industrial uses. Based on the potential for contaminant release to the environment from the sanitary sewer system and significant staining, Parcel 2 was classified as a ECP Area Type 7 in the Basewide EBS, requiring further investigation.

Since the completion of the Basewide EBS, Parcel 2 was identified as potentially impacted by the UST release identified on Parcel 4 (near Building 827).

##### **4.1.2.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study, therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

###### ***Significant Staining***

Significant staining on Parcel 2 was observed during the Basewide EBS site walks. Soil sampling was conducted to assess impacts to the site from past uses.

In February 1996, as part of the screening level investigation, six soil samples were collected from Parcel 2. The samples ranged in depth from surface to 10 feet bgs. The samples were analyzed for SVOCs, TPH, VOCs, and metals. A maximum concentration 0.07 mg/kg acetone, a common laboratory contaminant, was detected in one sample. No other VOCs or SVOCs were detected in any of the samples. Arsenic was detected at a concentration of 11.8 mg/kg, which slightly exceeds the final screening criteria, but was within the regional background concentration. No other metals were detected at concentrations exceeding final screening criteria. No further sampling activities are required for this area (PRC and U&A 1997b).

#### **4.1.2.3 Parcel Reclassification**

Parcel 2 has been reclassified as ECP Area Type 6, due to the apparent impact from the Parcel 4 UST release. Further investigation is being conducted under the Navy's UST program.

#### **4.1.3 Parcel 3/Building 829**

##### **4.1.3.1 Site Characterization**

Parcel 3, located in the northwestern part of Zone A, contains Building 829. This building is a 9,400 square-foot, single-story building constructed in 1944 that was used for vehicle, furniture, and scrap lumber storage. The building is currently used as a temporary homeless shelter. An oil-filled transformer observed on site during a Basewide EBS site walk showed no signs of leakage (ERM-West, Inc. 1995a). Discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 3 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system, Parcel 3 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.1.3.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study,

therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 3 was built prior to 1978, Building 829 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. This building was identified as having paint in good condition, with no observable paint chips. No further evaluation of lead-based paint is required for structures on Parcel 3.

#### **4.1.3.3 Parcel Reclassification**

Parcel 3 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*, and the assessment of non-residential lead-based paint.

#### **4.1.4 Parcel 4/Buildings 826/827**

##### **4.1.4.1 Site Characterization**

Parcel 4 is located in Zone A and contains Buildings 826 and 827. Building 826 is a 4,000 square-foot building constructed in 1953 and used for a dry cleaning facility. The building is in poor condition and contains small quantities of paints, lacquer thinner, and petroleum products in cans. Building 827 is 1,500 square feet, is also abandoned, and is filled with general refuse. The building was constructed in 1953 and was used as a cold storage facility. Building 826 currently contains many large containers of petroleum products. Hazardous chemicals used in the dry cleaning process were probably stored on Parcel 4 at one time. A transformer on site showed no signs of leakage (ERM-West, Inc. 1995a). The sanitary sewer line that traverses Parcel 4 is potentially a source of contamination as a result of up-gradient sources. Vent pipes and fill ports indicating the presence of a potential UST were observed on Parcel 4 during the Basewide EBS site walk. No further information regarding the potential UST was available. Based on these issues, the Parcel 4 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.4.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone A is in good condition and requires no repairs, based on field inspections, interviews, and literature reviews. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone A (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Historic Uses***

Building 826 formerly housed a dry cleaning facility. To assess the potential impact of chemical storage and operations associated with dry cleaning facilities, soil sampling activities were planned for the parcel.

In February 1996, as part of the screening level sampling program, six soil samples were collected in Parcels 4 at depths varying from 4 feet to 10 feet bgs. Each sample was analyzed for VOCs. One sample contained 0.07 mg/kg acetone, a common laboratory contaminant. The remaining samples were below the detection limits for constituents analyzed.

##### ***Underground Storage Tanks***

The Navy identified and removed four USTs from Parcel 4 in May 1996. Based on verbal communication with the Navy, analysis results for volatile organic compounds were below the detection limit from soil samples. According to Navy personnel, TPH was detected in soil samples (Navy 1996).

Further investigation conducted through the Navy's UST program identified trichloroethene in the shallow groundwater. The extent of the affected groundwater is still being investigated.

##### ***Non-Residential Lead-Based Paint***

Since the buildings on Parcel 4 were built prior to 1978, Buildings 826 and 827 were evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The buildings on Parcel 4 are planned to be demolished and have an impervious barrier around the structure. No further evaluation of lead-based paint is required for structures on Parcel 4.

#### **4.1.4.3 Parcel Reclassification**

Parcel 4 has been reclassified as ECP Area Type 6 since contamination related to the USTs has been identified on site. The Navy will conduct further investigations and remediation with respect to the former leaking USTs on the property.

#### **4.1.5 Parcel 5/Building 825**

##### **4.1.5.1 Site Characterization**

Parcel 5 is located in the northern portion of Zone A. The site was once the location of a dry cleaning facility and, as such, may have been used to store hazardous chemicals from the dry cleaning process. No building currently exists at the site. Building 825, originally built in 1958 and used as a dry cleaner, was demolished sometime between 1975 and 1981. A sanitary sewer line originates on Parcel 5. Discharges from former uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines.

As noted in the Basewide EBS, Parcel 5 was classified as ECP Area Type 7 due to potential soil contamination from cracks or leaks in the sanitary sewer line, as well as the potential former storage of hazardous chemicals from the former dry cleaning facility.

##### **4.1.5.2 Site Investigation Activities Historic Uses**

Building 825 formerly housed a dry cleaning facility. To assess the potential impact of chemical storage and operations associated with dry cleaning operations, soil sampling activities were conducted. In February 1996, 12 soil samples were collected from Parcels 4 and 5 at depths varying from 4 feet to 10 feet bgs. Each sample was analyzed for VOCs. Acetone, a common laboratory contaminant, was detected in one sample at an estimated concentration of 0.07 mg/kg, which is below screening criteria. Analytical results for the remaining samples were below the detection limits for other constituents analyzed. Therefore, no further sampling activities were required for this area (PRC and U&A 1997b).

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study,

therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

#### **4.1.5.3 Parcel Reclassification**

Parcel 5 has been reclassified as ECP Area Type 1 based on the results of sampling and analysis and the review of the integrity of the sanitary sewer system.

#### **4.1.6 Parcel 6/Building 821**

##### **4.1.6.1 Site Characterization**

Parcel 6 is located in Zone A and contains Building 821. This building is 6,300 square-feet in size, was constructed in 1942, and has been used as a vehicle maintenance shop, a carpentry shop, and a warehouse. Containers of paint and gasoline are currently stored in the building. However, no staining was observed on the property during the Basewide EBS site walk. Therefore, no soil investigations were required by the BCT. Discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 6 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system, Parcel 6 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.1.6.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study, therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

###### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 6 was built prior to 1978, Building 821 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in

Appendix A. The building on Parcel 6 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 6.

#### **4.1.6.3 Parcel Reclassification**

Parcel 6 has been reclassified as ECP Area Type 1, based on the review of sewer system and the results of the non-residential lead-based paint evaluation.

#### **4.1.7 Parcel 7/Building 820**

##### **4.1.7.1 Site Characterization**

Parcel 7 is located in Zone A and contains Building 820. This building is 2,700 square feet in size, was constructed in 1942, and has been used as a warehouse and vehicle maintenance shop. Containers of paint and gasoline were stored in the building. No staining was observed on the property during the Basewide EBS site walk. Discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 7 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system, Parcel 7 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.1.7.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicated that the sanitary sewer system in Zone A was in good condition and required no repairs. This Study, therefore, confirmed that there were no substantial historical cracks or leaks in the system. As such, no further investigations or sampling activities were required for the sewer system (PRC and U&A 1997b).

###### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 7 was built prior to 1978, Building 820 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 7 is planned to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 7.

#### **4.1.7.3 Parcel Reclassification**

Parcel 7 has been reclassified as ECP Area Type 1, based on the review of the integrity of the sanitary sewer system and the results of the non-residential lead-based paint evaluation.

#### **4.1.8 Parcel 8/Building 816**

##### **4.1.8.1 Site Characterization**

Parcel 8 is located in the northwestern area of the base in Zone A and contains Building 816. The building is 9,500 square-feet in size, was constructed in 1943, and has been used as an auto hobby shop. A 500-gallon waste oil AST exists on the parcel as well as hazardous automobile products and several large dip tanks containing solvents. Significant staining was observed around the AST. The AST and dip tanks have been removed. The storm sewer may have been impacted by hobby shop activities at Building 816. The sanitary sewer line that traverses Parcel 8 is potentially a source of contamination as a result of up-gradient sources. An oil-filled transformer observed on site showed no signs of leakage (ERM-West, Inc. 1995a).

Based on potential for contaminant release to the environment from the sanitary sewer system, historical uses, and the observed significant staining, Parcel 8 was classified as a ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.1.8.2 Site Investigation Activities**

###### ***Historical Use and Significant Staining***

Due to the historical use of Building 816 as a hobby shop and the observed chemical storage and stains, screening level investigations were planned for Parcel 8.

In February 1996, as part of the screening level sampling program, six soil samples were collected from Parcel 8 at depths ranging from 1 foot to 10 feet bgs. In addition, a sediment sample was collected from a catch basin near Building 816. The samples were analyzed for metals, VOCs, SVOCs, and TPH. Constituents were not detected at concentrations exceeding screening criteria in the soil samples. No further investigations are planned for this area (PRC and U&A 1997b).

### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone A is in good condition and requires no repairs. In addition, based on the standard operating procedures for storm sewer maintenance included in the Environmental Baseline Survey Sampling and Analysis Screening Level Report, the storm sewer traversing Parcel 8 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 8 was built prior to 1978, Building 816 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 8 is to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 8.

#### **4.1.8.3 Parcel Reclassification**

Parcel 8 has been reclassified as ECP Area Type 6 until the storm drain cleaning program is completed.

#### **4.1.9 Parcel 9**

##### **4.1.9.1 Site Characterization**

Parcel 9 is located in the northwestern area of the base in Zone A. No structures currently occupy the property. A structure of unknown use was demolished on the site prior to 1958. A 55-gallon drum was observed on the site, but no evidence of leakage was noted during the Basewide EBS site walk. No soil sampling was recommended for this area in the Final Sampling Workplan.

In addition, discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 9 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and former chemical storage, Parcel 9 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.9.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone A is in good condition and requires no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

#### **4.1.9.3 Parcel Reclassification**

Parcel 9 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

#### **4.1.10 Parcel 11/Building 804**

##### **4.1.10.1 Site Characterization**

Parcel 11 is located in Zone A and contains Building 804. The building is 20,000 square-feet in size, two-stories high, constructed in 1942, and was used as the base commissary and formerly as a morgue. The commissary stores small quantities of hazardous materials. An oil-filled transformer exists on the site, as well as an AST. No evidence of leakage from the oil-filled transformer on site was discussed during the Basewide EBS site walk (ERM-West, Inc. 1995a). Significant surface staining was observed on the property during the Basewide EBS site walk.

Based on the past chemical storage and the presence of significant staining, Parcel 11 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.10.2 Site Investigation Activities**

##### ***Chemical Storage and Significant Staining***

Due to the presence of an AST and surface staining on site, soil samples were collected during level to assess the potential impacts of past uses of Parcel 11.

In February 1996, three soil samples were collected from Parcel 11 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, VOCs, and TPH. Detected concentrations were not greater than screening criteria. One sample contained acetone, a common laboratory contaminant, at a concentration of 0.1 mg/kg. No other VOCs or TPH compounds were present above detection limits. No further investigations planned for this area (PRC and U&A 1997b).

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 11 was built prior to 1978, Building 804 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 11 is planned to be demolished and has an impervious barrier around the structure. No further evaluation of lead-based paint is required for structures on Parcel 11.

#### **4.1.10.3 Parcel Reclassification**

Parcel 11 has been reclassified as ECP Area Type 1, based on the results of the sampling and analysis and the results of the non-residential lead-based paint evaluation.

#### **4.1.11 Parcel 12/Building 803**

##### **4.1.11.1 Site Characterization**

Parcel 12 is located in Zone A and contains Building 803. The building, constructed in 1943, is 9,000 square feet and has been used exclusively for storage. Hazardous materials may have been stored on site, but no signs of leakage was observed during the Basewide EBS site walk. No soil sampling was recommended for this area in the *Final Sampling Workplan* (ERM West 1996a).

Discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 12 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and former chemical storage, Parcel 12 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.11.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone A is in good condition and requires no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 12 was built prior to 1978, Building 803 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 12 is planned to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for the structure on Parcel 12.

#### **4.1.11.3 Parcel Reclassification**

Parcel 12 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

#### **4.1.12 Parcel 14/Building 801**

##### **4.1.12.1 4.1.12.1 Site Characterization**

Parcel 14 is located in Zone A and contains Building 801. The building was constructed in 1943, is 9,000 square-feet in size, and has been used exclusively for storage. Hazardous chemicals may have been stored in the building, but no staining associated with chemical storage was observed during the Basewide EBS site walk.

A small, 18-liter oil spill occurred on the day of the Basewide EBS site walk. The spill occurred on asphalt and was cleaned up immediately by Navy personnel. Some minor staining was observed on the asphalt as a result of the spill. However, given the small quantity of oil involved in the spill, and the cleanup efforts that were conducted, the BCT agreed that no soil sampling or further remediation activities would be required for the site.

The storm sewer traversing Parcel 14 may have been impacted by the industrial activities of Parcel 8. In addition, discharges from former industrial uses in Zone A may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sewer lines traversing Parcel 14 are therefore considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary and storm sewer systems, Parcel 14 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.1.12.2 Site Investigation Activities**

##### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary and storm sewer system in Zone A is in good condition and requires no repairs. In addition, based on the standard operating procedures for storm sewer maintenance included in the final Environmental Baseline Survey Sampling and Analysis Screening Level Report, the storm sewer traversing Parcel 14 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils.

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 14 was built prior to 1978, Building 801 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 14 has paint in good condition. No further evaluation of lead-based paint is required for the structures on Parcel 14.

#### **4.1.12.3 Parcel Reclassification**

Parcel 14 has been reclassified as ECP Area Type 1 based on indication of release to environment, and review of the integrity of the sewer systems and an evaluation of non-residential lead-based paint.

#### **4.1.13 Parcel 15**

##### **4.1.13.1 Site Characterization**

Parcel 15 is located in Zone A. No structures currently exist on the property. A small shed was once located on the Parcel, but was demolished prior to 1958. Sanitary and storm sewers traverse the site. Discharges from former industrial uses on Parcel 8 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary and storm sewer lines traverse Parcel 15 are, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary and storm sewer systems, Parcel 15 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.1.13.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary and storm sewer system in Zone A are in good condition and require no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

##### **4.1.13.3 Parcel Reclassification**

Parcel 15 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

## **4.2 ZONE B - NAVY EXCHANGE ZONE**

### **4.2.1 Parcel 16/Building 971**

#### **4.2.1.1 Site Characterization**

Parcel 16 is located in Zone B and contains Building 971. The building is one-story, was constructed in 1975, and has been used as a shopping center which included a grocery store, beauty salons, barber shops, and a dry cleaning facility. Buildings 950 and 951 were formerly located on the property prior to Building 971. These buildings housed automobile maintenance facilities. Oil-filled transformers were observed on site during the Basewide EBS site walk, but no signs of leakage were observed (ERM-West, Inc. 1995a). Building 971 stored small quantities of hazardous materials, but, again, no signs of leakage were observed during the Basewide EBS site walk. The former auto maintenance facility was noted in the Basewide EBS as a potential source of contamination. Contamination from the leaking UST on adjacent Parcel 19 may also have migrated onto Parcel 16. Discharges from former industrial uses in Zone B may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 16 is, therefore, considered a potential source of contamination. The storm sewer on Parcel 16 may have been impacted by the industrial activities of the adjacent Army property of Parcel 901.

Based on these issues, Parcel 16 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.2.1.2 Site Investigation Activities**

##### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

### ***Potential Contaminant Migration***

The Final UST Investigation and Corrective Measures Study for UST 957 in Parcel 19 indicates that the leaking UST impacted groundwater. However, the contamination plume, as characterized in the investigation report, does not appear to be impacting Parcel 16, located approximately 200 feet north. Although additional remediation activities are planned for Parcel 19, no further investigations are planned for Parcel 16 (ERM-West, Inc. 1995b).

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 16 was built prior to 1978, Building 971 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 16 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 16.

#### **4.2.1.3 Parcel Reclassification**

Parcel 16 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

#### **4.2.2 Parcel 17**

##### **4.2.2.1 Site Characterization**

Parcel 17 consists of open space and is located in Zone B. No structures currently occupy the property. No buildings have ever occupied the property. The site may have been impacted by contamination released from the leaking UST in Parcel 19. In addition, discharges from former industrial uses in Zone B may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 17 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and migration from the UST on Parcel 19, Parcel 17 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.2.2.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. This Study therefore, confirms that no substantial historical cracks or leaks in the sanitary sewer system in Zone B (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Potential Contaminant Migration***

The Final UST Investigation and Corrective Measures Study for UST 957 in Parcel 19 indicates that the leaking UST impacted groundwater. However, the contamination plume, as characterized in the investigation report, does not appear to be impacting Parcel 17, located approximately 200 feet north. Although additional remediation activities are planned for Parcel 19, no further investigations are planned for Parcel 17 (ERM-West, Inc. 1995b).

Parcel 29 is another UST site up-gradient of Parcel 17. The methy-tributyl-ether contamination plume from this site is not defined in the downgradient groundwater flow direction (towards Parcel 17).

#### **4.2.2.3 Parcel Reclassification**

Parcel 17 has been reclassified as ECP Area Type 2-7, due to potential impact from contaminant migration from Parcel 29.

