

FORA ESCA REMEDIATION PROGRAM

DRAFT

Group 3

**Land Use Controls Implementation Plan/
Operation and Maintenance Plan
Del Rey Oaks / Monterey, Laguna Seca Parking,
and Military Operations in Urban Terrain Site
Munitions Response Areas**

Former Fort Ord
Monterey County, California

April 24, 2015

Prepared for:

FORT ORD REUSE AUTHORITY

920 2nd Avenue, Suite A
Marina, California 93933



Prepared Under:

**Environmental Services Cooperative Agreement
No. W9128F-07-2-01621**

and

FORA Remediation Services Agreement (3/30/07)

Document Control Number: 09595-15-081-002

Prepared by:

This effort was sponsored by the Army, Assistant Chief of Staff Installation Management. The content of the information does not necessarily reflect the position or policy of the Government and no official endorsement should be inferred.

Group 3
Land Use Controls Implementation Plan/Operation and Maintenance Plan
Former Fort Ord
Monterey County, California

Reviewed By:	Stan Cook FORA ESCA Program Manager Fort Ord Reuse Authority	Date
--------------	--	------

Approved By:	Michael Houlemard Executive Officer Fort Ord Reuse Authority	Date
--------------	--	------

Reviewed By:	Denise Chamberlain ESCA Technical Manager ARCADIS US, Inc. (formerly LFR Inc.)	Date
--------------	--	------

Reviewed By:	Linda Temple ESCA Remediation Project Manager Weston Solutions, Inc.	Date
--------------	--	------

Approved By:	Dwight Gemar, P.E. ESCA Remediation Project Engineer Weston Solutions, Inc.	Date
--------------	---	------

Approved By:	Christopher G. Spill, P.G. ESCA Remediation Program Manager ARCADIS US, Inc. (formerly LFR Inc.)	Date
--------------	--	------

CONTENTS

ACRONYMS AND ABBREVIATIONS	V
GLOSSARY	VII
1.0 INTRODUCTION	1-1
1.1 Regulatory Background.....	1-1
1.2 FORA ESCA Regulatory Framework and Responsibilities.....	1-2
1.2.1 FORA Successor in Interest	1-3
1.3 Area of Remedy Implementation	1-3
1.3.1 DRO/Monterey MRA.....	1-3
1.3.2 Laguna Seca Parking MRA.....	1-3
1.3.3 MOUT Site MRA.....	1-4
1.4 Description of Selected Remedy	1-4
1.4.1 MEC Recognition and Safety Training	1-5
1.4.2 Construction Support	1-5
1.4.3 Restrictions Prohibiting Residential Use.....	1-6
1.4.4 Long-Term Management Measures	1-6
1.4.5 Other Long-Term Management Measures	1-7
2.0 SITE DESCRIPTION	2-1
2.1 Site History.....	2-1
2.2 Regulatory History	2-2
2.3 Group 3 MRAs Munitions Response Site Summaries	2-3
2.4 Group 3 MRAs Remedial Investigation Summary.....	2-4
2.4.1 DRO/Monterey MRA.....	2-4
2.4.2. Laguna Seca Parking MRA.....	2-5
2.4.3. MOUT Site MRA.....	2-6

2.5 Group 3 MRAs Munitions Response Site Summaries2-7

 2.5.1 DRO/Monterey MRA.....2-7

 2.5.2 Laguna Seca Parking MRA.....2-8

 2.5.3 MOUT Site MRA.....2-10

2.6 Potential Future Land and Resource Uses2-12

 2.6.1 DRO/Monterey MRA.....2-12

 2.6.2 Laguna Seca Parking MRA.....2-12

 2.6.3 MOUT Site MRA.....2-12

3.0 LAND USE CONTROL IMPLEMENTATION STRATEGIES3-1

 3.1 MEC Recognition and Safety Training3-1

 3.2 Construction Support.....3-1

 3.3 Restrictions Prohibiting Residential Use3-2

 3.4 Long-term Management Measures3-2

4.0 REMEDY IMPLEMENTATION ACTIONS.....4-1

 4.1 MEC Recognition and Safety Training4-2

 4.1.1 Development of Training Materials and Procedures.....4-2

 4.1.2 Providing Training4-2

 4.1.3 Monitoring and Reporting of Training Activities4-3

 4.2 Construction Support by UXO-Qualified Personnel for Ground-disturbing or Intrusive Activities4-4

 4.2.1 Construction Support Planning4-4

 4.2.2 Construction Support Evidence of MEC.....4-5

 4.2.3 Construction Support Documentation and Reporting4-6

 4.2.4 Determination Construction Support No Longer Necessary.....4-6

 4.3 Restrictions Prohibiting Residential Use.....4-7

 4.3.1 Maintaining Residential Use Restriction.....4-7

4.3.2	Process for Approval of Proposals to Remove Residential Use Restriction	4-7
4.4	Long-Term Management Measures.....	4-7
4.4.1	LUCIP/OMP Annual Inspections.....	4-8
4.4.2	Annual LUC Monitoring Reports	4-8
4.4.3	CERCLA Five-Year Reviews	4-8
4.5	Property Recipient Responsibilities - LUCIP/OMP Inspections, Reporting, and Enforcement	4-8
4.5.1	Compliance with LUCIP/OMP	4-8
4.5.2	Property Conveyance	4-9
4.5.3	Notice of Planned Property Conveyances	4-9
4.6	Army LUCIP/OMP Inspections, Reporting, and Enforcement Responsibilities	4-9
4.7	Notification Should Action(s) Interfere with LUCIP/OMP Effectiveness.....	4-9
4.8	Notification of MEC Item Discovery During Ground-Disturbing Activities.....	4-10
4.9	Additional Response or Remedy Modification	4-10
4.9.1	Additional Investigation or Follow-up Action	4-10
4.9.2	Remedy Modification.....	4-11
5.0	REMEDY IMPLEMENTATION SEQUENCE	5-1
5.1	General Administrative Sequence for Establishing LUC Remedy.....	5-1
5.2	Long-Term Operations and Maintenance of LUC Remedy	5-1
5.2.1	Pre-Land Transfer from FORA to Group 3 Jurisdictions	5-1
5.2.2	Post-Land Transfer from FORA to Group 3 Jurisdictions	5-2
6.0	REFERENCES	6-1

FIGURES

- 1 Group 3 MRAs and Fort Ord Location Map
- 2 Del Rey Oaks/Monterey MRA – Reuse Areas and Munition Response Sites
- 3 Laguna Seca Parking MRA – Reuse Areas and Munition Response Sites
- 4 MOUT Site MRA – Reuse Areas and Munition Response Sites

APPENDICES

- A Record of Decision Group 3 Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California
- B Survey Plats
- C Memorandum of Agreement Among The Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College and the Department of Toxic Substance Control Concerning Monitoring and Reporting on Environmental Restrictions on The Former Fort Ord, February 27, 2008
- D Land Use Control Inspection Methodology
- E 2014 Update to the Former Fort Ord Land Use Covenant Report Outline
- F Distribution List

ACRONYMS AND ABBREVIATIONS

AOC	Administrative Order on Consent
ARARs	applicable or relevant and appropriate requirements
Army	United States Department of the Army
bgs	below ground surface
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
County	County of Monterey
CMS	CMS Environmental, Inc.
CRUP	Covenant to Restrict the Use of Property
CSUMB	California State University Monterey Bay
cy	cubic yards
DDESB	Department of Defense Explosives Safety Board
DMM	discarded military munitions
DRO	Del Rey Oaks
DTSC	Department of Toxic Substances Control
EOD	explosive ordnance disposal
EPA	United States Environmental Protection Agency
EPP	Environmental Protection Provisions
ESCA	Environmental Services Cooperative Agreement
FFA	Federal Facility Agreement
FORA	Fort Ord Reuse Authority
FOSET	Finding of Suitability for Early Transfer
ft	foot
HFA	Human Factors Applications, Inc.
HMP	Habitat Management Plan
LTO	Long-Term Obligation
LTMM	Long-Term Management Measure
LUC	Land Use Control
LUCIP	Land Use Controls Implementation Plan
MD	munitions debris
MEC	munitions and explosives of concern
mm	millimeter
MOA	Memorandum of Agreement
MOUT	Military Operations in Urban Terrain
MPC	Monterey Peninsula College
MR	Munitions Response

MRA	Munitions Response Area
MRS	Munitions Response Site
OMC	Ord Military Community
OMP	Operation and Maintenance Plan
OE	Ordnance and Explosives
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RP	Remediation Program
RWQCB	Regional Water Quality Control Board
SEDR	Summary of Existing Data Report
Shaw	Shaw Environmental, Inc.
SS/GS	SiteStat/GridStat
TCRA	Time-Critical Removal Action
USA	USA Environmental, Inc.
USACE	United States Army Corps of Engineers
UXB	UXB International, Inc.
UXO	unexploded ordnance

GLOSSARY

Anomaly

Any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity should deviate from the expected subsurface ferrous and non-ferrous material at a site (i.e., pipes, power lines, etc.).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980

CERCLA authorizes federal action to respond to the release or threatened release of hazardous substances into the environment or a release or threatened release of a pollutant or contaminant into the environment that may present an imminent or substantial danger to public health or welfare.

Construction Activity

Development or construction which includes ground-disturbing or intrusive activities such as excavation, digging, development and other ground disturbance that involves displacement of more than ten (10) cubic yards (cy) of soil. Construction activities within the Group 3 MRA are subject to the excavation permitting process under the Group 3 jurisdictions' digging and excavation ordinances.

Construction Support

Assistance provided by the United States (US) Department of Defense (DoD) explosive ordnance disposal (EOD) or Unexploded Ordnance (UXO)-qualified personnel and/or by personnel trained and qualified for operations involving chemical agents (CA), regardless of configuration, during intrusive construction activities on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., discarded military munitions [DMM]), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to ensure the safety of personnel or resources from any potential explosive or CA hazards.

Covenant Deferral Request (CDR)

A letter along with a supporting information package known as a CDR assembled by the Federal landholding to formally request deferral of the CERCLA covenant until all remediation has been accomplished prior to transfer. The United States Environmental Protection Agency (EPA) requires that the information is: 1) of sufficient quality and quantity to support the request for deferral of the CERCLA Covenant; and 2) that it provides a basis for EPA to make its determination. This information is submitted to EPA in the form of a CDR.

Deferral Period

The period of time that the CERCLA covenant, warranting that all remedial action is complete before transfer, is deferred through the Early Transfer Authority.

Discarded Military Munitions (DMM)

Generally, military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710[e][2])

Early Transfers

The transfer, by deed, of federal property by the DoD to a nonfederal entity before all remedial actions on the property have been taken. Section 120 (h)(3)(C) of the CERCLA allows federal agencies to transfer property before all necessary cleanup actions have been taken. This provision, known as Early Transfer Authority, authorizes the deferral of the CERCLA covenant when the findings required by the statute can be made and the response action assurances required by the statute are given. The Governor of the state where the property is located must concur with the deferral request for property not listed on the National Priorities List (NPL). For NPL property, the deferral must be provided by the EPA with the concurrence of the Governor. Upon approval to defer the covenant, the DoD may proceed with the early transfer.

Environmental Services Cooperative Agreement Remediation Program (ESCA RP) Team

ARCADIS U.S, Inc. (formerly LFR Inc.), Weston Solutions, Inc., and Westcliffe Engineers, Inc.

Explosive

A substance or a mixture of substances that is capable by chemical reaction of producing gas at such temperature, pressure, and speed as to cause damage to the surroundings. The term “explosive” includes all substances variously known as high explosives and propellants, together with igniters, primers, initiators, and pyrotechnics (e.g., illuminant, smoke, delay, decoy, flare, and incendiary compositions).

Feasibility Study (FS)

A study conducted where the primary objective is “to ensure appropriate remedial alternatives are being developed and evaluated and an appropriate remedy selected” (NCP 40 CFR 300.430[e]).

High Explosive (HE)

An explosive substance designed to function by detonation (e.g., main charge, booster, or primary explosive).

Intrusive Activity

An activity that involves or results in the penetration of the ground surface at an area known or suspected to contain MEC. Intrusive activities can be of an investigative or removal action nature.

Mag and dig

A method of target investigation where handheld geophysical instruments are used to detect anomalies, which are immediately investigated (without using collection of digital data and post processing to determine which anomalies to dig) by manual digging or with the assistance of heavy equipment.

Mag and flag

A method of target investigation where handheld geophysical instruments are used to detect anomalies, anomalies are marked with a flag and are later investigated by manual digging or with the assistance of heavy equipment.

Material Potentially Presenting an Explosive Hazard (MPPEH)

Material that, prior to determination of its explosives safety status, potentially contains

explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris); or potentially contains a high enough concentration of explosives such that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization or disposal operations). Excluded from MPPEH are munitions within the DoD established munitions management system and other hazardous items that may present explosion hazards (e.g., gasoline cans, compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Military Munitions

All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DoD, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101[e][4][A through C])

Military Munitions Response Program (MMRP)

DoD-established program that manages the environmental, health, and safety issues presented by MEC.

Munitions and Explosives of Concern (MEC)

This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means: (A) UXO, as defined in 10 U.S.C. 101(e)(5)(A) through (C); (B) DMM, as defined in 10 U.S.C. 2710(e)(2); or (C) Munitions constituents (e.g., TNT, cyclotrimethylenetrinitramine [RDX]), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions Constituents (MC)

Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710[e][3])

Munitions Debris (MD)

Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Munitions Response

Response actions, including investigation, removal actions, and remedial actions to address the explosives safety, human health, or environmental risks presented by UXO, DMM, or MC, or to support a determination that no removal or remedial action is required.

Munitions Response Area (MRA)

Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites.

Munitions Response Site (MRS)

A discrete location within an MRA that is known to require a munitions response.

Ordnance and Explosives (OE)

OE is an obsolete term replaced by MEC. See MEC in the glossary for further definition.

Quality Assurance (QA)

The management system implemented by a United States Army Corps of Engineers (USACE) Safety Specialist or a Third Party Safety Specialist to ensure Quality Control (QC) is functioning and that project quality objectives are being met. QC components include planning, implementation, assessment, reporting, and quality improvement.

Quality Control (QC)

The system of inspections, typically performed by the munitions contractor performing the work, of operational activities, work in progress, and work completed to assess the attributes and performance of a process against defined standards that are used to fulfill requirements for quality.

Remedial Actions

Those actions consistent with a permanent remedy taken instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health, welfare, or the environment. The term includes but is not limited to such actions at the location of the release as storage; confinement; perimeter protection using dikes, trenches, or ditches; clay cover; neutralization; cleanup of released hazardous substances and associated contaminated materials; recycling or reuse; diversion; destruction; segregation of reactive wastes; dredging or excavations; repair or replacement of leaking containers; collection of leachate and runoff; on-site treatment or incineration; provision of alternative water supplies; and any monitoring reasonably required to assure that such actions protect the public health, welfare, and the environment. The term includes the costs of permanent relocation of residents and businesses and community facilities where the President of the United States determines that, alone or in combination with other measures, such relocation is more cost-effective and environmentally preferable to the transportation, storage, treatment, destruction, or secure disposition off site of hazardous substances, or may otherwise be necessary to protect the public health or welfare. The term includes off-site transport and off-site storage, treatment, destruction, or secure disposition of hazardous substances and associated contaminated materials.

Remedial Investigation (RI)

An investigation intended to “adequately characterize the site for the purpose of developing and evaluating an effective remedial alternative” (NCP, 40 CFR 300.430(d)). In addition, the RI provides information to assess the risks to human health, safety, and the environment that were identified during risk screening in the site investigation.

Response Action

Action taken instead of or in addition to a removal action to prevent or minimize the release of MEC so that it does not cause substantial danger to present or future public health or welfare or the environment.

Small Arms Ammunition (SAA)

Ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

Unexploded Ordnance (UXO)

Military munitions that (A) have been primed, fuzed, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material; and (C) remain unexploded either by malfunction, design, or any other cause. (10 U.S.C. 101[e][5][A] through [C])

UXO-Qualified Personnel

Personnel who have performed successfully in military EOD positions, or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, or Senior UXO Supervisor.

UXO Technicians

Personnel who are qualified for and filling Department of Labor, Service Contract Act, Directory of Occupations, contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III.

[this page intentionally left blank]

1.0 INTRODUCTION

This Land Use Controls Implementation Plan, and Operation and Maintenance Plan (LUCIP/OMP) was prepared by the Environmental Services Cooperative Agreement (ESCA) Remediation Program (RP) Team (the ESCA RP Team) on behalf of the Fort Ord Reuse Authority (FORA) for the Group 3 Munitions Response Areas (MRAs) within the former Fort Ord in Monterey County, California (Figure 1). Group 3 consists of Del Rey Oaks (DRO)/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain (MOUT) Site MRAs. Originally, Group 3 included the Interim Action Ranges MRA. The Interim Action Ranges MRA was removed from Group 3 for further evaluation as agreed upon by FORA, United States Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC) and the United States Department of the Army (Army).

The purpose of this LUCIP/OMP is to provide remedy implementation and maintenance information for the Group 3 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Record of Decision (ROD) dated October 27, 2014 (Appendix A).

The selected remedy addresses human health and the environment munitions and explosives of concern (MEC) risk that potentially remains in the Group 3 MRAs. Group 3 munitions responses (MEC removals) have been completed, significantly reducing the risks to human health and the environment. The selected remedy for the Group 3 MRAs includes Land Use Controls (LUCs) because detection technologies may not detect all MEC present. The LUCs include requirements for: (1) MEC recognition and safety training for those people that conduct ground-disturbing or intrusive activities on the property; (2) construction support by unexploded ordnance (UXO)-qualified personnel for ground-disturbing or intrusive activities; and (3) restrictions prohibiting residential use. These LUCs are intended to limit MEC risk that may remain at the Group 3 MRAs.

The selected remedy will be implemented by FORA under the ESCA and in accordance with the Administrative Order on Consent (AOC) for Cleanup of Portions of the Former Fort Ord, Docket No. R9-2007-003. This LUCIP/OMP was developed to: (1) outline the processes for implementing land use restrictions; and (2) identify procedures for responding to MEC discoveries, including coordinating a response to a discovery of a significant amount of MEC in the Group 3 MRAs. The selected LUCs may be modified in the future. In addition, Long-Term Management Measures (LTMMs) comprised of a deed restriction, annual monitoring and reporting and five-year review reporting will be implemented for the reuse areas within the Group 3 MRAs.

1.1 Regulatory Background

The former Fort Ord was placed on the National Priorities List in 1990. To oversee the cleanup of the base, the Army, DTSC, Central Coast Regional Water Quality Control Board (RWQCB), and EPA entered into a Federal Facility Agreement (FFA). One of the purposes of the FFA is to ensure that the environmental impacts associated with past and present activities at the former Fort Ord are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health and the environment. In November 1998, the

Army agreed to evaluate MEC at the former Fort Ord and perform a base-wide Munitions Response (MR) Remedial Investigation/Feasibility Study (RI/FS) consistent with CERCLA. The base-wide MR RI/FS program addressed MEC hazards on the former Fort Ord and evaluated past removal actions as well as recommended future remedial actions deemed necessary to protect human health and the environment under future uses. In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate MEC at the former Fort Ord subject to the provisions of the FFA. The signatories agreed that the FFA provided the appropriate framework and process to address the Army's MEC activities.

In March 2007, the Army and FORA entered into an ESCA to provide MEC remediation services funding. In accordance with the ESCA and an AOC, FORA is responsible for completion of CERCLA response actions, except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord. The AOC was entered into by FORA, EPA, DTSC, and the United States Department of Justice Environment and Natural Resources Division in December 2006 (EPA Region 9 CERCLA Docket No. R9-2007-03). The underlying property was transferred to FORA in May 2009. The Group 3 MRAs are included in the ESCA. The Army is the responsible party and lead agency for investigating, reporting, making cleanup decisions, and taking cleanup actions at the former Fort Ord. Under the ESCA, FORA is investigating, reporting, and implementing cleanup actions within the ESCA areas on behalf of the Army.

The Group 3 MRAs include sites where MEC were found and munitions response (MEC removals) actions were conducted. The Group 3 MRAs contain portions, or all, of seven Munitions Response Sites (MRSs) that were suspected of having been used for military training with military munitions. These MRSs were investigated, with all detected MEC removed. These munitions response actions also included Quality Control and Quality Assurance requirements that evaluated the adequacy of the munitions response actions.

Although MEC is not expected to be encountered within these MRSs, it is possible that some MEC may not have been detected and remains present. Because a future land user (e.g., worker or recreational user) may encounter MEC at the Group 3 MRAs, a Group 3 RI/FS was conducted to evaluate remedial alternatives to address this potential risk to future land users (ESCA RP Team 2012). The Group 3 RI/FS was developed by FORA under the ESCA and in accordance with the AOC. The RI/FS evaluated the risks related to potentially remaining MEC within the Group 3 MRAs based upon the intended future uses. On October 27, 2014 the Army and EPA, in consultation with DTSC, recorded the final decision in the ROD documenting the selected remedial alternative of LUCs for managing the risk to future land users from MEC that potentially remain in the Group 3 MRAs. This LUCIP/OMP was prepared as a result of the selection of LUCs as a component of the remedy in accordance with the ROD for Group 3 MRAs.

1.2 FORA ESCA Regulatory Framework and Responsibilities

In connection with the early transfer of a portion of the former Fort Ord, FORA performed a portion of the Army's cleanup obligations under an ESCA grant. Pursuant to the associated AOC, entered into in December 2006 and effective July 25, 2008, and the ESCA, dated March 27, 2007, FORA agreed to implement the selected remedy for the Group 3 MRA sites.

This LUCIP/OMP fulfills the AOC requirements identified under Group 3 MRAs Appendix B, Statement of Work, Tasks 7 and 8. FORA requested EPA's approval to waive Appendix B, Statement of Work, Task 6 (Remedial Design/Remedial Action) requirements of the AOC, as the selected remedy for the Group 3 MRAs consists solely of institutional controls implementation. EPA approved this request in a letter to FORA dated January 5, 2015.

1.2.1 FORA Successor in Interest

In 2014, Assembly Bill 1614 was passed to extend FORA's statutory authorities to June 30, 2020, extending the organization by 6 years. The federal deeds, ESCA and AOC fully contemplated the eventual sunset of FORA and made provisions for a successor in interest to perform FORA's Long-Term Obligations (LTOs). For purposes of this LUCIP/OMP, the terminology of "FORA or its successor" refers to obligations or requirements that are currently assigned to FORA, but will eventually be transferred to FORA's successor in interest for the performance of LTOs.

1.3 Area of Remedy Implementation

The area addressed by this LUCIP/OMP consists of those areas included in the Army's ROD, Group 3, DRO/Monterey, Laguna Seca Parking, and MOUT Site Munitions Response Areas, Former Fort Ord, California (Appendix A). The Group 3 MRAs are described below. Survey plats for each MRA are provided in Appendix B.

1.3.1 DRO/Monterey MRA

The DRO/Monterey MRA is located in the southwestern portion of the former Fort Ord and encompasses approximately 30 acres of undeveloped land and approximately 5.3 acres of the existing South Boundary Road and associated right-of-way (Figure 1). The DRO/Monterey MRA is comprised of two non-contiguous portions of a MRS, specifically MRS-43 and a portion of the South Boundary Road, which is not located within the boundaries of an MRS (Figure 2).

The DRO/Monterey MRA includes three proposed planned reuses: habitat management; business park/light industrial and office/research and development; and South Boundary Road and associated right-of-way.

1.3.2 Laguna Seca Parking MRA

The Laguna Seca Parking MRA is located in the south-central portion of the former Fort Ord adjacent to the Laguna Seca Raceway and is approximately 276 acres (Figure 1). The Laguna Seca Parking MRA includes MRS-14A, MRS-29, MRS-30, and MRS-47 (Figure 3).

The Laguna Seca Parking MRA includes two proposed planned reuses: open space/recreation, as continued use of the area for overflow parking along Barloy Canyon Road and South Boundary Road during Laguna Seca Raceway events; and development (with reserve areas/restrictions) subject to the proposed Highway 68 bypass.

1.3.3 MOUT Site MRA

The MOUT Site MRA is located in the central portion of the former Fort Ord within the northeastern portion of the historical impact area and is approximately 58 acres (Figure 1). The MRA consists of MRS-28 (the MOUT training area), which includes a mock city training area currently used for tactical training of military, federal, and local law enforcement and emergency services providers, and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area (Figure 4). The northern segment of the Barloy Canyon Road portion of the MOUT Site MRA passes through a former training site identified as MRS-27O. The southern portion of Barloy Canyon Road is bordered by MRS-14D to the east. The MRA also includes a portion of Barloy Canyon Road located outside of an MRS boundary.

The proposed MRA uses are consistent with current site usage, which includes: the MOUT Training Area for tactical/law enforcement and emergency service provider training by Monterey Peninsula College (MPC); and Barloy Canyon Road and associated right of way.

1.4 Description of Selected Remedy

The selected remedy addresses risks to human health and the environment from MEC that potentially remains in the Group 3 MRAs. Munitions responses (MEC removals) have been completed at the Group 3 MRAs, significantly reducing the risks to human health and the environment. The selected remedy for the Group 3 MRAs includes LUCs because detection technologies may not detect all MEC present. The LUCs include requirements for:

- (1) MEC recognition and safety training for those conducting ground-disturbing or intrusive activities on the property;
- (2) Construction support by UXO-qualified personnel for ground-disturbing or intrusive activities; and
- (3) Restrictions prohibiting residential use.

For the purpose of this remedy, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007). Any proposal for residential development in the Group 3 MRAs will be subject to regulatory agency and Army review and approval; however, per the FORA Fort Ord Reuse Plan (Base Reuse Plan; FORA 1997), no residential reuse is planned for the Group 3 MRAs.

The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as real property owner or as a government entity.

As part of the LUC implementation strategy, LTMM comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 3 MRAs. The Army will evaluate these sites as part of

the installation-wide CERCLA five-year review to be conducted in 2017. The selected LUCs may be modified in the future based on the five-year review process.

As part of the early transfer of the subject property, the Army has entered into State Covenants to Restrict the Use of Property (CRUPs) with DTSC that document land use restrictions. The existing deeds to FORA for the Group 3 MRA parcels include the following land use restrictions: 1) residential use; and 2) excavation (unless construction support and MEC recognition and safety training are provided). The Army will modify the existing land use restrictions in the federal deeds, as necessary, to reflect the selected remedy. FORA, or its successor under the ESCA and the AOC, will prepare and submit annual letter reports to EPA and DTSC summarizing any MEC found and changes in site conditions that could increase the possibility of encountering MEC. Copies of the annual monitoring report will also be provided to the Army for inclusion in the five-year reviews.