#### **4.2.3 Parcel 18**

##### **4.2.3.1 Site Characterization**

Parcel 18 consists of open space and is located in Zone B. No structures currently occupy the property, although Building 961 once occupied the site. The former building was used as an auto service station and wash rack. Several barrels and a hazardous material storage locker were observed on the site during the Basewide EBS site walk, although no staining or evidence of spills were observed. An oil-filled transformer was also observed on site, however no evidence of leakage from the transformer was found (ERM-West, Inc. 1995a). Sanitary and storm sewers traverse the property. The storm sewer on Parcel

18 may have been impacted by the industrial activities of the adjacent Army property of Parcel 901. Contamination from the leaking USTs in Parcel 19 and 29 may have impacted groundwater on Parcel 18.

Based on these issues, Parcel 18 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.2.3.2 Site Investigation Activities**

##### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary systems in Zone B are in good condition and require no repairs. The study, therefore, confirmed that there are no substantial historical cracks or leaks in the sanitary sewer systems in Zone B (Bechtel, 1985). In addition, based on the standard operating procedures for storm sewer maintenance included in the Environmental Baseline Survey Sampling and Analysis Screening Level Report (PRC and U&A 1997b), the storm sewer traversing Parcel 18 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils.

##### ***Potential Contaminant Migration***

The Final UST Investigation and Corrective Measures Study for UST 957 in Parcel 19 indicates that the leaking UST impacted groundwater. However, the same report indicates that the groundwater flow direction in the area is toward the north. Parcel 18 is west of Parcel 19. Based on the UST investigation report, the contamination does not appear to have migrated onto Parcel 18 (ERM-West, Inc. 1995b). Although additional remediation activities are planned for this UST release, no specific investigations are planned for Parcel 18.

Based on a site characterization report prepared in August 1996, soil and groundwater sample analysis from samples collected within Parcel 18, reported the presence of petroleum hydrocarbons. The contamination is suspected of originating from Parcel 29 (PRC 1996b).

#### **4.2.3.3 Parcel Reclassification**

Parcel 18 has been reclassified as ECP Area Type 2-6, since TPH contamination has been detected in soil samples collected on the property. The Navy will conduct further investigations and remediation with respect to the identified TPH contamination.

#### **4.2.4 Parcel 19/Buildings 954, 955, 957, 958**

##### **4.2.4.1 Site Characterization**

Parcel 19 is located in Zone B. No buildings currently exist on site. However, four buildings formerly occupied the property but were demolished. The former buildings were used as automobile maintenance facilities, fueling stations, and hazardous materials and waste storage areas. Parcel 19 has been used to store hazardous materials and its former use as an automobile maintenance facility generated hazardous waste. A known spill associated with the UST on the site occurred at Parcel 19, and remediation activities are on-going.

Based on former UST releases, Parcel 19 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.2.4.2 Site Investigation Activities**

###### ***Underground Storage Tank Release***

UST 957 was removed in 1992. Evidence of soil contamination was observed during the removal. Additional soil and groundwater investigations conducted in 1995 confirmed the TPH contamination at Parcel 19. Further remediation and site investigations are ongoing and will be managed by the Navy's UST program for this area. In addition, the identified contamination from UST releases on Parcel 29 appears to be impacting Parcel 19. Further investigation and remediation will be combined with the investigation of Parcel 29.

###### ***Historical Uses***

As noted in the Basewide EBS, former Buildings 957 and 958 on Parcel 19 were historically used as automobile maintenance facilities.

In February 1996, six soil samples were collected from the parcel at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. No VOCs were detected. No constituents were detected at concentrations exceeding screening criteria.

#### **4.2.4.3 Parcel Reclassification**

Parcel 19 has been reclassified as ECP Area Type 2-6 since TPH contamination has been detected on site. The Navy will conduct further investigations and remediation with respect to the former leaking USTs on the property.

#### **4.2.5 Parcel 21/Building 960**

##### **4.2.5.1 Site Characterization**

Parcel 21, located in Zone B, contains Building 960. The building is one-story high, 3,000 square-feet in size, was constructed in 1942, and currently houses the grounds maintenance shop. Former uses of the building include automobile maintenance activities. Hazardous chemicals (including pesticides) may have been stored in Building 960 and hazardous waste has been generated and stored on site. The contamination from the leaking UST on Parcel 19 may have impacted Parcel 21. Significant staining was observed on the property. In addition, the sanitary sewer line that traverses the parcel is potentially a source of contamination as a result of up-gradient sources.

Parcel 21 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.2.5.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

###### ***Historical Uses***

Building 960 on Parcel 21 was used as an automobile maintenance facility in the past as noted in the Basewide EBS. Significant staining was also observed on the site.

In February 1996, three soil samples were collected from Parcel 21 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. Analytical results were reported at

concentrations below the screening criteria. No metals were detected in the samples at concentrations in excess of the screening criteria. No VOCs or TPH were detected above the detection limits in the samples. No further investigations are planned for this area (PRC and U&A 1997b).

#### ***Potential Contaminant Migration***

During a site investigation performed by ERM-West, Inc., in 1995 (ERM-West, Inc. 1995), soil and groundwater samples were collected from the former UST site (UST 957) in Parcel 19 to characterize the extent of contamination. The *Final UST Investigation and Corrective Measures Study for UST 957 and UST 972* concluded that the groundwater flow direction was toward the north and that the hydrocarbons detected at the site appeared to have migrated only slightly in the direction of groundwater flow. Parcel 21 is located approximately 200 feet west. Although additional remediation activities are planned for Parcel 19, no further investigations are planned for Parcel 21 (ERM-West, Inc. 1995b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 21 was built prior to 1978, Building 960 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 21 has an impervious barrier around the structure and the paint is in good condition with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 21.

#### **4.2.5.3 Parcel Reclassification**

Parcel 21 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

#### **4.2.6 Parcel 22/Building 965**

##### **4.2.6.1 Site Characterization**

Parcel 22 is located in Zone B and contains Building 965. The building is 660 square-feet in size and was most recently used as a housing maintenance shop. The building was used for automobile maintenance activities. The building has also been used for hazardous materials storage and hazardous waste has been generated and stored on site. Battery maintenance activities appear to have occurred on site as noted during the BCT site walk. An oil/water separator associated with a wash rack may also

exist on site. The sanitary sewer line that traverses Parcel 22 is potentially a source of contamination as a result of up-gradient sources. Contamination from leaking USTs in Parcels 19 and 24 may have impacted the site. Building 965 is also known to contain asbestos-containing materials

Based on these issues, Parcel 22 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.2.6.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs.

##### ***Historical Uses***

The Basewide EBS indicates that Building 965 on Parcel 22 has been used as an automobile maintenance facility. Significant staining was observed on the site during the Basewide EBS site walk. Battery maintenance activities may also have occurred on site as noted during the BCT site walk. In February 1996, as part of the screening level sampling program, three soil samples were collected from Parcel 22 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. The maximum concentration of TPH detected in the soil was 510 mg/kg motor oil. None of the samples exceeded final screening criteria for metals. One soil sample contained low levels (0.08 mg/kg) of acetone, a common laboratory contaminant. No other VOCs were detected. No further investigations are planned for this area (PRC and U&A 1997b).

##### ***Oil/Water Separator and Wash Rack***

As noted in the Basewide EBS, an oil/water separator and wash rack may exist on site. However, site walks conducted during the screening sampling program in March 1996 found no evidence of an oil/water separator on Parcel 22. A concrete pad on which vehicles may have been washed was located. A sediment sample was collected from a catch basin near a concrete pad. Maximum concentrations of 151 mg/kg copper, 235 mg/kg lead, 5.8 mg/kg mercury, and 22,000 mg/kg TPH motor oil were detected in the sediment sample. According to the sewer utility figure in the *Field Sampling Workplan*, the catch basin near the concrete pad connects to the sanitary sewer system and not the storm sewer system. The catch basin identified here will be included in the storm drain cleaning effort to be conducted by the Navy.

Appendix C of the Basewide EBS contains the field notes made during the Basewide EBS site walks. No mention of an oil/water separator for Parcel 22 is contained in these notes. However, a separator is noted for Parcel 29. This separator discharges to the sanitary sewer line which ultimately traverses Parcel 22. Based on observations made during the site walk conducted in March 1996 and the review of the previous Basewide EBS site walk field notes, there is no indication that an oil/water separator exists on site.

#### ***Potential Contaminant Migration***

During a site investigation performed by ERM-West, Inc., in 1995 (ERM-West, Inc. 1995), soil and groundwater samples were collected from the former UST site (UST 957) in Parcel 19 to characterize the extent of contamination. The *Final UST Investigation and Corrective Measures Study for UST 957 and UST 972* concluded that the groundwater flow direction was toward the north and that the low levels of hydrocarbons detected at the site appeared to have migrated only slightly in the direction of groundwater flow. Parcel 22 is located approximately 200 feet west of the Parcel 19 contaminant plume. Although additional remediation activities are planned for Parcel 19, no further investigations are planned for Parcel 22 (ERM-West, Inc. 1995b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 22 was built prior to 1978, Building 965 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 22 has an impervious barrier around the structure and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 22.

#### **4.2.6.3 Parcel Reclassification**

Parcel 22 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

## **4.2.7 Parcel 23/Building 969**

### **4.2.7.1 Site Characterization**

Parcel 23 is located in Zone B and contains Building 969. The building is one-story high, 3,000 square-feet in size, was constructed in 1942, and has been used as a warehouse, but may also have been used for automobile maintenance activities. In addition, the building has been used for hazardous materials storage and hazardous waste has been generated and stored on site. The sanitary sewer line that traverses the Parcel is potentially a source of contamination as a result of up-gradient sources. Contamination from leaking USTs in Parcels 19 and 24 may have impacted the site.

Based on these issues, Parcel 23 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

### **4.2.7.2 Site Investigation Activities**

#### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. The study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone B (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### ***Historical Uses***

As noted in the Basewide EBS, Building 969 on Parcel 23 has been used as an automobile maintenance facility in the past. Hazardous materials and wastes may have also been stored on site and significant staining was observed.

In February 1996, eight soil samples were collected from Parcel 23 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. Metals were detected at concentrations less than the screening criteria. The maximum concentration of TPH detected in soil was 510 mg/kg motor oil, which is greater than the final screening criteria (500 mg/kg). The location of this sample was adjacent to Parcel 24, an UST site that received closure from RWQCB with residual

contamination. One soil sample contained 0.07 mg/kg acetone, a known laboratory contaminant. No other VOCs were detected. No further investigations are planned for this area (PRC and U&A 1997b).

#### ***Potential Contaminant Migration***

During a site investigation performed by ERM-West, Inc. in 1995 (ERM-West, Inc. 1995), soil and groundwater samples were collected from the former UST site (UST 957) in Parcel 19 to characterize the extent of contamination. The *Final UST Investigation and Corrective Measures Study for UST 957 and UST 972* concluded that the groundwater flow direction was toward the north and that the low levels of hydrocarbons detected at the site appeared to have migrated only slightly in the direction of groundwater flow. Parcel 23 is located approximately 200 feet west of Parcel 19 contaminant plume. Although additional remediation activities are planned for Parcel 19, no further investigations are planned for Parcel 23 (ERM-West, Inc. 1995b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 23 was built prior to 1978, Building 969 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 23 was noted as having an impervious barrier around the structure. No further evaluation of lead-based paint is required for structures on Parcel 23.

#### **4.2.7.3 Parcel Reclassification**

Parcel 23 has been reclassified as ECP Area Type 2-3 since TPH was detected near screening criteria.

#### **4.2.8 Parcel 24/Building 972**

##### **4.2.8.1 Site Characterization**

Parcel 24, located in Zone B, contains Building 972. The one-story, 18,000 square-foot building was constructed in 1942, and houses maintenance shops, offices, and storage areas. Past uses of Building 972 include automobile maintenance activities and hazardous material storage. The building was and is used for hazardous materials storage and hazardous waste generation and storage. A leaking UST is known to exist on site. Potential contaminant migration from Parcel 29 is suspected. Significant staining was observed on site. In addition, discharges from the former up-gradient industrial uses may have been

released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 24 is therefore considered a potential source of contamination.

Based on these issues, Parcel 24 was classified as a ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.2.8.2 Site Investigation Activities**

##### ***Underground Storage Tank***

UST 972 was removed from Parcel 24 in 1992. Soil and groundwater samples collected during the removal indicated that the UST had leaked. A subsequent site investigation conducted in 1995 further characterized the TPH contamination at the site. A closure letter for this UST site was received from the RWQCB on November 1, 1996.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. The study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone B (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Historical Uses***

Building 972 on Parcel 24 has been used as an automobile maintenance facility. Hazardous materials and wastes may have also been stored on site.

In February 1996, eight soil samples were collected from Parcel 24 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. Several samples contained low levels of acetone, a known laboratory contaminant below screening criteria. No other VOCs were detected. No concentrations were detected above screening criteria. No further investigations are planned for this area (PRC and U&A 1997b).

##### ***Potential Contaminant Migration***

Contamination from the leaking UST on Parcel 29 has impacted Parcel 24. Based on the site characterization report prepared for the former USTs on Parcel 29, the TPH contamination plume extends

from the location of the former USTs on Parcel 29 to the north, across Parcels 24 and 25 and into Parcels 18 and 19 (PRC 1996c).

Further investigation and remediation with respect to the detected TPH contamination from Parcel 29 will be conducted through the Navy's UST program.

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 24 was built prior to 1978, Building 972 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 24 has an impervious barrier around the structure. No further evaluation of lead-based paint is required for structures on Parcel 24.

#### **4.2.8.3 Parcel Reclassification**

Parcel 24 has been reclassified as ECP Area Type 2-6 since TPH compounds were detected on site.

#### **4.2.9 Parcel 25/Building 973**

##### **4.2.9.1 Site Characterization**

Parcel 25 is located in Zone B and contains Building 973. The 2,200 square-foot building was constructed in 1943 and is currently used as a youth recreational facility. Past uses include automobile maintenance activities. The following issues were presented in the Basewide EBS for Parcel 25: small quantities of hazardous materials stored on site; potential hazardous waste generation; contaminant migration from Parcel 29; and the sanitary sewer line. Parcel 25 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.2.9.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone B is in good condition and requires no repairs. The study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone B (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

### ***Historical Uses***

Building 973 on Parcel 25 has been historically used as an automobile maintenance facility. Hazardous materials and wastes may have also been stored on site.

In February 1996, four soil samples were collected from Parcel 25 at depths ranging from 1 foot to 10 feet bgs. The samples were analyzed for metals, TPH, and VOCs. Several samples contained low levels of acetone, a known laboratory contaminant. One sample was reported to have a detected concentration of 0.007 mg/kg toluene; no other VOCs were detected. No constituents were detected at concentrations exceeding the screening criteria. No further sampling activities are required for this area (PRC and U&A 1997b).

### ***Potential Contaminant Migration***

Contamination from the leaking UST on Parcel 29 has impacted Parcel 25. Based on the site characterization report prepared for the former USTs on Parcel 29, the TPH contamination plume extends from the location of the former USTs on Parcel 29 to the north across Parcels 24 and 25 and into Parcels 18 and 19 (PRC 1996c).

Further investigation and remediation with respect to the detected TPH contamination will be conducted through the Navy's UST program.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 25 was built prior to 1978, Building 973 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 25 has an impervious barrier around the structure and the paint is in good condition with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 25.

#### **4.2.9.3 Parcel Reclassification**

Parcel 25 has been reclassified as ECP Area Type 2-6 since TPH contamination was detected on site.

#### **4.2.10 Parcel 28**

##### **4.2.10.1 Site Characterization**

Parcel 28 consists of open space located in Zone B. No structures currently exist on the property. Sanitary and storm sewers traversing the site may have been impacted by up-gradient sources. The storm sewer traversing Parcel 28 is connected to a catch basin near the Parcel 29 service station. In addition, contamination migrating from the leaking UST in Parcel 29 may have impacted the property.

Parcel 28 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.2.10.2 Site Investigation Activities**

###### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc. indicates the sanitary sewer systems in Zone B are in good condition and require no repairs. Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

###### ***Potential Contaminant Migration***

Based on verbal communication with Navy personnel, the contamination plume from Parcel 29 USTs has been defined on the western edge. Analytical results from soil samples collected west of the former USTs were below the detection limit for TPH (Navy 1996). Therefore, TPH contamination migrating from the USTs on Parcel 29 is not suspected of having impacted Parcel 28.

##### **4.2.10.3 Parcel Reclassification**

Parcel 28 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

## **4.2.11 Parcel 29/Building 970**

### **4.2.11.1 Site Characterization**

Parcel 29, located in Zone B, contains a 4,500 square-foot building, Building 970. The building, constructed in 1974, was used as the Navy Exchange Automobile Service Station. Two USTs were removed in 1995, and two additional USTs were removed in 1996. No USTs currently exist on site. Buildings 983, 985, and 986 formerly occupied the property and were used respectively, as a bus shelter, a recreational facility, and a traffic check house. These buildings were demolished between 1958 and 1963.

Building 970 houses two hydraulic lifts and an oil-water separator. Hazardous chemicals and wastes associated with automobile servicing are stored on site. An oil-filled transformer existing on site shows no sign of leakage (ERM West Inc., 1995a). In addition, both sanitary and storm sewer lines suspected of possible contamination traverse the property.

Parcel 29 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

### **4.2.11.2 Site Investigation Activities**

#### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer systems in Zone B are in good condition and require no repairs. The Utility Technical Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer systems in Zone B (Bechtel, 1985). Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

#### ***Historical Uses***

The extent of contamination from leaking USTs on Parcel 29 will be investigated through the Navy's UST program.

In February 1996, 12 soil samples were collected from the automobile maintenance area to assess impacts from activities at the site from sources other than the UST leaks. The samples were collected at

UST leaks. The samples were collected at depths ranging from 1 foot to 10 feet bgs and analyzed for TPH, VOCs, pesticides, and PCBs. Metals were not detected at concentrations above the final screening criteria. A maximum concentration of 15,000 mg/kg TPH as motor oil was detected. The parcel is being evaluated under the Navy's UST program.

### ***Underground Storage Tank***

The Navy removed two gasoline USTs from Parcel 29 in July 1996. The characterization report suggests that contamination from these former USTs may be impacting Parcels 24, 25, 18, and 19. Two additional USTs at Parcel 29 were removed in January 1995. One was a 10,000-gallon tank containing gasoline which was used until 1991, when it failed a tightness test and was taken out of service. The other, was a waste oil UST located on the service station site, on the west side of Building 970. Based on the site characterization report prepared for the site, TPH contamination has been detected in soil and groundwater (PRC 1996c).

Further investigation and remediation with respect to the detected TPH concentrations in soil and groundwater will be conducted through the Navy's UST program.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 29 was built prior to 1978, Building 970 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The buildings on Parcel 29 are planned to be demolished, have an impervious barrier around the structure and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 29.

#### **4.2.11.3 Parcel Reclassification**

Parcel 29 has been reclassified as ECP Area Type 6 since the extent of TPH contamination is under investigation. Further investigations and remediation with respect to the TPH contamination plume from former USTs on site will be conducted by the Navy.

### **4.3            ZONE C            AIR FORCE TRIANGLE ZONE**

#### **4.3.1            Parcel 20/Building 926**

##### **4.3.1.1            Site Characterization**

Parcel 20 is located in the northern portion of Zone C. No buildings have existed on the property since Building 926 (a former supply warehouse) and Building 928 (a former gymnasium) were demolished sometime between 1962 and 1991. As noted in the Basewide EBS, Parcel 20 may have been impacted by a TPH contaminant plume originating at the former UST site in adjacent Parcel 19.

Due to the potential for off-site migration onto the parcel, Parcel 20 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.3.1.2            Site Investigation Activities**

During a site investigation performed by ERM-West, Inc. in 1995 (ERM-West, Inc. 1995), soil and groundwater samples were collected from the former UST site (UST 957) at Parcel 19 to characterize the extent of contamination. The *Final UST Investigation and Corrective Measures Study for UST 957 and UST 972* concluded that the groundwater flow direction was toward the north and that the low levels of hydrocarbons detected at the site appeared to have migrated only slightly in the direction of groundwater flow. Parcel 20 lies to the east of the former UST site. As part of the characterization activities, soil borings and monitoring wells were installed on Parcel 20. Groundwater samples collected from monitoring wells on Parcel 20 exhibited a maximum gasoline concentration of 0.22 mg/L; however, benzene was not present above the detection limit. A maximum concentration of 1.0 mg/kg TPH as gasoline was detected in soil samples collected from Parcel 20; however, benzene was not present above the detection limit. The site investigation report indicates that Parcel 20 has been impacted by the petroleum contamination originating on Parcel 19 (ERM-West, Inc. 1995b). Based on the maximum concentrations of TPH reported on the property, no further actions are planned for Parcel 20. Further investigations and remedial activities for Parcel 19 will be conducted by the Navy's UST program.

Parcel 20 is also downgradient from the Parcel 29 UST site. Detected concentrations of MTBE in wells on Parcel 20 indicate that the impact from Parcel 29 has not yet been defined. Further investigation is

planned. Based on the UST site investigation performed on neighboring Parcels 19 and 29, Parcel 20 appears to have been impacted by the neighboring UST sites.

#### **4.3.1.3 Parcel Reclassification**

Parcel 20 has been reclassified as ECP Area Type 2-6, since impact from the Parcel 29 release has not yet been defined.

#### **4.3.2 Parcel 30**

##### **4.3.2.1 Site Characterization**

Parcel 30 is open space located in Zone C. No structures currently exist on the property. Contamination from the USTs on adjacent Parcels 29 and 19 may have impacted the site.

Based on potential contamination from USTs, Parcel 30 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.3.2.2 Site Investigation Activities**

###### ***Potential Contaminant Migration***

Contamination from the leaking UST on Parcel 19 has migrated onto the northwest corner of Parcel 30. Soil sample results from the site characterization indicated a maximum of 0.01 mg/kg benzene (ERM-West 1995b).

Based on the site characterization conducted for Parcel 29, the contamination plume from the former USTs has not impacted Parcel 30 (PRC 1996c).

##### **4.3.2.3 Parcel Reclassification**

Parcel 30 has been reclassified as ECP Area Type 2-3 based on detected concentrations of TPH from adjacent UST sites on the Parcel. Although further investigation and remediation is planned for the neighboring former UST sites, no further investigation or remediation is planned specifically for Parcel 30.

### **4.3.3 Parcel 42/Building 911**

#### **4.3.3.1 Site Characterization**

Parcel 42 is located in Zone C. Building 911 formerly occupied the property and was demolished prior to 1991. The building was constructed in the 1940s and housed Air Force administration offices. Building 911 was burned to the ground as part of the Novato Fire Department training exercises.

Due to the unconventional building demolition, Parcel 42 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.3.3.2 Site Investigation Activities**

##### ***Unconventional Building Demolition***

In a effort to evaluate the impact of the burned building, Parcel 42 was included in the Final Sampling Workplan for screening level soil analysis.

In February 1996, one surface soil sample was collected in Parcel 42. The sample was analyzed for SVOCs and lead. Analytical results indicated detected concentrations of 106 mg/kg lead and 0.4 mg/kg phenol (a common laboratory contaminant). No other organic constituents were detected. The detected concentration of phenol is below the final screening criteria. The lead result exceeds the final screening criteria but is within the regional background range. No further investigations are planned for this area (PRC and U&A 1997b).

#### **4.3.3.3 Parcel Reclassification**

Parcel 42 has been reclassified as ECP Area Type 3, since elevated concentrations of lead were found in soil samples.

### **4.3.4 Parcel 43/Building 912**

#### **4.3.4.1 Site Characterization**

Parcel 43, located in Zone C, was the former location of Building 912. Building 912 was built in the 1940's and was demolished by fire as a training exercise for the Novato Fire Department prior to 1991.

The building contained classrooms, recreational facilities, quarters and administration. The site was used for a short time as a contractor's storage yard after the demolition of the building. The site walk performed for the Basewide EBS noted heavy staining and several containers of hazardous materials such as diesel and hydraulic fluid. In addition, the Basewide EBS noted a makeshift culvert on site and noted that the sanitary sewer may act as a conduit for contamination from up-gradient sources.

Based on these issues, Parcel 43 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.3.4.2 Site Investigation Activities**

##### ***Unconventional Demolition***

In a effort to evaluate the impact of the burned building and the extent of contamination from the observed staining, Parcel 43 was included in the screening level investigation.

In February 1996, one soil sample was collected in Parcel 43 at the ground surface. The sample was analyzed for SVOCs and lead. No SVOCs were present at concentrations above the detection limits, and the concentration of lead did not exceed screening criteria. No further investigations are planned for this area (PRC and U&A 1997b).

##### ***Heavy Staining***

The culvert and the staining identified in the Basewide EBS were not located during a BCT site walk in February 1996.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone C is in good condition and requires no repairs. The study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone C (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.3.4.3 Parcel Reclassification**

Parcel 43 has been reclassified as ECP Area Type 1 based on the absence of staining, sampling and analysis results, and review of the sewer system.

#### **4.4 ZONE D - KNOLLS HOUSING AND RECREATION ZONE**

##### **4.4.1 Parcel 50/Building 603**

###### **4.4.1.1 Site Characterization**

Parcel 50, located in Zone D, contains a 10,700 square-foot building (Building 603), which is currently used as a chapel. The building was constructed in the 1960's. A railroad spur once ran across the property and small quantities of household hazardous materials, such as cleaning fluids and paints, were observed on the property during the Basewide EBS site walk. However, no staining, or evidence that stored hazardous materials had spilled, was observed during the BCT site walk in February 1996. The BCT agreed that soil samples were not necessary to verify that past chemical storage had not impacted the site.

Since railroad spurs frequently received applications of pesticides greater than what would be considered routine, Parcel 50 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

###### **4.4.1.2 Site Investigation Activities**

###### ***Former Railroad Spur***

Soil sampling activities near the former railroad spur were described in the *Final Sampling Workplan* (ERM-West, Inc. 1996). However, during the BCT site walk, it was determined that contamination resulting from pesticide application would have primarily impacted surface soils; furthermore, these surface soils have most likely been removed to accommodate the new building and extensive landscaping. As a result, soil sampling activities outlined in the *Final Sampling Workplan* for this site were canceled.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 50 was built prior to 1978, Building 603 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 50 was identified as having the paint condition good and no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 50.

#### **4.4.1.3 Parcel Reclassification**

Parcel 50 has been reclassified as ECP Area Type 1 based on the observations made during the BCT site walk and the assessment of non-residential lead-based paint.

#### **4.4.2 Parcel 58/Building 507**

##### **4.4.2.1 Site Characterization**

Parcel 58, located in Zone D, contains a two-story, 6,000 square-foot building, Building 507. The building has been used as a theater since its construction in 1938. The abandoned sanitary sewer line traversing the property may have been a source of contamination from the former medical facilities on Parcel 67, located up-gradient from Parcel 58.

Based on the potential for contaminant release to the environment from the sanitary sewer system, Parcel 58 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.2.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 58 was built prior to 1978, Building 507 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in

Appendix A. The building on Parcel 58 is of Spanish Housing Vintage. No further evaluation of lead-based paint is required for structures on Parcel 58.

#### **4.4.2.3 Parcel Reclassification**

Parcel 58 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*, and the evaluation of non-residential lead-based paint.

#### **4.4.2.4 Parcel 59/Building 504 Site Characterization**

Parcel 59, located in Zone D, contains a one-story, 20,000 square-foot building (Building 504) used as a security office, arts and crafts facility, communications facility, and telephone exchange. The building was constructed prior to 1952 and contains an incinerator used to burn paper. At one time an underground storage tank was mentioned in plans for the site. The sanitary sewer line traversing the site may be a source of contamination originating from the former medical facilities on Parcel 67.

Due to the potential of an underground storage tank on site and the uncharacterized sanitary sewer line, the EBS identified Parcel 59 as a ECP Area Type 7, requiring further investigation.

#### **4.4.2.5 Site Investigation Activities**

##### ***Historic Uses/ Potential UST***

As stated in the Environmental Baseline Survey Sampling and Analysis Screening Level Report, a geophysical investigation was conducted for the area around Building 504 in April 1996 in an attempt to locate the suspected UST. As discussed in Section 2.1.5, no UST was located (PRC and U&A 1997b). In addition, literature searches found no evidence of any UST near Building 504. An empty AST was observed inside the building, but there was no indication that this AST had ever leaked or had ever been used.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D

(Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 59 was built prior to 1978, Building 504 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 59 is planned to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 59.

#### **4.4.2.6 Parcel Reclassification**

Parcel 59 has been reclassified as ECP Area Type 1 based on the absence of an UST, the review of the sewer system, and the assessment of non-residential lead-based paint.

#### **4.4.3 Parcel 61/Building 505**

##### **4.4.3.1 Site Characterization**

Parcel 61, located in Zone D, contains a 117 square-foot building, Building 505. The structure, constructed in 1938, is an electrical switch station. Oil-filled transformers existing on the property show no signs of leakage (ERM-West, Inc. 1995a). Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 61 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system Parcel 61 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.3.2 Site Investigation Activities**

#### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D

(Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.4.3.3 Parcel Reclassification**

Parcel 61 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.4 Parcel 63/Building 513**

##### **4.4.4.1 Site Characterization**

Parcel 63, located in Zone D, contains Building 513. This 4,200 square-foot building, constructed in 1934, has been used as a residential housing unit since its construction. The sanitary sewer traversing the site may be a source of contamination from the former medical facilities on Parcel 67, located up-gradient from Parcel 63.

Based on the potential for contaminant release to the environment from the sanitary sewer system, Parcel 63 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.4.2 Site Investigation Activities**

The Final Sampling Workplan includes a map of the sanitary sewer system at DODHF Novato (ERM-West, Inc. 1996). The map shows that the sanitary sewer line from Parcel 67 does not traverse Parcel 63 as noted in the Basewide EBS. Therefore, potential impacts from past sanitary sewer use do not apply to Parcel 63.

##### **4.4.4.3 Parcel Reclassification**

Based on review of the sewer maps, Parcel 63 has been reclassified as ECP Area Type 1.

#### **4.4.5 Parcel 67/Knolls Housing**

##### **4.4.5.1 Site Characterization**

Parcel 67 consists of the Knolls Housing residential neighborhood located in Zone D. Structures on the parcel include approximately 50 residential housing units, a radio communications facility (Building 549), an aboveground water storage tank, and associated equipment. The residential houses currently on site were constructed in the mid-1980s. Literature reviews and aerial photograph surveys conducted for the area indicate that a medical facility consisting of approximately 18 buildings formerly existed on the property now occupied by the residential housing. These buildings served as storage facilities, administrative offices, quarters, medical and dental offices, and various support facilities including water storage and a heating facility.

Former activities at the medical facilities may have impacted the sanitary sewer line which leads in a southerly direction through several other parcels. Any cracks or breaks in the line could have allowed contaminants generated by the medical facilities to leach into soils on Parcel 67 as well as parcels down gradient.

Two USTs formerly on the property and associated with Buildings 522 and 532 are described in the Basewide EBS. A report entitled Confirmation of Hazardous Wastes for HAFB prepared by Woodward Clyde Consultants in 1987 indicates that three soil samples collected at a depth of 2 feet to 3 feet contained petroleum hydrocarbons at maximum concentrations of 12 mg/kg jet fuel and 70 mg/kg motor oil. During the construction of the current housing facilities on the site, approximately 10 feet to 15 feet of surface soil was graded from the site and used as fill material. Any contamination associated with the former UST was most likely included in the graded material and deposited as fill. The fill was primarily used within Parcel 67 during the construction of the houses. However, some of the soil may have been transported to Parcels 108, 121, and 122 for temporary stockpiling.

Several additional heating oil USTs may have existed in association with the former buildings on Parcel 67. However, interview information included in the Basewide EBS indicates that the heating oil USTs were removed during the construction of Knolls Housing units.

Building 549 houses the radio transmitter and contains an aboveground fuel storage tank supplying emergency generators. The Basewide EBS site walk noted the presence of a 5-gallon container of

gasoline in the building. In addition, significant staining on the concrete pad was observed near the generators.

Finally, contamination may have migrated onto Parcel 67 from the leaking USTs 11A and 11B in Parcel 85 which were removed in 1992.

Due to the above-mentioned issues, Parcel 67 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation

#### **4.4.5.2 Site Investigation Activities**

##### ***Building 522 and 532 USTs***

As described in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs on Parcel 67 do not appear to have resulted in the presence of TPH in soils at concentrations above screening criteria. No further action is required.

##### ***Observed Staining***

During the site walk in February 1996, the BCT observed no cracks or crevices in the concrete in Building 549, where a stain had been previously noted. The absence of cracks indicating that underlying soils were not impacted. The BCT required no sampling in the area.

##### ***Off-site Contaminant Migration***

The *Final UST Investigation and Corrective Measures Study for Former Underground Storage Tank Sites 11, 957, And 972* was prepared by ERM-West, Inc. in December 1995. Analytical results of groundwater samples collected east of the excavation area in January 1995 indicated maximum concentrations of 4.0 mg/L gasoline and 0.13 mg/L benzene. The groundwater gradient was determined to be toward the east, away from Parcel 67. The recent investigations found very low levels of contamination in soil and groundwater samples collected north and west of the excavation (maximum concentration of 1.0 mg/kg TPH as gasoline in soil). Based on the UST removal report, the USTs 11A and 11B have not impacted soils in Parcel 67 to the north and west or Parcel 85.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. The study, therefore,

confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 67 was built prior to 1978, Building 549 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 67 is planned to be demolished, of Spanish Housing Vintage and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 67.

#### **4.4.5.3 Parcel Reclassification**

Parcel 67 has been reclassified as ECP Area Type 2-3 based on literature review, evaluation of non-residential lead-based paint, site walks and the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.6 Parcel 68/Building 525**

##### **4.4.6.1 Site Characterization**

Parcel 68, located in Zone D, contains a 1,350 square-foot building, Building 525. The building, constructed in 1941, has been used as a medical clinic and storage facility. The former USTs on Parcel 67 may have impacted the property. In addition, discharges from former medical facilities located up-gradient on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 68 is, therefore, considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and USTs on Parcel 67, the Basewide EBS identified Parcel 68 as ECP Area Type 7, requiring further investigation.

#### **4.4.6.2 Site Characterization Activities**

##### ***Contaminant Migration from Parcel 67 USTs***

As described in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs in Parcel 67 did not impact soils. Based on this information, no further action is planned.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.4.6.3 Parcel Reclassification**

Parcel 68 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato* and no impact to soils from Parcel 67 USTs.

#### **4.4.7 Parcel 70**

##### **4.4.7.1 Site Characterization**

Parcel 70 is located in Zone D. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 70 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination. An oil-filled transformer exists on the site; this transformer shows no signs of leakage (ERM-West, Inc. 1995a).

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 70 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.4.7.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.4.7.3 Parcel Reclassification**

Parcel 70 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.8 Parcel 71**

##### **4.4.8.1 Site Characterization**

Parcel 71, located in Zone D, includes an amphitheater constructed in 1935. No other structures exist on the site. Two empty containers of Methyl Ethyl Keytone (MEK) (a chemical used as an industrial solvent) were observed on the property during the Basewide EBS site walk. However, no evidence of release, such as a sheen, odors, or stressed vegetation, was observed. It was noted in the Basewide EBS that Parcel 71 could be potentially impacted by contamination from the UST in Parcel 67.

Due to the presence of the empty MEK container and potential contaminant migration from Parcel 67 USTs, Parcel 71 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.8.2 Site Investigation Activities**

###### ***MEK Containers***

The BCT site walk conducted on Parcel 71 in February 1996 observed no staining or other evidence of potential contamination caused by hazardous material storage or disposal. The BCT required no further investigations of the site.

### ***Contaminant Migration from Parcel 67 USTs***

As described in *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs at Parcel 67 did not impact soils around them. Therefore, Parcel 71 does not appear to have been impacted and no further actions are planned.