While the Army does not consider California laws and regulations concerning CRUPs to be applicable or relevant and appropriate requirements (ARARs), the Army entered into CRUPs with DTSC at the time the property was transferred to FORA. The CRUPs set forth protective provisions, covenants, restrictions and conditions applicable to properties; and compliance responsibility lies with current and future land owners and occupants. Each and every CRUP restriction and requirement (a) runs with the land, (b) is enforceable by DTSC and (c) is imposed on entire properties unless expressly stated. DTSC will modify the existing CRUP, if appropriate, to reflect the land use restrictions included in the selected remedy. Although DTSC and EPA Region 9 disagree with the Army's determination that California laws and regulations concerning CRUPs are not ARARs, they will agree-to-disagree on this issue since the Army executed the CRUPs and DTSC will modify the CRUPs, if appropriate, to be consistent with the identified remedy.

1.4.1 MEC Recognition and Safety Training

For the areas addressed in this LUCIP/OMP, ground-disturbing or intrusive activities are expected to occur. People involved in ground-disturbing or intrusive operations at these areas will be required to attend MEC recognition and safety training to increase awareness of and ability to identify MEC items. Prior to conducting ground-disturbing or intrusive activities, property owners will be required to notify FORA or its successor for MEC recognition and safety training for those performing ground-disturbing or intrusive activities.

MEC recognition and safety training will be evaluated as part of the five-year review process to determine if the training program should continue. If further evaluation indicates that this LUC is no longer necessary, the program may be discontinued with regulatory approval.

1.4.2 Construction Support

Construction support by UXO-qualified personnel is required during any intrusive or ground-disturbing construction activities at the Group 3 MRAs in order to address potential MEC risks to construction and maintenance personnel. Construction activities are defined as any activity that involves disturbance of 10 cubic yards (cy) or more. Construction support will be arranged during the construction and maintenance planning stages of the project prior to the start of any intrusive or ground-disturbing activities. Group 3 jurisdictions in consultation

with DTSC, shall determine the level of construction support required on a case-by-case basis. Construction support is determined by the probability of encountering MEC.

If evidence of MEC is found during construction support activities, the intrusive or ground-disturbing work will immediately cease, no attempt will be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property will be immediately notified so that appropriate explosive ordnance disposal (EOD) personnel can be dispatched to address the MEC, as required under applicable laws and regulations. Construction support may be applicable in the short term during development of the reuse area, and/or in the long-term during established reuse.

Construction support will be evaluated as part of the five-year review process to determine if the LUC should continue. If the MEC-related data collected during the development of the disturbed areas indicate that this LUC is no longer necessary, construction support may be discontinued after regulatory approval.

1.4.3 Restrictions Prohibiting Residential Use

Residential use restrictions placed on the Group 3 property at the time the property was transferred to FORA will be maintained. For the purposes of this document, residential reuse includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007).

1.4.4 Long-Term Management Measures

As part of the implementation plan, the LUCIP/OMP will also describe the following LTMM:

- **Existing land use restrictions:** The deeds to FORA for the Group 3 MRA parcels restrict residential use. Residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. It should be noted that the CRUPs for the Group 3 MRA parcels restrict residential use.
- **Annual monitoring and reporting:** FORA, or its successor entity under the ESCA and the AOC, will perform annual monitoring and reporting. FORA or its successor entity will notify the regulatory agencies, as soon as practicable, of any MEC-related information identified during use of the property, and report the results of monitoring activities annually.
- **Five-year review reporting:** Five-year reviews will be conducted by the Army in accordance with CERCLA Section 121(c) and the Fort Ord FFA. The five-year review will evaluate the protectiveness of the selected remedy. Based on the evaluation, the selected LUCs may be modified or discontinued, with the approval of EPA and DTSC.

1.4.5 Other Long-Term Management Measures

A number of other LTMM are required to be implemented, tracked and reported on Group 3 properties in addition to the selected LUCs imposed under the ROD that are required by deeds, CRUPs, municipal ordinances and other enforceable documents and agreements. This may include long-term biological monitoring, ground water restrictions, construction related, and other relevant municipal codes.

[this page intentionally left blank]

2.0 SITE DESCRIPTION

The former Fort Ord is located on the Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1) and consists of approximately 28,000 acres. State Route 1 passes through the western portion of former Fort Ord, delineating the beachfront from the rest of the base. Laguna Seca Recreation Area and Toro Regional Park border former Fort Ord to the south and southeast, respectively, as well as several small communities, such as Toro Park Estates and San Benancio. The Salinas Valley agricultural uses border the former installation to the North.

The Group 3 MRAs are located in the central and southern portions of the former Fort Ord and include the DRO/Monterey MRA, the Laguna Seca Parking MRA, and the MOUT Site MRA. Total acreage for the Group 3 MRAs is approximately 369.8 acres.

This section provides background information on the Group 3 MRAs, including a summary of results of the site-specific remedial investigation and site evaluations presented in the Group 3 RI/FS.

2.1 Site History

Since 1917, portions of the former Fort Ord were used by cavalry, field artillery, and infantry units for maneuvers, target ranges, and other purposes. From 1947 to 1974, Fort Ord was a basic training center. After 1975, the 7th Infantry Division occupied Fort Ord. Fort Ord was selected in 1991 for decommissioning, but troop reallocation was not completed until 1993 and the base was not officially closed until September 1994. The property remaining in the Army's possession was designated as the Presidio of Monterey Annex on October 1, 1994, and subsequently renamed the Ord Military Community (OMC). Although Army personnel still operate parts of the base, no active Army division is stationed at the former Fort Ord. Since the base was selected in 1991 for Base Realignment and Closure (BRAC), site visits, historical and archival investigations, military munitions sampling, and removal actions have been performed and documented in preparation for transfer and reuse of the former Fort Ord property. The Army will continue to retain the OMC and the U.S. Army Reserve Center located at the former Fort Ord. The remainder of the former Fort Ord was identified for transfer to Federal, State, and local government agencies and other organizations and, since base closure in September 1994, has been subjected to the reuse process. Portions of the property on the installation have been transferred. A large portion of the Inland Training Ranges was assigned to the U.S. Department of the Interior, Bureau of Land Management. Other areas on the installation have been, or will be, transferred through economic development conveyance, public benefit conveyance, negotiated sale, or other means.

Munitions-related activities (e.g., live-fire training, demilitarization) involving different types of conventional military munitions (e.g., artillery and mortar projectiles, rockets and guided missiles, rifle and hand grenades, practice land mines, pyrotechnics, bombs, and demolition materials) were conducted at Fort Ord. Because of these activities, MEC, specifically UXO and discarded military munitions (DMM), have been encountered and are known or suspected to remain present at sites throughout the former Fort Ord.

2.2 Regulatory History

The Army is the responsible party and lead agency for investigating, reporting, making cleanup decisions, and taking cleanup actions at the former Fort Ord under CERCLA. To address the possibility of the public being exposed to explosive hazards, MEC investigations and removal actions began following BRAC listing and closure of Fort Ord. In November 1998, the Army agreed to evaluate military munitions at the former Fort Ord in an Ordnance and Explosives (OE) RI/FS (base-wide OE RI/FS) — now termed the base-wide MR RI/FS — consistent with CERCLA. An FFA was signed in 1990 by the Army, EPA, DTSC (formerly the Department of Health Services or DHS), and the RWQCB. The FFA established schedules for performing remedial investigations and feasibility studies and requires that remedial actions be completed as expeditiously as possible. In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate military munitions and perform military munitions response activities at the former Fort Ord subject to the provisions of the Fort Ord FFA.

The base-wide MR RI/FS program reviews and evaluates past investigative and removal actions, as well as recommends future response actions deemed necessary to protect human health and the environment regarding explosive safety risks posed by MEC on the basis of proposed reuses. These reuses are specified in the Base Reuse Plan (FORA 1997) and its updates. The base-wide MR RI/FS documents are being prepared in accordance with the FFA, as amended. These documents are made available for public review and comment, and placed in the Army's Fort Ord Administrative Record.

The Army has been conducting military munitions response actions (e.g., investigation, removal) at identified MRSs and will continue these actions to mitigate imminent MEC-related hazards to the public, while gathering data about the type of military munitions and level of hazard at each of the MRSs for use in the base-wide MR RI/FS. The Army is performing its activities pursuant to the President's authority under CERCLA Section 104, as delegated to the Army in accordance with Executive Order 12580 and in compliance with the process set out in CERCLA Section 120. Regulatory agencies (EPA and DTSC) have been and will continue to provide oversight of the munitions response activities pursuant to the FFA.

The Army conducts ongoing and future responses to MEC at the former Fort Ord that are components of the Army's base-wide efforts to promote explosive safety because of Fort Ord's history as a military base. These efforts include: (1) five-year reviews and reporting; (2) notices and restrictions in deeds and property transfer documentations (e.g., letter of transfer); (3) MEC incident reporting; (4) MEC recognition and safety training; (5) school education; and (6) community involvement.

In March 2007, the Army and FORA entered into an ESCA to provide funding for MEC remediation services. In accordance with the ESCA, the AOC, and the FFA Amendment No. 1, FORA is responsible for completion of the CERCLA MEC and related remedial activities, except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord with funding provided by the Army. The AOC was entered into voluntarily by FORA, EPA, DTSC, and the United States Department of Justice Environment and

Natural Resources Division in December 2006 (EPA Region 9 CERCLA Docket No. R9-2007-03). The underlying property was transferred to FORA in May 2009.

As part of the early transfer of the subject property, the Army has entered into State CRUPs with DTSC that document land use restrictions. The applicability of and requirements for CRUPs are described in California Code of Regulations Section 67391.1 and California Civil Code Section 1471.

As described in Final Summary of Existing Data Report (SEDR), Former Fort Ord, Monterey, California (ESCA RP Team 2008), the ESCA areas were combined into nine MRAs, and they were further consolidated into four groups according to similar pathway-to-closure characteristics. Group 1 consists of the Parker Flats and Seaside MRAs. Group 2 consists of the California State University Monterey Bay (CSUMB) Off-Campus and County North MRAs. Group 3 consists of DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs. Originally, Group 3 included the Interim Action Ranges MRA. The Interim Action Ranges MRA was removed from Group 3 for further evaluation as agreed upon by FORA, EPA, DTSC and the Army. Group 4 consists of the Future East Garrison MRA.

2.3 Group 3 MRAs Munitions Response Site Summaries

To facilitate previous MEC investigations and removal activities, the historical use areas were divided into MRSs. Results of the remedial investigations were presented in the Group 3 RI/FS (ESCA RP Team 2012) and have been summarized below.

- **DRO/Monterey MRA** - The DRO/Monterey MRA is located in the southwestern portion of the former Fort Ord and encompasses approximately 30 acres of undeveloped land and approximately 5.245 acres of the existing South Boundary Road and associated right-of-way (Figure 1). The DRO/Monterey MRA is comprised of two non-contiguous portions of MRS-43 and a portion of the South Boundary Road, which is not located within the boundaries of an MRS (Figure 2). Historical records and recovered MEC and munitions debris (MD) indicate that MRS-43 was previously used for artillery training with 37 millimeter (mm) projectiles.
- **Laguna Seca Parking MRA** - The Laguna Seca Parking MRA is located in the south-central portion of the former Fort Ord adjacent to the Laguna Seca Raceway and encompasses approximately 276 acres (Figure 1). The Laguna Seca Parking MRA includes four MRSs: MRS-14A, MRS-29, MRS-30, and MRS-47 (Figure 3). Historical records and recovered MEC and MD indicate that these MRSs were previously used for artillery training, mortar training, troop training, and basic maneuvers.
- **MOUT Site MRA** - The MOUT Site MRA is located in the central portion of the former Fort Ord within the northeastern portion of the historical impact area and encompasses approximately 58 acres (Figure 1). The MRA consists of MRS-28 (the MOUT training area), which includes a mock city training area currently used for tactical training of military, federal, and local law enforcement and emergency services providers, and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area (Figure 4). The northern segment of the Barloy

Canyon Road portion of the MOUT Site MRA passes through a former training site identified as MRS-27O. The southern portion of Barloy Canyon Road is bordered by MRS-14D to the east. The MRA also includes a portion of Barloy Canyon Road located outside of an MRS boundary. Historical records and recovered MEC and MD indicate that the MOUT training area (MRS-28) was used for infantry training in an urban setting in addition to hand grenade training, firing point for rocket launcher training, hand-to-hand combat, combat pistol training, assault course, squad tactics, and night defense training. The Barloy Canyon Road portion of the MRA was maintained as a road and the overlapping MRS-27O was used for bivouac, troop maneuvers, and subcaliber artillery training.

2.4 Group 3 MRAs Remedial Investigation Summary

The Group 3 MRAs contain portions, or all, of seven MRSs, where munitions response actions have been conducted. These MRSs are also shown on Figures 2, 3, and 4. The Remedial Investigation for the Group 3 MRAs is based on the evaluation of previous work conducted for the MRAs in accordance with the Group 3 RI/FS Work Plan (ESCA RP Team 2009).

This section provides background information on the Group 3 MRA Remedial Investigation data collection and review (site evaluations) conducted for the MRSs. Section 2.5 presents a summary of the site evaluations for the MRSs in the Group 3 MRAs as presented in the Group 3 RI/FS (Volume 1; ESCA RP Team 2012).

2.4.1 DRO/Monterey MRA

Scope of Removal Actions - The initial phase of the MEC removal action was designed to address MEC present to a depth of up to 4 feet below ground surface (bgs). During this removal action, all detected anomalies (i.e., ferromagnetic material), even those deeper than 4 feet, were investigated with all detected MEC removed within the MRA. The next phase of the investigation was designed to address MEC to depth of detection. All anomalies detected during the removal actions were investigated or resolved, and all detected MEC items were removed or destroyed. These investigations and removal actions conducted within the DRO/Monterey MRA were focused on addressing explosive hazards.

At the DRO/Monterey MRA, the primary munitions response contractor that performed munitions responses was USA Environmental, Inc. (USA) prior to the ESCA.

Site Evaluation - The evaluation process was documented by completion of a series of checklists for the DRO/Monterey MRA in accordance with the Group 3 RI/FS Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 RI/FS (Volume 1; ESCA RP Team 2012).

The DRO/Monterey MRA is comprised of two non-contiguous portions of MRS-43 and a portion of South Boundary Road, which is not located within the boundaries of an MRS (Figure 2). MRS-43 was identified through a review of former Fort Ord records compiled for the Revised Fort Ord Archive Search Report (USACE 1997a) and was used to facilitate MEC

investigations and removal actions. The DRO/Monterey MRA is bounded by MRS-15 DRO.1 along the northern side of South Boundary Road and by Track 1 sites to the northwest (no MRS designation) and southeast (formerly MRS 43A). The boundaries of the two non-contiguous portions of MRS-43 include a large section of Parcel L6.2 and all of Parcel E29.1 for a combined area of approximately 29 acres. The South Boundary Road portion of the DRO/Monterey MRA includes Parcels L20.13.1.2 and L20.13.3.1 for a total area of approximately 5.245 acres. Based on the results of the literature review, investigations, and removal actions, the MRA was impacted during military training with the 37mm projectile used prior to World War II. Items found may have the potential to penetrate deeper than the depth of detection of the digital and analog equipment used during the removal actions. These findings are consistent with the historical use of this MRA as a weapons and troop training area as indicated in the SEDR (ESCA RP Team 2008).

The Army's munitions response contractor conducted MEC removal actions across the entire MRA with the exception of a 50-foot (ft) wide strip of land on the northwest boundary of the MRA (in the habitat reserve area, Parcel L6.2) and the southern side of the road east of Parcel E29.1, which are both located outside of the MRS-43 boundary (Figure 2). The initial phase of the MEC removal action was conducted using analog instruments to depths of 4 feet bgs. The subsequent phase of the investigation was conducted using digital geophysical equipment to the depth of detection. While two small portions of the MRA have not been subjected to MEC removal actions, SiteStat/GridStat (SS/GS) investigation grids were either located partially within or immediately adjacent to the two areas. No MEC or MD items were recovered from the SS/GS investigation grids located within or immediately adjacent to these two areas. Therefore, it is expected that finding MEC in either of these two areas would not be likely.

2.4.2. Laguna Seca Parking MRA

Scope of Removal Actions - The MEC removal actions were designed to address MEC to a depth of 4 feet bgs in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, and to a depth of 1 foot bgs along the western and eastern slopes of MRS-14A. All anomalies (i.e., ferromagnetic material), even those deeper than 4 feet in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, were investigated with all detected MEC encountered removed within the MRA. These investigations and removal actions conducted within the Laguna Seca Parking MRA were focused on addressing explosive hazards.

At the Laguna Seca Parking MRA, the three primary munitions response contractors that performed munitions responses were Human Factors Applications, Inc. (HFA), UXB International, Inc. (UXB), and USA prior to the ESCA.

Site Evaluation - The evaluation process was documented by completion of a series of checklists for the Laguna Seca Parking MRA in accordance with the Group 3 RI/FS Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 RI/FS (Volume 1; ESCA RP Team 2012).

The vicinity of the Laguna Seca Parking MRA was identified as a training area on historical maps for the 1st Brigade and Division Artillery. The MRA consists of four MRSs that were

identified to facilitate previous MEC investigations and removal actions: MRS-14A, MRS-29, MRS-30, and MRS-47 (Figure 3). The MRA encompasses approximately 276 acres and contains the following six parcels: L20.3.1, L20.3.2, L20.5.1, L20.5.2, L20.5.3, and L20.5.4 (Figure 3).

MEC removal actions completed by the Army's munitions response contractors were conducted using analog instruments across the MRSs within the MRA. The MEC removal actions were conducted to a depth of 4 feet bgs with two exceptions: the MEC removal action was conducted to a depth of 1 foot bgs along the western and eastern slopes of MRS-14A; and MEC removal actions were not completed in two whole and four partial grids in MRS-14A due to terrain-related inaccessibility. Based upon the results of the MEC removal action conducted immediately surrounding these grids, it is not anticipated that MEC items posing a significant risk would remain in the six grids. Items found in the MRA may have the potential to penetrate deeper than the depth of detection of the analog instruments used during the MEC removal actions. The majority of MEC and MD encountered were consistent with the documented historical use of the MRA. Some items encountered along the western boundary of the MRA were likely the result of being adjacent to the historical impact area.

2.4.3. MOUT Site MRA

Scope of Removal Actions - The visual surface removal and field verification survey conducted in the MOUT Site MRA were designed to address MEC on the ground surface. Grid sampling investigations were conducted in a small percentage of the MRA to address MEC to depths of 4 feet bgs. During the grid sampling investigations, all anomalies (i.e., ferromagnetic material), even those deeper than 4 feet, were investigated with all detected MEC encountered removed within the MRA. These investigations and removal actions conducted within the MOUT Site MRA were focused on addressing explosive hazards.

At the MOUT Site MRA, the three primary munitions response contractors that performed munitions responses were HFA, UXB, and USA prior to the ESCA.

Site Evaluation - The evaluation process was documented by completion of a series of checklists for the MOUT Site MRA in accordance with the Group 3 RI/FS Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 RI/FS (Volume 1; ESCA RP Team 2012).

The MOUT Site MRA includes two areas: the MOUT training area, which encompasses approximately 51 acres and consists of a mock city training area that is currently used for tactical training of military, federal, and local law enforcement agencies, and emergency service providers by MPC; and a portion of Barloy Canyon Road encompassing approximately seven acres located along the eastern boundary of the historical impact area (Figure 4). To facilitate previous MEC investigations and removal actions, the MOUT training area was designated as MRS-28, which corresponds to Parcel F1.7.2 (Figure 4). The Barloy Canyon Road portion of the MRA was designated as Parcel L20.8 and borders a former military training area to the east (MRS-14D) in the southern portion of the parcel and the historical impact area to the west. The northern portion of Parcel L20.8 passes through a former training site designated as MRS-270.

A grid sampling investigation and a SS/GS sampling investigation were conducted over a portion of MRS-28. During sampling, geophysical anomalies were intrusively investigated to a depth of up to 4 feet bgs. The recommendation included in the After-Action Report for the SS/GS and grid sampling investigations was for further site characterization in the northern central and southern portions of MRS-28 to ascertain the extent of MEC removal operations necessary to support current and future reuse of the property (USA 2001b). Following an accidental fire in the area, a visual surface time-critical removal action (TCRA) was conducted over the majority of the MOUT Site MRA with the exception of a small area in the southwestern portion of MRS-28 and the southern portion of Barloy Canyon Road along the eastern side of the roadway. A site verification survey was performed in the southwestern portion of MRS-28 where the TCRA was not conducted (ESCA RP Team 2012). A grid sampling investigation and 4-ft removal action were conducted in MRS-14D, adjacent and to the east of the southern portion of Barloy Canyon Road (USA 2001a). One sampling grid was located in the roadway Parcel L20.8 within the boundaries of the MOUT Site MRA. The majority of MEC and MD encountered during the MEC investigations and removal actions were consistent with the documented historical use of the MRA. Some items encountered in the MRA were likely the result of the area being located within and along the edge of the historical impact area.

2.5 Group 3 MRAs Munitions Response Site Summaries

This section summarizes the MEC investigations and removal actions conducted for the MRSs identified in the Group 3 RI/FS (Volume 1; ESCA RP Team 2012). MEC encountered during these actions were destroyed by detonation and recovered MD was disposed of or recycled after being inspected and determined not to pose an explosive hazard.

2.5.1 DRO/Monterey MRA

The DRO/Monterey MRA includes a portion of MRS-43 where MEC investigations and removal actions have been conducted as presented below. The MEC and MD encountered within the DRO/Monterey MRA were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the MEC investigations and removal actions conducted within MRS-43 successfully detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-43

A SS/GS investigation was conducted in part of MRS-43 by USA in 1998 using Schonstedt magnetometers (USA 2001e). Five 100-ft by 200-ft grids and one partial grid were located in Parcel E29.1 of the DRO/Monterey MRA and one partial grid was located in Parcel L6.2 of the DRO/Monterey MRA. The results of the SS/GS sampling investigation indicated that while MD (referred to as ordnance scrap in the final report) related to 37mm projectiles and smoke hand grenades was found in grids, no MEC (referred to as UXO items in the final report) was found within MRS-43. The SS/GS sampling investigation in MRS-43 was determined to be inconclusive by the U.S. Army Corps of Engineers (USACE); therefore, a grid sampling investigation was recommended for MRS-43.

From December 1999 to March 2000, USA conducted a grid sampling investigation using Schonstedt magnetometers to a depth of 4 feet bgs, with deeper excavation as approved by USACE, in MRS-43 (USA 2001b). Four whole 100-ft by 100-ft grids, one partial 100-ft by 100-ft grid, two whole 100-ft by 200-ft SS/GS grids, and one partial 100-ft by 200-ft SS/GS grid were located in the DRO/Monterey MRA portion of MRS-43 and all anomalies encountered were investigated. The results of the grid sampling investigation indicated that MEC and MD related to hand grenades (single burial pit with 23 MEC items) and 37mm projectiles were found in MRS-43 (USA 2001b). The MEC items were not found within the boundaries of the DRO/Monterey MRA. The MEC and MD finds resulted in the need to conduct a removal action in the MRS. The southernmost half of MRS-43 (eventually designated as MRS-43A) was not subject to the removal action since no MEC or MD was discovered during the grid sampling investigations.

A MEC removal action was conducted in MRS-43 (Army 2000 and USA 2001b). The removal action consisted of a total of 258 whole and partial 100-ft by 100-ft grids. The removal action included the entire MRS-43 area and all anomalies encountered using Schonstedt magnetometers were investigated to a depth of 4 feet bgs (USA 2001b). The removal action corresponded to the entire DRO/Monterey MRA except for a narrow strip of land approximately 50 feet wide along the northwestern edge of Parcel L6.2 and South Boundary Road Parcels L20.13.3.1 and L20.13.1.2. Two ignition cartridges (designated as DMM) and a quarter pound of trinitrotoluene demolition charge (designated as UXO) were found in the area corresponding to Parcel L6.2. No MEC was found in the remainder of MRS-43 including Parcel E29.1 of the DRO/Monterey MRA. A total of 109 MD items were found throughout most of MRS-43 including Parcels L6.2 and E29.1 of the DRO/Monterey MRA.

A digital geophysical investigation was conducted in MRS-43 and in adjacent MRSs by USA using the G858 magnetometer, the cart-mounted EM61, and the handheld EM61, depending on vegetation and terrain (USA 2001b). Five whole and nine partial 100-ft by 100-ft grids located in the DRO/Monterey MRA portion of MRS-43 were investigated with the portable G858 magnetometer. The portable cart-mounted EM61 was employed in the investigation of 154 100-ft by 100-ft grids and 10 sampling grids (USA 2001b) in MRS-43. A number of these grids were located within Parcel E29.1 and only a few grids were located within Parcel L6.2. Two whole and two partial 100-ft by 100-ft grids were investigated using a handheld EM61. All but one partial grid were within Parcel E29.1; the partial grid was in Parcel L6.2 (USA 2001b).

2.5.2 Laguna Seca Parking MRA

The Laguna Seca Parking MRA consists of MRS-14A, MRS-29, MRS-30, and MRS-47 where MEC investigations and removal actions have been conducted as presented below. The MEC and MD encountered within MRS-14A, MRS-29, MRS-30, and MRS-47 were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the investigation and removal actions conducted in the Laguna Seca Parking MRA successfully detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-14A

The initial MEC response actions conducted in MRS-14A included a removal action to a depth of 3 feet bgs to support proposed Laguna Seca Raceway parking on 50 acres in June 1994 (HFA 1994) and a grid sampling investigation to a depth of 4 feet bgs on 86 100-ft by 100-ft grids (10% of 193 acres) from July 1994 to May 1995, using Schonstedt magnetometers (UXB 1995a). The areas where the initial MEC response actions were conducted were also included in the MEC removal actions discussed in the following paragraphs.

A removal action to a depth of 4 feet bgs was performed at MRS-14D (identified as Site OE 14D in the corresponding after-action report), which included the northernmost tip of MRS-14A, by USA using Schonstedt magnetometers from September 1996 through January 1997. Eight full and two partial 100-ft by 100-ft grids included in the removal action were located within the current boundary of MRS-14A. One MEC item was discovered within the boundaries of MRS-14A and one MEC item was found outside MRS-14A, but inside the Laguna Seca Parking MRA. Both items were removed in accordance with the work plan (CMS 1995).