#### **4.4.8.3 Parcel Reclassification**

Based on the site walk observations and Parcel 67 review, Parcel 71 has been reclassified as ECP Area Type 1.

#### **4.4.9 Parcel 72/Building 531**

##### **4.4.9.1 Site Characterization**

Parcel 72, located in Zone D, contains Building 531, a 4,500 square-foot building constructed in 1942 and used as a day care center and as a chapel. Small quantities of cleaning supplies are stored in Building 531. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 72 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and former chemical storage, Parcel 72 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.9.2 Site Investigation Activities**

###### ***Chemical Storage***

During the walk conducted by the BCT in February 1996, no staining or evidence that the small quantities of hazardous materials stored at the site have impacted Parcel 72 were found. As a result, the BCT did not require sampling in this parcel.

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore,

confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 72 was built prior to 1978, Building 531 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 72 was identified with the paint condition good and with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 72.

#### **4.4.9.3 Parcel Reclassification**

Parcel 72 has been reclassified as ECP Area Type 1 based on the review of the sewer system and the assessment of non-residential lead-based paint.

#### **4.4.10 Parcel 84/Building 577**

##### **4.4.10.1 Site Characterization**

Parcel 84, located in Zone D, contains a one-story, 114 square-foot building (Building 577) used as a utility vault and switching station. The building was constructed in 1956. One oil-filled transformer was observed inside the building. The BCT site walk conducted in February 1996 found no staining or evidence of contamination at Parcel 84 resulting from the oil-filled transformer. This parcel was also potentially affected by the suspected petroleum contamination resulting from the former USTs at Parcel 67.

Based on the potential contaminant migration from Parcel 67, Parcel 84 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.10.2 Site Investigation Activities**

###### ***Contaminant Migration from Parcel 67 USTs***

As described in *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs at Parcel 67 did not impact soils. Therefore, Parcel 84 does not appear to have been impacted and no further actions are planned.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 84 was built prior to 1978, Building 577 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 84 was identified with paint condition good and with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 84.

#### **4.4.10.3 Parcel Reclassification**

Parcel 84 has been reclassified as ECP Area Type 1 based on the Parcel 67 review and the assessment of non-residential lead-based paint.

#### **4.4.11 Parcel 85**

##### **4.4.11.1 Site Characterization**

Parcel 85, located in Zone D, contains a parking area. An UST is known to have released petroleum hydrocarbons on the property. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 85 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on the potential for contaminant release to the environment from the sanitary sewer system and potential contaminant migration, Parcel 85 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.11.2 Site Investigation Activities**

###### ***Contaminant Migration from Parcel 67***

As described in *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs in Parcel 67 do not appear to have impacted soils. Based on this information, no further action is planned.

### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

### ***Underground Storage Tanks***

A known petroleum hydrocarbon release in Parcel 85 was noted in the Basewide EBS from the former USTs 11A and 11B. UST site investigations have detected TPH contamination in soils and groundwater in the area. Further investigations and remedial activities will be conducted by the Navy.

#### **4.4.11.3 Parcel Reclassification**

Parcel 85 has been reclassified as ECP Area Type 2-6 since TPH contamination has been detected on site. The Navy will conduct further investigations and remediation with respect to the former leaking USTs on the property.

#### **4.4.12 Parcel 87/Building 575**

##### **4.4.12.1 Site Characterization**

Parcel 87 is located in Zone D. It is the former location of Building 575, which was demolished prior to 1985. The construction date and former use of the building is unknown. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 87 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 87 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.12.2 Site Investigation Activities**

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore,

confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.4.12.3 Parcel Reclassification**

Parcel 87 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.13 Parcel 88/Building 115**

##### **4.4.13.1 Site Characterization**

Parcel 88, located in Zone D, contains a one-and-a-half story, 20,000 square-foot building (Building 115) that was used as a gymnasium and bowling alley. The building was constructed in 1945. Small quantities of cleaning supplies were stored in the building, and an oil-filled transformer currently existing on site shows no signs of leakage (ERM-West, Inc. 1995a). It is noted in the Basewide EBS that migrating contamination from the former USTs at Parcel 67 and Parcel 85 could have impacted Parcel 88.

Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 88 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

In addition, as noted in the Basewide EBS, an UST was suspected of existing on Parcel 88. A search was conducted through the Navy's UST program for a suspected UST (Tank 115) in Parcel 88 in 1992. Ground penetrating radar was employed to locate the tank, but no tank was found. Under the supervision of the Marin County Office of Waste Management, the investigation was terminated. No further searches or investigations are planned.

Parcel 88 was classified as ECP Area Type 7, requiring further investigation in the Basewide EBS.

#### **4.4.13.2 Site Investigation Activities**

##### ***Contaminant Migration from USTs 11A and 11B***

The *Final UST Investigation and Corrective Measures Study for Former Underground Storage Tank Sites 11, 957, And 972* prepared by ERM-West, Inc. in December 1995 reported analytical results from samples collected during the removal of USTs 11A and 11B from Parcel 85 in 1992. A maximum concentration of 4.0 mg/L gasoline was detected in groundwater samples collected in January 1995 east of the excavation area. The groundwater gradient was determined to be toward the east. Parcel 88 lies to the south of the excavation area. Groundwater samples collected directly south of the excavation were below the detection limit for constituents analyzed. Based on the investigation report, the USTs 11A and 11B have not impacted soils in Parcel 88.

##### ***Contaminant Migration from USTs on Parcel 67***

As described in Environmental Baseline Survey Sampling and Analysis Screening Level Report, the former USTs in Parcel 67 do not appear to have impacted soils. Based on this information, no further action is planned.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 88 was built prior to 1978, Building 115 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 88 was identified with paint condition good and with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 88.

#### **4.4.13.3 Parcel Reclassification**

Parcel 88 has been reclassified ECP Area Type 1 based on review of the sewer system, Parcel 67 review, and the evaluation of non-residential lead-based paint.

#### **4.4.14 Parcel 89/Building 113**

##### **4.4.14.1 Site Characterization**

Parcel 89, located in Zone D, contains indoor racquetball courts in Building 113 which was built in 1994. Parcel 89 could have been adversely impacted by contamination originating from the two USTs (11A and 11B) in Parcel 85. In addition, discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 89 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Due to the potential for contamination from off-site sources and the potential for contaminant release to the environment from the sanitary sewer system, Parcel 89 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.14.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

###### ***Contaminant Migration from USTs 11A and 11B***

The *Final UST Investigation and Corrective Measures Study for Former Underground Storage Tank Sites 11, 957, And 972* prepared by ERM-West, Inc. in December 1995 reported sample analytical results collected during the removal of USTs 11A and 11B from Parcel 85 in 1992. A maximum concentration 4.0 mg/L gasoline was reported for groundwater samples collected in January 1995 east of the excavation area. The groundwater gradient was determined to be toward the east. Parcel 89 lies to the southeast of the excavation area. Maximum concentrations of 5.4 mg/kg gasoline, 17.0 mg/kg diesel, and 0.129 mg/kg BTEX were found in soil samples collected approximately 50 feet southeast of the excavation. Groundwater samples collected directly south of the excavation were below the detection limit for

constituents analyzed. Based on the investigation report, the USTs 11A and 11B have not impacted soils in Parcel 89.

#### **4.4.14.3 Parcel Reclassification**

Parcel 89 has been reclassified as ECP Area Type 1 based on literature reviews and the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.15 Parcel 90/Building 111**

##### **4.4.15.1 Site Characterization**

Parcel 90, located in Zone D, contains Building 111, a two-story, 7,095 square-foot building constructed in 1939 and 1942 and used as a Bachelor Officer's Quarters. A wash rack sign was observed adjacent to the building. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 90 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system and the presence of a wash rack sign, Parcel 90 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.15.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

###### ***Wash Rack Sign Observation***

No drain or evidence of a wash rack were observed at the site during the BCT site walk conducted in February 1996. No further actions are planned.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 90 was built prior to 1978, Building 111 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 90 is planned to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 90.

#### **4.4.15.3 Parcel Reclassification**

Parcel 90 has been reclassified as ECP Area Type 1 based on site walk observations, the results of the *Utility Technical Study for DODHF Novato*, and the evaluation of non-residential lead-based paint.

#### **4.4.16 Parcel 91/Building 108**

##### **4.4.16.1 Site Characterization**

Parcel 91, located in Zone D, was the former location of Building 108 which was demolished in the 1980s. The building was used as a storage warehouse, supply facility, and as a mess hall. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 91 is downgradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 91 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.16.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.4.16.3 Parcel Reclassification**

Parcel 91 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.17 Parcel 92/Building 103**

##### **4.4.17.1 Site Characterization**

Parcel 92, located in Zone D, was the former location of Building 103. The building was used as officer's quarters but was demolished in the early 1990s. The property is currently used as a parking area. During the Basewide EBS site walk, heavy oil staining from automobiles was observed in the parking area from automobiles. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 92 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system and the presence of oil stains, Parcel 92 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.17.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

###### ***Significant Staining***

During the site walk conducted by the BCT in February 1996, oil stains were observed in the parking area. The stains were agreed to be typical of staining associated with parking areas and no further actions were recommended.

#### **4.4.17.3 Parcel Reclassification**

Parcel 92 has been reclassified as ECP Area Type 1 based on site walk observations and the results of the *Utility Technical Study for DODHF Novato*.

#### **4.4.18 Parcel 93/Building 101**

##### **4.4.18.1 Site Characterization**

Parcel 93, located in Zone D, contains a one-story, 120-square-foot electrical transformer vault and switch station (Building 101). The building was constructed in 1932 and enlarged in 1946. An oil-filled transformer was observed within the building, but no evidence of leaking was noted. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 93 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 93 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.18.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone D is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone D (Bechtel 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

###### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 93 was built prior to 1978, Building 101 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 93 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 93.

#### **4.4.18.3 Parcel Reclassification**

Parcel 93 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato* and the assessment of non-residential lead-based paint.

#### **4.4.19 Parcel 96/Building 110**

##### **4.4.19.1 Site Characterization**

Parcel 96, located in Zone D, was the location of former Building 110. The building was used as officer's quarters and was demolished sometime in the late 1970s or early 1980s by explosives. Contractors may have used the property for dumping construction wastes after the building was demolished.

Due to the unconventional building demolition and contractor usage, Parcel 96 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.19.2 Site Investigation Activities**

The *Final Sampling Workplan* recommended that samples be collected from the first six inches of soil in the location of the former Building 110. However, during a site walk conducted in February 1996, the BCT observed that the surface soils had been substantially altered since the building demolition had occurred. As a result, the planned sampling was canceled with the concurrence of the BCT.

##### **4.4.19.3 Parcel Reclassification**

Based on site walk observations made by the BCT, Parcel 96 has been reclassified as ECP Area Type 1.

#### **4.4.20 Parcel 97/Building 104**

##### **4.4.20.1 Site Characterization**

Parcel 97, located in Zone D, was the location of former Building 104. The building was used as an officer's quarters and was demolished sometime in the late 1970s or early 1980s by explosives.

Contractors may have used the property for dumping construction wastes after the building was demolished. In addition, an oily sheen was observed on puddles within the parcel.

Due to the unconventional building demolition, contractor usage, and the observed sheen, Parcel 97 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.4.20.2 Site Investigation Activities**

The *Final Sampling Workplan* recommended that samples be collected from the first six inches of soil in the location of former Building 104. However, during a site walk conducted in February 1996, the BCT observed that the surface soils had been substantially altered since the building demolition had occurred. No evidence of construction wastes were noted during the BCT site walk. In addition, the sheen noted in the Basewide EBS was not observed in subsequent site walks conducted by the BCT in February 1996. As a result, the planned sampling was canceled with the concurrence of the BCT.

#### **4.4.20.3 Parcel Reclassification**

Based on site observations made by the BCT, Parcel 97 has been reclassified as ECP Area Type 1.

#### **4.4.21 Parcel 98/Building 105**

##### **4.4.21.1 Site Characterization**

Parcel 98, located in Zone D, was the location of former Building 105. The building was used as officer's quarters and was demolished sometime in the late 1970s or early 1980s by explosives. Contractors may have used the property for dumping construction wastes after the building was demolished. In addition, an oily sheen was observed on puddles within the parcel.

Due to the unconventional building demolition, contractor usage, and the observed sheen, Parcel 98 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.21.2 Site Investigation Activities**

The *Final Sampling Workplan* recommended that samples be collected from the first six inches of soil in the location of former Building 105. However, during a site walk conducted in February 1996, the BCT

observed that the surface soils had been substantially altered since the building demolition had occurred. No evidence of construction wastes were noted. In addition, the sheen noted in the Basewide EBS was not observed in subsequent site walks conducted by the BCT. As a result, the planned sampling was canceled with the concurrence of the BCT.

#### **4.4.21.3 Parcel Reclassification**

Based on site observations made by the BCT, Parcel 98 has been reclassified as ECP Area Type 1.

#### **4.4.22 Parcel 99/Building 106**

##### **4.4.22.1 Site Characterization**

Parcel 99, located in Zone D, was the location of former Building 106. The building was used as officer's quarters and was demolished sometime in the late 1970s or early 1980s by explosives. Contractors may have used the property for dumping construction wastes after the building was demolished. In addition, an oily sheen was observed on puddles within the parcel.

Due to the unconventional building demolition, contractor usage, and the observed sheen, Parcel 99 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.4.22.2 Site Investigation Activities**

The *Final Sampling Workplan* recommended that samples be collected from the first 6 inches of soil in the location of the former Building 106. However, during a site walk conducted in February 1996, the BCT observed that the surface soils had been substantially altered since the building demolition had occurred. No evidence of construction wastes were noted. In addition, the sheen noted in the Basewide EBS was not observed in subsequent site walks conducted by the BCT in February 1996. As a result, the planned sampling was canceled with the concurrence of the BCT.

##### **4.4.22.3 Parcel Reclassification**

Based on site observations made by the BCT, Parcel 99 has been reclassified as ECP Area Type 1.

## **4.5 ZONE E - FORMER RUNWAY AND RECREATION ZONE**

### **4.5.1 Parcel 107**

#### **4.5.1.1 Site Characterization**

Parcel 107 is open space located in Zone E and contains a baseball diamond. No permanent structures currently exist on the site. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 107 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 107 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.5.1.2 Site Investigation Activities**

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone E is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone E (Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.5.1.3 Parcel Reclassification**

Parcel 107 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

### **4.5.2 Parcel 108**

#### **4.5.2.1 Site Characterization**

Parcel 108 is open space located in Zone E and contains a baseball diamond. No other permanent structures exist on the property. An electrical transformer located on the site showed no signs of leaking. Fill material from Parcel 67 could have been placed in Parcel 108. Discharges from the former medical

facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 108 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Due to the potential for contamination from off-site sources and based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 108 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.5.2.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone E is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone E (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Potentially Contaminated Fill***

As discussed in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, soils excavated from Parcel 67 were found to contain a maximum 70 mg/kg TPH motor oil. There is no indication that soils excavated from Parcel 67 and stockpiled on Parcel 108 would adversely impact the Parcel 108.

#### **4.5.2.3 Parcel Reclassification**

Parcel 108 has been reclassified as ECP Area Type 1 based the results of the Parcel 67 investigation and the *Utility Technical Study for DODHF Novato*.

#### **4.5.3 Parcel 110/Building 251**

##### **4.5.3.1 Site Characterization**

Parcel 110 is open space located in Zone E and contains a 251 square-foot concrete building. The building houses a transformer and four dry electrical switches. No evidence of leaking or staining was noted in the Basewide EBS. Discharges from the former medical facilities on Parcel 67 may have been

released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 110 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 110 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.5.3.2 Site Investigation Activities**

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone E is in good condition and requires no repairs. This Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone E (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 110 was built prior to 1978, Building 251 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 110 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 110.

#### **4.5.3.3 Parcel Reclassification**

Parcel 110 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*, and the evaluation of non-residential lead-based paint.

#### **4.5.4 Parcel 111**

##### **4.5.4.1 Site Characterization**

Parcel 111 is open space located in Zone E. No permanent structures currently exist on the parcel. Contamination known to exist at HAAF could possibly have migrated onto the site via sanitary sewers, storm sewers, or groundwater.

Due to the potential for off-site contaminant migration, Parcel 111 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.5.4.2 Site Investigation Activities**

##### ***Groundwater Contaminant Migration***

Groundwater contamination from HAAF is not suspected to be impacting Parcel 111. The *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* notes that, based on the literature review, the hydraulic gradient at HAAF appears to be directed away from Zone E, towards the east. In addition, the soils throughout the property have been documented as having low hydraulic conductivity and thus, groundwater movement is minimal. As such, groundwater contamination from HAAF does not appear to be migrating toward DODHF Novato.

##### ***Sanitary and Storm Sewers***

A force-main sanitary sewer line traverses Parcel 111 originating on HAAF property. A utility study prepared in 1985 by Bechtel National, Inc. indicates that the sanitary sewer lines at DODHF Novato are in good condition and require no repairs (Bechtel National, Inc., 1985). In addition, based on the standard operating procedures for storm sewer maintenance included in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the storm sewer running near by Parcel 111 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils.

#### **4.5.4.3 Parcel Reclassification**

Parcel 111 has been reclassified as ECP Area Type 1 based on a review of potential impacts from HAAF, the storm sewer system review, and standard operating procedures for storm sewer maintenance.

#### **4.5.5 Parcel 112/Building 191**

##### **4.5.5.1 Site Characterization**

Parcel 112 located in Zone E contains a 1,200 square-foot building (Building 191) constructed in 1934. The building was formerly used as a magazine for storage of arms and ammunition. Contamination

known to exist at HAAF could possibly have migrated onto the site via sanitary sewers, storm sewers, or groundwater.

Due to the potential for off site contaminant migration as well as the history of ordnance storage on site, Parcel 112 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.5.5.2 Site Investigation Activities**

##### ***Groundwater Contaminant Migration***

Groundwater contamination from HAAF is not suspected to be impacting Parcel 112. The *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* notes that, based on the literature review, the hydraulic gradient at HAAF appears to be directed away from Zone E, towards the east. In addition, the soils throughout the property have been documented as having low hydraulic conductivity and thus, groundwater movement is minimal. As such, groundwater contamination from HAAF does not appear to be migrating toward DODHF Novato.

##### ***Sanitary and Storm Sewers***

A force-main sanitary sewer line traverses Parcel 112 originating on HAAF property. A utility study prepared in 1985 by Bechtel National, Inc. indicates that the sewer lines at DODHF Novato are in good condition and require no repairs (Bechtel National, Inc., 1985). As a result, contamination from the sanitary sewer is not suspected in soils on Parcel 112. In addition, based on the standard operating procedures for storm sewer maintenance included in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the storm sewer running near by Parcel 112 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils.

##### ***Ordnance Storage***

Based on a BCT site walk, sampling activities relating to unexploded ordnance were canceled. Building 191, constructed of concrete and brick, is in good condition with no significant cracks or staining. There is no indication that former ordnance storage has impacted the site.

##### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 112 was built prior to 1978, Building 191 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in

Appendix A. The building on Parcel 112 is planned to be demolished, of Spanish Housing vintage and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 112.

#### **4.5.5.3 Parcel Reclassification**

Parcel 112 has been reclassified as ECP Area Type 1 based on review of potential migration from HAAF, review of sewer systems, BCT observations of the site and the evaluation of non-residential lead-based paint.

#### **4.5.6 Parcel 114/Building 193**

##### **4.5.6.1 Site Characterization**

Parcel 114, located in Zone E, contains a 120 square-foot building constructed in 1934. The building was formerly used as a transformer vault and an ammunition magazine. Contamination originating at HAAF may have migrated onto the site via groundwater.

Due to the potential for contaminant migration onto the parcel, as well as the history of ordnance storage on site, Parcel 114 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.5.6.2 Site Investigation Activities**

###### ***Groundwater Contaminant Migration***

Groundwater contamination from HAAF is not suspected to be impacting Parcel 114. The *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* notes that, based on the literature review, the hydraulic gradient at HAAF appears to be directed away from Zone E, to the east. In addition, the soils throughout the property have been documented as having low hydraulic conductivity and thus, groundwater movement is minimal. As such, groundwater contamination from HAAF does not appear to be migrating toward DODHF Novato.

### ***Ordnance Storage***

Based on a BCT site walk, investigation activities for unexploded ordnance were canceled. Building 193, constructed of concrete and brick, is in good condition with no significant cracks or staining. There is no indication that former ordnance storage has impacted the site.

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 114 was built prior to 1978, Building 193 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 114 is planned to be demolished and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 114.

#### **4.5.6.3 Parcel Reclassification**

Parcel 114 has been reclassified as ECP Area Type 1, based on site walk observations, a literature review of HAAF, and the evaluation of non-residential lead-based paint.

#### **4.5.7 Parcel 115**

##### **4.5.7.1 Site Characterization**

Parcel 115 is open space located in Zone E. No buildings currently exist on the site. A small quantity of waste motor oil was observed on the site during the Basewide EBS site walk, but no signs of leakage were noted. In addition, oil-filled transformers observed on site show no signs of leakage. As noted in the Basewide EBS, contamination originating at HAAF may have migrated onto the property via sanitary sewer, storm sewer, and groundwater.

Due to the potential for off-site contaminant migration, Parcel 115 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.5.7.2 Site Investigation Activities**

###### ***Groundwater Contaminant Migration***

Groundwater contamination from HAAF is not suspected to be impacting Parcel 115. The *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* notes that, based on the literature review, the hydraulic gradient at HAAF appears to be directed away from Zone E, towards the

east. In addition, the soils throughout the property have been documented as having low hydraulic conductivity and thus, groundwater movement is minimal. As such, groundwater contamination from HAAF does not appear to be migrating toward DODHF Novato.

### ***Sanitary and Storm Sewers***

A force-main sanitary sewer line traverses Parcel 115 originating on HAAF property. A utility study prepared in 1985 by Bechtel National, Inc. indicates that the sewer lines at DODHF Novato are in good condition and require no repairs (Bechtel National, Inc., 1985). As a result, contamination from the sanitary sewer is not suspected in soils on Parcel 115. In addition, based on the standard operating procedures for storm sewer maintenance included in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the storm sewer running near by Parcel 115 is not expected of having cracks or breakages, and no contamination is suspected in surrounding soils.

#### **4.5.7.3 Parcel Reclassification**

Parcel 115 has been reclassified as ECP Area Type 1 based on HAAF literature review, and review of sewer system.

## **4.6 ZONE F - SPANISH HOUSING ZONE**

### **4.6.1 Parcel 56/Building 550**

#### **4.6.1.1 Site Characterization**

Parcel 56 is located in Zone F, adjacent to Army-owned property which reportedly contains a number of USTs. The site is used as a picnic area and contains a 123 square-foot latrine structure built in 1933 (Building 550). The potential exists for contamination to migrate from the neighboring Army-owned property onto Parcel 56.

Due to the concern of contaminant migration from neighboring property, Parcel 56 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.6.1.2 Site Investigation Activities**

The Final Sampling Workplan noted that site walks had found no indication of industrial uses of neighboring properties. The adjacent properties owned by the Army appeared to be residential. In addition, a search was conducted by Woodward Clyde Consultants for potential USTs on neighboring Army property and none were found (ERM-West, Inc. 1996). As a result, no samples were recommended in the *Final Sampling Workplan*.

#### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 56 was built prior to 1978, Building 550 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 56 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 56.

#### **4.6.1.3 Parcel Reclassification**

Parcel 56 has been reclassified as ECP Area Type 1 based on site walk observations, an UST search as noted in the *Final Sampling Workplan* (ERM-West, Inc. 1996), and the evaluation of non-residential lead-based paint.

#### **4.6.2 Parcel 66/Buildings 551 and 552**

##### **4.6.2.1 Site Characterization**

Parcel 66, located in Zone F, contains two buildings. Building 551 was constructed in 1933 and has been used exclusively as a gas meter and electrical switch station. Building 552, constructed in 1933, was also used as an electrical switching station. From 1986 to 1991, Building 552 was used to store PCB-containing transformers as part of the Navy's PCB removal program. Therefore, the parcel was classified in the Basewide EBS as ECP Area Type 7, requiring further investigation.

##### **4.6.2.2 Site Investigation Activities**

#### ***Historical Uses***

The two buildings on Parcel 66 are known to have stored PCB-containing transformers. No evidence of staining was observed during the Basewide EBS site walk.

In February 1996, as part of the screening level sampling program, two surface soil samples were collected. The samples were analyzed for TPH, pesticides, and PCBs. No further sampling activities are required for this area (PRC and U&A 1997b).

#### ***Non-Residential Lead-Based Paint***

Since the buildings on Parcel 66 were built prior to 1978, Buildings 551 and 552 were evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The buildings on Parcel 66 are of Spanish Housing vintage. No further evaluation of lead-based paint is required for structures on Parcel 66.

#### **4.6.2.3 Parcel Reclassification**

Based on soil sample results and an assessment of non-residential lead-based paint, Parcel 66 has been reclassified as ECP Area Type 2-3.

#### **4.6.3 Parcel 80**

##### **4.6.3.1 Site Characterization**

Parcel 80 consists of open space located in Zone F. No structures currently exist on the property. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 80 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 80 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.6.3.2 Site Investigation Activities**

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone F is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone F (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.6.3.3 Parcel Reclassification**

Parcel 80 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.6.4 Parcel 81**

##### **4.6.4.1 Site Characterization**

Parcel 81 consists of open space and a partially paved lot, located in Zone F. Discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 81 is down-gradient from Parcel 67, and is therefore, considered a potential source of contamination.

Based on potential for contaminant release to the environment from the sanitary sewer system, Parcel 81 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.6.4.2 Site Investigation Activities**

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone F is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone F (Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

##### **4.6.4.3 Parcel Reclassification**

Parcel 81 has been reclassified as ECP Area Type 1 based on the results of the *Utility Technical Study for DODHF Novato*.

#### **4.6.5 Parcel 86**

##### **4.6.5.1 Site Characterization**

Parcel 86, located in Zone F, is the traffic circle at the intersection of San Jose Drive and San Pablo Avenue. No structures currently exist on this parcel. A large prehistoric archaeological site containing Native American burials once existed in the immediate vicinity but was destroyed by construction in 1932. Though unlikely, cultural remains could potentially be discovered during construction. Parcel 86 may have been impacted by USTs in the adjacent Parcel 67. In addition, discharges from the former medical facilities on Parcel 67 may have been released to the environment through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 86 is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Due to the potential for contamination through cracks in the sanitary sewer as well as potential contaminant migration from former USTs in Parcel 67, Parcel 86 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.6.5.2 Site Investigation Activities**

###### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone F is in good condition and requires no repairs. This study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone F (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

###### ***Contaminant Migration from Parcel 67 USTs***

As described in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs in Parcel 67 do not appear to have impacted soils. Therefore, Parcel 86 has not been impacted, and no further actions are planned.

##### **4.6.5.3 Parcel Reclassification**

Parcel 86 has been reclassified as ECP Area Type 1 based on the results of the Parcel 67 review and the results of the *Utility Technical Study for DODHF Novato*.

#### **4.6.6 Parcel 95/Building 201**

##### **4.6.6.1 Site Characterization**

Parcel 95, located in Zone F, contains a 21,328 square-foot building, Building 201. The building, constructed in 1934, has been used as bachelor officer's quarters. Several vent and fill pipes normally associated with USTs were observed on the property near Building 201. Parcel 95 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.6.6.2 Site Investigation Activities**

###### ***Unknown UST***

The Navy's UST program investigated the potential UST on Parcel 95. Based on communications with Navy personnel, no UST nor evidence that an UST ever existed on the site was located. No further investigations are planned (Navy 1996).

###### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 95 was built prior to 1978, Building 201 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 95 is of Spanish Housing vintage and the paint condition is good with no paint chips. No further evaluation of lead-based paint is required for structures on Parcel 95.

##### **4.6.6.3 Parcel Reclassification**

Parcel 95 has been reclassified a ECP Area Type 1 based on site investigations, and the evaluation of non-residential lead-based paint.

#### **4.6.7 Parcel 104/Building 203**

##### **4.6.7.1 Site Characterization**

Parcel 104, located in Zone F, contains Building 203, a 22,294 square-foot building historically used as a community center, library, office space, and Officer's Club. An UST is apparently located along the south side of the building. An oil-filled transformer existing on site shows no sign of leakage (ERM

West Inc., 1995a). Parcel 104 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.6.7.2 Site Investigation Activities**

##### ***Underground Storage Tanks***

Two USTs were removed from the area in May 1996. Based on verbal communication with the Navy, TPH contamination was detected in soil samples collected from the UST excavation (Navy 1996). The Navy's UST program will perform any additional required investigations and remediation of the area.

#### **4.6.7.3 Parcel Reclassification**

Parcel 104 has been reclassified as ECP Area Type 2-6 since TPH contamination has been detected on site.

#### **4.6.8 Parcel 105A/ Spanish Housing**

##### **4.6.8.1 Site Characterization**

Parcel 105 has been divided into two separate parcels to expedite transfer: 105A and 105B. Parcel 105A consists of the Spanish Housing complex and is located in Zone F. Parcel 105B is also located in Zone F. Figure 3-1 delineates the boundaries for parcels 105A and 105B. Parcel 105B is described in below.

The Spanish Housing complex, located in Parcel 105A, is comprised of one and two story units constructed between 1933 and 1934. During the site walk conducted for the Basewide EBS, oil-filled transformers on site showed no signs of leakage (ERM-West, Inc. 1995a). In addition, waste oil stored in containers in the backyards of some units was noted in the Basewide EBS. However, the oil observed was a small quantity and appeared to be a one-time occurrence. No further investigations were recommended in the Basewide EBS.

The following issues of concern were identified in the Basewide EBS for Parcel 105A: lead-based paint on residences, potential contaminant migration, and possible impact from stockpiled fill material originating from Parcel 67. As a result of the issues, Parcel 105 was identified as ECP Area Type 7, requiring further information. This section describes those issues pertaining to the newly delineated Parcel 105A.

#### **4.6.8.2 Site Investigation Activities**

##### ***Contaminant Migration***

As described in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, contamination from the former USTs on Parcel 67 does not appear to have impacted surrounding properties.

##### ***Possibly Contaminated Fill***

As discussed in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, soils excavated from Parcel 67 were found to contain low levels of petroleum hydrocarbons. The soil samples collected near the former USTs contained a maximum concentration of 70 mg/kg TPH as motor oil. There is no indication that soils excavated from Parcel 67 and stockpiled on Parcel 105A would adversely impact the property.

##### ***Lead-Based Paint***

Lead-based paint was identified in the Spanish Housing complex and reported in the Lead Management Plan (PWC 1996b). The report includes analytical results for lead contained in dust samples, soil samples, and paint samples collected in 1995. The report identifies hazards and recommends short-term response actions for the lead-based paint observed as damaged. However, no hazards or response actions based on the analytical results from the dust and soil samples are identified for the Spanish Housing complex.

#### **4.6.8.3 Parcel Reclassification**

Based on site walk observations and a literature review, Parcel 105A has been reclassified as ECP Area Type 1.

#### **4.6.9 Parcel 105B/Railroad Spur**

##### **4.6.9.1 Site Characterization**

Parcel 105 has been divided into two parcels to expedite transfer. Parcel 105B contains the railroad spur in the northern corner of the property in Zone F. No other buildings exist on the newly defined parcel. Discharges from the former medical facilities on Parcel 67 may have been released to the environment

through historical leaks and cracks in the sanitary sewer lines. The sanitary sewer line traversing Parcel 105B is down-gradient from Parcel 67, and is therefore considered a potential source of contamination.

Past pesticide usage and potential contaminant migration from Parcel 67 were noted in the Basewide EBS as issues of concern. As a result, Parcel 105 was identified as ECP Area Type 7, requiring further information. This section describes those issues pertaining to the newly delineated Parcel 105B.

#### **4.6.9.2 Site Investigation Activities**

##### ***Railroad Spur***

In February 1996, as part of the screening level sampling program, five soil samples were collected within 6 inches of the surface. The samples were analyzed for TPH, SVOCs, pesticides, lead, and arsenic. The sample analysis reported elevated concentrations of lead and arsenic, residual pesticides, and TPH as motor oil. Further investigation was recommended by the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*.

##### ***Contaminant Migration from Parcel 67***

As described in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, the former USTs in Parcel 67 do not appear to have impacted soils. Based on this information, no further action is planned.

##### ***Sanitary Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone F is in good condition and requires no repairs. This Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone F (Bechtel,1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

#### **4.6.9.3 Parcel Reclassification**

Parcel 105B has been reclassified ECP Area Type 6, based on detected concentrations and planned follow-up sampling.

#### **4.6.10 Parcel 121**

##### **4.6.10.1 Site Characterization**

Parcel 121 is open space located in Zone F. Fill material from the Hillside Housing area (Parcel 65A) and the Knolls Housing area (Parcel 67) could have been stockpiled on Parcel 121. As a result, Parcel 121 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.6.10.2 Site Investigation Activities**

###### ***Potentially Contaminated Fill***

As discussed in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, soils excavated from Parcel 67 were found to contain low levels of petroleum hydrocarbons. The soil samples collected near the former USTs contained a maximum concentration of 70 mg/kg motor oil. Based on these findings, there is no indication that soils excavated from Parcel 67 and stockpiled on Parcel 121 would have adversely impacted the property.

The Basewide EBS gives no indication that soils originating from the Hillside Housing area would be contaminated. Therefore, soils excavated from the Hillside Housing area and stockpiled on Parcel 121 would not be expected to adversely impact the property.

##### **4.6.10.3 Parcel Reclassification**

Based on literature reviews, Parcel 121 has been reclassified as ECP Area Type 1.

#### **4.6.11 Parcel 122**

##### **4.6.11.1 Site Characterization**

Parcel 122 is open space located in Zone F. Fill material from Parcel 67 could have been transported to Parcel 122. As a result, Parcel 122 was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

#### **4.6.11.2 Site Investigation Activities**

As discussed in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report*, soils excavated from Parcel 67 were found to contain low levels of petroleum hydrocarbons. The soil samples collected near the former USTs contained a maximum concentration of 70 mg/kg motor oil. There is no indication that soils excavated from Parcel 67 and stockpiled on Parcel 122 would have adversely impacted the property.

#### **4.6.11.3 Parcel Reclassification**

Based on literature reviews, Parcel 122 has been reclassified as ECP Area Type 1.

### **4.7 ZONE G - CAPEHART HOUSING ZONE**

#### **4.7.1 Parcel 54/Building 1000**

##### **4.7.1.1 Site Characterization**

Parcel 54, located in Zone G, contains Building 1000. The building, constructed in 1948, is used for office space. A 5-gallon container of lubrication oil was observed on the site, as well as an oil-filled transformer. The Basewide EBS site walk found no staining or other evidence of contamination at Parcel 54 resulting from the oil-filled transformer on site.

Due to the observed oil container on site, Parcel 54 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.7.1.2 Site Investigation Activities**

###### ***Chemical Storage***

In February 1996, as part of the screening level sampling program, one sample was collected from Parcel 54 at a depth of six inches. The sample was analyzed for TPH. A maximum concentration of 610 mg/kg TPH of motor oil was detected. Further sampling activities are planned for this area (PRC and U&A 1997b).

### ***Non-Residential Lead-Based Paint***

Since the building on Parcel 54 was built prior to 1978, Building 1000 was evaluated for potential soil lead hazards as a result of the use of lead-based paint. The results of this evaluation are presented in Appendix A. The building on Parcel 54 is planned to be demolished. No further evaluation of lead-based paint is required for structures on Parcel 54.

#### **4.7.1.3 Parcel Reclassification**

Based on soil sampling and site walk observations, Parcel 54 has been reclassified as ECP Area Type 2-6.