A removal action was conducted by USA at MRS-14A using Schonstedt magnetometers from June 1997 through April 1998. The removal action was conducted on 427 grids to a depth of 4 feet bgs and 384 grids to a depth of 1 foot bgs. Six grids (two complete grids and portions of four grids) were not accessible and a paved ditch along Lookout Ridge Road was not surveyed during the MEC removal action (USA 2001c). The removal action at MRS-14A encountered 137 MEC items including electric blasting caps, smoke grenades and assorted pyrotechnics, expended 37mm, 57mm, and 75mm projectiles, and training 81mm mortars. MEC items discovered were removed in accordance with the work plan.

MRS-29

A random sampling investigation was conducted on 69 100-ft by 100-ft grids in MRS-29 in 1995 using Schonstedt magnetometers (UXB 1995b). The investigation was converted to a removal action, which included the 69 sampling investigation grids, as discussed in the following paragraph.

A removal action to a depth of 4 feet bgs was performed by CMS Environmental, Inc. (CMS; currently known as USA) on MRS-29 from June 1997 to July 1998 using Schonstedt magnetometers. A total of 125 100-ft by 100-ft grids and partial grids were completed by CMS. No MEC items were found during this removal action (USA 2000a).

MRS-30

A removal action was conducted to a depth of 4 feet bgs using Schonstedt magnetometers on the entire 5.9 acres of MRS-30, which consisted of 25 100-ft by 100-ft grids and 10 partial grids (UXB 1995c). Two MEC items were found: one 75mm high explosive projectile and one 81mm illumination mortar cartridge. Both items were detonated in place in accordance with the work plan (UXB 1995c).

MRS-47

The initial MEC response actions conducted in MRS-47 included a vegetation clearance in 1994 to facilitate access for a controlled burn (USACE 1997a and USA 2000b), sampling investigation of three grids by HFA in January 1994 using Schonstedt magnetometers (HFA 1994), a removal action to a depth of 3 feet bgs by UXB from July 1994 to July 1995 using Schonstedt magnetometers (UXB 1995d), and a sampling investigation from July to September 1996 by USA using Schonstedt magnetometers (USA 2000b). The areas where these initial MEC response actions were conducted were also included in the MEC removal action discussed in the following paragraph.

From February to June 1997, USA conducted a removal action to a depth of 4 feet bgs on the entire 79 acres of MRS-47 using Schonstedt magnetometers (USA 2000b). MEC found included 81mm mortars, 37mm projectiles, 3-inch Stokes mortars, 75mm projectiles, 60mm mortars, smoke-filled hand grenades, two unfired high explosive 40mm cartridges, a variety of pyrotechnic items, a 4.2-inch projectile, a 20mm projectile, a 57mm projectile, a 2.36-inch rocket, and various fuzes for grenades, mines, and projectiles.

2.5.3 MOUT Site MRA

The MOUT Site MRA consists of MRS-28 (the MOUT training area) and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area. The northern segment of the Barloy Canyon Road portion of the MOUT Site MRA passes through a former training site identified as MRS-27O. The southern portion of Barloy Canyon Road is bordered by MRS-14D to the east. Because the proximity of the roadway to these MRSs, the sampling and removal actions performed in MRS-27O and MRS-14D are included in the following discussions. The MEC and MD encountered within the MOUT Site MRA were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the investigations and removal actions conducted in the MOUT Site MRA detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-28

From March to September 1998, USA conducted a grid sampling investigation in MRS-28 for the Army to determine the need for performing a MEC removal action (USA 2001d). The grid sampling was conducted in 16 100-ft by 100-ft grids in the northeastern and southern portions of the MRS. The sampling investigation included the entire grid area and the anomalies encountered using Schonstedt magnetometers were investigated to a depth of 4 feet bgs. The boundaries of MRS-28 were modified since this investigation; therefore, 13 of the 16 grids were located within the current boundaries of MRS-28. In the northeastern portion of MRS-28, five MEC items (two practice hand grenades, two smoke hand grenades, and one hand grenade fuze) were found. The majority of the MD items found were also related to practice hand grenades, smoke hand grenades, and hand grenade fuzes. In the southern portion of MRS-28, two MEC items (one civilian blast simulator and one practice hand grenade fuze) were found. The majority of the MD items found were related to 40mm

cartridge cases, practice 3.5-inch rockets, practice 2.36-inch rockets, and practice hand grenade fuzes.

From March to September 1998, USA conducted a SS/GS sampling investigation in the central portion of MRS-28 to determine the need for performing an MEC removal action (USA 2001d). The SS/GS investigation was conducted in 14 100-ft by 200-ft grids. Grids were investigated using the Schonstedt magnetometer. In the central portion of MRS-28, MEC items (3.5-inch rocket, ground burst simulator, ignition cartridge, mine fuzes, and hand grenade fuzes) were found. Forty hand grenade fuzes were found in a single “pit” and 16 mine fuzes were found in one location. The majority of the MD items found in these grids were related to practice hand grenades, smoke hand grenades, hand grenade fuzes, practice 3.5-inch rockets, practice 2.36-inch rockets, trip flares, and illumination signals.

From approximately November to December 2003, a visual surface TCRA and military munitions reconnaissance was conducted for the Army by Shaw Environmental, Inc. (Shaw) to remove MEC following an accidental fire in the area (Shaw 2005). MD (greater than 2 inches in size) was also removed. MRS-28 was included in the TCRA with the exception of a small area consisting of approximately 10 100-ft by 100-ft whole and partial grids along the northwestern border. MEC items found in MRS-28 included practice hand grenades, smoke hand grenades, hand grenade fuzes (practice and non-practice), one fragmentation hand grenade, 40mm projectiles (illumination parachute, smoke, and practice), antitank rifle grenades, a surface trip flare, and ground illumination flares.

In February 2012, an instrument-aided field verification survey using a Schonstedt magnetometer was conducted by the ESCA RP Team in 24 100-ft by 100-ft whole and partial grids in MRS-28 along the southwestern border of the MOUT training facility area including the area not previously investigated in the TCRA. One MEC item, a smoke hand grenade, was found during the survey.

MRS-27O

From November to December 2003, a visual surface TCRA and military munitions reconnaissance was conducted for the Army by Shaw to remove MEC following an accidental fire in the area (Shaw 2005). MD (greater than 2 inches in size) was also removed. MEC items found included a flash artillery simulator next to the portion of Barloy Canyon Road that passes through the MRS.

MRS-14D

From August through November 1995, CMS (currently known as USA) performed a grid sampling investigation in MRS-14D, located to the east of the southern portion of Barloy Canyon Road, to a depth of 4 feet bgs in 35 100-ft by 100-ft grids and partial grids using Schonstedt magnetometers (USA 2001a). The areas where the grid sampling investigation was conducted were also included in the MEC removal action discussed in the following paragraph.

A removal action to a depth of 4 feet bgs was performed at MRS-14D, located to the east of the southern portion of Barloy Canyon Road, by USA using Schonstedt magnetometers from September 1995 through January 1997. Partial 100-ft by 100-ft grids included in the removal action extended into the current boundary of the Barloy Canyon Road portion of the MOUT Site MRA. Two MEC items were recovered along the east side of Barloy Canyon Road within the MOUT Site MRA.

2.6 Potential Future Land and Resource Uses

The future land uses for the Group 3 MRAs, summarized below, are based upon the Fort Ord Base Reuse Plan (FORA 1997). Future land use information is also included in the Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP; USACE 1997b) and modifications to the HMP provided in Assessment, East Garrison – Parker Flats Land Use Modifications, Fort Ord, California (Zander 2002), and Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification (Army 2004).

2.6.1 DRO/Monterey MRA

The DRO/Monterey MRA is proposed for habitat management and business park/light industrial and office/research and development reuse in the Base Reuse Plan. The reasonably foreseeable reuses being considered for the DRO/Monterey MRA include:

- Habitat Management Reuse Area - Parcel L6.2, approximately 7 acres;
- Business Park/Light Industrial and Office/Research and Development Reuse Area - Parcel E29.1, approximately 23 acres; and
- South Boundary Road and Associated Right of Way Reuse Area, Parcels L20.13.3.1 and L20.13.1.2, area totals approximately 5.3 acres.

2.6.2 Laguna Seca Parking MRA

The Laguna Seca Parking MRA is proposed for open space/recreation reuse in the Base Reuse Plan and development with reserve areas or development with restrictions in the HMP. The reasonably foreseeable reuses being considered for the Laguna Seca Parking MRA include:

- Open Space/Recreation Reuse Area - Parcels L20.3.2, L20.5.1, L20.5.3, and L20.5.4, area totals approximately 177 acres; and
- Open Space/Recreation Reuse Area/Highway 68 Bypass Right of Way - Parcels L20.3.1 and L20.5.2, area totals approximately 99 acres.

2.6.3 MOUT Site MRA

The MOUT Site MRA is proposed for school/university reuse in the Base Reuse Plan. The reasonably foreseeable uses being considered for the MOUT Site MRA include:

- MOUT Training Area Reuse Area - Parcel F1.7.2, approximately 51 acres.
- Barloy Canyon Road Reuse Area - Parcel L20.8, approximately 7 acres.

[this page intentionally left blank]

3.0 LAND USE CONTROL IMPLEMENTATION STRATEGIES

In this section, performance objectives for the LUC remedy to be implemented at Group 3 MRAs are presented along with the implementation strategy for achieving each objective. Specific actions to be taken to implement each objective, including monitoring and reporting requirements are then presented in Section 4.0.

LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: 1) new information (e.g., limited geophysical mapping, site development); or 2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed.

3.1 MEC Recognition and Safety Training

Performance Objective: Ensure that land users and their contractors involved in ground-disturbing or intrusive activities are educated about the possibility of encountering MEC, and ensure that land users involved in ground-disturbing or intrusive activities stop the activity when MEC is encountered and report the encounter to the appropriate authority.

Implementation Strategy: The MEC recognition and safety training requirement is currently being implemented through either classroom or tailgate instruction offered by both the FORA ESCA Team and by the Army. To facilitate long-term implementation of training, FORA will develop an option for delivery of training via web-based video or slide presentation. FORA will also develop and implement a process and procedures for requesting training, providing access to the training materials, documenting and monitoring training activities. Training activities will be reported in the annual LUC monitoring report. In addition to this ROD requirement, people conducting ground-disturbing or intrusive activities are also required to obtain MEC recognition and safety training as a condition for excavation permits under the local digging and excavation ordinance. Training is also required under the deed restrictions, State CRUP, and Finding of Suitability for Early Transfer (FOSET) Environmental Protection Provisions (EPP) providing for redundancy in this LUC requirement. See Section 4.1 for details on the implementation of this LUC.

3.2 Construction Support

Performance Objectives: Ensure projects involving ground-disturbing or intrusive activities are coordinated with UXO-qualified personnel so encounters with potential MEC items will be handled appropriately. Mechanisms for implementing the requirement for construction support may include local ordinances.

Implementation Strategy: Construction support is required for ground-disturbing or intrusive activities and is being implemented through an excavation permitting process under the Group 3 jurisdictions' digging and excavation ordinances. During the excavation permitting process, Group 3 jurisdictions in consultation with DTSC, determine the level of

construction support required for a project on a case-by-case basis. Construction support requirements are determined using current Department of Defense Explosives Safety Board (DDESB) requirements and site-specific conditions, including the probability of encountering MEC. To facilitate implementation of construction support, FORA will develop procedure for construction support planning, including guidelines and requirements for determining appropriate levels of construction support, response to potential MEC finds, reporting and documentation. The procedures will include actions to be taken if evidence of MEC is encountered during ground disturbing activities regardless of the volume of displacement, including requirements for land owners or contractors to stop work and report MEC finds to local law enforcement and notification to regulatory agencies. Major elements of implementing the construction support include construction planning support, response to evidence of MEC during construction support activities, construction support reporting and documentation and determination of when constructions support is no longer necessary. Construction support is also a requirement of the local digging and excavation ordinance, deed restrictions, State CRUP, and FOSET EPP providing for redundancy in this LUC requirement. See Section 4.2 for details on the implementation of this LUC.

3.3 Restrictions Prohibiting Residential Use

Performance Objectives: Ensure that any proposals to allow residential development or modifications to residential restrictions are approved by EPA and Army in coordination with DTSC.

Implementation Strategy: Residential use is currently prohibited within the Group 3 MRAs by deed restriction, FOSET EPP and State CRUP. To ensure the residential use restriction is maintained, FORA and the Group 3 jurisdictions conducting annual inspections of the Group 3 MRAs, including review of property transfers and deed amendments, development activities and changes in land use. FORA and the Group 3 jurisdictions currently conduct annual monitoring and reporting on LUCs. Responsibility for annual monitoring and reporting of LUCs will transfer to the Group 3 jurisdictions at property transfer. A memorandum of agreement (MOA) is in place with the Group 3 jurisdictions outlining their obligation to maintain the LUCs, including the residential use restriction (Appendix C). The residential use restriction is also a provision of the deed restrictions, State CRUP, and FOSET EPP providing for redundancy in this LUC requirement. See Section 4.3 for details on the implementation of this LUC.

3.4 Long-term Management Measures

As part of the LUCIP/OMP, the following LTMM will also be implemented in the Group 3 MRAs:

Existing land use restrictions: The deeds to FORA for the Group 3 MRA parcels restrict residential use. Residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. It should be noted that the CRUPs for the Group 3 MRA parcels restrict residential use.

Annual monitoring and reporting: FORA, or its successor entity under the ESCA and the AOC, will perform annual monitoring and reporting. FORA or its successor entity will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during use of the property, and report the results of monitoring activities annually.

Five-year review reporting: Five-year reviews will be conducted by the Army in accordance with CERCLA Section 121(c) and the Fort Ord FFA. The five-year review will evaluate the protectiveness of the selected remedy. Based on the evaluation, the selected land use controls may be modified or discontinued, with the approval of EPA and DTSC. See Section 4.9.2 for details on the implementation of this LTMM.

[this page intentionally left blank]

4.0 REMEDY IMPLEMENTATION ACTIONS

This section presents implementation actions to facilitate LUC remedy objectives. Implementation actions including monitoring, maintenance and reporting requirements are outlined. In addition, long-term execution responsibilities have been identified.

All applicable local Building Codes and permits apply to the Group 3 MRA properties. In addition, Monterey County (County) and the Cities of Del Rey Oaks and Monterey (Cities) have each adopted digging and excavation ordinances that specify special standards and procedures for ground disturbing activities on the former Fort Ord (“digging and excavation ordinances”). The intent of these ordinances is to ensure that site purchasers, developers or workers are aware of the potential that MEC may still be located on these properties, and are aware of the requirements for MEC precautions to be implemented prior to any ground disturbance.

The digging and excavation ordinances apply to all Group 3 MRA properties and are applicable to excavation, digging, development and ground disturbance that involve displacement of more than ten (10) cy. For purposes of the LUCIP/OMP, these intrusive actions will be referred to as “construction activities.” Elements of these digging and excavation ordinances include directives for: documentation of previous MEC excavation or removal; detailed project description and mapping; procurement of excavation permits; acknowledgments and permit fees; and procedures and requirements for MEC recognition and safety training, construction support, and after action reporting. As stated in the ordinances, DTSC shall be continually involved in the establishment of controls for these properties which shall be coordinated by the Group 3 jurisdictions.

Post FORA land transfer, the County, Cities and MPC are required to implement LUC compliance monitoring and reporting. On February 27, 2008, FORA, Monterey County, the Cities of Seaside, Monterey, Del Rey Oaks, and Marina, CSUMB, University of California Santa Cruz, and MPC (“jurisdictions”) entered into the Memorandum of Agreement Among the Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College and the Department of Toxic Substance Control Concerning Monitoring and Reporting on Environmental Restrictions on The Former Fort Ord, Monterey California (MOA). As stated in the MOA, the jurisdictions are required to monitor and report LUC compliance, as outlined below. For reference, the MOA is provided in Appendix C. For purposes of the Group 3 LUCIP/OMP, “Group 3 jurisdictions” include Monterey County, Cities of Del Rey Oaks and Monterey, and MPC.

In 2014, Assembly Bill 1614 was passed to extend FORA’s statutory authorities to June 30, 2020. The ESCA fully contemplated the eventual sunset of FORA and made provisions for a successor in interest to FORA’s LTO. For purposes of this LUCIP/OMP, the terminology of “FORA or its successor” refers to obligations or requirements that are currently assigned to FORA, but will eventually be transferred to FORA’s successor in interest.

4.1 MEC Recognition and Safety Training

People involved in ground-disturbing or intrusive operations at these areas will be required to attend MEC recognition and safety training to increase their awareness of and ability to identify MEC items. Prior to conducting ground-disturbing or intrusive activities, the property owner will be required to notify FORA or its successor or the Presidio of Monterey Directorate of Environmental and Natural Resources Management to provide MEC recognition and safety training for all people performing ground-disturbing or intrusive activities. The actions to implement MEC recognition and safety trainings LUC are detailed below.

MEC recognition and safety training will be evaluated as part of the five-year review (see Section 4.4) process to determine if the training program should continue. If further evaluation indicates that this LUC is no longer necessary, the program may be discontinued upon regulatory approval.

4.1.1 Development of Training Materials and Procedures

Remedy Implementation Phase

- FORA will develop MEC recognition and safety training materials, including video and handouts, to fulfill the requirements for MEC recognition and safety training for people involved in ground-disturbing or intrusive operations.
- FORA MEC Recognition and Safety Training procedure to include: outlining process and tasks to periodically advertise availability of training including how to access Web based training materials; process for public to request training classroom and/or tailgate training, including minimum class size and timing expectations for scheduling live training; process to ensure materials are available to UXO professionals for use in conducting training, make training materials available to UXO professionals for use in conducting classroom or tailgate training, and provide access to web-based video training modules; and monitoring, reporting and audit systems.

Remedy Execution Phase

- FORA will develop procedures to ensure availability of training and provide public notification of the availability of training, to include process for public to request training, options for providing access to the training materials, and how to document and monitor training activities.

4.1.2 Providing Training

Remedy Implementation Phase

- Group 3 jurisdictions have establish basic notification and training requirements per local digging and excavation ordinances which include a requirement that workers receive the Safety Alert – Ordnance and Explosives at former Fort Ord pamphlet, as

prepared by the Directorate of Environmental and Natural Resources Management at the Presidio of Monterey, or its successor document, and explain to each such person the information set forth in that notice.

- The State CRUP recommends reasonable and prudent precautions be taken when conducting intrusive operations, including providing the Army's MEC recognition and safety training, or equivalent, to any persons conducting such activities.

Remedy Execution Phase

- MEC Recognition and Safety Training requirements are currently in place through existing deed restriction, State CRUP and local jurisdiction digging and excavation ordinance.
- Group 3 jurisdictions will execute training requirements and procedures, prior to issuing permits for construction activities, including MEC recognition and safety training as a condition of applicable digging and excavation ordinances.
- FORA will make training materials available to MEC professionals for use in conducting classroom or tailgate training, and will provide access to web-based video training modules.
- Directorate of Environmental and Natural Resources Management at the Presidio of Monterey will make accessible all available documentation, information, notices and training programs to Group 3 jurisdictions on the Army's Fort Ord Administrative Record.

4.1.3 Monitoring and Reporting of Training Activities

Remedy Implementation Phase

- FORA to develop reporting requirements for Group 3 jurisdictions to track training activities and monitor land owner and contractor compliance with training requirements at part of annual LUC monitoring reporting.
- Group 3 jurisdictions to establish procedures, as required in State CRUP and digging and excavation ordinances, to monitor and report MEC recognition and safety training requirements in the annual LUC monitoring report.

Remedy Execution Phase

- FORA will ensure MEC Recognition and Safety Training requirements remain in place through existing deed restriction, State CRUP, and local jurisdiction digging and excavation ordinance.
- FORA and Group 3 jurisdictions to track training activities and include in the annual LUC monitoring report (see Section 4.4.2).

4.2 Construction Support by UXO-Qualified Personnel for Ground-disturbing or Intrusive Activities

Construction support by UXO-qualified personnel is required during any intrusive or ground-disturbing construction activities at the Group 3 MRAs to address potential MEC risks to construction and maintenance personnel. Construction support will be arranged through the Group 3 jurisdictions during the construction and maintenance planning stages of the project prior to the start of any “construction activities”. Requirements for construction support will be implemented consistent with digging and excavation ordinances. Construction activities are established in the digging and excavation ordinances and include excavation, digging, development and ground disturbance of any type that involves the displacement of more than ten (10) cy. Group 3 jurisdictions shall determine the level of construction support required on a case-by-case basis during the excavation permitting process. The level of construction support is determined based on the probability of encountering MEC.

The probability of encountering MEC in those portions of the MOUT Site MRA that did not receive full clearance to depth is considered moderate to high. The probability of encountering MEC in those portions of Laguna Seca Parking MRA that did not receive full clearance to depth is considered moderate to high. The probability of encountering MEC in the remaining areas of the MOUT Site MRA, Laguna Seca Parking MRA, and the entire DRO/Monterey MRA is considered to be low.

If the probability of encountering MEC is determined to be low, UXO-qualified personnel must be contacted to ensure their availability, advised about the project, and placed “on call” to assist if suspected UXO are encountered during construction. Discoveries of MEC on such sites require reassessment of the level of support required. If the probability of encountering MEC is determined to be moderate to high, UXO-qualified personnel must attempt to identify and remove any explosive hazards in the construction footprint prior to any intrusive construction activities.

If evidence of MEC is found during “construction activities”, the intrusive or ground-disturbing work will immediately cease, no attempt will be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property will be immediately notified so that appropriate EOD personnel can be dispatched to address the MEC, as required under applicable laws and regulations. Construction support requirements may be applicable in the short term during initial development of the reuse area, and/or in the long-term during reuse and redevelopment activities.

Construction support will be evaluated as part of the five-year review process to determine if the LUC should continue. If the MEC-related data collected during the development of the reuse areas indicate that this LUC is no longer necessary, construction support may be discontinued with regulatory approval.

4.2.1 Construction Support Planning

Remedy Implementation Phase

- FORA will provide references to information to support local jurisdictions in implementation of construction support requirements, including references that

identify current probability of encountering MEC within the MRAs and available mapping as appropriate, including the Group 3 ROD and other references in Section 6.0 of the LUCIP/OMP.

- Group 3 jurisdictions will implement requirements for construction support planning consistent with applicable digging and excavation ordinances as well as State CRUP restrictions.
- The Group 3 jurisdictions shall implement the special standards and procedures as defined in the adopted digging and excavation ordinances. Requirements include description of previous MEC activities, completion and submittal of all other appropriate permits, detailed description of site and proposed “construction activities”, excavation permits and plans for “construction activities”, construction support requirements including construction support, and preparation and submittal of after action reports.
- Group 3 jurisdictions shall provide notice of permit approval to the Army, DTSC and all property owners within 300 feet of impacted property.
- Director of Environmental and Natural Resource Management at Presidio of Monterey to make accessible all available documentation that identifies current probability of encountering MEC in Group 3 MRAs and available mapping, as appropriate on the Army’s Fort Ord Administrative Record.

Remedy Execution Phase

- Documents available on the Army’s Fort Ord Administrative Record (www.fortordcleanup.com).
- Group 3 jurisdictions to execute jurisdictional digging and excavation ordinances construction support planning requirements.

4.2.2 Construction Support Evidence of MEC

Remedy Implementation Phase

- FORA will develop procedures for proper response to potential MEC finds and requirements for reporting and documentation, including actions to be taken if evidence of MEC is encountered during ground disturbing activities.
- FORA to develop procedure for reporting and documenting of potential MEC finds.

Remedy Execution Phase

- Excavation permits under digging and excavation ordinance require provision for land owners or contractors to stop work and report potential MEC finds to local law enforcement and notification to regulatory agencies.
- FORA or its successor will notify the regulatory agencies, as soon as practicable, of any potential MEC finds during “construction activities” or any other MEC finds, and report the potential MEC finds during monitoring activities annually.

- Local law enforcement to respond to reports of potential MEC finds.
- Regulators and Army to determine probability of encountering MEC and determine nature and extent of additional assessment and/or field investigation.

4.2.3 Construction Support Documentation and Reporting

Remedy Implementation Phase

- The monitoring and reporting of construction support requirements is implemented through a MOA between the DTSC and local jurisdictions, which: 1) requires the jurisdictions to monitor compliance with all land use covenants; 2) requires the jurisdictions to report to FORA or the County concerning their compliance with all recorded LUCs within their jurisdiction; and 3) requires FORA or the County to compile data in the jurisdiction reports and transmit those data in a report to the DTSC.
- FORA to update annual LUC inspection checklist to include instructions for review of deeds, State CRUPs and local digging and excavation ordinances to verify construction support requirement continue to run with the land.
- Group 3 jurisdictions to develop local digging and excavation ordinances construction support documentation reporting procedures to support annual LUC monitoring report.

Remedy Execution Phase

- Construction support contractor documents project and reports per FORA or Group 3 jurisdiction requirements.
- FORA and jurisdictions report construction support activities in the annual LUC monitoring report.

4.2.4 Determination Construction Support No Longer Necessary

Remedy Implementation Phase

- None

Remedy Execution Phase

- Army to evaluate construction support as part of the five-year review process to determine if the LUC should continue.
- Landowner may request EPA and DTSC review and approval of determination that construction support LUC is no longer necessary for a specific parcel or portion thereof.

4.3 Restrictions Prohibiting Residential Use

Residential use restriction in the Group 3 property deeds will be maintained and will run with the land. For the purposes of this document, residential reuse includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007). Group 3 jurisdictions will coordinate DTSC review of developer or land owner's proposals to remove the residential use restrictions, in consultation with EPA and Army.

4.3.1 Maintaining Residential Use Restriction

Ensure restrictions remain in place by monitoring property LUCs. See also Long-Term Management Measures (Section 4.4).

Remedy Implementation Phase

- FORA to develop annual inspection procedures to ensure residential deed restrictions remain on property through future property transfer deeds.

Remedy Execution Phase

- FORA is currently conducting annual monitoring and reporting on LUCs. Responsibility for annual monitoring and reporting of LUCs will transfer to the Group 3 jurisdictions at property transfer. An MOA is in place where Group 3 jurisdictions have agreed to maintain the LUCs, including the residential use restriction.
- Group 3 jurisdictions are responsible for ensuring residential deed restrictions remain on property through future property transfer deeds.

4.3.2 Process for Approval of Proposals to Remove Residential Use Restriction

The MOA, CRUP, ROD and deeds ensure any future proposals to remove residential use restrictions within the Group 3 MRAs require review and approval by DTSC in consultation with EPA and Army.