#### **4.7.2 Parcel 55**

##### **4.7.2.1 Site Characterization**

Parcel 55, located in Zone G, contains several residential buildings. The storm sewer traversing the site may be a source of contamination from up-gradient sources. In addition, the contamination plume from the adjacent Parcel 29 could have impacted Parcel 55.

Based on the potential for contaminant release to the environment from the storm sewer system and potential contamination from Parcel 29, Parcel 55 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.7.2.2 Site Investigation Activities**

###### ***Storm Sewer***

Utility maps show that the storm sewer in Parcel 55 does not originate or traverse Parcel 29 as indicated in the Basewide EBS, but rather originates in a residential area (ERM-West, Inc. 1996a, Figure 7-1). Therefore, contamination from up-gradient industrial sources is not expected, and no further investigations are required. However, based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

### ***Contaminant Migration***

Based on verbal communication with Navy personnel, the southern edge of the contamination plume on Parcel 29 has been defined. The inferred groundwater gradient in the area is toward the north. Analytical results of soil samples collected south of the former USTs did not indicate the presence of TPH above the detection limit (Navy 1996). Therefore, TPH contamination migrating from the USTs on Parcel 29 is not suspected of having impacted Parcel 55.

#### **4.7.2.3 Parcel Reclassification**

Parcel 55 has been reclassified as ECP Area Type 6 since the parcel is part of the storm sewer cleaning effort.

#### **4.7.3 Parcel 64**

##### **4.7.3.1 Site Characterization**

Parcel 64 is an open space property bordering a creek on the western-most edge of Zone G. An empty 55-gallon drum was observed on the creek bank, indicating that the site may have been impacted by the drum storage facility located on the neighboring Parcel 907. In addition, it is noted in the Basewide EBS that discharges from the gas station on Parcel 29 to the storm sewer lines may have impacted Parcel 64. The storm sewer line traversing Parcel 64 is, therefore, considered a potential source of contamination.

Due to the presence of an empty 55-gallon drum on site and the storm sewer line, Parcel 64 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.7.3.2 Site Investigation Activities**

###### ***Observed 55-Gallon Drum***

During the site walk conducted by the BCT in February 1996, it was noted that the 55-gallon drum identified in the Basewide EBS was on the opposite side of the creek, which is Parcel 907 and is not Navy-owned. The creek makes up the western-most boundary of Parcel 64. Based on these observations, no further investigations are required.

### ***Storm Sewer***

Utility maps show that the storm sewer in Parcel 64 does not originate or traverse Parcel 29 as indicated in the Basewide EBS, but rather originates in a residential area (ERM-West, Inc. 1996a, Figure 7-1). Therefore, contamination from up-gradient industrial sources is not likely, and no further investigations are required. However, based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

#### **4.7.3.3 Parcel Reclassification**

Parcel 64 has been reclassified as ECP Area Type 6 based on parcel being a part of the storm sewer cleaning effort.

#### **4.7.4 Parcel 65A/Hillside Housing**

##### **4.7.4.1 Site Characterization**

Parcel 65 has been divided into two parcels to expedite transfer: Parcels 65A and 65B. Parcel 65A consists of the Hillside Housing residential neighborhood and adjacent open space in Zone G. The Hillside Housing area was constructed in the late 1980s. Oil-filled transformers observed on site showed no signs of leakage (ERM West Inc., 1995a). Lead-based paint surveys had not been conducted on the housing units at the time of the Basewide EBS.

Due to the lack of information regarding lead-based paint, Parcel 65 a was classified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.7.4.2 Site Investigation Activities**

###### ***Lead-Based Paint***

Based on the date of construction (late 1980s), the Hillside Housing area is not suspected of containing lead-based paint. However, a *Lead Management Plan* was prepared for the area in 1996 (PWC, 1996). The report includes analytical results for lead in dust and soil samples. The report identifies no hazards or response actions for the Hillside Housing area with respect to lead-based paint.

#### **4.7.4.3 Parcel Reclassification**

Parcel 65A has been reclassified as ECP Area Type 1, based on results from the lead-based paint survey.

#### **4.7.5 Parcel 65B/Capehart Housing**

##### **4.7.5.1 Site Characterization**

Parcel 65 has been divided into two parcels to expedite transfer: Parcel 65A and 65B. Parcel 65B consists of the Capehart Housing residential neighborhood in Zone G. The housing was built in the late 1950s and early 1960s. There is a possibility that there is lead-based paint on the buildings and contaminant migration from the Parcel 29 USTs.

Due to the above-mentioned issues, Parcel 65B was identified as ECP Area Type 7 in the Basewide EBS, requiring further information.

##### **4.7.5.2 Site Investigation Activities**

###### ***Sanitary and Storm Sewer***

The *Utility Technical Study for DODHF Novato*, completed in 1985 by Bechtel National, Inc., indicates the sanitary sewer system in Zone F is in good condition and requires no repairs. This Study, therefore, confirms that there are no substantial historical cracks or leaks in the sanitary sewer system in Zone F (Bechtel, 1985). No further investigations or sampling activities are required for the sewer systems (PRC and U&A 1997b).

Based on detected concentrations in sediment samples as documented in the *Final Environmental Baseline Survey Sampling and Analysis Screening Level Report* (PRC and U&A 1997b), the Navy is implementing a storm drain cleaning effort to remove residual sediment.

###### ***Contaminant Migration***

Based on verbal communication with Navy personnel, the southern edge contamination plume on Parcel 29 has been defined. Analytical results from soil samples collected south of the former USTs are below the detection limit for TPH (Navy 1996). Therefore, TPH contamination migrating from the USTs on Parcel 29 is no longer suspected of having impacted Parcel 65B.

### ***Lead-Based Paint***

A lead-based paint survey has been conducted. Lead has been detected in the soils around the housing units at concentrations greater than the 400 mg/kg Housing and Urban Development (HUD) guidelines.

#### **4.7.5.3 Parcel Reclassification**

Parcel 65B remains an ECP Area Type 7 due to concerns of how to address elevated concentrations lead in soil.

#### **4.7.6 Parcel 73/Capehart Housing**

##### **4.7.6.1 Site Characterization**

In the Basewide EBS Parcel 73 was categorized as BRAC Area Type 1. Since then, the parcel has not received formal DTSC concurrence. This parcel is part of the Capehart Housing area and lead-based paint release to soil has become a concern. Due to this concern Parcel 73 is now recognized as an ECP Area Type 7.

##### **4.7.6.2 Site Investigation Activities**

### ***Lead-Based Paint***

A lead-based paint survey has been conducted. Lead has been detected in the soils around the housing units at concentrations greater than the 400 mg/kg HUD guidelines.

#### **4.7.6.3 Parcel Reclassification**

Parcel 73 has been reclassified as an ECP Area Type 7, due to elevated lead concentrations in soil.

#### **4.7.7 Parcel 76/Capehart Housing**

##### **4.7.7.1 Site Characterization**

In the Basewide EBS Parcel 76 was categorized as BRAC Area Type 1. Since then, the parcel has not received formal DTSC concurrence. This parcel is part of the Capehart Housing area and lead-based paint in soil has become a concern. Due to this concern Parcel 76 is now recognized as an ECP Area Type 7.

#### **4.7.7.2 Site Investigation Activities**

##### ***Lead-Based Paint***

A lead-based paint survey has been conducted. Lead has been detected in the soils around the housing units at concentrations greater than the 400 mg/kg HUD guidelines.

#### **4.7.7.3 Parcel Reclassification**

Parcel 76 has been reclassified as an ECP Area Type 1.

### **4.8 ZONE H - RAFAEL VILLAGE HOUSING ZONE**

#### **4.8.1 Parcel 126**

##### **4.8.1.1 Site Characterization**

Parcel 126, located in Zone H, contains a landscaping staging area on a concrete slab which was formerly the foundation of Building 1098. A 55-gallon drum of waste oil was observed on the site along with a flammable storage cabinet. As a result, Parcel 126 was identified as ECP Area Type 7 in the Basewide EBS, requiring further investigation.

##### **4.8.1.2 Site Investigation Activities**

In February 1996, two soil samples were collected from the landscaping staging area of Parcel 126 at depths of 6 inches and 3 feet bgs. The samples were analyzed for TPH-purgeables, TPH-extractables, pesticides, PCBs, and BTEX. A maximum concentration of 16 mg/kg TPH as motor oil was detected. No other constituents were detected at concentrations above the detection limits. No further sampling activities are planned for this area (PRC and U&A 1997b).

##### **4.8.1.3 Parcel Reclassification**

Parcel 126 has been reclassified as ECP Area Type 2-3 based on sampling and analysis results.

## REFERENCES

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- U.S. Department of the Navy (Navy). 1996. Personal communication with John Pfister of EFA-West Underground Storage Tank Program, October 10, 1996.
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**APPENDIX A**

**ASSESSMENT REPORT OF NONRESIDENTIAL BUILDINGS FOR  
POTENTIAL SOIL LEAD HAZARDS FROM LEAD-BASED PAINT AT THE  
DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA**

**ASSESSMENT REPORT OF  
NONRESIDENTIAL BUILDINGS  
FOR  
POTENTIAL SOIL LEAD HAZARDS  
FROM LEAD-BASED PAINT  
AT THE  
DEPARTMENT OF DEFENSE  
HOUSING FACILITY (DODHF)  
NOVATO, CALIFORNIA**

**APRIL 1997**

**PREPARED BY  
ENGINEERING FIELD ACTIVITY WEST  
SAN BRUNO, CALIFORNIA**

## BACKGROUND

In 1989, the U.S. Navy designated the Department of Defense Housing Facility Novato (DODHF Novato) in Marin County, California for closure under the Base realignment and Closure Act of 1990. The goal of the BRAC program is to transfer property and facilities of closing installations to the community as expeditiously as possible and with minimal impact on the local economy.

DODHF Novato consists of approximately 533 acres of Navy owned land on two sites. The Main Site includes 4 neighborhoods of military family housing, a commissary, a post exchange, community service area, a bowling alley, officer club and recreational fields. Offsite there is an additional neighborhood of military family housing located one mile north west of the Main Site.

It is the responsibility of the BRAC Cleanup Team to assess the environmental status of the property. This assessment is to assure that there is sufficient information and data available to support an Finding of Suitability of Transfer (FOST). One area that should be properly addressed is the release of lead to the soil from lead-based paint (LBP). It is Navy policy to comply with the Residential Lead-Based Paint Hazard Reduction Act of 1992. This Act deals with residential structures. The BCT felt that there should also be an assessment for the potential of lead hazards in soils adjacent to non-residential structure. The objective of this investigation is to conduct and document a preliminary assessment of non-residential structures to determine the potential of lead hazards in soil due to LBP.

## DISCUSSION

Lead has been used in paint up until 1978, when it was banned for residential use. Therefore those structures built prior to 1978 may contain lead-based paint and may have released material into the surrounding ground surface.

A visual survey of all the nonresidential buildings at DODHF Novato was conducted on 3 March 1997. The results of this survey for each of the buildings are included in Appendix B of this report. The purpose of the visual survey was to document the condition of the exterior paint of the structures and to document the presents of paint chips on the ground adjacent to the structures. This information was used to assess potential lead hazard in the soil at each of the structures from lead-based paint.

There were four categories which would not pose a soil lead hazard adjacent the structure. These four categories are 1) The structure was constructed after 1978; 2) There is an impervious barrier around the structure (i.e. asphalt concrete); 3) The structure is of the same vintage as the houses in the Spanish Housing neighborhood; and 4) The current condition of the paint is good and there are no visible paint chips in the soil around the structure. In addition, a fifth category is the demolition of the structure prior to reuse. This would eliminate any potential soil lead hazards that might have existed prior to demolition. Why each of these five categories would not pose a soil lead hazard are discussed in detail as follows:

1) The structure was constructed after 1978

The use of lead in paint for residential and consumer use was ban in 1978. Therefore structures built after 1978 would not have received lead-based paint. These structures would not have the potential to pose a health risk due to paint chips from the structure collecting in the soil.

2) The structure will be demolished with no reuse

At the Hamilton Army Air Field (HAAF), the Corps of Engineers conducted an evaluation of five building locations. The purpose was to perform a screening level sampling and to evaluate if there was a potential impact to surface soils for lead from LBP around former and existing buildings. This evaluation is summarized in the Corps of Engineering's report titled Preliminary Assessment Report for GSA Phase II Sale Area dated Oct 1996. Based on the results of this screening level sampling, and the findings from other studies performed at HAAF, the report concluded there does not appear to be a significant impact at HAAF for lead in the soil due to LBP.

The former location for building 707 was one area that was sampled. The result of the soil sample at this area was 18.7 mg/Kg of lead, which was well below PRGs and the GSA cleanup level for lead. The conclusion reached by the Army from this example was that there would be no impact from lead in the soil if the building is to be demolished as was the case with building 707. This is what is being concluded, as well, for those buildings at DODHF that are scheduled for demolition. Those buildings being demolished would no longer not have the potential to pose a health risk.

In Appendix A there is the confirming letter dated April 11, 1997 from the City of Novato listing those non-residential buildings that will be demolished with the implementation of the Reuse Plan for DODHF Novato. Those same buildings are also indicated in Table 1.

3) There is an impervious barrier around the structure

If there is an impervious barrier around the structure, any paint chips generated from previous paint removal operations or from deteriorating paint on the structure would have long since been blown away by the wind or have been washed away during rainy periods. There would be no lead hazards existing near the structures and therefore the adjacent area would not have the potential to pose a health risk from lead.

4) The structure is the same vintage as the Spanish Housing neighborhood

Soil testing for lead was conducted by the Navy on a representative group of homes in the Spanish Housing Area and on the Community Center (CDC). The Community Center was built at the same time as Spanish housing. The results for the lead concentrations from all the soil samples were all below action levels and would not pose a health risk. These test results are documented in Lead Management Plan, CDC DOD Novato, Novato, California and the Lead Management Plan, Spanish Housing, Novato, California both dated January 1996 and prepared by Navy Public Works Center Norfolk, Virginia. Other structures in the area of Spanish housing, which would have been built at the same time, would also have been painted and maintained the same. Many have the same exterior surface, though some have been remodeled with wood siding. It was concluded that these other structures would exhibit the same characteristics as the Spanish housing and the Community Center. Therefore they also would not have the potential to pose a health risk from lead in the soil.

5) The current paint on the structure is in good condition and there were no visible paint chips observed in the soil adjacent the structure during the site investigation

The Navy conducted soil sampling for lead at several housing units in the Capehart housing neighborhood. The results of this soil sampling are documented in Lead Management Plan, Capehart DOD Novato, Novato, California dated January 1996 prepared by Navy Public Works Center, Norfolk Virginia. Typically those housing units that had elevated, potentially hazardous

level of lead in the adjacent soil also had several visible paint chips on the ground next to the structure. Those that had low, nonhazardous levels of lead, had very little or no visible paint chip.

From the assessment conducted by the Corps of Engineer discussed in Category #2 above, two of the buildings (Buildings 646 and 624) at HAAF that were sampled lead also had visible paint chips. The results for lead in the soil from the samples taken at these two buildings were below or near GSA cleanup levels. It was therefore concluded by the Army that the area does not have a significant impact due to LBP.

From this analogy, it was concluded that if no paint chips were observed around structures during the site visit of March 3, 1997, that those areas would not have the potential to pose a health risk

## CONCLUSION

Table 1 summarizes the investigation. Only buildings 801 and 802 did not meet one of the five categories. These two buildings are planned to be used for commercial use as storage buildings. Very few paint chips were noted during the visual inspection of these two buildings on 3 March. In addition, paint chips were only noted on three sides of Building 802 and on only one side of Building 801. As discussed in Category #5 above, two HAAF structures that were sampled had visible paint chips. The results of the soil sample for those two buildings were 299 mg/Kg and 150 mg/Kg. This samples are below 400 mg/Kg, the U.S. EPA PRGs and U.S. Housing and Urban Development screening level. One was below the GSA Phase II cleanup goal of 190 mg/Kg for lead. It was concluded in the Corps of Engineers report that these two buildings did not appear to be a significant impact due to lead in the soil from LBP. Therefore since Buildings 801 and 802 will not be used for residential and the fact that the amount of paint chips noted during the visual inspection were similar to those buildings sampled at HAAF, it is concluded that the soil around Building 801 and 802 would not have a significant impact due to lead from LBP.

From this evaluation it is concluded that all of the nonresidential buildings at DODHF Novato do not have the potential to pose a threat or do not pose a significant threat with respect to lead hazard from lead-based paint.

**Table 1**  
**NonResidential Buildings Sorted by Parcels**  
**DODHF Novato**

Parcel	Building	Description (Current and Former Use)	Status				
			To Be Demolished	Spanish Housing Vintage	Built After 1978	Impervious Barrier Around Structure	Paint Condition Good/No Paint Chips
3	829	Vehicle, furniture, and scrap lumber storage. (Formerly listed as auto hobby shop.) Formerly used as a commissary, general store, NEX/retail store, and warehouse for NEX.					X
4	826	Vacant. Formerly used as a dry cleaning/laundry facility.	X			X	
4	827	Vacant. Formerly used as a cold storage facility by NEX.	X			X	
6	821	Carpentry shop, storage (i.e., furniture, lawn equipment, lumber). (Formerly listed as recreation.) Formerly used as carpentry shop, equipment maintenance shop, and warehouse.	X				
7	820	Storage (furniture, lawnmowers, appliances). Formerly used as warehouse and equipment maintenance shop.	X				X
8	816	Auto hobby shop, self-service auto maintenance facility. Historically used as auto, metal, and wood hobby shops.	X				X
11	804	Commissary. Potentially formerly used as a morgue.	X			X	
12	803	Paper, food and dry product storage warehouse for NEX commissary.	X				X
13	802	NEX storage. Former administrative headquarters for morgue, administrative office for NEX.					
14	801	NEX storage warehouse.					
16	971	Navy Exchange (beauty salon, barber shop, optician, dry cleaner pick-up).					X
21	960	Contractor's office and shop. Former automobile maintenance shop and tire shop.				X	X
22	965	Contractor's shop and work area. Former automobile maintenance shop.				X	X
23	969	PWC shop storage. Former automobile maintenance shop.				X	
24	972	PWC shops (wood working, metal working), administrative offices, and storage. Former automobile maintenance shop and motor pool.				X	
25	973	Youth recreation center. Former automobile maintenance shop.				X	X

**Table 1**

**NonResidential Buildings Sorted by Parcels  
DODHF Novato**

Parcel	Building	Description (Current and Former Use)	Status				
			To Be Demolished	Spanish Housing Vintage	Built After 1978	Impervious Barrier Around Structure	Paint Condition Good/No Paint Chips
26	930	Credit Union. Formerly used as barracks, Air Force headquarters activities, and housing and personnel support activities.	X				X
29	970	Navy Exchange Service Station.	X			X	X
35	933	Recreation activities for Boy Scouts and Girl Scouts. Formerly used for Air Force Division headquarters, barracks, recreation, expansion housing, and general support.	X				
36	934	Youth center. Formerly used for barracks, recreation, expansion housing, general support, mess hall, and a PX shop.	X				X
37	935	Ceramics shop and activity room for the Youth center. Formerly used for Air Force Division headquarters, expansion housing and personnel support.	X				X
45	914	Thrift shop. Formerly used as a dining hall, mess hall, expansion housing, and personnel support.	X				
46	915	Recreation activities for Boy Scouts of America. Formerly used as a squadron headquarters, lounge, toy store, and housing and personnel support facility.	X				
47	916	Storage for Boy Scouts of America. Formerly used as a supply and equipment room, warehouse, and housing and personnel support facility.	X				
50	603	Chapel and Sunday School. Former location of railroad spur.					X
54	1000	Housing office, garden and maintenance storage.	X				
55	982	Water supply, water treatment.	X				
57	508	Vacant. Formerly used as Chief Petty Officers' (CPO) club and recreation club. Last occupant, the Air Force Department, departed in 1975.	X				
58	507	Theater		X			

Table 1

**NonResidential Buildings Sorted by Parcels  
DODHF Novato**

Parcel	Building	Description (Current and Former Use)	Status				
			To Be Demolished	Spanish Housing Vintage	Built After 1978	Impervious Barrier Around Structure	Paint Condition Good/No Paint Chips
59	504	Base security offices, telephone control station, folk art gallery. Formerly used as a thrift shop, health clinic, HIS House, arts and crafts facility, base communications facility, and telephone exchange. Formerly used by the cryptography unit.	X				X
66	551	Gas meter facility and electrical switch house.		X			X
66	552	Gas meter facility and electrical switch house.		X			
67	549	Radio communications facility (contains electronics workshop). Marin Amateur Radio Club (MARS) is current occupant.		X			X
69	509	Bathrooms. Formerly used as tennis equipment shed, storage shed, and heating facility.					X
69	528	Vacant. Formerly used as a swimming pool water treatment facility (chlorinator house).	X				X
72	531	Chapel. Formerly used as a day care center.					X
74	518	Transformer vault.					X
82	519	Transformer vault.					X
83	564	Transformer vault.					X
84	577	Utility vault and switching station.					X
88	115	Gymnasium, bowling alley.					X
89	113	Indoor racquetball court. Formerly an outdoor racquetball court.			X		X
90	111	Vacant. Formerly used as Bachelor Officers' quarters.	X				X
94	225	Transformer vault.					X
95	201	Bachelor Officers' quarters, housing.		X			X
101	227	Child care center. Formerly used as a Sunday school, personal services, offices, living quarters, and Bachelor Officers' quarters.					X
102	204	Swimming pool bathhouse.		X			X
102	205	Swimming pool or water supply storage.		X			
102	208	Swimming pool heating system.					X
102	209	Swimming pool water treatment system.		X			X
103	206	Mess hall, recreation lounge.					X
104	203	Community center, library, special services office, and Officers' club.		X			X
106	231	Transformer vault.					X
109	241	Transformer vault.					X

**Table 1**  
**NonResidential Buildings Sorted by Parcels**  
**DODHF Novato**

<i>Parcel</i>	<i>Building</i>	<i>Description (Current and Former Use)</i>	<i>Status</i>				
			<i>To Be Demolished</i>	<i>Spanish Housing Vintage</i>	<i>Built After 1978</i>	<i>Impervious Barrier Around Structure</i>	<i>Paint Condition Good/No Paint Chips</i>
112	191	Formerly used as an arms and ammunition magazine.	X	X			X
113	247	Transformer vault.					X
114	193	Recreational equipment storage. Formerly used as a transformer vault and switch station.	X				X
116	279	Transformer vault.					X
117	196	Vacant.	X				X
118	261	Transformer vault.					X
119	273	Transformer vault.					X
120	295	Transformer vault.					X
128	4041	Karate instruction/training center. Formerly used as a warehouse, supply & equipment/exchange service outlet.	X				X

**APPENDIX A**



THE CITY OF  
**NOVATO**  
CALIFORNIA

900 Sherman Avenue  
Novato, CA 94945  
415/897-4311  
FAX 415/897-4354

Mayor  
Pat Eklund  
Mayor Pro Tem  
Carole Dillon-Knutson  
Councilmembers  
Michael Di Giorgio  
Ernest J. Gray  
Cynthia L. Murray

City Manager  
Roderick J. Wood

April 11, 1997

**Mr. Larry L. Lind**  
**Manager, UST/HazWaste/RCRA Section**  
**Department of the Navy**  
**Engineering Field Activity West**  
**900 Commodore Drive**  
**San Bruno, CA 94066-5006**

Dear Larry:

The attached list of structures at the DODHF Novato should be considered as intended for demolition coincident with the implementation of the ReUse Plan.

Sincerely,

**K.H. Bell**  
**Hamilton Field Conversion Program**  
**Manager for the City of Novato**

**Table 1**  
**NonResidential Buildings Sorted by Parcels**  
**DODHF Novato**

Parcel	Building	Description (Current and Former Use)	To Be Demolished
3	829	Vehicle, furniture, and scrap lumber storage. (Formerly listed as auto hobby shop.) Formerly used as a commissary, general store, NEX/retail store, and warehouse for NEX.	
4	826	Vacant. Formerly used as a dry cleaning/laundry facility.	X
4	827	Vacant. Formerly used as a cold storage facility by NEX.	X
6	821	Carpentry shop, storage (i.e., furniture, lawn equipment, lumber). (Formerly listed as recreation.) Formerly used as carpentry shop, equipment maintenance shop, and warehouse.	X
7	820	Storage (furniture, lawnmowers, appliances). Formerly used as warehouse and equipment maintenance shop.	X
8	816	Auto hobby shop, self-service auto maintenance facility. Historically used as auto, metal, and wood hobby shops.	X
11	804	Commissary. Potentially formerly used as a morgue.	X
12	803	Paper, food and dry product storage warehouse for NEX commissary.	X
13	802	NEX storage. Former administrative headquarters for morgue, administrative office for NEX.	
14	801	NEX storage warehouse.	
16	971	Navy Exchange (beauty salon, barber shop, optician, dry cleaner pick-up).	
21	960	Contractor's office and shop. Former automobile maintenance shop and tire shop.	
22	965	Contractor's shop and work area. Former automobile maintenance shop.	
23	969	PWC shop storage. Former automobile maintenance shop.	
24	972	PWC shops (wood working, metal working), administrative offices, and storage. Former automobile maintenance shop and motor pool.	

**Table 1**  
**NonResidential Buildings Sorted by Parcels**  
**DODHF Novato**

Parcel	Building	Description (Current and Former Use)	To Be Demolished
25	973	Youth recreation center. Former automobile maintenance shop.	
26	930	Credit Union. Formerly used as barracks, Air Force headquarters activities, and housing and personnel support activities.	X
29	970	Navy Exchange Service Station.	X
35	933	Recreation activities for Boy Scouts and Girl Scouts. Formerly used for Air Force Division headquarters, barracks, recreation, expansion housing, and general support.	X
36	934	Youth center. Formerly used for barracks, recreation, expansion housing, general support, mess hall, and a PX shop.	X
37	935	Ceramics shop and activity room for the Youth center. Formerly used for Air Force Division headquarters, expansion housing and personnel support.	X
45	914	Thrift shop. Formerly used as a dining hall, mess hall, expansion housing, and personnel support.	X
46	915	Recreation activities for Boy Scouts of America. Formerly used as a squadron headquarters, lounge, toy store, and housing and personnel support facility.	X
47	916	Storage for Boy Scouts of America. Formerly used as a supply and equipment room, warehouse, and housing and personnel support facility.	X
50	603	Chapel and Sunday School. Former location of railroad spur.	
54	1000	Housing office, garden and maintenance storage.	X
55	982	Water supply, water treatment.	X
57	508	Vacant. Formerly used as Chief Petty Officers' (CPO) club and recreation club. Last occupant, the Air Force Department, departed in 1975.	X
58	507	Theatre	

**Table 1**  
**NonResidential Buildings Sorted by Parcels**  
**DODHF Novato**

<i>Parcel</i>	<i>Building</i>	<i>Description (Current and Former Use)</i>	<i>To Be</i>
			<i>Demolished</i>
59	504	Base security offices, telephone control station, folk art gallery. Formerly used as a thrift shop, health clinic, HIS House, arts and crafts facility, base communications facility, and telephone exchange. Formerly used by the cryptography unit.	X
69	509	Bathrooms. Formerly used as tennis equipment shed, storage shed, and heating facility.	
69	528	Vacant. Formerly used as a swimming pool water treatment facility (chlorinator house).	X
72	531	Chapel. Formerly used as a day care center.	
88	115	Gymnasium, bowling alley.	
89	113	Indoor racquetball court. Formerly an outdoor racquetball court.	
90	111	Vacant. Formerly used as Bachelor Officers' quarters.	X
95	201	Bachelor Officers' quarters, housing.	
102	204	Swimming pool bathhouse.	
102	205	Swimming pool or water supply storage.	
102	208	Swimming pool heating system.	
102	209	Swimming pool water treatment system.	
103	206	Mess hall, recreation lounge.	
104	203	Community center, library, special services office, and Officers' club.	
112	191	Formerly used as an arms and ammunition magazine.	X
114	193	Recreational equipment storage. Formerly used as a transformer vault and switch station.	X
117	196	Vacant.	X
128	4041	Karate instruction/training center. Formerly used as a warehouse, supply & equipment/exchange service outlet.	X

**APPENDIX B**

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 829

PARCEL LOCATION: 3

DESCRIPTION: Formerly used as a commissary/general store

CONST. OF BUILDING: Wood frame over concrete, one story

YEAR OF CONSTRUCTION: 1944

CURRENT USE: Abandoned

REUSE: To be reused?

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Dirt/Weeds  
SIDE 3: Dirt/Weeds  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 826

PARCEL LOCATION: 4

DESCRIPTION Formerly used as a dry cleaning/laundry facility

CONST. OF BUILDING: Masonry, concrete floor

YEAR OF CONSTRUCTION: 1953

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Conc. ramp  
SIDE 2: Asphalt Concrete  
SIDE 3: Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Yes  
SIDE 2: Yes  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 827

PARCEL LOCATION: 4

DESCRIPTION: Formerly used as a cold storage facility

CONST. OF BUILDING: Masonry, concrete floor

YEAR OF CONSTRUCTION: 1953

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Peeling (a lot)  
SIDE 3: Peeling (a lot)  
SIDE 4: Peeling

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Yes  
SIDE 3: Yes  
SIDE 4: Yes

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 821

PARCEL LOCATION: 6

DESCRIPTION: Carpentry shop, storage.

CONST. OF BUILDING: Wood siding, wood frame, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Storage

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Loading Dock  
SIDE 2: Dirt/Weeds  
SIDE 3: Dirt/Weeds  
SIDE 4: Dirt/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 820

PARCEL LOCATION: 7

DESCRIPTION: Storage/warehouse

CONST. OF BUILDING: Wood siding, wood frame, conc. floor

YEAR OF CONSTRUCTION: 1943

CURRENT USE: Storage

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete Loading Dock  
SIDE 2: Dirt/Weeds  
SIDE 3: Dirt/Weeds  
SIDE 4: Dirt/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 816

PARCEL LOCATION: 8

DESCRIPTION: Auto hobby shop, self service auto maintenance facility

CONST. OF BUILDING: Wood siding, wood frame, concrete floor

YEAR OF CONSTRUCTION: 1943

CURRENT USE: Storage

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Concrete/Dirt  
SIDE 3: Asphalt Concrete  
SIDE 4: Weeds/Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 804

PARCEL LOCATION: 11

DESCRIPTION: Commissary

CONST. OF BUILDING: Wood frame, asbestos siding, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Commissary

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete/Conc. ramp  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Occasional  
SIDE 3: None  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 803

PARCEL LOCATION: 12

DESCRIPTION: Paper, food and dry product storage  
warehouse for commissary

CONST. OF BUILDING: Wood siding, wood frame, concrete floor

YEAR OF CONSTRUCTION: 1943

CURRENT USE: Storage

REUSE: Storage

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Dirt/Weeds  
SIDE 3: Asphalt Concrete  
SIDE 4: Dirt/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Some peeling  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 802

PARCEL LOCATION: 13

DESCRIPTION: Storage for the NEX

CONST. OF BUILDING: Wood frame, asbestos siding, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Warehouse

REUSE: Storage

SURFACE AROUND BUILDING: SIDE 1: Dirt/Bushed/Ent. Walk  
SIDE 2: Asphalt Concrete/Dirt  
SIDE 3: Weeds/Dirt  
SIDE 4: Weeds/Dirt

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Some peeling  
SIDE 3: Some peeling  
SIDE 4: Some peeling

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Occasionally  
SIDE 3: Occasionally  
SIDE 4: Yes

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 801

PARCEL LOCATION: 14

DESCRIPTION: NEX storage warehouse

CONST. OF BUILDING: Wood siding, wood frame, concrete floor

YEAR OF CONSTRUCTION: 1943

CURRENT USE: Warehouse

REUSE: Storage

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Conc. ramps  
SIDE 2: Dirt/Weeds  
SIDE 3: Asphalt Concrete  
SIDE 4: Dirt/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Some peeling  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 971

PARCEL LOCATION: 16

DESCRIPTION: Navy Exchange

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1975

CURRENT USE: Navy exchange

REUSE: Building to remain for Commercial use

SURFACE AROUND BUILDING: SIDE 1: Sidewalk/Asphalt Conc./Ivy  
SIDE 2: Concrete/Dirt  
SIDE 3: Ivy  
SIDE 4: Dirt/Ivy

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 960

PARCEL LOCATION: 21

DESCRIPTION: Former automobile maintenance shop and tire shop

CONST. OF BUILDING: Wood frame, siding, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Contractors office and shop

REUSE: Building to remain for commercial reuse

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 965

PARCEL LOCATION: 22

DESCRIPTION: Former automobile maintenance shop

CONST. OF BUILDING: Masonry, concrete floor

YEAR OF CONSTRUCTION: 1958

CURRENT USE: Contractor's office and shop

REUSE: Building to remain for commercial use

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete/Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 969

PARCEL LOCATION: 23

DESCRIPTION: Former automotive maintenance

CONST. OF BUILDING: Wood frame siding, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: PWC shop storage

REUSE: Building to remain for commercial use

SURFACE AROUND BUILDING: SIDE 1: Concrete Ramp  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Peeling Doors (6)  
SIDE 2: Some peeling  
SIDE 3: Good  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Occasional  
SIDE 3: Occasional  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 972

PARCEL LOCATION: 24

DESCRIPTION: Former automobile maintenance shop and motor pool

CONST. OF BUILDING: Wood frame, siding, concrete floor

YEAR OF CONSTRUCTION: 1942

CURRENT USE: PWC shops

REUSE: Building to remain for commercial use

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Conc. Ramps  
SIDE 2: Asphalt Concrete/Conc. Stoops  
SIDE 3: Asphalt Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Peeling Doors  
SIDE 3: Good  
SIDE 4: Some peeling

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: None  
SIDE 3: None  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 973

PARCEL LOCATION: 25

DESCRIPTION: Former automotive maintenance

CONST. OF BUILDING: Wood frame, stucco/wood siding, conc. floor

YEAR OF CONSTRUCTION: 1943

CURRENT USE: Youth recreation center

REUSE: Building to remain for commercial use

SURFACE AROUND BUILDING:

SIDE 1:	Asphalt Concrete/Concrete
SIDE 2:	Asphalt Concrete
SIDE 3:	Concrete
SIDE 4:	Asphalt Concrete/Concrete

CONDITION OF EXT. PAINT:

SIDE 1:	Good
SIDE 2:	Good
SIDE 3:	Good
SIDE 4:	Good

VISIBLE PAINT CHIPS:

SIDE 1:	None
SIDE 2:	None
SIDE 3:	None
SIDE 4:	None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 970

PARCEL LOCATION: 29

DESCRIPTION: Navy Exchange Service Station

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1974

CURRENT USE: Navy exchange service station

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Concrete  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 930

PARCEL LOCATION: 26

DESCRIPTION: Formerly used as barracks, Air Force headquarters activities

CONST. OF BUILDING: Wood siding, two stories, wood frame

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Credit Union

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Dirt  
SIDE 2: Asphalt Concrete  
SIDE 3: Grass/Weeds  
SIDE 4: Grass/Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 933

PARCEL LOCATION: 35

DESCRIPTION: Formerly used for Air Force Division  
headquarters, barracks

CONST. OF BUILDING: Wood building on piers

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Recreation activities for Boy and Girl Scouts

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Bushed/2 Wood Stairs  
SIDE 2: Grass  
SIDE 3: Grass/Bushes/2 Wood Stairs  
SIDE 4: Grass/Bush/Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Peeling  
SIDE 3: Peeling  
SIDE 4: Peeling

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: Occasional  
SIDE 3: Occasional  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 934