4.4 Long-Term Management Measures

The LUCIP/OMP also describes the following LTMM implementation defined in the ESCA and supporting documents. FORA will implement post-Site Closeout LTO through the ESCA to be 2037 performance period. The LTOs to be implemented include long-term review, monitoring, and operations and maintenance activities/reporting required to maintain the effectiveness of the remedy. Site Closeout is defined as the time after FORA has performed all the environmental services except LTO. The MOA Annual LUC Report outline will be used to fulfill this LTO (Appendices D and E).

4.4.1 LUCIP/OMP Annual Inspections

LUCIP/OMP objectives compliance includes on-site inspections and review of local building and planning department records, and construction support potential MEC finds report review. For reference, the following are provided in this LUCIP/OMP: Appendix D - Land Use Control Inspection Methodology and Appendix E – 2014 Update to Former Fort Ord Land Use Reporting Outline.

4.4.2 Annual LUC Monitoring Reports

The LUCIP/OMP annual inspections and record review results will be summarized in an annual LUC monitoring report letter report format (see Appendices D and E). As reference, the following are provided in this LUCIP/OMP: Appendix D - Land Use Control Inspection Methodology and Appendix E - 2014 Update to the Land Use Covenant¹ Report Outline. FORA or its successor will submit the annual monitoring report within 90 days following inspection and record review to the Army, EPA and DTSC. Upon property transfer, the Group 3 jurisdictions will be responsible for completing annual LUC reporting. This requirement is established in the executed MOA and CRUPs and will be documented in the deeds.

4.4.3 CERCLA Five-Year Reviews

The Army shall conduct five-year reviews of the Group 3 remedy as required by CERCLA and the National Contingency Plan. FORA or its successor may assist the Army in these five-year reviews as defined in the ESCA.

4.5 Property Recipient Responsibilities - LUCIP/OMP Inspections, Reporting, and Enforcement

4.5.1 Compliance with LUCIP/OMP

Group 3 jurisdictions, as established in the MOA, have the responsibility to facilitate the LUC remedy performance objective implementation including monitoring, maintenance and reporting as outlined in this plan. This will include LUCIP/OMP annual LUC inspections and reporting (Section 4.4) as well as execution of the Group 3 jurisdictions digging and excavation ordinances. In addition, Group 3 jurisdictions are required to track and enforce LUC compliance of future property owners. Per the MOA and CRUP reporting requirements, Group 3 jurisdictions will deliver their reports to FORA or successor to send to DTSC.

¹ The terms land use covenant and land use control are used interchangeably within the context of this LUCIP/OMP.

4.5.2 Property Conveyance

Army to FORA deeds for the Group 3 properties contain requirements that the Group 3 jurisdictions and MPC adhere to the Cities' or County's digging and excavation ordinances. FORA to jurisdiction deeds transferring properties will include this requirement and also include LUCs and covenants as in the ROD and CRUPs. The deeds ensure that restrictions continue to run with the land. As these are enforceable by EPA, DTSC and Army, each agency and the Army will receive a draft copy of deed language for review and comment. The final executed deed will be recorded. Group 3 jurisdictions will be responsible for passing on deed restrictions to future land owners.

4.5.3 Notice of Planned Property Conveyances

Property recipients will be notified of the property restrictions and LUC and CRUP compliance requirements. For initial property conveyance from FORA to Group 3 jurisdictions, FORA will be responsible for deed notification. Group 3 jurisdictions will be responsible for FORA/jurisdiction deed recordation. Group 3 jurisdictions are also responsible for property restriction notification in subsequent land transfers as well as monitoring compliance with LUC and CRUP restrictions on current and future land uses.

4.6 Army LUCIP/OMP Inspections, Reporting, and Enforcement Responsibilities

The Army shall retain ultimate responsibility for remedy integrity. FORA or successor, per the terms and definitions of the ESCA and AOC, is responsible for implementing, inspecting, reporting, and enforcing the LUCIP/OMP requirements until 2037. FORA or successor may transfer these procedural responsibilities to other parties by deed, contract, property transfer agreement, or other means.

4.7 Notification Should Action(s) Interfere with LUCIP/OMP Effectiveness

Within seventy-two (72) hours of discovery of any activity on the property that is inconsistent with the Group 3 LUCIP/OMP objectives, FORA or its successor shall notify EPA, DTSC, and the Army. Examples of inconsistent activities include not executing requirement for MEC Recognition and Safety Training or Construction Support; violating CRUP prohibiting residential uses; or not meeting local digging and excavation ordinances and local permitting requirements.

Within forty-five (45) days, FORA or its successor shall identify the LUCIP/OMP inconsistency cause, and evaluate and implement any necessary changes to avoid future noncompliance. In accordance with the MOA, the Group 3 jurisdictions have agreed to take on this responsibility when FORA ceases to exist. This reporting requirement does not preclude the Army from taking immediate action to prevent exposure. This reporting requirement will enable the Army to take appropriate action to ensure the effectiveness of the remedy.

4.8 Notification of MEC Item Discovery During Ground-Disturbing Activities

As required in the ROD and in accordance with the digging and excavation ordinances, the property owner shall stop work and notify the local law enforcement agency immediately if any unanticipated potential MEC items (known or suspected) are encountered during ground-disturbing activities. The standard procedure for reporting unanticipated encounters with a known or suspected MEC item in the transferred former Fort Ord property is to immediately call 911, which will transfer the call to the appropriate local law enforcement agency. The local law enforcement agency will promptly request DoD response support (e.g., an EOD Unit). FORA or Group 3 jurisdictions will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during the incident. The incident results will be reported in the annual LUC monitoring report. The regulatory agencies may request additional investigation and/or follow-up actions based on the MEC-related data identified during the incident (see Section 4.9.1).

4.9 Additional Response or Remedy Modification

4.9.1 Additional Investigation or Follow-up Action

After the EOD response to unanticipated MEC finds, the Army and EPA may assess the probability of encountering additional MEC based on guidance from the DDESB. The probability of encountering MEC and the resulting level of construction support will be determined jointly by the Army and EPA, in consultation with DTSC. If the probability of encountering MEC is low, construction activities may resume with construction support. If the probability of encountering MEC is determined to be different from originally estimated, EPA in consultation with DTSC will determine an appropriate follow-up action.

If EPA determines that additional investigation and/or action is required, EPA will advise the Army that it is obligated under the FFA to conduct the investigation and/or action. Additional action will be conducted in accordance with an approved work plan. EPA, in consultation with DTSC, will evaluate and approve the results of the investigation. The agency consultation process will be completed as expeditiously as practicable.

The Army will notify FORA if the investigation and/or action is within the scope of FORA's obligations under the ESCA and CRUP. The Army retains full responsibility for Army obligations pursuant to the ESCA "Army obligations". Nothing shall require FORA, or its successor, to assume responsibility for any Army Obligation, as contractor to the Army, under the terms of the ESCA.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA or its successor assumes responsibility for completion of necessary CERCLA response actions for MEC, a CERCLA hazardous substance (except Army Obligations), which include implementing, maintaining, reporting, and enforcing the LUCs. Although the Army has already contracted for performance of its responsibilities to implement, maintain, monitor, and enforce LUCs, the Army retains the ultimate responsibility for remedy integrity.

Additional response will be conducted in accordance with an approved work plan. EPA, in consultation with DTSC, will evaluate and approve the results of the investigation. The agency consultation process will be completed as expeditiously as practicable.

4.9.2 Remedy Modification

If the Army and EPA, in consultation with DTSC, determine that the selected remedy is no longer protective, the Army and EPA will jointly select an additional response action or modification of the remedy. EPA will advise the Army that it is obligated under the FFA to conduct the investigation and/or response. DTSC will be provided an opportunity to review and comment on the proposal. The additional actions required and their remedial objectives will be documented in an Explanation of Significant Difference or ROD Amendment, as appropriate.

The Army will notify FORA if the investigation and/or response is within the scope of FORA's obligations under ESCA. If it is determined that the additional response is within FORA's scope of obligation under the ESCA, FORA will be responsible for implementation. Nothing shall require FORA, or its successor, as contractor to the Army, to assume responsibility for any Army Obligation under the terms of the ESCA.

[this page intentionally left blank]

5.0 REMEDY IMPLEMENTATION SEQUENCE

This section provides an overview of the execution sequence of the actions proposed in Section 4.0 in order to facilitate the implementation of the LUC remedy performance objectives. The general administrative sequence for establishing the LUC remedy is presented. These are followed by the activity sequence and requirement for pre- and post-land transfer from FORA to the Group 3 jurisdictions. As available and appropriate, date driven compliance requirements have been presented.

5.1 General Administrative Sequence for Establishing LUC Remedy

- The Army will place the Final LUCIP/OMP document, within 10 days of regulatory approval, in the Army-maintained Information Repository and on the Army-maintained Administrative Record. FORA will provide Administrative Record reference to Group 3 jurisdictions.
- FORA will be responsible for establishing LUCIP/OMP plans and procedures as outlined in Section 4.0. The plans and procedures should be established and adopted within 6 months of the approved plan.
- FORA or its successor, may be required to provide input to the Army in the five-year reviews as defined in the ESCA grant award. The information must be submitted to the Army by February of the review year. The next Five Year Review is scheduled for 2017.

5.2 Long-Term Operations and Maintenance of LUC Remedy

5.2.1 Pre-Land Transfer from FORA to Group 3 Jurisdictions

- FORA will implement the established processes and procedures as outlined in LUCIP/OMP Section 4.0.
- FORA will be responsible for executing annual inspections and annual LUC monitoring reports in accordance with Section 4.0. The annual inspections and annual LUC monitoring reports should be completed and provided to EPA and DTSC as outlined in the MOA (see Appendices D and E).
- FORA shall provide at least 60-day prior notice to the Army, EPA, and DTSC of Group 3 MRA property transfers. The notice shall reference LUCIP/OMP implementation, maintenance, inspection, reporting, and enforcement methods. Property conveyance notification requirements will pass to future property owners.
- Prior to land transfer Group 3 jurisdictions will establish processes and procedures to implement the digging and excavation ordinances as adopted by the Group 3 jurisdictions. Additionally Group 3 jurisdictions will establish processes and procedures to implement other requirements to execute the LUC remedy as outlined in this LUCIP/OMP.
- LUCs shall be maintained by Section 4.0 delineated periodic inspection and enforcement.

- New property owners will be notified of, and shall comply with, any deed restrictions as described in Section 4.5.

5.2.2 Post-Land Transfer from FORA to Group 3 Jurisdictions

- Group 3 jurisdictions will implement the established processes and procedures as prescribed in the digging and excavation ordinances as adopted by the Group 3 jurisdictions. Additionally Group 3 jurisdictions will implement the processes and procedures outlined in this LUCIP/OMP.
- Group 3 jurisdictions will be responsible for completing annual inspections and providing input to FORA or its successor in order to complete the annual LUC monitoring report in accordance with Section 4.0. The annual inspection and monitoring report should be completed and provided to EPA and DTSC as outlined in the MOA (see Appendices D and E).
- Prior to any ground-disturbing or intrusive activities, a property owner or user within the former Fort Ord intending to conduct intrusive activities must first complete a notification and permitting process per the adopted Group 3 jurisdiction digging and excavation ordinances. Once an application for a permit is received by the County and Cities, the County and Cities shall review the permit to verify the location of the proposed excavation and to determine if any sites within known LUCs will be affected.
- If the work involved is within the Group 3 MRAs, the County, Cities and MPC shall contact the Army, EPA, FORA (or its successor) and DTSC by email or written correspondence prior to granting the permit. As described in the digging and excavation ordinances, the permit applicant may not move or disturb any soil unless the applicant is in compliance with the requirements placed on the property by the CRUP and deed.
- LUCs shall be maintained by Section 4.0 delineated periodic inspection and enforcement.

6.0 REFERENCES

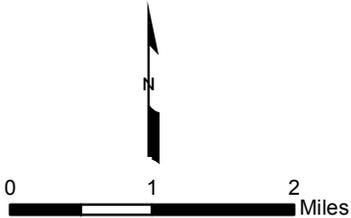
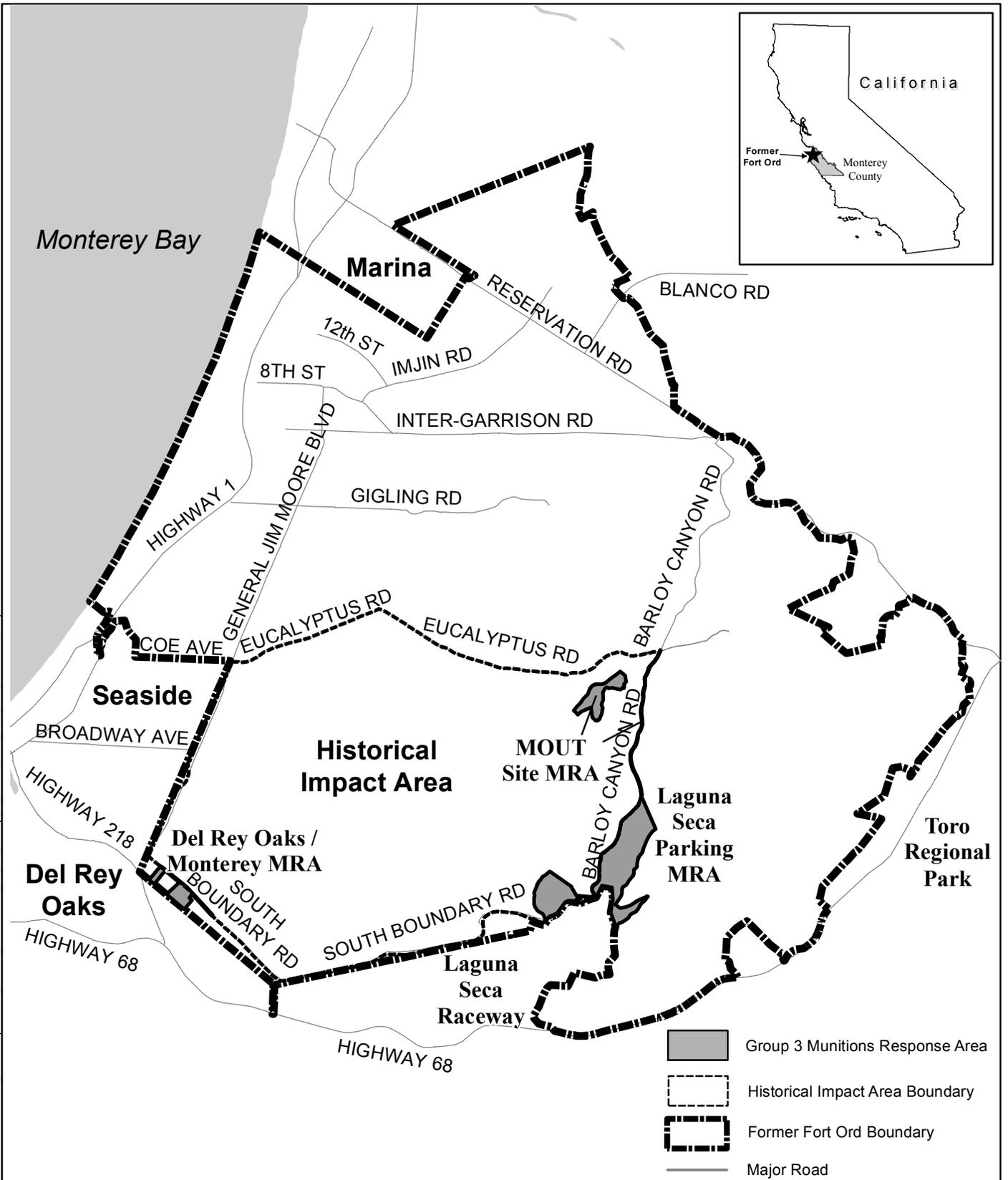
- CMS Environmental, Inc. (CMS). 1995. CEHND Approved OEW Sampling and Removal Action Work Plan, Fort Ord, California. August 22. (Fort Ord Administrative Record No. OE-0130)
- Environmental Services Cooperative Agreement Remediation Program Team (ESCA RP Team). 2008. Final Summary of Existing Data Report, Former Fort Ord, Monterey County, California. November 26. (Fort Ord Administrative Record No. ESCA-0130)
- _____. 2009. Final Group 3 Remedial Investigation/Feasibility Study Work Plan, Former Fort Ord, Monterey, California. November 13. (Fort Ord Administrative Record No. ESCA-0241)
- _____. 2012. Final Group 3 Remedial Investigation/Feasibility Study, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California. July 31. (Fort Ord Administrative Record No. ESCA-0249B)
- Fort Ord Reuse Authority (FORA). 1997. Fort Ord Base Reuse Plan.
- Human Factors Applications, Inc. (HFA). 1994. OEW Sampling and OEW Removal Action. Ft. Ord Final Report. December 1. (Fort Ord Administrative Record No. OE-0012)
- Shaw Environmental, Inc. (Shaw). 2005. Final After Action Report, Time Critical Removal Action and Military Munitions Reconnaissance, Eucalyptus Fire Area, Former Fort Ord, California. Revision O. January 20. (Fort Ord Administrative Record No. OE-0499G)
- United States Department of the Army (Army). 2000. Notice of Intent, Removal Action at Sites OE-15DRO.2 and OE-43, Former Fort Ord, California. March 6. (Fort Ord Administrative Record No. OE-0279)
- _____. 2004. Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification. August 3. (Fort Ord Administrative Record No. BW- 2180A)
- _____. 2007. Final Finding of Suitability for Early Transfer (FOSET), Former Fort Ord, California, Environmental Services Cooperative Agreement (ESCA) Parcels and Non-ESCA Parcels (Operable Unit Carbon Tetrachloride Plume; FOSET 5). November 15. (Fort Ord Administrative Record No. FOSET-004J)
- U.S. Army Corps of Engineers (USACE). 1997a. Revised Archive Search Report, Former Fort Ord, California, Monterey County, California. (Fort Ord Administrative Record No. OE-0022)

- _____. 1997b. Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP). April. With technical assistance from Jones and Stokes Associates, Sacramento, California. (Fort Ord Administrative Record No. BW-1787)
- USA Environmental, Inc. (USA). 2000a. Final OE Removal Action, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-29. December 30. (Fort Ord Administrative Record No. OE-0226A)
- _____. 2000b. Final After Action Report, 100% OE Removal, Inland Range Contract, Former Fort Ord, California, Site OE-47. November 9. (Fort Ord Administrative Record No. OE-0213A-B)
- _____. 2001a. Final After Action Report, Site OE-14D (14 West), Former Fort Ord, California. April 19. (Fort Ord Administrative Record No. OE-0301A)
- _____. 2001b. Final After Action Report, Geophysical Sampling, Investigation & Removal, Inland Range Contract, Former Fort Ord, California, Site Del Rey Oaks Group. April 24. (Fort Ord Administrative Record No. OE-0293A)
- _____. 2001c. Final OE Removal Action, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-14A (Lookout Ridge II). April 26. (Fort Ord Administrative Record No. OE-0296C)
- _____. 2001d. Final SS/GS and 100% Grid Sampling, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-28. August 17. (Fort Ord Administrative Record No. OE-0314)
- _____. 2001e. Final GridStats/SiteStats Sampling After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-43 and OE-15DRO.1. August 30. (Fort Ord Administrative Record No. OE-0336)
- UXB International, Inc. (UXB). 1995a. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Lookout Ridge II. November 1. (Fort Ord Administrative Record No. OE-0109)
- _____. 1995b. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Laguna Seca Bus Turn-around (LSBT). November 1. (Fort Ord Administrative Record No. OE-0107)
- _____. 1995c. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Laguna Seca Turn 11 (LST11). November 1. (Fort Ord Administrative Record No. OE-0108)
- _____. 1995d. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Wolf Hill. November 1. (Fort Ord Administrative Record No. OE-0125)

Zander Associates (Zander). 2002. Assessment, East Garrison – Parker Flats Land Use Modifications, Fort Ord, California. May 1. (Fort Ord Administrative Record No. BW-2180)

[this page intentionally left blank]

Document Path: Z:\GIS\PROJECTS\ENV\FortOrd\095956 GIS\Projects\G3_LUCIP_OMP\2015_02_13_Group_3_MRAs_and_Fort_Ord_Location_Map.mxd



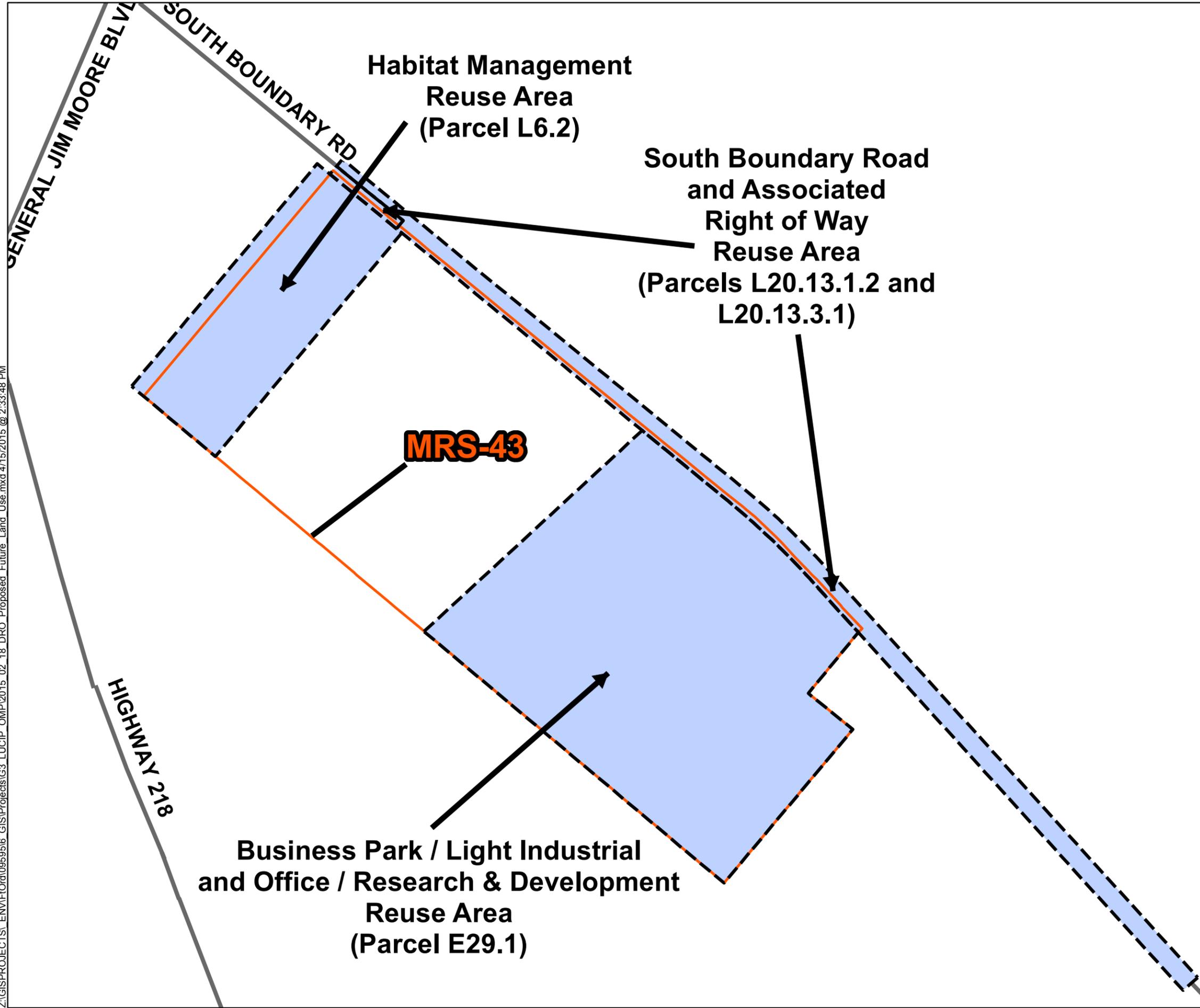
Group 3 MRAs and Fort Ord Location Map

Monterey County, California

DRAFT

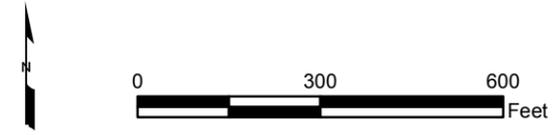
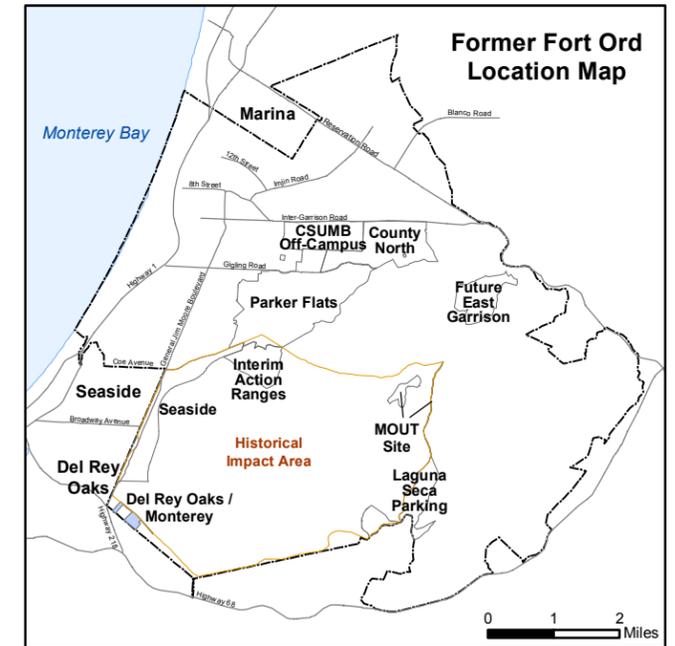
Figure 1

Z:\GISPROJECTS\ENV\FortOrd\0959516_GIS\Projects\G3_LUCIP_OIMP\2015_02_18_DRO_Proposed_Future_Land_Use.mxd 4/15/2015 @ 2:33:48 PM



Legend

-  Munitions Response Area (area subject to Land Use Controls)
-  USACE Parcel
-  Munitions Response Site
-  Major Road



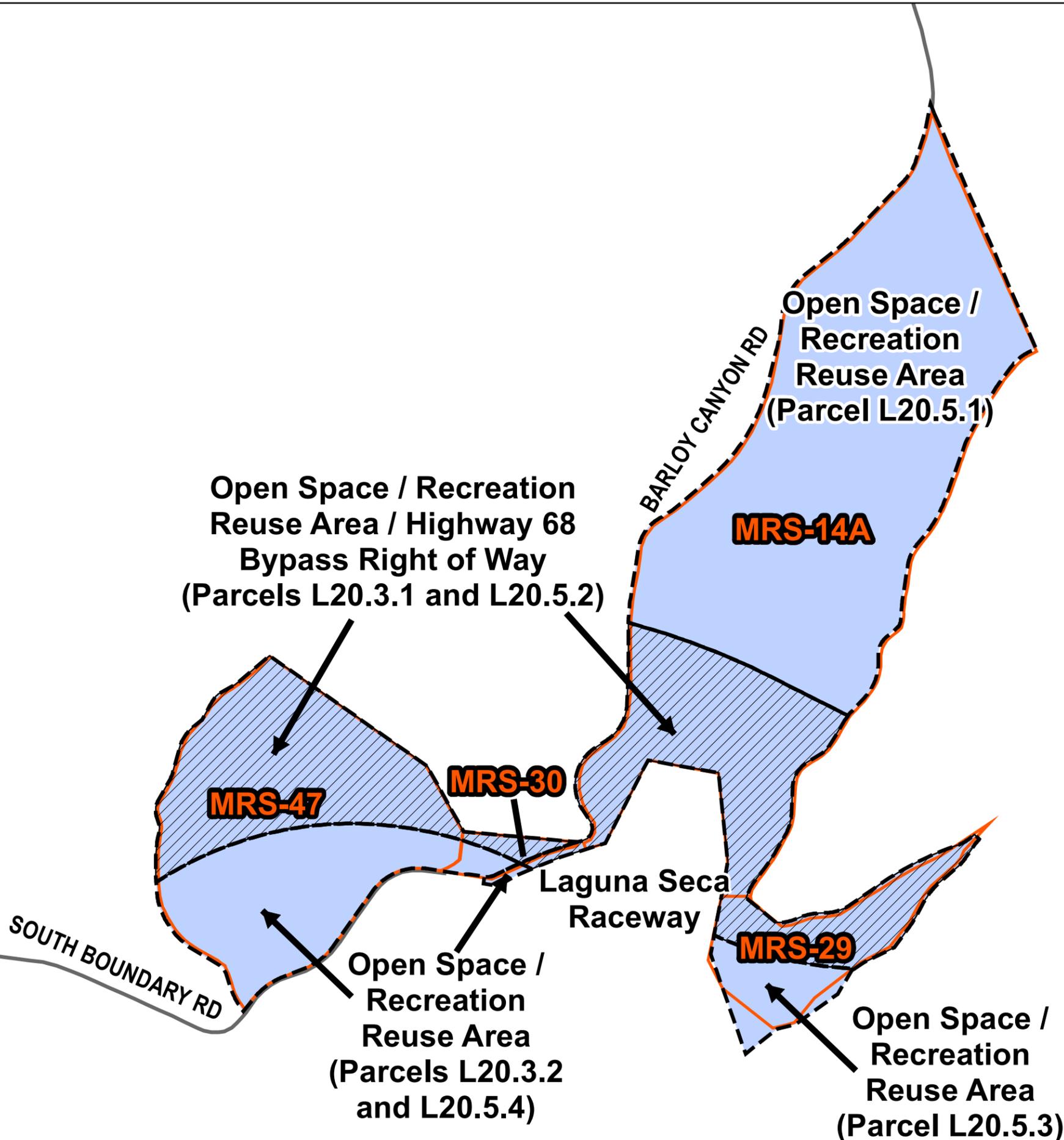
Del Rey Oaks / Monterey MRA Reuse Areas and Munitions Response Sites

Monterey County, California

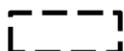
DRAFT

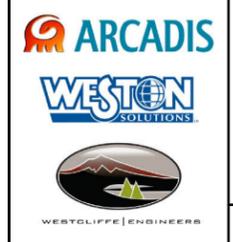
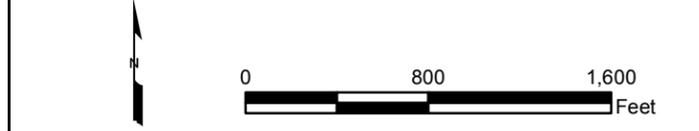
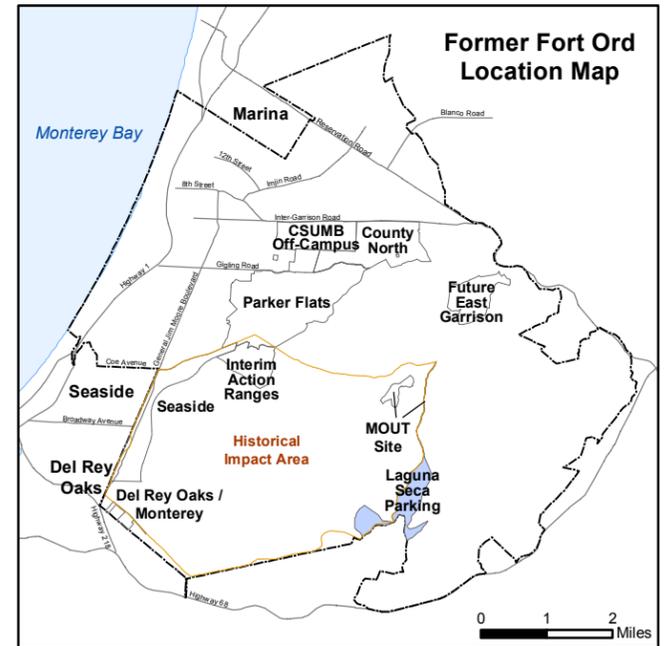
Figure 2

Z:\GISPROJECTS\ENV\FortOrd\0959516_GIS\Projects\G3_LUCIP_OIMP\2015_02_18_LSP_Proposed_Future_Land_Use.mxd 4/15/2015 @ 2:35:05 PM



Legend

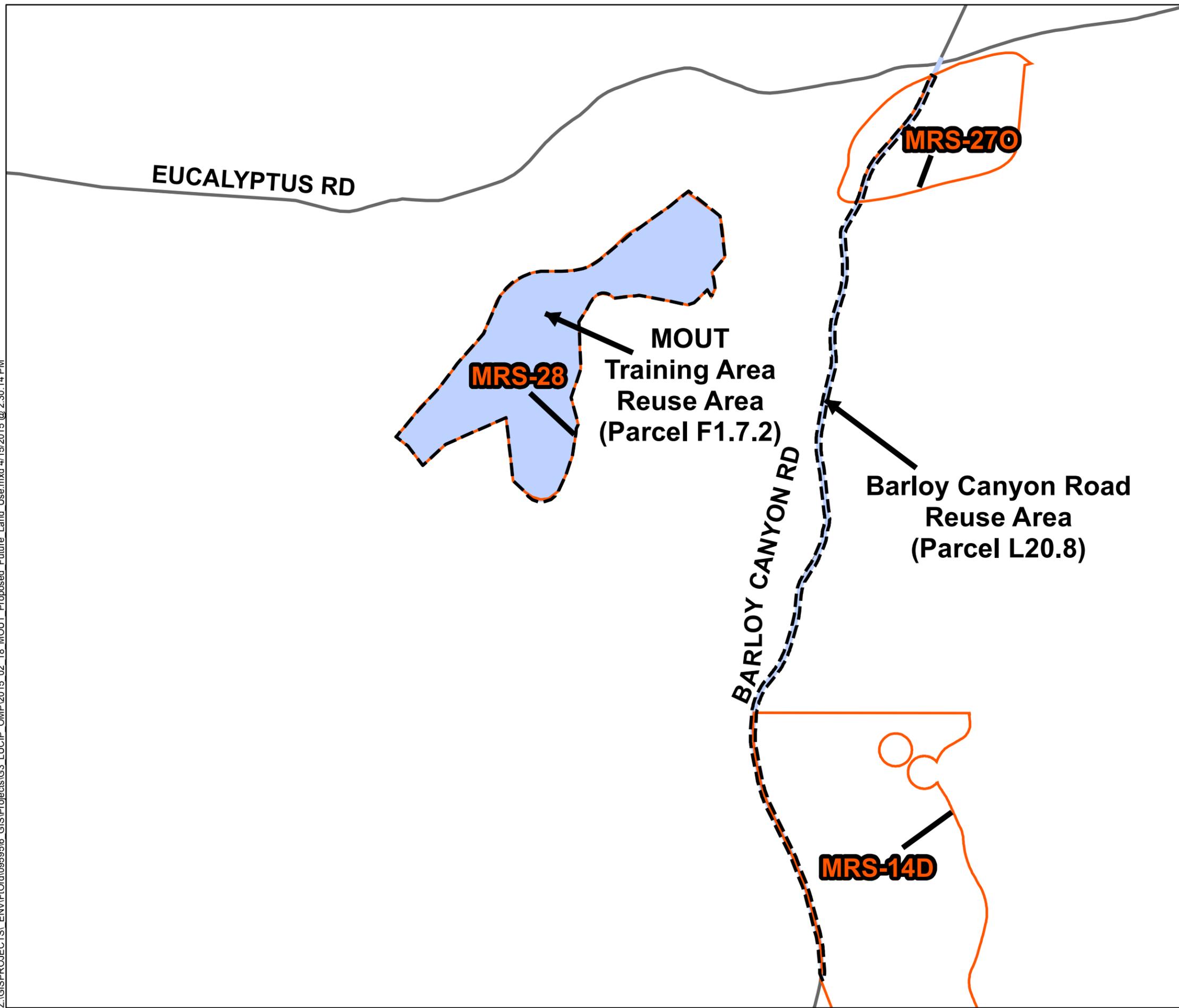
-  Munitions Response Area (area subject to Land Use Controls)
-  USACE Parcel
-  Munitions Response Site
-  Highway 68 Bypass Right of Way
-  Major Road



Laguna Seca Parking MRA Reuse Areas and Munitions Response Sites
 Monterey County, California

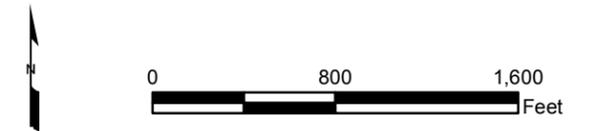
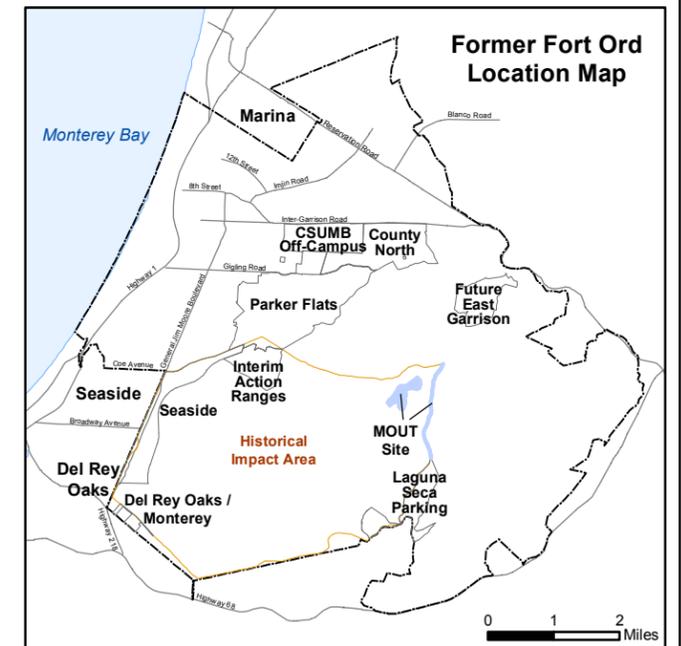
DRAFT **Figure 3**

Z:\GISPROJECTS\ENV\FortOrd\0959516_GIS\Projects\G3_LUCIP_CMP\2015_02_18_MOUT_Proposed_Future_Land_Use.mxd 4/15/2015 @ 2:30:14 PM



Legend

-  Munitions Response Area (area subject to Land Use Controls)
-  USACE Parcel
-  MRS-28 Munitions Response Site
-  Major Road



**MOUT Site MRA
Reuse Areas and Munitions
Response Sites**

Monterey County, California

DRAFT **Figure 4**

APPENDIX A

**Record of Decision Group 3, Del Rey Oaks/Monterey, Laguna Seca Parking,
and Military Operations in Urban Terrain Site Munitions Response Areas,
Former Fort Ord, California, October 26, 2014**

FINAL

Record of Decision

Group 3

Del Rey Oaks / Monterey, Laguna Seca Parking,
and Military Operations in Urban Terrain Site
Munitions Response Areas

Former Fort Ord, California

October 27, 2014

United States Department of the Army
Base Realignment and Closure (BRAC)
Former Fort Ord, California

CONTENTS

1. DECLARATION	1
1.1. Site Name and Location	1
1.2. Basis and Purpose	2
1.3. Site Assessment	2
1.4. Description of the Selected Remedy	2
1.5. Statutory Determination	3
1.6. ROD Data Certification Checklist	3
1.7. Authorizing Signatures and Support Agency Acceptance of Remedy	5
2. DECISION SUMMARY	9
2.1. Site Description	9
2.2. Site History	9
2.3. Enforcement and Regulatory History	10
2.4. Community Participation	11
2.5. Scope and Role of Response Action	11
2.6. Site Characteristics	12
2.6.1. DRO/Monterey MRA	12
2.6.2. Laguna Seca Parking MRA	12
2.6.3. MOUT Site MRA	12
2.7. Group 3 MRAs Remedial Investigation Summary	13
2.7.1. DRO/Monterey MRA	13
2.7.2. Laguna Seca Parking MRA	14
2.7.3. MOUT Site MRA	15
2.8. Group 3 MRAs Munitions Response Site Summaries	16
2.8.1. DRO/Monterey MRA	16
2.8.2. Laguna Seca Parking MRA	17
2.8.3. MOUT Site MRA	18
2.9. Current and Potential Future Land and Resource Uses	20
2.9.1. DRO/Monterey MRA	20

2.9.2.	Laguna Seca Parking MRA	20
2.9.3.	MOUT Site MRA	21
2.10.	Summary of Site Risks	21
2.11.	Remedial Action Objectives	23
2.12.	Description of Alternatives	23
2.13.	Principal Threat Wastes	26
2.14.	Selected Remedy	26
2.14.1.	Summary of the Rationale for the Selected Remedy	26
2.14.2.	Description of the Selected Remedy	27
2.14.3.	Land Use Control Implementation Strategy	28
2.14.4.	Summary of the Estimated Remedy Costs	29
2.14.5.	Expected Outcomes of Selected Remedy	29
2.15.	Statutory Determinations	29
2.16.	Documentation of Significant Changes from Preferred Alternative of Proposed Plan	30
3.	RESPONSIVENESS SUMMARY	31
3.1.	Proposed Plan Overview	31
3.2.	Background on Community Involvement	31
3.3.	Summary of Comments Received During the Public Comment Period and Department of the Army Responses	31
4.	REFERENCES	39

TABLES

1	Summary of Munitions Response Site (MRS) Investigations
2	Summary of Group 3 MRA Transfer Parcels
3	Summary of Remedial Alternatives Evaluation and Comparison for Del Rey Oaks/Monterey Munitions Response Area
4	Summary of Remedial Alternatives Evaluation and Comparison for Laguna Seca Parking Munitions Response Area
5	Summary of Remedial Alternatives Evaluation and Comparison for Military Operations in Urban Terrain Site Munitions Response Area

FIGURES

- 1 Group 3 MRAs and Fort Ord Location Map
- 2 Del Rey Oaks/Monterey MRA Reuse Areas and Munitions Response Sites
- 3 Laguna Seca Parking MRA Reuse Areas and Munitions Response Sites
- 4 MOUT Site MRA Reuse Areas and Munitions Response Sites

APPENDIX

- A Glossary of Military Munitions Response Program Terms

1. DECLARATION

1.1. Site Name and Location

The former Fort Ord is located in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1). The U.S. Environmental Protection Agency (EPA) identification number for Fort Ord is CA7210020676. This Record of Decision (ROD) addresses Munitions and Explosives of Concern (MEC), specifically unexploded ordnance (UXO) and discarded military munitions (DMM) that potentially remains in the Group 3 Munitions Response Areas (MRAs), which include the Del Rey Oaks (DRO)/Monterey MRA, the Laguna Seca Parking MRA, and the Military Operations in Urban Terrain (MOUT) Site MRA.

Since 1917, military units (e.g., cavalry, field artillery, and infantry) used portions of the former Fort Ord for training (e.g., maneuvers, live-fire target ranges) and other purposes. Because the military conducted munitions-related activities (e.g., live-fire training) on the facility, military munitions (e.g., UXO and DMM) may be present on parts of the former Fort Ord. The types of military munitions used at the former Fort Ord included: artillery and mortar projectiles, rockets, guided missiles, rifle and hand grenades, practice land mines, pyrotechnics, bombs, and demolition materials. For the Fort Ord Military Munitions Response Program (MMRP) being conducted and this ROD, MEC does not include small arms ammunition (.50 caliber and below). A Glossary of Military Munitions Response Program Terms is provided in Appendix A.

In March 2007, the United States Department of the Army (Army) and Fort Ord Reuse Authority (FORA) entered into an Environmental Services Cooperative Agreement (ESCA) to provide funding for MEC remediation services. In accordance with the ESCA and an Administrative Order on Consent (AOC), FORA is responsible for completion of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions, except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord with funding provided by the Army. The AOC was entered into voluntarily by FORA, EPA, California Environmental Protection Agency Department of Toxic Substances Control (DTSC), and the United States Department of Justice Environment and Natural Resources Division in December 2006 (EPA Region 9 CERCLA Docket No. R9-2007-03). The underlying property was transferred to FORA in May 2009. The Group 3 MRAs are included in the ESCA between the Army and FORA.

The Group 3 MRAs include sites where MEC were found and munitions response (MEC removal) actions were conducted. The Group 3 MRAs contain portions, or all, of seven munitions response sites (MRSs) that were suspected to have been used for military training with military munitions (Table 1). These MRSs were investigated, with all detected MEC removed. These munitions response actions also included Quality Control and Quality Assurance requirements that evaluated the adequacy of the munitions response actions. Although MEC is not expected to be encountered within these MRSs, it is possible that some MEC may not have been detected and remains present. Because a future land user (e.g., worker or recreational user) may encounter MEC at the Group 3 MRAs, a Group 3 Remedial Investigation/Feasibility Study (RI/FS) was conducted to evaluate remedial alternatives to address this potential risk to future land users (ESCA RP Team 2012). The Group 3 RI/FS was developed by FORA under the ESCA and in accordance with the AOC.

1.2. Basis and Purpose

This decision document selects the remedial action for MEC for the Group 3 MRAs. The remedy for each MRA was selected in accordance with CERCLA of 1980, as amended, and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on information and reports contained in the Administrative Record for the former Fort Ord.

This decision is undertaken pursuant to the President's authority under CERCLA Section 104, as delegated to the Army in accordance with Executive Order 12580, and in compliance with the process set out in CERCLA Section 120. The selection of the remedy is authorized pursuant to CERCLA Section 104, and the selected remedy will be carried out in accordance with CERCLA Section 121.

The Army and EPA have jointly selected the remedy. The DTSC has had an opportunity to review and comment on the ROD.

1.3. Site Assessment

This ROD addresses hazardous substances and pollutants or contaminants which may pose a threat to human health and welfare or the environment.

The Army has provided the CERCLA covenant in the deeds for the property. Some MEC items found and detonated on the property in the past were a Resource Conservation and Recovery Act (RCRA) reactive waste and thus a CERCLA hazardous substance. Therefore, MEC items discovered on the property in the future will likewise be addressed as such pursuant to the CERCLA covenant unless the Army determines that an item is not a hazardous substance by making a waste specific determination based on testing or knowledge consistent with RCRA.

1.4. Description of the Selected Remedy

The selected remedy addresses risks to human health and the environment from MEC that potentially remains in the Group 3 MRAs. Munitions responses (MEC removals) have been completed at the Group 3 MRAs, significantly reducing the risks to human health and the environment. The selected remedy for the Group 3 MRAs includes Land Use Controls (LUCs) because detection technologies may not detect all MEC present. The LUCs include requirements for: (1) MEC recognition and safety training for those people that conduct ground-disturbing or intrusive activities on the property; (2) construction support by UXO-qualified personnel for ground-disturbing or intrusive activities; and (3) restrictions prohibiting residential use. For the purpose of this decision document, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007). Any proposal for residential development in the Group 3 MRAs will be subject to regulatory agency and Army review and approval; however, per the FORA Fort Ord Reuse Plan ("Base Reuse Plan"; FORA 1997), no residential reuse is planned for the Group 3 MRAs. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity. A Remedial Design/Remedial Action (RD/RA) Work Plan will be developed to: (1) outline the processes for implementing the LUCs selected as part of the remedy; and (2) identify procedures for responding to discoveries of MEC. The Army will evaluate these sites as part of the installation-wide CERCLA five-year review to be conducted in 2017. The selected LUCs may be modified in the future based on the five-year review process.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 3 MRAs. As part of the early transfer of the subject property, the Army has entered into State Covenants to Restrict the Use of Property (CRUPs) with the DTSC that document land use restrictions. The existing deeds to FORA for the Group 3 MRA parcels include the following land use restrictions: 1) residential use restriction; and 2) excavation restrictions (unless construction support and MEC recognition and safety training are provided). The Army will modify the existing land use restrictions in the federal deeds, as necessary, to reflect the selected remedy. FORA, or its successor under the ESCA and the AOC, will prepare and submit annual letter reports to the EPA and the DTSC summarizing any MEC found and changes in site conditions that could increase the possibility of encountering MEC. Copies of the annual monitoring report will also be provided to the Army for inclusion in the five-year reviews.

While the Army does not consider California laws and regulations concerning CRUPs to be potential applicable or relevant and appropriate requirements (ARARs), the Army entered into CRUPs with the DTSC at the time the property was transferred to FORA. The DTSC will modify the existing CRUP, if appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagree with the Army's determination that California laws and regulations concerning CRUPs are not potential ARARs, they will agree-to-disagree on this issue since the Army executed the CRUPs and the DTSC will modify the CRUPs, if appropriate, to be consistent with the identified remedy.

1.5. Statutory Determination

The selected remedy is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to this remedial action, and is cost effective. Munitions responses to address the principal threat by removing all identified MEC items have already been completed. This meets the intent of using permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable, and satisfies the statutory preference for treatment as a principal element (i.e., reducing the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants as a principal element through treatment).

Because the selected remedy may not result in removal of all MEC potentially present within the Group 3 MRAs, a statutory review will be conducted by the Army within five years after initiation of the remedial action to ensure the remedy is, or will be, protective of human health and the environment. The next five-year review will occur in 2017.

1.6. ROD Data Certification Checklist

The following information is included in the Decision Summary, Section 2, of this ROD. Additional information can be found in the Administrative Record file for this site.

- Types of MEC identified during previous removal actions (Section 2.8.).
- Current and reasonably anticipated future land use assumptions used in the risk assessment and ROD (Section 2.9. and Table 2).
- Current after-action "Overall MEC Risk Scores" estimated in the Risk Assessment based upon the current site conditions (Section 2.10.).

- Remedial action objectives for addressing the current after-action “Overall MEC Risk Scores” estimated in the Risk Assessment (Section 2.11.).
- How source materials constituting principal threats are addressed (Sections 2.13. and 2.14.).
- Potential land use that will be available at the site as a result of the selected remedy (Section 2.14. and Table 2).
- Estimated capital, annual operations and maintenance (O&M), and total present worth costs, discount rate, and the number of years over which the remedy cost estimates are projected (Section 2.14.4.).
- Key factor(s) that led to selection of the remedy (Section 2.14.1 and 2.15. and Tables 3, 4, and 5).

1.7. Authorizing Signatures and Support Agency Acceptance of Remedy

**Record of Decision
Group 3
Del Rey Oaks/Monterey, Laguna Seca Parking, and
Military Operations in Urban Terrain Site Munitions Response Areas
Former Fort Ord, California**

Signature Sheet for the foregoing Record of Decision for Group 3, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California, among the United States Department of the Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.



Thomas E. Lederle
Chief
Base Realignment and Closure Division
U.S. Department of the Army

4 Nov 2014
Date

**Record of Decision
Group 3
Del Rey Oaks/Monterey, Laguna Seca Parking, and
Military Operations in Urban Terrain Site Munitions Response Areas
Former Fort Ord, California**

Signature Sheet for the foregoing Record of Decision for Group 3, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California, among the United States Department of the Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

William K. Collins

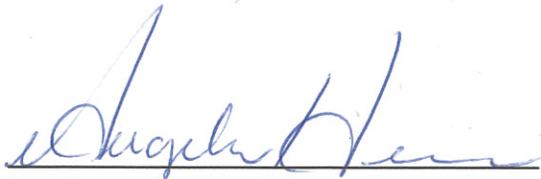
William K. Collins
BRAC Environmental Coordinator
Fort Ord BRAC Office
U.S. Department of the Army

10/28/2014

Date

**Record of Decision
Group 3
Del Rey Oaks/Monterey, Laguna Seca Parking, and
Military Operations in Urban Terrain Site Munitions Response Areas
Former Fort Ord, California**

Signature Sheet for the foregoing Record of Decision for Group 3, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California, among the United States Department of the Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.



Angeles Herrera
Assistant Director, Superfund Division
Federal Facilities and Site Cleanup Branch
U.S. Environmental Protection Agency, Region IX

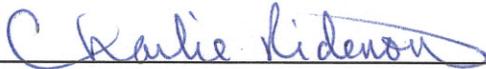
11/25/2014

Date

**Record of Decision
Group 3
Del Rey Oaks/Monterey, Laguna Seca Parking, and
Military Operations in Urban Terrain Site Munitions Response Areas
Former Fort Ord, California**

Signature Sheet for the foregoing Record of Decision for Group 3, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California, among the United States Department of the Army, the United States Environmental Protection Agency, and the California Environmental Protection Agency, Department of Toxic Substances Control.

The State of California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) had an opportunity to review and comment on the Record of Decision (ROD) and our concerns were addressed.



Charlie Ridenour, P.E.
Branch Chief
Cleanup Program - Sacramento Office
California Environmental Protection Agency
Department of Toxic Substances Control

11/5/14
Date

2. DECISION SUMMARY

2.1. Site Description

The former Fort Ord is located near Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1). The former Army post consists of approximately 28,000 acres adjacent to Monterey Bay and the cities of Seaside, Sand City, Monterey, and Del Rey Oaks to the south and Marina to the north. State Route 1 passes through the western portion of former Fort Ord, separating the beachfront from the rest of the base. Laguna Seca Recreation Area and Toro Regional Park border former Fort Ord to the south and southeast, respectively, as well as several small communities, such as Toro Park Estates and San Benancio. Additional information about the site:

- EPA Identification Number: CA7210020676;
- Lead Agency: Army;
- Lead Oversight Agency: EPA;
- Support Agency: DTSC;
- Source of Cleanup Monies: Army;
- Site Type: Former Military Installation.