PARCEL LOCATION: 36

DESCRIPTION: Formerly used for barracks, general support

CONST. OF BUILDING: Wood siding, wood frame on piers

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Youth Center

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Grass/Conc.entrance/bushes  
SIDE 2: Dirt/Concrete Stairs (2)  
SIDE 3: Grass  
SIDE 4: Grass/Conc. Stairs

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 935

PARCEL LOCATION: 37

DESCRIPTION: Formerly used for Air Force Division headquarters, personnel support

CONST. OF BUILDING: Wood frame, wood siding

YEAR OF CONSTRUCTION: 1939-1942

CURRENT USE: Youth Center

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Concrete/Some grass

CONDITION OF EXT. PAINT: SIDE 1: Peeling at eaves  
SIDE 2: Peeling at eaves  
SIDE 3: Peeling at eaves  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 914

PARCEL LOCATION: 45

DESCRIPTION: Formerly used as a dining hall, mess hall,  
personnel support

CONST. OF BUILDING: Wood frame, wood siding

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Thrift shop

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Weeds/Wood ramps  
SIDE 2: Asphalt Concrete/Dirt/Wood ramp  
SIDE 3: Dirt/Ramp  
SIDE 4: Concrete/Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: Occasional  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 915

PARCEL LOCATION: 46

DESCRIPTION: Formerly used as a squadron headquarters,  
personnel support

CONST. OF BUILDING: Wood frame, wood siding

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Recreation activities for Boy Scouts

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Weeds/Wood Ramp/Stairs  
SIDE 2: Weeds  
SIDE 3: Weeds  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: Occasional  
SIDE 3: Occasional  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
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BUILDING NUMBER: 916

PARCEL LOCATION: 47

DESCRIPTION: Formerly used as a supply and equipment room, personnel support

CONST. OF BUILDING: Wood frame, wood siding

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Storage for the Boy Scouts

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Concrete walk  
SIDE 2: Asphalt Concrete  
SIDE 3: Dirt/Bushes  
SIDE 4: Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 1000

PARCEL LOCATION: 54

DESCRIPTION: Housing Office, garden and maintenance shop

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1948

CURRENT USE: Housing Office

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Grass/Weeds/Conc.Stairs  
SIDE 2: Grass/Weeds  
SIDE 3: Grass/Weeds/Concrete  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Little peeling at eaves  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Occasional  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 603

PARCEL LOCATION: 50

DESCRIPTION: Chapel

CONST. OF BUILDING: Stucco, wood frame, tile roof

YEAR OF CONSTRUCTION: 1960s

CURRENT USE: Chapel

REUSE: Building to remain

SURFACE AROUND BUILDING: SIDE 1: Grass/Sidewalk  
SIDE 2: Grass  
SIDE 3: Grass/Asphalt Concrete  
SIDE 4: Grass/Dirt/Bushes

CONDITION OF EXT. PAINT: SIDE 1: Excellent  
SIDE 2: Excellent  
SIDE 3: Excellent  
SIDE 4: Excellent

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
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BUILDING NUMBER: 508

PARCEL LOCATION: 57

DESCRIPTION: Formerly used as Chief Petty Officers' club and recreation club

CONST. OF BUILDING: Stucco, wood frame

YEAR OF CONSTRUCTION: 1939

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Steps  
SIDE 2: Asphalt Concrete/Conc. Stairs  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Peeling  
SIDE 2: Some Peeling  
SIDE 3: Peeling  
SIDE 4: Peeling

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: Occasional  
SIDE 3: Occasional  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
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BUILDING NUMBER: 507

PARCEL LOCATION: 58

DESCRIPTION: Theater

CONST. OF BUILDING: Stucco, wood frame, two stories

YEAR OF CONSTRUCTION: 1937

CURRENT USE: Theater

REUSE: Building to remain

SURFACE AROUND BUILDING: SIDE 1: Concrete Entrance  
SIDE 2: Grass/Some Concrete  
SIDE 3: Dirt/Asphalt Concrete/Weeds  
SIDE 4: Grass/Some Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Minor peeling  
SIDE 3: Good  
SIDE 4: Minor peeling

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: Occasional  
SIDE 3: None  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
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BUILDING NUMBER: 504

PARCEL LOCATION: 59

DESCRIPTION: Formerly used as a thrift shop, health clinic,  
arts and craft facility

CONST. OF BUILDING: Concrete/Masonry

YEAR OF CONSTRUCTION: 1952

CURRENT USE: Base Security Office

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Dirt/Bushes/Conc. Steps  
SIDE 2: Dirt/Grass/Concrete Stoop  
SIDE 3: Dirt/Trees/Concrete  
SIDE 4: Asphalt Concrete/Concrete

CONDITION OF EXT. PAINT: SIDE 1: Excellent  
SIDE 2: Excellent  
SIDE 3: Excellent  
SIDE 4: Excellent

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 531

PARCEL LOCATION: 72

DESCRIPTION: Formerly a day care center

CONST. OF BUILDING: Wood frame, wood siding, two stories

YEAR OF CONSTRUCTION: 1942

CURRENT USE: Chapel

REUSE: Building to remain

SURFACE AROUND BUILDING: SIDE 1: Dirt/Concrete Stairs  
SIDE 2: Ivy/Weeds  
SIDE 3: Ivy/Weeds  
SIDE 4: Dirt/Bush

CONDITION OF EXT. PAINT: SIDE 1: Excellent  
SIDE 2: Excellent  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
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BUILDING NUMBER: 528

PARCEL LOCATION: 69

DESCRIPTION: Formerly used as a swimming pool water treatment facility

CONST. OF BUILDING: Asbestos siding, wood frame

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Weeds/Concrete Wall  
SIDE 3: Grass/Concrete Stoop  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Fair  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
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BUILDING NUMBER: 509

PARCEL LOCATION: 69

DESCRIPTION: Formerly used as tennis equipment shed

CONST. OF BUILDING: Concrete Masonry

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Weeds  
SIDE 2: Weeds  
SIDE 3: Weeds  
SIDE 4: Weeds

CONDITION OF EXT. PAINT: SIDE 1: Fair  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

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NOVATO, CALIFORNIA  
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BUILDING NUMBER: 549

PARCEL LOCATION: 67

DESCRIPTION: Radio communication facility

CONST. OF BUILDING: Stucco, wood frame

YEAR OF CONSTRUCTION: 1934

CURRENT USE: Marin Amateur Radio Club

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt/Concrete  
SIDE 2: Dirt  
SIDE 3: Dirt/Weeds  
SIDE 4: Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 551

PARCEL LOCATION: 66

DESCRIPTION: Gas meter facility

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1933

CURRENT USE: Gas meter facility

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt/Weeds  
SIDE 2: Dirt Weeds  
SIDE 3: Bushes  
SIDE 4: Dirt/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Some peeling  
SIDE 3: Some peeling  
SIDE 4: Some peeling

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 552

PARCEL LOCATION: 66

DESCRIPTION: Gas meter facility

CONST. OF BUILDING:

YEAR OF CONSTRUCTION: 1933

CURRENT USE: gas meter facility

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt/Weeds  
SIDE 2: Weeds  
SIDE 3: Dirt/Concrete Stoop  
SIDE 4: Gravel

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 518

PARCEL LOCATION: 74

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to Remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 519

PARCEL LOCATION: 82

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to Remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt/Grass  
SIDE 2: Dirt/Grass  
SIDE 3: Dirt/Grass  
SIDE 4: Dirt/Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 564

PARCEL LOCATION: 83

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to Remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass  
SIDE 2: Grass  
SIDE 3: Concrete/Grass  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 225

PARCEL LOCATION: 94

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Masonry

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass/Concrete Stoop  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 577

PARCEL LOCATION: 84

DESCRIPTION: Utility vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: 1956

CURRENT USE: Utility vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass  
SIDE 2: Grass  
SIDE 3: Grass/Bushes  
SIDE 4: Grass/Bushes

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 227

PARCEL LOCATION: 101

DESCRIPTION: Formerly used as a Sunday school, BOQ

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1966

CURRENT USE: Housing offices

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Concrete Sidewalk/Grass  
SIDE 2: Concrete Sidewalk/Grass  
SIDE 3: Concrete Sidewalk/Grass  
SIDE 4: Concrete Sidewalk/Grass

CONDITION OF EXT. PAINT: SIDE 1: Excellent  
SIDE 2: Excellent  
SIDE 3: Excellent  
SIDE 4: Excellent

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 111

PARCEL LOCATION: 90

DESCRIPTION: Former BOQ

CONST. OF BUILDING: Asbestos siding, wood frame

YEAR OF CONSTRUCTION: 1939-1942

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Weeds/Brush  
SIDE 2: Weeds/Concrete Stoop  
SIDE 3: Weeds/Brush  
SIDE 4: Weeds/Brush

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 113

PARCEL LOCATION: 89

DESCRIPTION: New Building

CONST. OF BUILDING: Metal frame and siding

YEAR OF CONSTRUCTION: 1994

CURRENT USE: Indoor racquetball court

REUSE: Racquetball court

SURFACE AROUND BUILDING: SIDE 1:  
SIDE 2:  
SIDE 3:  
SIDE 4:

CONDITION OF EXT. PAINT: SIDE 1:  
SIDE 2:  
SIDE 3:  
SIDE 4:

VISIBLE PAINT CHIPS: SIDE 1:  
SIDE 2:  
SIDE 3:  
SIDE 4:

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 115

PARCEL LOCATION: 88

DESCRIPTION: Gym, bowling alley

CONST. OF BUILDING: Wood frame and siding

YEAR OF CONSTRUCTION: 1945

CURRENT USE: Gym, bowling alley

REUSE: Building to remain for recreation

SURFACE AROUND BUILDING: SIDE 1: Grass/Weeds/Concrete Ramps  
SIDE 2: Grass/Weeds  
SIDE 3: Grass/Dirt/Concrete  
SIDE 4: Grass/Weeds

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 208

PARCEL LOCATION: 102

DESCRIPTION: Swimming pool heating building

CONST. OF BUILDING: Masonry

YEAR OF CONSTRUCTION: 1962

CURRENT USE: Swimming pool heating building

REUSE: Building to Remain for same

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Dirt  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 209

PARCEL LOCATION: 102

DESCRIPTION: Swimming pool water treatment building

CONST. OF BUILDING: Wood

YEAR OF CONSTRUCTION: 1934

CURRENT USE: Swimming pool water treatment building

REUSE: Building to remain and used for same

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Concrete  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Fair  
SIDE 2: Some peeling  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 206

PARCEL LOCATION: 102

DESCRIPTION: Mess hall, recreation lounge

CONST. OF BUILDING: Wood (not painted)

YEAR OF CONSTRUCTION: 1944

CURRENT USE: Pool lounge

REUSE: Building to remain and used as same

SURFACE AROUND BUILDING: SIDE 1: Concrete/Dirt  
SIDE 2: Asphalt Concrete  
SIDE 3: Asphalt Concrete/Concrete  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: N/A  
SIDE 2: N/A  
SIDE 3: N/A  
SIDE 4: N/A

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 204

PARCEL LOCATION: 102

DESCRIPTION: Swimming pool bath house

CONST. OF BUILDING: Wood siding (not painted)

YEAR OF CONSTRUCTION: 1938

CURRENT USE: Swimming pool bath house

REUSE: Building to remain and used as same

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Dirt/Concrete Walk  
SIDE 3: Wood/Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: N/A  
SIDE 2: N/A  
SIDE 3: N/A  
SIDE 4: N/A

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 201

PARCEL LOCATION: 95

DESCRIPTION: BOQ

CONST. OF BUILDING: Stucco

YEAR OF CONSTRUCTION: 1934

CURRENT USE: Vacant

REUSE: Building to remain and used as offices

SURFACE AROUND BUILDING: SIDE 1: Asphalt Concrete/Some Dirt  
SIDE 2: Asphalt Concrete/Dirt  
SIDE 3: Dirt/Weeds/Brush/Concrete Stoop  
SIDE 4: Dirt/Weeds/Concrete Steps

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Some peeling  
SIDE 3: Some peeling  
SIDE 4: Some peeling

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 231

PARCEL LOCATION: 106

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to Remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt  
SIDE 2: Dirt  
SIDE 3: Dirt/Trees  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 241

PARCEL LOCATION: 109

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING:

SIDE 1:	Weeds
SIDE 2:	Weeds
SIDE 3:	Weeds/Brush
SIDE 4:	Dirt

---

CONDITION OF EXT. PAINT:

SIDE 1:	Good
SIDE 2:	Good
SIDE 3:	Good
SIDE 4:	Good

VISIBLE PAINT CHIPS:

SIDE 1:	None
SIDE 2:	None
SIDE 3:	None
SIDE 4:	None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 247

PARCEL LOCATION: 113

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to Remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Dirt  
SIDE 2: Dirt  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 279

PARCEL LOCATION: 116

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass/Concrete Stoop  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997**

BUILDING NUMBER: 191

PARCEL LOCATION: 112

DESCRIPTION: Formerly used as an arms and ammunition magazine

CONST. OF BUILDING: Concrete Masonry

YEAR OF CONSTRUCTION: 1934

CURRENT USE: Vacant

REUSE: Building to be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete Loading Dock  
SIDE 2: Dirt  
SIDE 3: Dirt  
SIDE 4: Asphalt Concrete

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 193

PARCEL LOCATION: 114

DESCRIPTION: Former transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: 1932-1946

CURRENT USE: Recreation equipment storage

REUSE: Building to be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete Stoop/Dirt  
SIDE 2: Concrete  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 196

PARCEL LOCATION: 117

DESCRIPTION: Vacant, partially demolished

CONST. OF BUILDING: Wood (partially demolished)

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Abandoned

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Weeds  
SIDE 2: Weeds  
SIDE 3: Weeds  
SIDE 4: Weeds/Tree

CONDITION OF EXT. PAINT: SIDE 1: Fair  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 261

PARCEL LOCATION: 118

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Weeds/Grass  
SIDE 2: Weeds/Grass  
SIDE 3: Weeds/Grass  
SIDE 4: Weeds/Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 273

PARCEL LOCATION: 119

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Weeds/Grass  
SIDE 2: Weeds/Grass  
SIDE 3: Weeds/Grass  
SIDE 4: Weeds/Grass

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 295

PARCEL LOCATION: 120

DESCRIPTION: Transformer vault

CONST. OF BUILDING: Concrete

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Transformer vault

REUSE: Building to remain/Transfer to Coast Guard

SURFACE AROUND BUILDING: SIDE 1: Grass  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Grass

CONDITION OF EXT. PAINT: SIDE 1: Fair  
SIDE 2: Fair  
SIDE 3: Fair  
SIDE 4: Fair

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 982

PARCEL LOCATION: 55

DESCRIPTION: Chlorination building

CONST. OF BUILDING: Asbestos Siding

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Chlorination Building

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete/Dirt  
SIDE 2: Dirt/Tree  
SIDE 3: Dirt  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Some peeling  
SIDE 2: Some peeling  
SIDE 3: Some peeling  
SIDE 4: Some peeling

VISIBLE PAINT CHIPS: SIDE 1: Occasional  
SIDE 2: Occasional  
SIDE 3: Occasional  
SIDE 4: Occasional

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

DEPARTMENT OF DEFENSE HOUSING FACILITY  
NOVATO, CALIFORNIA  
NONRESIDENTIAL BUILDING SURVEY  
MARCH 3, 1997

BUILDING NUMBER: 4041

PARCEL LOCATION: 128

DESCRIPTION: Formerly used as a warehouse, supply and equipment exchange

CONST. OF BUILDING: Brick/Stucco

YEAR OF CONSTRUCTION: Unknown

CURRENT USE: Karate instruction/training center

REUSE: To be demolished

SURFACE AROUND BUILDING: SIDE 1: Concrete  
SIDE 2: Grass  
SIDE 3: Grass  
SIDE 4: Dirt

CONDITION OF EXT. PAINT: SIDE 1: Good  
SIDE 2: Good  
SIDE 3: Good  
SIDE 4: Good

VISIBLE PAINT CHIPS: SIDE 1: None  
SIDE 2: None  
SIDE 3: None  
SIDE 4: None

(Side 1=Front of the building, Sides 2-4 is clockwise around the building)

**APPENDIX B**

**SUMMARY OF PESTICIDE USAGE**

**APPENDIX B**  
**SUMMARY OF PESTICIDE USAGE AT DODHF, NOVATO CA**

**Pesticides Used**

There is no evidence to suggest the pesticides and herbicides other than those ordinarily and routinely applied in a manner consistent with the standards for licensed application were ever used at this site. There are no areas where there was extensive application of pesticides.

A review of past records indicates the following were typical of herbicides and pesticides that were used. Herbicides which may have been used at DODHF include the following:

- XL 2G
- Team 2G
- Surflan A.S.
- Ronstar 50 WP
- No Foam A,
- No Foam B,
- CMR Herbicide Activator
- Roundup
- Ronstar G

Insecticides, termiticides, and rodenticides which may have been used at DODHF include the following:

- Dursban TC
- PT-515
- Vaponite 2E
- Dursban 2E
- Dursban 4E
- Dursban-TC
- Drione
- Fiscam W
- Diazinon 4E
- Sevin 80W
- Bait Blocks

## **Pesticide Management**

Pesticides, insecticides, termiticides, and rodenticides were applied intermittently on an as needed basis at the DODHF site either by personnel from the Navy Public Works Pest Control Department or by contractor personnel. All personnel from the Public Works Pest Control Department or contractor were trained and licensed in the proper and legal application of pesticides, which included insecticides, termiticides, and rodenticides listed above. All pesticides were applied per manufacturer's directions in accordance with the State and Federal EPA registered pesticide label directions and in accordance with the installation's annually approved Pest Management Plan. Incidental use of pesticides by homeowners is presumed. Therefore, since the pesticides and herbicides were routinely applied in a manner consistent with the standards for licensed application, they likely do not pose a threat to human health and the environment. In addition, since pesticides were applied by specific, trained personnel, there is no indication that reportable quantities of pesticides were stored at DODHF Novato.