2.2. Site History

Since 1917, portions of the former Fort Ord were used by cavalry, field artillery, and infantry units for maneuvers, target ranges, and other purposes. From 1947 to 1974, Fort Ord was a basic training center. The 7th Infantry Division was activated at Fort Ord in October 1974, and occupied Fort Ord until base closure in 1994. Fort Ord was selected in 1991 for decommissioning, but troop reallocation was not completed until 1993 and the base was not officially closed until September 1994. The property remaining in the Army's possession was designated as the Presidio of Monterey Annex on October 1, 1994, and subsequently renamed the Ord Military Community (OMC). Although Army personnel still operate parts of the base, no active Army division is stationed at the former Fort Ord. Since the base was selected in 1991 for Base Realignment and Closure (BRAC), site visits, historical and archival investigations, military munitions sampling, and removal actions have been performed and documented in preparation for transfer and reuse of the former Fort Ord property. The Army will continue to retain the OMC and the U.S. Army Reserve Center located at the former Fort Ord. The remainder of Fort Ord was identified for transfer to Federal, State, and local government agencies and other organizations and, since base closure in September 1994, has been subjected to the reuse process. Portions of the property on the installation have been transferred. A large portion of the Inland Training Ranges was assigned to the U.S. Department of the Interior, Bureau of Land Management (BLM). Other areas on the installation have been, or will be, transferred through economic development conveyance, public benefit conveyance, negotiated sale, or other means.

Munitions-related activities (e.g., live-fire training, demilitarization) involving different types of conventional military munitions (e.g., artillery and mortar projectiles, rockets and guided missiles, rifle and hand grenades, practice land mines, pyrotechnics, bombs, and demolition materials) were conducted at Fort Ord. Because of these activities, MEC, specifically UXO and DMM, have been encountered and are known or suspected to remain present at sites throughout the former Fort Ord. A Glossary of Military Munitions Response Program Terms is provided in Appendix A.

2.3. Enforcement and Regulatory History

The Army is the responsible party and lead agency for investigating, reporting, making cleanup decisions, and taking cleanup actions at the former Fort Ord under CERCLA. To address the possibility of the public being exposed to explosive hazards, MEC investigations and removal actions began following BRAC listing and closure of Fort Ord. In November 1998, the Army agreed to evaluate military munitions at former Fort Ord in an Ordnance and Explosives Remedial Investigation/Feasibility Study (basewide OE Remedial Investigation/Feasibility Study) — now termed the basewide Munitions Response Remedial Investigation/Feasibility Study (basewide MR Remedial Investigation/Feasibility Study) — consistent with CERCLA. A Federal Facility Agreement (FFA) was signed in 1990 by the Army, EPA, DTSC (formerly the Department of Health Services or DHS), and the California Regional Water Quality Control Board (RWQCB). The FFA established schedules for performing remedial investigations and feasibility studies and requires that remedial actions be completed as expeditiously as possible. In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate military munitions and perform military munitions response activities at the former Fort Ord subject to the provisions of the Fort Ord FFA.

The basewide MR Remedial Investigation/Feasibility Study program reviews and evaluates past investigative and removal actions, as well as recommends future response actions deemed necessary to protect human health and the environment regarding explosive safety risks posed by MEC on the basis of proposed reuses. These reuses are specified in the Base Reuse Plan (FORA 1997) and its updates. The basewide MR Remedial Investigation/Feasibility Study documents are being prepared in accordance with the FFA, as amended. These documents are made available for public review and comment, and placed in the Administrative Record.

The Army has been conducting military munitions response actions (e.g., investigation, removal) at identified MRSs and will continue these actions to mitigate imminent MEC-related hazards to the public, while gathering data about the type of military munitions and level of hazard at each of the MRSs for use in the basewide MR Remedial Investigation/Feasibility Study. The Army is performing its activities pursuant to the President's authority under CERCLA Section 104, as delegated to the Army in accordance with Executive Order 12580 and in compliance with the process set out in CERCLA Section 120. Regulatory agencies (EPA and DTSC) have been and will continue to provide oversight of the munitions response activities pursuant to the FFA.

The Army conducts ongoing and future responses to MEC at the former Fort Ord that are components of the Army's basewide efforts to promote explosive safety because of Fort Ord's history as a military base. These efforts include: (1) five-year reviews and reporting; (2) notices and restrictions in deeds and property transfer documentations (e.g., letter of transfer); (3) MEC incident reporting; (4) MEC recognition and safety training; (5) school education; and (6) community involvement.

In March 2007, the Army and FORA entered into an ESCA to provide funding for MEC remediation services. In accordance with the ESCA, the AOC, and the FFA Amendment No. 1, FORA is responsible for completion of the CERCLA remedial activities, except for those responsibilities retained by the Army, on approximately 3,300 acres of the former Fort Ord with funding provided by the Army. The AOC was entered into voluntarily by FORA, EPA, DTSC, and the United States Department of Justice Environment and Natural Resources Division in December 2006 (EPA Region 9 CERCLA Docket No. R9-2007-03). The underlying property was transferred to FORA in May 2009.

As part of the early transfer of the subject property, the Army has entered into State CRUPs with the DTSC that document land use restrictions. The applicability of and requirements for CRUPs are described in California Code of Regulations Section 67391.1 and California Civil Code Section 1471.

As described in Final Summary of Existing Data Report, Former Fort Ord, Monterey, California (ESCA RP Team 2008), the ESCA areas were combined into nine MRAs, and they were further consolidated into four groups according to similar pathway-to-closure characteristics. Group 1 consists of the Parker Flats and Seaside MRAs. Group 2 consists of the California State University Monterey Bay (CSUMB) Off-Campus and County North MRAs. Group 3 consists of DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs. Originally, Group 3 included the Interim Action Ranges MRA. The Interim Action Ranges MRA was removed from Group 3 for further evaluation as agreed upon by FORA, EPA, DTSC and the Army. Group 4 consists of the Future East Garrison MRA.

2.4. Community Participation

The Final Group 3 Remedial Investigation/Feasibility Study was published on July 31, 2012, and the Group 3 Proposed Plan was made available to the public on January 11, 2013. The Proposed Plan presented the preferred alternative of Land Use Controls (Alternative 2). The Land Use Control alternative is being selected as the final remedy in this ROD. The Proposed Plan also summarized the information in the Group 3 Remedial Investigation/Feasibility Study and other supporting documents in the Administrative Record. These documents were made available to the public at the following locations:

- Seaside Library, 550 Harcourt Avenue, Seaside, California.
- California State University Monterey Bay Tanimura & Antle Family Memorial Library, Divarty Street, CSUMB Campus, Seaside, California.
- Fort Ord Administrative Record, Building 4463, Gigling Road, Room 101, Ord Military Community, California.
- www.fortordcleanup.com website.

The notice of the availability of the Proposed Plan was published in the Monterey County Herald and the Salinas Californian on January 15, 2013. A 30-day public comment period was held from January 15, 2013, to February 13, 2013. In addition, a public meeting was held on January 30, 2013 to present the Proposed Plan to a broader community audience than those that had already been involved at the site. At this meeting, representatives from the Army, EPA, and DTSC were present, and the public had the opportunity to submit written and oral comments about the Proposed Plan. Representatives from FORA were also present to answer questions. The Army's response to the comments received during this period is included in the Responsiveness Summary, which is part of this ROD (Section 3.0).

2.5. Scope and Role of Response Action

This ROD addresses the planned response action for managing the potential risk to future land users from MEC that potentially remains in the Group 3 MRAs, where munitions response activities have been completed as described in Section 2.7 below and detailed in the Group 3 Remedial Investigation/Feasibility Study (ESCA RP Team 2012).

The planned response action for the Group 3 MRAs will be the final remedy for protection of human health and the environment. Remedial Alternative 2, which was identified as the preferred remedial alternative for the Group 3 MRAs, is summarized as follows:

- **Remedial Alternative 2 - Land Use Controls (LUCs):** MEC recognition and safety training for people that will conduct ground-disturbing or intrusive activities; construction support during ground-disturbing or intrusive activities; and restrictions prohibiting residential use.

The selected remedy will be implemented by FORA under the ESCA and in accordance with the AOC. An RD/RA Work Plan will be developed to: (1) outline the processes for implementing land use restrictions; and (2) identify procedures for responding to discoveries of MEC, including coordinating a response to a discovery of a significant amount of MEC in the Group 3 MRAs. The selected LUCs may be modified in the future based on the five-year review process.

In addition, Long Term Management Measures comprised of a deed restriction, annual monitoring and reporting, and five-year review reporting will be implemented for the reuse areas within the Group 3 MRAs.

Based on the Army Basewide Range Assessment Program (Shaw/MACTEC 2009), which evaluated the potential presence of chemicals of concern in soil, no further action has been recommended for Historical Areas (HAs) within the DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs.

2.6. Site Characteristics

2.6.1. DRO/Monterey MRA

The DRO/Monterey MRA is located in the southwestern portion of the former Fort Ord and encompasses approximately 30 acres of undeveloped land and approximately 5.245 acres of the existing South Boundary Road and associated right-of-way (Figure 1). The DRO/Monterey MRA is comprised of two non-contiguous portions of MRS-43 and a portion of the South Boundary Road, which is not located within the boundaries of a MRS (Figure 2).

Historical records and recovered MEC and munitions debris (MD) indicate that MRS-43 was previously used for artillery training with 37 millimeter (mm) projectiles.

2.6.2. Laguna Seca Parking MRA

The Laguna Seca Parking MRA is located in the south-central portion of the former Fort Ord adjacent to the Laguna Seca Raceway and encompasses approximately 276 acres (Figure 1). The Laguna Seca Parking MRA includes four MRSs: MRS-14A, MRS-29, MRS-30, and MRS-47 (Figure 3).

Historical records and recovered MEC and MD indicate that these MRSs were previously used for artillery training, mortar training, troop training, and basic maneuvers.

2.6.3. MOUT Site MRA

The MOUT Site MRA is located in the central portion of the former Fort Ord within the northeastern portion of the historical impact area and encompasses approximately 58 acres (Figure 1). The MRA consists of MRS-28 (the MOUT training area), which includes a mock city training area currently used for tactical training of military, federal, and local law enforcement and emergency services providers, and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area (Figure 4). The northern segment of the Barloy Canyon Road portion of the MOUT Site MRA passes through a former training site identified as MRS-270. The southern portion of Barloy Canyon Road is bordered by

MRS-14D to the east. The MRA also includes a portion of Barloy Canyon Road located outside of a MRS boundary.

Historical records and recovered MEC and MD indicate that the MOUT training area (MRS-28) was used for infantry training in an urban setting in addition to hand grenade training, firing point for rocket launcher training, hand-to-hand combat, combat pistol training, assault course, squad tactics, and night defense training. The Barloy Canyon Road portion of the MRA was maintained as a road and the overlapping MRS-27O was used for bivouac, troop maneuvers, and subcaliber artillery training.

2.7. Group 3 MRAs Remedial Investigation Summary

The Group 3 MRAs contain portions, or all, of seven MRSs identified in Table 1, where munitions response actions have been conducted. These MRSs are also shown on Figures 2, 3, and 4. The Remedial Investigation for the Group 3 MRAs is based on the evaluation of previous work conducted for the MRAs in accordance with the Group 3 Remedial Investigation/Feasibility Study Work Plan (ESCA RP Team 2009).

This section provides background information on the Group 3 MRA Remedial Investigation data collection and review (site evaluations) conducted for the MRSs. Table 1 summarizes the results of the site-specific remedial investigations, and Section 2.8 presents a summary of the site evaluations for the MRSs in the Group 3 MRAs as presented in the Group 3 Remedial Investigation/Feasibility Study (Volume 1; ESCA RP Team 2012).

2.7.1. DRO/Monterey MRA

Scope of Removal Actions - The initial phase of the MEC removal action was designed to address MEC present to a depth of up to 4 feet below ground surface (bgs). During this removal action, all detected anomalies (i.e., ferromagnetic material), even those deeper than 4 feet, were investigated with all detected MEC removed within the MRA. The next phase of the investigation was designed to address MEC to depth of detection. All anomalies detected during the removal actions were investigated or resolved, and all detected MEC items were removed or destroyed. These investigations and removal actions conducted within the DRO/Monterey MRA were focused on addressing explosive hazards.

At the DRO/Monterey MRA, the primary munitions response was performed by the Army prior to the ESCA.

Site Evaluation – The evaluation process was documented by completion of a series of checklists for the DRO/Monterey MRA in accordance with the Group 3 Remedial Investigation/Feasibility Study Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 Remedial Investigation/Feasibility Study (Volume 1; ESCA RP Team 2012).

The DRO/Monterey MRA is comprised of two non-contiguous portions of MRS-43 and a portion of South Boundary Road, which is not located within the boundaries of an MRS (Figure 2). MRS-43 was identified through a review of former Fort Ord records compiled for the Revised Fort Ord Archive Search Report (USACE 1997a) and was used to facilitate MEC investigations and removal actions. The DRO/Monterey MRA is bounded by MRS-15 DRO.1 along the northern side of South Boundary Road and by Track 1 sites to the northwest (no MRS designation) and southeast (formerly MRS-43A). The boundaries of the two non-contiguous portions of MRS-43 include a large section of Parcel L6.2 and all of Parcel E29.1 for a combined area of approximately 29 acres (Table 2). The South Boundary Road portion of the DRO/Monterey MRA includes Parcels L20.13.1.2 and L20.13.3.1 for a total area of

approximately 5.245 acres (Table 2). Based on the results of the literature review, investigations, and removal actions, the MRA was impacted during military training with the 37mm projectile used prior to World War II. Items found may have the potential to penetrate deeper than the depth of detection of the digital and analog equipment used during the removal actions. These findings are consistent with the historical use of this MRA as a weapons and troop training area as indicated in the Summary of Existing Data Report (ESCA RP Team 2008).

The Army's munitions response contractor conducted MEC removal actions across the entire MRA with the exception of a 50-foot wide strip of land on the northwest boundary of the MRA (in the habitat reserve area, Parcel L6.2) and the southern side of the road east of Parcel E29.1, which are both located outside of the MRS-43 boundary (Figure 2). The initial phase of the MEC removal action was conducted using analog instruments to depths of 4 feet bgs. The subsequent phase of the investigation was conducted using digital geophysical equipment to the depth of detection. While two small portions of the MRA have not been subjected to MEC removal actions, SiteStat/GridStat (SS/GS) investigation grids were either located partially within or immediately adjacent to the two areas. No MEC or MD items were recovered from the SS/GS investigation grids located within or immediately adjacent to these two areas. Therefore, it is expected that finding MEC in either of these two areas would not be likely.

2.7.2. Laguna Seca Parking MRA

Scope of Removal Actions - The MEC removal actions were designed to address MEC to a depth of 4 feet bgs in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, and to a depth of 1 foot bgs along the western and eastern slopes of MRS-14A. All anomalies (i.e., ferromagnetic material), even those deeper than 4 feet in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, were investigated with all detected MEC encountered removed within the MRA. These investigations and removal actions conducted within the Laguna Seca Parking MRA were focused on addressing explosive hazards.

At the Laguna Seca Parking MRA, the three primary munitions response contractors that performed munitions responses to MEC were Human Factors Applications, Inc. (HFA), UXB International, Inc. (UXB), and USA Environmental, Inc. (USA).

Site Evaluation – The evaluation process was documented by completion of a series of checklists for the Laguna Seca Parking MRA in accordance with the Group 3 Remedial Investigation/Feasibility Study Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 Remedial Investigation/Feasibility Study (Volume 1; ESCA RP Team 2012).

The vicinity of the Laguna Seca Parking MRA was identified as a training area on historical maps for the 1st Brigade and Division Artillery. The MRA consists of four MRSs that were identified to facilitate previous MEC investigations and removal actions: MRS-14A, MRS-29, MRS-30, and MRS-47 (Figure 3). The MRA encompasses approximately 276 acres and contains the following six parcels: L20.3.1, L20.3.2, L20.5.1, L20.5.2, L20.5.3, and L20.5.4 (Table 2 and Figure 3).

MEC removal actions completed by the Army's munitions response contractors were conducted using analog instruments across the MRSs within the MRA. The MEC removal actions were conducted to a depth of 4 feet bgs with two exceptions: the MEC removal action was conducted to a depth of 1 foot bgs along the western and eastern slopes of MRS-14A; and MEC removal actions were not completed in two whole and four partial grids in MRS-14A due to terrain-related inaccessibility. Based upon the results of the MEC removal action conducted immediately surrounding these grids, it is not anticipated that MEC

items posing a significant risk would remain in the six grids. Items found in the MRA may have the potential to penetrate deeper than the depth of detection of the analog instruments used during the MEC removal actions. The majority of MEC and MD encountered were consistent with the documented historical use of the MRA. Some items encountered along the western boundary of the MRA were likely the result of being adjacent to the historical impact area.

2.7.3. MOUT Site MRA

Scope of Removal Actions - The visual surface removal and field verification survey conducted in the MOUT Site MRA were designed to address MEC on the ground surface. Grid sampling investigations were conducted in a small percentage of the MRA to address MEC to depths of 4 feet bgs. During the grid sampling investigations, all anomalies (i.e., ferromagnetic material), even those deeper than 4 feet, were investigated with all detected MEC encountered removed within the MRA. These investigations and removal actions conducted within the MOUT Site MRA were focused on addressing explosive hazards.

At the MOUT Site MRA, the three primary munitions response contractors that performed munitions responses to MEC were HFA, UXB, and USA.

Site Evaluation – The evaluation process was documented by completion of a series of checklists for the MOUT Site MRA in accordance with the Group 3 Remedial Investigation/Feasibility Study Work Plan (ESCA RP Team 2009). Checklists prepared for the MRA were provided as Appendix D of the Group 3 Remedial Investigation/Feasibility Study (Volume 1; ESCA RP Team 2012).

The MOUT Site MRA includes two areas: the MOUT training area, which encompasses approximately 51 acres and consists of a mock city training area that is currently used for tactical training of military, federal, and local law enforcement agencies, and emergency service providers by Monterey Peninsula College; and a portion of Barloy Canyon Road encompassing approximately seven acres located along the eastern boundary of the historical impact area (Table 2 and Figure 4). To facilitate previous MEC investigations and removal actions, the MOUT training area was designated as MRS-28, which corresponds to Parcel F1.7.2 (Figure 4). The Barloy Canyon Road portion of the MRA was designated as Parcel L20.8 and borders a former military training area to the east (MRS-14D) in the southern portion of the parcel and the historical impact area to the west. The northern portion of Parcel L20.8 passes through a former training site designated as MRS-27O.

A grid sampling investigation and a SS/GS sampling investigation were conducted over a portion of MRS-28. During sampling, geophysical anomalies were intrusively investigated to a depth of up to 4 feet bgs. The recommendation included in the After-Action Report for the SS/GS and grid sampling investigations was for further site characterization in the northern central and southern portions of MRS-28 to ascertain the extent of MEC removal operations necessary to support current and future reuse of the property (USA 2001d). Following an accidental fire in the area, a visual surface time-critical removal action (TCRA) was conducted over the majority of the MOUT Site MRA with the exception of a small area in the southwestern portion of MRS-28 and the southern portion of Barloy Canyon Road along the eastern side of the roadway. A site verification survey was performed in the southwestern portion of MRS-28 where the TCRA was not conducted (ESCA RP Team 2012). A grid sampling investigation and 4-foot (ft) removal action were conducted in MRS-14D, adjacent and to the east of the southern portion of Barloy Canyon Road (USA 2001a). One sampling grid was located in the roadway Parcel L20.8 within the boundaries of the MOUT Site MRA. The majority of MEC and MD encountered during the MEC investigations and removal actions were consistent with the documented historical use of the MRA. Some

items encountered in the MRA were likely the result of the area being located within and along the edge of the historical impact area.

2.8. Group 3 MRAs Munitions Response Site Summaries

This section summarizes the MEC investigations and removal actions conducted for the MRSs identified in the Group 3 Remedial Investigation/Feasibility Study (Volume 1; ESCA RP Team 2012). MEC encountered during these actions were destroyed by detonation and recovered MD was disposed of or recycled after being inspected and determined not to pose an explosive hazard. Table 1 summarizes key information about the MRSs included in each Group 3 MRA.

2.8.1. DRO/Monterey MRA

The DRO/Monterey MRA includes a portion of MRS-43 where MEC investigations and removal actions have been conducted as presented below. The MEC and MD encountered within the DRO/Monterey MRA were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the MEC investigations and removal actions conducted within MRS-43 successfully detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-43

A SS/GS investigation was conducted in part of MRS-43 by USA in 1998 using Schonstedt magnetometers (USA 2001e). Five 100-ft by 200-ft grids and one partial grid were located in Parcel E29.1 of the DRO/Monterey MRA and one partial grid was located in Parcel L6.2 of the DRO/Monterey MRA. The results of the SS/GS sampling investigation indicated that while MD (referred to as ordnance scrap in the final report) related to 37mm projectiles and smoke hand grenades was found in grids, no MEC (referred to as UXO items in the final report) was found within MRS-43. The SS/GS sampling investigation in MRS-43 was determined to be inconclusive by the U.S. Army Corps of Engineers (USACE); therefore, a grid sampling investigation was recommended for MRS-43.

From December 1999 to March 2000, USA conducted a grid sampling investigation using Schonstedt magnetometers to a depth of 4 feet bgs, with deeper excavation as approved by USACE, in MRS-43 (USA 2001b). Four whole 100-ft by 100-ft grids, one partial 100-ft by 100-ft grid, two whole 100-ft by 200-ft SS/GS grids, and one partial 100-ft by 200-ft SS/GS grid were located in the DRO/Monterey MRA portion of MRS-43 and all anomalies encountered were investigated. The results of the grid sampling investigation indicated that MEC and MD related to hand grenades (single burial pit with 23 MEC items) and 37mm projectiles were found in MRS-43 (USA 2001b). The MEC items were not found within the boundaries of the DRO/Monterey MRA. The MEC and MD finds resulted in the need to conduct a removal action in the MRS. The southernmost half of MRS-43 (eventually designated as MRS-43A) was not subject to the removal action since no MEC or MD was discovered during the grid sampling investigations.

A MEC removal action was conducted in MRS-43 (Army 2000 and USA 2001b). The removal action consisted of a total of 258 whole and partial 100-ft by 100-ft grids. The removal action included the entire MRS-43 area and all anomalies encountered using Schonstedt magnetometers were investigated to a depth of 4 feet bgs (USA 2001b). The removal action corresponded to the entire DRO/Monterey MRA except for a narrow strip of land approximately 50 feet wide along the northwestern edge of Parcel L6.2 and South Boundary Road Parcels L20.13.3.1 and L20.13.1.2. Two ignition cartridges (designated as

DMM) and a quarter pound of trinitrotoluene (TNT) demolition charge (designated as UXO) were found in the area corresponding to Parcel L6.2. No MEC was found in the remainder of MRS-43 including Parcel E29.1 of the DRO/Monterey MRA. A total of 109 MD items were found throughout most of MRS-43 including Parcels L6.2 and E29.1 of the DRO/Monterey MRA.

A digital geophysical investigation was conducted in MRS-43 and in adjacent MRSs by USA using the G858 magnetometer, the cart-mounted EM61, and the handheld EM61, depending on vegetation and terrain (USA 2001b). Five whole and nine partial 100-ft by 100-ft grids located in the DRO/Monterey MRA portion of MRS-43 were investigated with the portable G858 magnetometer. The portable cart-mounted EM61 was employed in the investigation of 154 100-ft by 100-ft grids and 10 sampling grids (USA 2001b) in MRS-43. A number of these grids were located within Parcel E29.1 and only a few grids were located within Parcel L6.2. Two whole and two partial 100-ft by 100-ft grids were investigated using a handheld EM61. All but one partial grid were within Parcel E29.1; the partial grid was in Parcel L6.2 (USA 2001b).

2.8.2. Laguna Seca Parking MRA

The Laguna Seca Parking MRA consists of MRS-14A, MRS-29, MRS-30, and MRS-47 where MEC investigations and removal actions have been conducted as presented below. The MEC and MD encountered within MRS-14A, MRS-29, MRS-30, and MRS-47 were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the investigation and removal actions conducted in the Laguna Seca Parking MRA successfully detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-14A

The initial MEC response actions conducted in MRS-14A included a removal action to a depth of 3 feet bgs to support proposed Laguna Seca Raceway parking on 50 acres in June 1994 (HFA 1994) and a grid sampling investigation to a depth of 4 feet bgs on 86 100-ft by 100-ft grids (10 % of 193 acres) from July 1994 to May 1995, using Schonstedt magnetometers (UXB 1995a). The areas where the initial MEC response actions were conducted were also included in the MEC removal actions discussed in the following paragraphs.

A removal action to a depth of 4 feet bgs was performed at MRS-14D (identified as Site OE 14D in the corresponding after-action report), which included the northernmost tip of MRS-14A, by USA using Schonstedt magnetometers from September 1996 through January 1997. Eight full and two partial 100-ft by 100-ft grids included in the removal action were located within the current boundary of MRS-14A. One MEC item was discovered within the boundaries of MRS-14A and one MEC item was found outside MRS-14A, but inside the Laguna Seca Parking MRA. Both items were removed in accordance with the work plan (CMS 1995).

A removal action was conducted by USA at MRS-14A using Schonstedt magnetometers from June 1997 through April 1998. The removal action was conducted on 427 grids to a depth of 4 feet bgs and 384 grids to a depth of 1 foot bgs. Six grids (two complete grids and portions of four grids) were not accessible and a paved ditch along Lookout Ridge Road was not surveyed during the MEC removal action (USA 2001c). The removal action at MRS-14A encountered 137 MEC items including electric blasting caps, smoke grenades and assorted pyrotechnics, expended 37mm, 57mm, and 75mm projectiles, and training 81mm mortars. MEC items discovered were removed in accordance with the work plan.

MRS-29

A random sampling investigation was conducted on 69 100-ft by 100-ft grids in MRS-29 in 1995 using Schonstedt magnetometers (UXB 1995b). The investigation was converted to a removal action, which included the 69 sampling investigation grids, as discussed in the following paragraph.

A removal action to a depth of 4 feet bgs was performed by CMS on MRS-29 from June 1997 to July 1998 using Schonstedt magnetometers. A total of 125 100-ft by 100-ft grids and partial grids were completed by CMS. No MEC items were found during this removal action (USA 2000a).

MRS-30

A removal action was conducted to a depth of 4 feet bgs using Schonstedt magnetometers on the entire 5.9 acres of MRS-30, which consisted of 25 100-ft by 100-ft grids and 10 partial grids (UXB 1995c). Two MEC items were found: one 75mm high explosive projectile and one 81mm illumination mortar cartridge. Both items were detonated in place in accordance with the work plan (UXB 1995c).

MRS-47

The initial MEC response actions conducted in MRS-47 included a vegetation clearance in 1994 to facilitate access for a controlled burn (USACE 1997a and USA 2000b), sampling investigation of three grids by HFA in January 1994 using Schonstedt magnetometers (HFA 1994), a removal action to a depth of 3 feet bgs by UXB from July 1994 to July 1995 using Schonstedt magnetometers (UXB 1995d), and a sampling investigation from July to September 1996 by USA using Schonstedt magnetometers (USA 2000b). The areas where these initial MEC response actions were conducted were also included in the MEC removal action discussed in the following paragraph.

From February to June 1997, USA conducted a removal action to a depth of 4 feet bgs on the entire 79 acres of MRS-47 using Schonstedt magnetometers (USA 2000b). MEC found included 81mm mortars, 37mm projectiles, 3-inch Stokes mortars, 75mm projectiles, 60mm mortars, smoke-filled hand grenades, two unfired high explosive 40mm cartridges, a variety of pyrotechnic items, a 4.2-inch projectile, a 20mm projectile, a 57mm projectile, a 2.36-inch rocket, and various fuzes for grenades, mines, and projectiles.

2.8.3. MOUT Site MRA

The MOUT Site MRA consists of MRS-28 (the MOUT training area) and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area. The northern segment of the Barloy Canyon Road portion of the MOUT Site MRA passes through a former training site identified as MRS-27O. The southern portion of Barloy Canyon Road is bordered by MRS-14D to the east. Because the proximity of the roadway to these MRSs, the sampling and removal actions performed in MRS-27O and MRS-14D are included in the following discussions. The MEC and MD encountered within the MOUT Site MRA were consistent with the historical use of the area for weapons and troop training. The results of the remedial investigation indicated that the investigations and removal actions conducted in the MOUT Site MRA detected, excavated, and recovered MEC to address the explosive hazard (ESCA RP Team 2012).

MRS-28

From March to September 1998, USA conducted a grid sampling investigation in MRS-28 for the Army to determine the need for performing a MEC removal action (USA 2001d). The grid sampling was conducted in 16 100-ft by 100-ft grids in the northeastern and southern portions of the MRS. The sampling investigation included the entire grid area and the anomalies encountered using Schonstedt magnetometers were investigated to a depth of 4 feet bgs. The boundaries of MRS-28 were modified since this investigation; therefore, 13 of the 16 grids were located within the current boundaries of MRS-28. In the northeastern portion of MRS-28, five MEC items (two practice hand grenades, two smoke hand grenades, and one hand grenade fuze) were found. The majority of the MD items found were also related to practice hand grenades, smoke hand grenades, and hand grenade fuzes. In the southern portion of MRS-28, two MEC items (one civilian blast simulator and one practice hand grenade fuze) were found. The majority of the MD items found were related to 40mm cartridge cases, practice 3.5-inch rockets, practice 2.36-inch rockets, and practice hand grenade fuzes.

From March to September 1998, USA conducted a SS/GS sampling investigation in the central portion of MRS-28 to determine the need for performing a MEC removal action (USA 2001d). The SS/GS investigation was conducted in 14 100-ft by 200-ft grids. Grids were investigated using the Schonstedt magnetometer. In the central portion of MRS-28, MEC items (3.5-inch rocket, ground burst simulator, ignition cartridge, mine fuzes, and hand grenade fuzes) were found. Forty hand grenade fuzes were found in a single "pit" and the 16 mine fuzes were found in one location. The majority of the MD items found in these grids were related to practice hand grenades, smoke hand grenades, hand grenade fuzes, practice 3.5-inch rockets, practice 2.36-inch rockets, trip flares, and illumination signals.

From approximately November to December 2003, a visual surface TCRA and military munitions reconnaissance was conducted for the Army by Shaw Environmental, Inc. (Shaw) to remove MEC following an accidental fire in the area (Shaw 2005). MD (greater than 2 inches in size) was also removed. MRS-28 was included in the TCRA with the exception of a small area consisting of approximately 10 100-ft by 100-ft whole and partial grids along the northwestern border. MEC items found in MRS-28 included practice hand grenades, smoke hand grenades, hand grenade fuzes (practice and non-practice), one fragmentation hand grenade, 40mm projectiles (illumination parachute, smoke, and practice), antitank rifle grenades, a surface trip flare, and ground illumination flares.

In February 2012, an instrument-aided field verification survey using a Schonstedt magnetometer was conducted for FORA by the ESCA RP Team in 24 100-ft by 100-ft whole and partial grids in MRS-28 along the southwestern border of the MOUT training facility area including the area not previously investigated in the TCRA. One MEC item, a smoke hand grenade, was found during the survey.

MRS-270

From November to December 2003, a visual surface TCRA and military munitions reconnaissance was conducted for the Army by Shaw to remove MEC following an accidental fire in the area (Shaw 2005). MD (greater than 2 inches in size) was also removed. MEC items found included a flash artillery simulator next to the portion of Barloy Canyon Road that passes through the MRS.

MRS-14D

From August through November 1995, CMS (currently known as USA) performed a grid sampling investigation in MRS-14D, located to the east of the southern portion of Barloy Canyon Road, to a depth

of 4 feet bgs in 35 100-ft by 100-ft grids and partial grids using Schonstedt magnetometers (USA 2001a). The areas where the grid sampling investigation was conducted were also included in the MEC removal action discussed in the following paragraph.

A removal action to a depth of 4 feet bgs was performed at MRS-14D, located to the east of the southern portion of Barloy Canyon Road, by USA using Schonstedt magnetometers from September 1995 through January 1997. Partial 100-ft by 100-ft grids included in the removal action extended into the current boundary of the Barloy Canyon Road portion of the MOUT Site MRA. Two MEC items were recovered along the east side of Barloy Canyon Road within the MOUT Site MRA.

2.9. Current and Potential Future Land and Resource Uses

The future land uses for the Group 3 MRAs, summarized below, are based upon the Fort Ord Base Reuse Plan (FORA 1997). Future land use information is also included in the Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP; USACE 1997b) and modifications to the HMP provided in *Assessment, East Garrison – Parker Flats Land Use Modifications, Fort Ord, California* (Zander 2002), and *Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification* (Army 2004).

2.9.1. DRO/Monterey MRA

The DRO/Monterey MRA is proposed for habitat management and business park/light industrial and office/research and development reuse in the Base Reuse Plan. The reasonably foreseeable reuses being considered for the DRO/Monterey MRA include:

- Habitat Management Reuse Area, Parcel L6.2 – the westernmost portion of the MRA is designated for habitat reserve as a development buffer (Table 2). The area is approximately seven acres and is predominantly maritime chaparral. The area is expected to be used for public recreation. Vegetated areas and hiking trails may require biological monitoring and maintenance, such as planting, weeding, and trail repair. Recreational hiking, bicycling, and horseback riding on dirt paths are also expected.
- Business Park/Light Industrial and Office/Research and Development Reuse Area, Parcel E29.1 – the easternmost portion of the MRA is designated for development (Table 2). The area totals approximately 23 acres and is predominantly maritime chaparral. Development encompassing commercial/retail activities is expected.
- South Boundary Road and Associated Right of Way Reuse Area, Parcels L20.13.3.1 and L20.13.1.2 – the northern boundary of the MRA is designated for development (Table 2). The area totals approximately 5.245 acres and is a paved roadway. Development encompassing infrastructure activities, such as roadway and utility construction, is expected. Roadway expansion and utility construction will constitute the major development along South Boundary Road.

2.9.2. Laguna Seca Parking MRA

The Laguna Seca Parking MRA is proposed for open space/recreation reuse in the Base Reuse Plan and development with reserve areas or development with restrictions in the HMP (Table 2). The reasonably foreseeable reuses being considered for the Laguna Seca Parking MRA include:

- Open Space/Recreation Reuse Area, Parcels L20.3.2, L20.5.1, L20.5.3, and L20.5.4 - the northernmost and southernmost portions of the MRA will continue to be used for overflow parking

during Laguna Seca Raceway events (Table 2) and includes parking, staging, and event-related roadway access along Barloy Canyon Road and South Boundary Road. The area totals approximately 177 acres and is predominantly grassland and maritime chaparral.

- Open Space/Recreation Reuse Area / Highway 68 Bypass Right of Way, Parcels L20.3.1 and L20.5.2 – the central portion of the MRA is designated for development with restrictions (Table 2). The area totals approximately 99 acres and is predominantly grassland and maritime chaparral. The area is currently used for overflow parking during Laguna Seca Raceway events (Table 2) and includes parking, staging, and event-related roadway access along Barloy Canyon Road and South Boundary Road. A roadway easement for a future bypass of Highway 68 is also a possible future use.

2.9.3. MOUT Site MRA

The MOUT Site MRA is proposed for school/university reuse in the Base Reuse Plan (Table 2). The reasonably foreseeable uses being considered for the MOUT Site MRA include:

- MOUT Training Area Reuse Area, Parcel F1.7.2 – the western portion of the MRA is designated as a training facility for tactical/law enforcement training and emergency service provider training by Monterey Peninsula College (Table 2). The parcel is approximately 51 acres. The MOUT trainees may participate in minor intrusive activities during training activities. It is anticipated that old buildings may be destroyed, new buildings may be constructed, or underground utilities may be installed in the area.
- Barloy Canyon Road Reuse Area, Parcel L20.8 – the roadway parcel will continue to be used as a roadway for recreation and for transportation during raceway events, and will require maintenance and possibly utilities (Table 2). The parcel is approximately seven acres. The Barloy Canyon portion of the MOUT Site MRA is likely to be improved and opened as a transportation corridor. To facilitate reuse, infrastructure improvements, such as utilities and roadways, may be required.

2.10. Summary of Site Risks

Munitions response actions have been completed at the Group 3 MRAs, significantly reducing the potential risks to human health and the environment from explosive hazards associated with MEC. Because detection technologies may not detect all MEC present and some areas contain barriers (e.g., pavement, buildings) that, while providing protection against MEC potentially present, preclude the use of detection technologies, a future land user (i.e., receptors) may encounter MEC. The risk was evaluated in a MEC Risk Assessment as part of the Group 3 Remedial Investigation/Feasibility Study (Volume 2; ESCA RP Team 2012).

The Fort Ord Ordnance and Explosives Risk Assessment Protocol (Malcolm Pirnie 2002) was developed to qualitatively estimate the risk to future land users of the property from potentially remaining MEC in terms of an "Overall MEC Risk Score" for each receptor expected to be present during area development and reuse.

The MEC Risk Assessment Protocol results are based on three key factors (MEC Hazard Type, Accessibility, and Exposure) that are assigned use-specific values and are weighted in importance. These factors were used to develop an Overall MEC Risk Score for each receptor at a given reuse area as follows:

Overall MEC Risk Score	A	B	C	D	E
	Lowest	Low	Medium	High	Highest

These qualitative Overall MEC Risk Scores guided the development and evaluation of alternatives in the Group 3 Feasibility Study. The future land users of the property identified for analysis in the MEC Risk Assessment and a summary of the Overall MEC Risk Scores for each receptor for the reuse areas within the Group 3 MRAs are provided below. It is recognized that although the detected anomalies have been investigated and all detected MEC have been removed during the previous removal actions conducted on the Group 3 MRAs, the potential exists that MEC may remain in the subsurface at the MRA. Therefore, the risks associated with subsurface (intrusive) receptors (e.g., maintenance workers and construction workers) are assumed to remain at the Group 3 MRAs at a level that requires mitigation and remedial alternatives were evaluated in a Feasibility Study.

The qualitative Overall MEC Risk Scores were used in the Group 3 Feasibility Study (Volume 3; ESCA RP Team 2012) to guide the development and evaluation of response alternatives for the Group 3 MRAs during development and for reasonably anticipated future uses.

The response actions selected in this ROD are necessary to protect the public health or welfare from the possible presence of subsurface MEC.

DRO / Monterey MRA

The receptors identified for analysis in the MEC Risk Assessment for the DRO/Monterey MRA included: office worker, habitat worker, recreational user, maintenance worker, construction worker, and trespasser. The overall MEC risk score for each receptor was “A” (lowest risk).

Laguna Seca Parking MRA

The receptors identified for analysis in the MEC Risk Assessment for the Laguna Seca Parking MRA included: recreational user, maintenance worker, construction worker, and trespasser. The overall MEC risk scores for surface receptors (e.g., recreational users and trespassers) were “A” (lowest risk) and “B” (low risk) depending on their location in the MRA. The overall MEC risk scores for subsurface (intrusive) receptors (i.e., maintenance workers and construction workers) were “B” (low risk) to “E” (highest risk) depending on their location in the MRA.

MOU Site MRA

The receptors identified for analysis in the MEC Risk Assessment for the MOU Site MRA included: trainee, recreational user, maintenance worker, construction worker, and trespasser. The overall MEC risk scores for surface receptors (e.g., trainees, recreational users, and/or trespasser) were “B” (low risk) and “C” (medium risk) for the MOU training area and “B” (low risk) for the Barloy Canyon roadway portion of the MRA. The overall MEC risk scores for subsurface (intrusive) receptors (e.g., maintenance workers and construction workers) were “B” (low risk) to “D” (high risk) for the MOU training area and “D” (high risk) for the Barloy Canyon roadway portion.

2.11. Remedial Action Objectives

The remedial action objective (RAO) for the Group 3 MRAs is based on the MEC Risk Assessment results and on EPA's Remedial Investigation/Feasibility Study Guidance (EPA 1988) to achieve the EPA's threshold criteria of "Overall Protection of Human Health and the Environment" and "Compliance with ARARs." The RAO developed for the protection of human health and the environment for the Group 3 MRAs is to prevent or reduce the potential for the Group 3 MRA reuse receptors to come in direct contact with MEC items potentially remaining in subsurface soil.

As described in EPA's Land Use in the CERCLA Remedy Selection Process (EPA 1995), "Remedial action objectives provide the foundation upon which remedial cleanup alternatives are developed. In general, remedial action objectives should be developed in order to develop alternatives that would achieve cleanup levels associated with the reasonably anticipated future land use over as much of the site as possible. EPA's remedy selection expectations described in section 300.430 (a) (1) (iii) of the NCP should also be considered when developing remedial action objectives. Where practicable, EPA expects to treat principal threats, to use engineering controls such as containment for low-level threats, to use institutional controls to supplement engineering controls...."

For the purpose of this ROD, the contaminant of concern within the Group 3 MRAs is MEC. The potential for soil contamination from munitions constituents at the former Fort Ord is being addressed under the Army's Basewide Range Assessment (BRA) Program (Shaw/MACTEC 2009). Based on the BRA Program, no further action has been recommended for HAs within the DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs (Shaw/MACTEC 2009).

Consistent with EPA's guidance, (1) the principal threats at the Group 3 MRAs have already been treated (i.e., MEC removal actions have been completed), and (2) institutional controls (herein referred to as land use controls or LUCs) are considered appropriate remedial alternatives.

2.12. Description of Alternatives

Remedial alternatives were evaluated for each of the Group 3 MRAs in the Group 3 Feasibility Study (Volume 3; ESCA RP Team 2012). The alternatives were summarized in the Group 3 Proposed Plan (Army 2013).

Long-term management measures (deed notice and restrictions, annual monitoring, and five-year review reporting) are implementation and management measures for Alternatives 2, 3, and 4. Long-term management measures are described further in Section 2.14.3. The costs associated with implementing these measures over a period of 30 years are approximately \$210,000 for the DRO/Monterey MRA and \$199,000 each for the Laguna Seca Parking MRA and MOUT Site MRA.

The Group 3 Risk Assessment (Volume 2; ESCA RP Team 2012) found that intrusive receptors (those who may dig below the ground surface), such as the maintenance worker and construction worker, have a higher potential risk from MEC that may remain at the Group 3 MRAs. Although previous removal actions have been conducted on the MRAs, the potential exists for MEC to remain in the subsurface. Therefore, the risks associated with intrusive receptors (maintenance workers and construction workers) are assumed to remain at a level that requires mitigation. The four remedial alternatives developed to mitigate this risk are summarized below:

Alternative 1 – No Further Action

This alternative was developed for analysis in the DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs. This alternative assumes no further action would be taken to address potential MEC risks for those receptors identified in the Risk Assessment. This alternative is provided as a baseline for comparison to the other remedial alternatives, as required under CERCLA and the NCP. There are minimal costs associated with implementation of this alternative.

Alternative 2 – Land Use Controls

This alternative was developed for analysis in the DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs. This alternative assumes that LUCs, without additional MEC remediation on any portion of the MRAs, would be implemented to address potential MEC risks for intrusive or ground-disturbing reuse. The LUCs alternative consists of MEC recognition and safety training, construction support, and continuation of the existing residential use restriction. The components of the alternative are described below:

MEC Recognition and Safety Training - People involved in intrusive operations during the proposed reuses and development at the Group 3 MRAs would be required to attend the MEC recognition and safety training to increase their awareness of and ability to identify MEC items. Prior to planned intrusive activities, the property owner would be required to notify FORA or its successor to provide MEC recognition and safety training for all people performing intrusive activities.

Construction Support - Construction support, either on-call or onsite, would be arranged during the construction and maintenance planning stages of the project prior to the start of any intrusive or ground-disturbing activities. For on-call construction support, UXO-qualified personnel must be contacted prior to the start of intrusive or ground-disturbing activities to ensure their availability, advised about the project, and placed “on call” to assist if suspected MEC are encountered during construction and maintenance. During on-call support, UXO technicians have the option to be present at the site during intrusive activities if warranted. For onsite construction support, UXO-qualified personnel will attempt to identify and remove any explosive hazard in the construction footprint prior to any intrusive construction activities. If evidence of MEC is found during construction activities, the intrusive or ground-disturbing work would immediately cease, no attempt would be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property would be immediately notified so that appropriate explosive ordnance disposal personnel could be dispatched to address the MEC, as required under applicable laws and regulations.

Residential Use Restriction - Residential use restriction placed on the Group 3 property at the time of property transfer to FORA will be maintained. For the purpose of this decision document, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007).

The LUCs included in this alternative are based on the planned reuse of the MRAs. The specific details of LUCs would be presented in the RD/RA Work Plan, or similar document. The costs associated with implementing this alternative are estimated to be \$757,000 for each of the Group 3 MRAs.

Alternative 3 – Additional Subsurface MEC Remediation

This alternative assumes that subsurface MEC remediation would be conducted throughout the entire footprints of the DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs. This alternative includes implementing the appropriate type of vegetation clearance in the MRA, if necessary, and the implementation of additional MEC remediation. For the portions of the Group 3 MRAs designated for development, vegetation removal would be accomplished using mechanical methods. For the portions of the Group 3 MRAs designated for habitat reserve, vegetation removal would be accomplished using prescribed burning techniques, to the extent feasible. Additional subsurface MEC remediation would involve identifying MEC through a visual search and operation of MEC detection equipment to locate subsurface items. Removal of subsurface MEC would be performed to the depth of detection using best available and appropriate detection technology and procedures and Department of Defense Explosives Safety Board (DDESB)-approved MEC detonation procedures in areas where explosive MEC items are identified during remedial activities and require disposal. Debris including MD that was found or detected during the process was also removed, to the extent feasible. The specific details of the vegetation clearance methods and the MEC detection equipment used would be presented in the RD/RA Work Plan, or similar document. The costs associated with implementing this alternative are estimated to be approximately \$1.0 million for the DRO/Monterey MRA, \$5.8 million for the Laguna Seca Parking MRA, and \$1.6 million for the MOUT Site MRA.

Alternative 4 – Additional Subsurface MEC Remediation in Selected Areas of the MRA and Land Use Controls

This alternative was developed for the DRO/Monterey and MOUT Site MRAs. Within the MRAs, this alternative would consist of implementation of the LUCs described in Alternative 2 plus performing subsurface MEC remediation within selected areas of the MRAs to address specific risks and/or reuse needs.

In the DRO/Monterey MRA, the area along South Boundary Road was identified for subsurface MEC remediation as part of this alternative. This selected area consisted of bar ditches that run along both sides of South Boundary Road and extended from the roadway pavement to the northern and southern boundary lines of the roadway right of way, totaling approximately five acres. Additional MEC remediation in this selected area would include brush cutting, surface MEC removal, fence removal, and subsurface MEC removal using best available and appropriate detection technology. The narrow strip of land approximately 50 feet wide and 900 feet long on the northwestern boundary of the DRO/Monterey MRA is not included as part of this alternative because MEC investigations and removal actions conducted in the vicinity resulted in the recovery of few MEC and MD items; therefore, there is a low probability of encountering MEC in this area. The cost associated with implementing this alternative is estimated to be approximately \$983,000 for the DRO/Monterey MRA.

In the MOUT Site MRA, the area along Barloy Canyon Road was identified for MEC remediation as part of this alternative. The selected area included the bar ditch along the west side of Barloy Canyon Road and extended from the western edge of the roadway pavement to the western boundary line of the roadway right of way along the entire length of the road within the MRA, totaling approximately 2.3 acres. Additional MEC remediation in this selected area would include brush cutting, fence removal, subsurface MEC removal using best available and appropriate detection technology, and fence replacement. The approximately 600 feet of the southern portion of Barloy Canyon Road along the east side of the roadway is not part of this alternative because MEC investigations and removal actions conducted in the vicinity resulted in the recovery of few MEC and MD items; therefore, there is a low

probability of encountering MEC in this area. The cost associated with implementing this alternative is estimated to be approximately \$1.1 million for the MOUT Site MRA.

Under this alternative, people conducting surface-only activities would be provided MEC recognition and safety training. Intrusive or ground-disturbing activities would be conducted with construction support by UXO-qualified personnel, and MEC recognition and safety training would be provided for people conducting intrusive or ground-disturbing activities.

2.13. Principal Threat Wastes

Munitions responses have been completed at the Group 3 MRAs. All MEC items which would meet the principal threat waste criteria identified as part of the investigation have already been addressed. The selected remedy includes LUCs because detection technologies may not detect all MEC present; certain areas contain barriers (e.g., pavement, buildings) that while providing protection against any MEC potentially present, preclude the use of detection technologies; therefore, subsurface investigations were not completed in small portions of the Group 3 MRAs. The source material constituting the principal threats at the Group 3 MRAs are MEC that potentially remain below the ground surface (in the subsurface).

The selected remedy will address the residual threats through implementing the following LUCs:

- MEC recognition and safety training for people that will conduct ground-disturbing or intrusive activities;
- Construction support for ground-disturbing or intrusive activities to address the possibility that MEC remains in the subsurface; and
- Restrictions prohibiting residential use.

2.14. Selected Remedy

2.14.1. Summary of the Rationale for the Selected Remedy

Each alternative developed for the Group 3 MRAs was assessed against the nine EPA evaluation criteria described in Tables 3, 4, and 5. Using the results of this assessment, the alternatives were compared and a remedy selected for each of the Group 3 MRAs. The remedy that best meets the nine EPA evaluation criteria is Alternative 2 (Land Use Controls). This remedy was selected because LUCs will be protective of human health for future land users, and would be effective in the short- and long-term at mitigating the risk to people conducting ground-disturbing or intrusive activities from MEC that is potentially present. This remedy will require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. The remedy can be implemented in a manner consistent with Federal and State guidance.

The Army and EPA have jointly selected the remedy. The DTSC has had an opportunity to review and comment on the ROD.

Community acceptance is discussed in the Responsiveness Summary (Section 3.0). The selected remedy is further described below.

2.14.2. Description of the Selected Remedy

The selected remedial alternative for each of the Group 3 MRAs is:

- DRO/Monterey MRA: Alternative 2 (Land Use Controls)
- Laguna Seca Parking MRA: Alternative 2 (Land Use Controls)
- MOUT Site MRA: Alternative 2 (Land Use Controls)

The LUCs and their implementation strategy are described below.

Land Use Controls

The LUCs that will be implemented at the Group 3 MRAs include requirements for: (1) MEC recognition and safety training for people that will conduct ground-disturbing or intrusive activities, (2) construction support for ground-disturbing or intrusive activities to address MEC that potentially remains in the subsurface, and (3) restrictions prohibiting residential use.

- **MEC recognition and safety training** - For the areas addressed in this ROD, ground-disturbing or intrusive activities are expected to occur. People involved in ground-disturbing or intrusive operations at these areas will be required to attend the MEC recognition and safety training to increase their awareness of and ability to identify MEC items. Prior to conducting ground-disturbing or intrusive activities, the property owner will be required to notify FORA or its successor to provide MEC recognition and safety training for all people performing ground-disturbing or intrusive activities.

MEC recognition and safety training will be evaluated as part of the five-year review process to determine if the training program should continue. If further evaluation indicates that this LUC is no longer necessary, the program may be discontinued with regulatory approval.

- **Construction support** - Construction support by UXO-qualified personnel is required during any intrusive or ground-disturbing construction activities at the Group 3 MRAs to address potential MEC risks to construction and maintenance personnel. Construction support will be arranged during the construction and maintenance planning stages of the project prior to the start of any intrusive or ground-disturbing activities. If evidence of MEC is found during construction support activities, the intrusive or ground-disturbing work will immediately cease, no attempt will be made to disturb, remove, or destroy the MEC, and the local law enforcement agency having jurisdiction on the property will be immediately notified so that appropriate explosive ordnance disposal personnel can be dispatched to address the MEC, as required under applicable laws and regulations. Construction support may be applicable in the short term during development of the reuse area, and/or in the long term during established reuse.

Construction support will be evaluated as part of the five-year review process to determine if the LUC should continue. If the MEC-related data collected during the development of the reuse areas indicate that this LUC is no longer necessary, construction support may be discontinued with regulatory approval.

- **Restrictions prohibiting residential use** - Residential use restriction placed on the Group 3 property at the time the property was transferred will be maintained. For the purposes of this document, residential reuse includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007).

2.14.3. Land Use Control Implementation Strategy

The performance objectives for the LUCs that are part of the remedy are the following:

- **MEC recognition and safety training:** (1) to ensure that land users involved in ground-disturbing or intrusive activities are educated about the possibility of encountering MEC, and (2) to ensure that land users involved in ground-disturbing or intrusive activities stop the activity when encountering MEC and report to the appropriate authority.
- **Construction support:** to ensure projects involving ground-disturbing or intrusive activities are coordinated with UXO-qualified personnel so discoveries of potential MEC items will be handled appropriately. Mechanisms for implementing the requirement for construction support may include local ordinance(s), and details of implementation will be described in the RD/RA Work Plan for the LUCs.
- **Restrictions prohibiting residential use:** to ensure that any proposals to allow residential development or modifications to residential restrictions are approved by EPA and Army in coordination with DTSC.

LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: 1) new information (e.g., limited geophysical mapping, site development); or 2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed.

The LUCs and the implementation actions will be explained in more detail in the RD/RA Work Plan. In accordance with the ESCA, the AOC, and the FFA Amendment No.1, FORA will prepare a LUC Remedial Design which shall contain implementation, monitoring and maintenance actions, including periodic reports. Within 21 days of the signature of the ROD, FORA shall provide EPA and DTSC for review and approval a schedule for implementation of a LUC remedial design.

As part of the implementation plan, the RD/RA Work Plan will also describe the following long-term management measures:

- **Existing land use restrictions:** The deeds to FORA for the Group 3 MRA parcels restrict residential use. Residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. It should be noted that the CRUPs for the Group 3 MRA parcels restrict residential use.
- **Annual monitoring and reporting:** After this ROD is signed, FORA, or its successor entity under the ESCA and the AOC, will perform annual monitoring and reporting. FORA or its successor entity will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during use of the property, and report the results of monitoring activities annually.
- **Five-year review reporting:** Five-year reviews will be conducted by the Army in accordance with CERCLA Section 121(c) and the Fort Ord FFA. The five-year review will evaluate the protectiveness of the selected remedy. Based on the evaluation, the selected LUCs may be modified or discontinued, with the approval of the EPA and DTSC.

The standard procedure for reporting any encounter with a known or suspected MEC item in the transferred former Fort Ord property is to immediately report the encounter to the local law enforcement

agency having jurisdiction on the property so that appropriate explosive ordnance disposal personnel can be dispatched to address the MEC, as required under applicable laws and regulations. After the response, the probability of encountering MEC will be reassessed. If the probability of encountering MEC is low, construction may resume with construction support. If the probability of encountering MEC is moderate to high, UXO-qualified personnel will attempt to identify and remove any explosive hazard in the construction footprint prior to any intrusive construction activities.

FORA or its successor will notify the regulatory agencies, as soon as practicable, of any MEC-related data identified during use of the property, and report the results of monitoring activities annually. The Army will conduct five-year reviews. If additional evaluation or work or modification of the selected remedy is proposed based on such review, it will be implemented in accordance with Paragraph 34 of the AOC, and/or Section C.4.1.7 of the ESCA.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls. Although the Army has already transferred the responsibilities to implement, maintain, monitor, and enforce LUCs to another party by contract, property transfer agreement, or through other means, the Army retains the ultimate responsibility for remedy integrity. Future property owners will also have responsibilities to act in accordance with the LUCs as specified in the deed(s).

2.14.4. Summary of the Estimated Remedy Costs

For those alternatives whose life-cycle is indeterminate or exceeds 30 years, for the purposes of evaluating and comparing alternatives as specified in EPA's Remedial Investigation/Feasibility Study Guidance (EPA 1988), a period of 30 years is used for estimating long term O&M costs. For the Group 3 MRAs, the life-cycle is indeterminate; therefore, long term O&M costs were estimated over a period of 30 years. Capital and long term O&M costs for implementing and maintaining LUCs under Alternative 2 are estimated at a total of approximately \$2.3 million for the reuse areas within the Group 3 MRAs. Capital and long term O&M costs for implementing and maintaining Long Term Management Measures are estimated at approximately \$608,000 for the reuse areas within the Group 3 MRAs. Therefore, the total estimated 30-year Net Present Value cost of the remedy is approximately \$2.9 million. Long term O&M costs are based on a 2.7 percent real interest rate for Years 1-7 (assumed duration for development and construction), and a 2.7 percent real interest rate for Years 8-30 (established reuse). A detailed, activity-based breakdown of the estimated costs associated with implementing and maintaining the remedy is provided in the Group 3 Feasibility Study (Volume 3; ESCA RP Team 2012).

2.14.5. Expected Outcomes of Selected Remedy

The expected outcomes of the selected remedy would be protection of human health and the environment through implementation of LUCs.

If residential development is planned for any part of the Group 3 MRAs included in this ROD, the plans will be subjected to regulatory agency and Army review and approval.

2.15. Statutory Determinations

The selected remedy satisfies the requirements of Section 121 of CERCLA as follows:

- Protection of Human Health and the Environment: The selected remedy provides protection for both human health and the environment through implementation of LUCs to mitigate the risk from potentially remaining MEC.
- Compliance with Applicable or Relevant and Appropriate Requirements: The selected remedy can be implemented in a manner consistent with Federal and State guidance. While the Army does not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army entered into CRUPs with the DTSC at the time the property was transferred to FORA. The DTSC will modify the existing CRUP, as appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagree with the Army's determination that California laws and regulations concerning CRUPs are not potential ARARs, they will agree-to-disagree on this issue since the Army executed the CRUPs and the DTSC will modify the CRUPs, if appropriate, to be consistent with the identified remedy.
- Cost Effectiveness: The selected remedy is a cost-effective solution for reducing the risks to human health and the environment. The Net Present Value of the total estimated costs for the reuse areas within the Group 3 MRAs (including Long Term Management Measures costs of \$608,000) is approximately \$608,000 for the No Action alternative (Alternative 1), and approximately \$2.9 million (including Long Term Management Measures costs of \$608,000) for the selected remedy of Land Use Controls (Alternative 2), which is well below the estimate for Additional MEC Remediation (Alternative 3) of approximately \$9.0 million (including Long Term Management Measures costs of \$608,000). In addition, costs for Alternative 3 may be higher than estimated because: (1) after additional MEC remediation is completed, these areas would require a re-evaluation of potential risk from MEC; and (2) the areas are likely to continue to require additional risk mitigation measures (e.g., LUCs) to protect human health during development and long-term reuse.
- Utilization of Permanent Solutions and Alternative Treatment (or Resource Recovery) Technologies to the Maximum Extent Practicable: The principal threats at the Group 3 MRAs have already been treated (i.e., MEC removal actions have been completed) utilizing permanent solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable.
- Preference for Treatment as a Principal Element: The principal threats at the Group 3 MRAs have already been addressed (i.e., MEC removal actions have been completed), satisfying the statutory preference for treatment as a principal element (i.e., reducing the toxicity, mobility, or volume of hazardous substances, pollutants, or contaminants as a principal element through treatment).
- Five-Year Review Requirements: Because the selected remedy may result in MEC potentially remaining within the Group 3 MRAs, a statutory review will be conducted by the Army within five years after initiation of the remedial action to ensure the remedy is, or will be, protective of human health and the environment. The purpose of a five-year review is to gather updated information, evaluate the condition of the site, and determine if the site remains safe from contamination that might be left at the site. The next five-year review will occur in 2017.

2.16. Documentation of Significant Changes from Preferred Alternative of Proposed Plan

As described in Section 2.4., the Proposed Plan for the Group 3 MRAs was released for public comment on January 11, 2013, and a public meeting was held on January 30, 2013. The Proposed Plan identified preferred remedial alternatives for the Group 3 MRAs. Comments collected over the 30-day public comment period between January 15, 2013, and February 13, 2013, did not necessitate any significant changes to the conclusions or procedures outlined in the Final Group 3 Remedial Investigation/Feasibility Study and Group 3 Proposed Plan.

3. RESPONSIVENESS SUMMARY

3.1. Proposed Plan Overview

Based on the Final Group 3 Remedial Investigation/Feasibility Study, dated July 31, 2012, the Army identified a preferred remedial alternative, which consists of the following requirements for future property users:

- MEC recognition and safety training (for people that will conduct ground-disturbing or intrusive activities, such as construction workers and outdoor maintenance workers)
- Construction support by UXO-qualified personnel (for ground-disturbing or intrusive activities)
- Restrictions prohibiting residential use

3.2. Background on Community Involvement

Focused community involvement for the Group 3 Proposed Plan involved a notice of availability of the Proposed Plan for review, a 30-day public review period, a public meeting, and a responsiveness summary to address comments received on the Group 3 Proposed Plan.

The Group 3 Proposed Plan notice of availability was published in the Monterey County Herald and the Salinas Californian newspapers on January 15, 2013. The 30-day public comment period began on January 15, 2013, and closed on February 13, 2013.

The public meeting was held on January 30, 2013, to present the Group 3 Proposed Plan to a broader community audience. At this meeting, representatives from the Army, EPA, and DTSC were present, and the public had the opportunity to submit written and oral comments about the Proposed Plan.

Representatives from FORA were also present at the public meeting to answer questions on the Group 3 Proposed Plan. Copies of the comments received on the Proposed Plan and a transcript of the public comments are available at the former Fort Ord Administrative Record and on the former Fort Ord website at www.fortordcleanup.com.

The responsiveness summary responds to written comments received during the Group 3 Proposed Plan public comment period as well as oral comments expressed during the Group 3 Proposed Plan public meeting. Public comments submitted during the Group 3 Proposed Plan public comment period and the Army's responses are provided in the following section.

3.3. Summary of Comments Received During the Public Comment Period and Department of the Army Responses

Public comments received during the Group 3 Proposed Plan public comment period and the Army's responses are summarized below.

Comments were received from the public: (1) at the public meeting held on January 30, 2013; and (2) in written comments received during the 30-day public comment period from January 15, 2013, to February 13, 2013.

Comment summaries are provided below and have been categorized based on the focus of each comment. The three categories are:

- A. Selected Remedy and Future Land Use
- B. Community Involvement and Outreach
- C. Other Comments

A. Selected Remedy and Future Land Use

A1: One commenter expressed the medium or high rating as the overall risk score for maintenance and construction workers in the MOUT Training Area within the MOUT Site MRA was difficult to judge, and expressed a preference for Alternative 3 or 4 being employed because both alternatives include subsurface MEC remediation. The commenter stated the likely potential of discovering residual munitions during future construction activities at the MOUT Training Area is a concern with regard to expense, possible disruption of future construction activities, and potential delays to realizing full utilization of the MOUT Training Area. The commenter also expressed concern for liability for residual munitions that may be encountered by trespassers at the MOUT Training Area.

Response: The Army is committed to the goal of selecting and implementing environmental cleanup actions that would support the reuse of the former Fort Ord as described in the Fort Ord Reuse Plan -- in this case, tactical/law enforcement and emergency service provider training facility at the MOUT Training Area. As described in the Group 3 RI/FS and Proposed Plan, previous MEC investigations in the MOUT Training Area included surface removal (2003), and subsurface investigation in portions of the area as part of sampling (1998) and ESCA field verification (2012). Reflecting the results of the previous site investigations, the risk assessment and the feasibility study were developed based on the assumption that MEC may potentially remain in the subsurface of the MOUT Training Area. The Group 3 RI/FS was developed by FORA under the ESCA. The facility has historically been used for MOUT training, practice hand grenade training, and pistol training, and contained a firing point and range fan for a rocket range. After base closure in 1994, the facility continued to be used for tactical training of military, federal and local law enforcement agencies. Military munitions (and civilian law enforcement equivalent) such as small arms and signals have been used in these training activities. The future operation of the MOUT Training Area under Monterey Peninsula College (MPC) is considered to be similar to the uses since base closure.

With regard to the cited concern about liability for any residual MEC that may be encountered by trespassers, whose potential risk was assessed as “B” and “C” (low and medium), as detailed in the Group 3 RI/FS, surface removal of MEC has been conducted in the entire footprint of the MOUT Training Area. Since the facility continues to be actively used and managed, the potential for MEC from previous Army activities to become present on the surface in the future is low. The Army has included a notice in the property transfer deed (which will be carried through subsequent property transfers in perpetuity) describing that, should any MEC item be discovered in the future, it should immediately be reported to local law enforcement agency. Appropriate ordnance disposal personnel will address the discovered MEC. This is a standard procedure that applies to any former Fort Ord property. The current deed also includes a requirement for the property owner to prevent unauthorized access to the MOUT Training Area, consistent with supporting the designated use as a training facility for tactical/law enforcement training and emergency service provider training area, as identified in the Base Reuse Plan.

With regard to the concern that the expense, possible disruption of construction, and potential delays for the public safety instruction program to address potential risk associated with construction activities, MEC recognition and safety training for future land users conducting ground disturbing or intrusive activities and construction support for ground disturbing or intrusive activities are appropriate means to address residual risks concerning ground-intrusive activities at the MOUT Training Area. These measures

are included in Alternative 2 so that appropriate safety measures are incorporated into planned construction projects. While the requirements for such measures could result in additional cost or schedule impacts to future landowners as compared to a project located outside of a former military installation, they are appropriate mitigation measures that should be taken when conducting ground-disturbing activities in areas with potential presence of MEC. Section 5.3 of the feasibility study describes that, because even current MEC-detection technologies do not have a 100% detection efficiency, Alternative 3 (subsurface MEC removal) is not expected to provide a significant increase in protection of human health, and therefore additional mitigation measures such as land use controls may still be necessary. Section 4.4 of the feasibility study describes Alternative 4 to include additional subsurface MEC remediation in selected areas; however, the selected areas only include areas along Barloy Canyon Road in Parcel L20.8, where MEC removal has not been conducted previously. Land use controls would be required in the MOUT Training Area under Alternative 4.

The Army acknowledges the concerns associated with potentially remaining MEC at the MOUT Site MRA during reuse. Residual risks were carefully considered during the risk assessment process and a set of land use controls, specifically designed to address residual risks such as those identified by the comment, was selected as the remedy for the MOUT Site MRA.

The LUCs and the implementation actions will be explained in more detail in the Remedial Design/Remedial Action Work Plan. The Army has recommended to MPC, the future recipient and operator of the MOUT Training Area, to participate in the development of the Remedial Design/Remedial Action Work Plan to address concerns such as cost and scheduling associated with implementation of the selected remedy. Under the ESCA, the selected remedy for the Group 3 MRAs will be implemented by FORA; FORA has been coordinating current and future ESCA related activities with future landowners, including conducting a meeting with MPC in April 2013.

A2: Comments were made regarding the potential for MEC to remain at the Group 3 MRAs. It was questioned why a remedial alternative including MEC recognition and safety training is needed on property where cleanup of MEC has been conducted. It was asked whether the Army had given up on the cleanup of MEC and, as a result, is requiring users of Fort Ord land to be trained in UXO recognition. It was suggested that if the land is unsafe, no one should be allowed to enter the property.

Response: Investigations and removal actions have been conducted in the Group 3 MRAs, with all detected MEC removed. These munitions response actions also included quality control and quality assurance requirements that evaluated the adequacy of the munitions response actions. As part of the CERCLA process, the available background information and investigation data was reviewed in the Group 3 RI/FS to evaluate if the MRAs had been sufficiently characterized for MEC with respect to human health and the environment based on the intended future uses of the properties. Although MEC is not expected to be encountered within the Group 3 MRAs, it is possible that some MEC may not have been detected and remain present in the subsurface. Therefore, to manage the risk to future land users from MEC that potentially remains in the property, remedial action alternatives were evaluated. As described in the Proposed Plan, LUCs and MEC removals were evaluated as remedial alternatives using the nine CERCLA evaluation criteria. The LUC remedy meets the protectiveness criteria by providing for safety training and support for intrusive activities, and by restricting the property from residential use (i.e. sensitive uses). The selected Land Use Controls are appropriate to address risks from MEC that may potentially remain at the site during reuse.

A3: A comment was made stating that economic conditions should be considered when determining the future use of the Fort Ord property. In addition, it was stated that the parking areas at Wolf Hill support major Laguna Seca events and should not be disrupted because such events provide revenue to the community.

Response: The purpose of this ROD is to select a remedy for the Group 3 MRAs based on anticipated reuse for the underlying property; it does not determine the future reuse. The planned reuse is documented in the Fort Ord Base Reuse Plan. The Base Reuse Plan is focused on the recovery of the former Fort Ord community based on education, environmental conservation, and economic development. Disruption of the use of the Wolf Hill area for parking for Laguna Seca Raceway events is not anticipated during the implementation of the remedial action.

A4: A comment was made to state that Del Rey Oaks, Lookout Ridge and Wolf Hill areas of the Group 3 Proposed Plan are frequently utilized for outdoor recreation. Support was expressed for Alternative 2, Land Use Controls, as the proposed alternative for the Group 3 MRAs because it does not involve any additional vegetation clearance.

Response: The comment is acknowledged.

B. Community Involvement and Outreach

B1: General comments were made regarding involvement of the community and local jurisdictions during the cleanup process. It was commented that technical assistance is not currently being provided to community members to help interpret the technical components of the cleanup process. A commenter stated that there are students and low-income community members that are not informed about the cleanup process and associated activities. Additionally, concern was expressed that the goals of the cleanup program have not been aligned with the priorities of some members of the local communities.

Response: Working with the community throughout the cleanup process is an important priority to the Army. The Army strives to do this through, in part, making the cleanup information available to the public and inviting the public to participate in the decision-making process. An extensive public participation process is also being implemented by FORA as part of the ESCA Remediation Program at the former Fort Ord. The Group 3 MRAs are part of the ESCA Remediation Program.

Under CERCLA, the Army follows the public participation and community involvement process, and encourages members of the local community and other interested parties to review cleanup documents and make comments during the decision-making process. Public comments are considered before any action is selected. The Army, in conjunction with the regulatory agencies, takes all comments into consideration, responds to them, and incorporates changes as appropriate.

Public participation was solicited and encouraged throughout the development of the Group 3 RI/FS, and public comments and input were carefully considered, responded to, and incorporated into the final RI/FS. The Army held a Proposed Plan public meeting as part of its public participation responsibilities under Section 117(a) of CERCLA or Superfund and Section 300.430(f)(2) of the NCP. Notices of the public meeting were published in two local newspapers and on the Fort Ord Environmental Cleanup Website www.fortordcleanup.com. The Proposed Plan was made available in the Fort Ord Administrative Record and local information repositories, as well as posted on the Fort Ord Environmental Cleanup Website. In addition, over 750 copies of the Proposed Plan were mailed to the local community members, and over 2,500 e-mail notifications to interested parties were made, notifying them of the availability of the Proposed Plan, the public comment period, and the public meeting. Please see response to comment B2 below for additional information on the distribution of related documents.

Additional public input opportunities were also provided as follows:

- An Informal Community Workshop was held by FORA on March 29, 2012 which included the status of the Group 3 RI/FS.
- A Former Fort Ord Environmental Cleanup Open House/Bus Tour was held on June 23, 2012, at which an information table included information on the Group 3 MRAs. Portions of the Group 3 areas were also highlighted during the bus tour. The public was provided an opportunity to discuss various aspects of the cleanup program with technical staff of the Army, FORA ESCA Remediation Program representatives, and regulatory agency representatives.
- A former Fort Ord Community Involvement Mobile Workshop was held on August 8, 2012, at which Group 3 MRAs was a presentation topic.
- A former Fort Ord Technical Review Committee meeting was held on August 9, 2012 at which Group 3 MRAs was a presentation topic.

As described in the Proposed Plan, community acceptance, along with State acceptance, is one of the two modifying criteria amongst the nine CERCLA evaluation criteria. Community acceptance is gauged using available public input and reactions to the information presented within the Proposed Plan as summarized in this Responsiveness Summary. The Army acknowledges some members of the community may not accept the Proposed Plan; however, many members of the public accept it and recognize the need for the proposed remedy.

B2: It was commented that distribution of documents associated with the cleanup of the Group 3 MRAs was not sufficient to reach the community for their review.

Response: The Fort Ord Cleanup Program maintains an extensive community outreach program to keep the public informed about the cleanup activities at the former Fort Ord and provide opportunities for the public to participate during the decision-making process. The draft and draft final Group 3 Work Plan were made available for public review and comment, and the comments were considered and incorporated into the Final Group 3 Work Plan, which was issued on November 13, 2009. The draft and draft final Group 3 RI/FS were also provided for review and comment by the public, and the comments were considered and incorporated into the Final Group 3 RI/FS on July 31, 2012. The Proposed Plan for the Group 3 MRAs was made available to the public on January 11, 2013. The Army made these documents available to the public in the following manner:

- California State University Monterey Bay (CSUMB) Tanimura & Antle Family Memorial Library, Divarty Street, CSUMB Campus, Seaside, California
- Seaside Library, 550 Harcourt Avenue, Seaside, California
- Fort Ord Administrative Record, Building 4463, Gigling Road, Room 101, Ord Military Community, California
- www.fortordcleanup.com website
- Approximately 750 copies of the Proposed Plan were mailed out to the Army's mailing list on January 11, 2013
- Over 2,500 e-mail were sent notifying interested community members of the availability of the Group 3 Proposed Plan, the public comment period, and the public meeting

- Copies of the Proposed Plan were distributed at the January 30, 2013 Proposed Plan public meeting

Notices of the availability of the Proposed Plan and the date and location of the Proposed Plan Public Meeting were published in the Monterey County Herald and the Salinas Californian on January 15, 2013. Additionally, notices on the availability of the Proposed Plan were published on the:

- Army's website
- The Fort Ord Reuse Authority (FORA) website
- The FORA ESCA Remediation Program website
- The FORA ESCA Remediation Program Facebook page
- The FORA ESCA Remediation Program email list

B3: A comment was made that the amount of information provided to community members during the Proposed Plan public meeting on January 30, 2013 was very light. It was stated that the presentation lacked information on former Army tank training, residual chemical contamination, and depths of recovered MEC.

Response: The focus of the Group 3 Proposed Plan public meeting presentation was to provide information on the remedial alternatives evaluated for the Group 3 MRAs, describe the preferred alternatives, and to accept public comments on the Proposed Plan. Information regarding the historical uses of the MRAs, previous MEC investigations and removal actions, and general information about MEC recovered during those investigations, were included in the presentation and are presented in more detail in the Group 3 RI/FS (ESCA RP Team 2012).

Similar comments regarding tank training and residual chemical contamination have previously been received during the development of the Group 3 RI/FS, and relevant information was incorporated into the final version as appropriate. Please refer to the responses to comments provided in Appendix F of the Group 3 RI/FS (ESCA RP Team 2012). In addition, the Administrative Record is a source of information on the cleanup of the former Fort Ord. The Fort Ord Administrative Record can be accessed online at www.fortordcleanup.com.

B4: The question was asked as to how community acceptance of the proposed alternative could be acquired when inadequate historical facts and perspective of the Superfund site had been provided to the community. The commenter provided a copy of the comment letter from Fort Ord Community Advisory Group to FORA, dated March 28, 2009 (Administrative Record No. ESCA-0154), regarding the Draft Group 3 RI/FS Work Plan. It was stated that the attachment was provided to convey additional information to the community.

Response: As described in the Group 3 Proposed Plan, community acceptance, along with State acceptance, is one of the two modifying criteria amongst the nine CERCLA evaluation criteria. Community acceptance is gauged using available public input and responses to the information presented within the Proposed Plan during the public comment period. A summary of public comments received on the Proposed Plan and the Army's responses to the comments are provided in the Responsiveness Summary.

As part of the CERCLA process, the available background information and investigation data was reviewed in the Group 3 RI/FS to evaluate if the MRAs had been sufficiently characterized for MEC with respect to human health and the environment based on the intended future uses of the properties. The data were determined to be of known and sufficient quality to be usable in the RI/FS to support completion of the explosives safety risk assessment and the evaluation of remedial alternatives (ESCA RP Team 2012).

As described in response to comments B1 and B2, outreach efforts for the Group 3 RI/FS and Proposed Plan included newspaper and other notices, community presentations, and making relevant documents available for public review and comment.

The letter dated March 28, 2009, provided as part of a comment to the Proposed Plan, was previously received by FORA and was included in the Administrative Record (Administrative Record No. ESCA-0154). The comments provided in the letter were considered and responded to, as provided in Appendix H of the Final Group 3 RI/FS Work Plan (ESCA RP Team 2009). Relevant information was incorporated into the Group 3 RI/FS.

B5: A comment was made to express appreciation for the cooperation of the Army with the speaker and his user group throughout the cleanup process. It was stated that community meetings were informative and that Army staff had been approachable and interactions had been positive.

Response: The comment is acknowledged.

C. Other Comments

C1: A general comment was made expressing concern that community members have a need for healthcare in Monterey County for exposures to toxins.

Response: The environmental cleanup program at the former Fort Ord, being conducted under CERCLA or Superfund, addresses environmental contamination that resulted from the previous use of the site as a military base. Human and ecological exposures to the contaminants are studied, and if warranted, remedial alternatives are developed and evaluated. Regarding healthcare in Monterey County, the Army understands that the local healthcare community implements processes for continually evaluating and addressing the current healthcare needs of the community. The Army regularly provides environmental investigation and cleanup information to healthcare agencies such as Monterey County Health Department and Agency for Toxic Substances and Disease Registry.

C2: Concern was raised as to who would be financially responsible if someone is injured from exposure to MEC.

Response: The purpose of the ROD is to select the remedy for the Property, and financial liability from injury is beyond the scope of the ROD. The LUC remedy will be protective of human health by providing MEC recognition and safety training, construction support for intrusive activities, and restricting the property from residential use (i.e. sensitive uses). The selected LUCs are appropriate to address risks from MEC that may potentially remain at the site during reuse.

C3: A question was asked whether Wolf Hill is still leased for use as a parking area for the Laguna Seca Raceway, whether there is a Laguna Seca expansion plan, and whether MRS-270 and MRS-14D are proposed for development. A comment was made that a "1,000-foot wide Official Plan Line given to the State Department of Transportation" (a proposed boundary for a future Highway 68 bypass) was inadequately identified on handouts depicting the DRO/Monterey MRA provided during the Group 3 Proposed Plan public meeting.

Response: FORA is the current property owner for the area containing Wolf Hill (MRS-47); an Army lease agreement for use as a parking area for Laguna Seca Raceway would have expired with property transfer. As indicated in the Proposed Plan, MRS-47 is designated for open space/recreation and continued use for overflow parking along Barloy Canyon Road and South Boundary Road during Laguna Seca Raceway events. FORA has established a right-of-entry agreement process to support this continued use.

The Group 3 RI/FS and Proposed Plan only address the areas included within the Del Rey Oaks/Monterey MRA, Laguna Seca Parking MRA, and MOUT Site MRA. Areas located outside of the three subject MRAs are beyond the scope of the Group 3 RI/FS and Proposed Plan. As described in the Proposed Plan, a northern segment of the Barloy Canyon Road portion of the MOUT Site MRA passes through MRS-27O, and a southern section of Barloy Canyon Road is bordered by MRS-14D to the east. Except for the road right-of-way, property underlying these MRSs is designated as habitat reserve.

As described in the Group 3 RI/FS, Appendix F, the proposed boundary for the future Highway 68 bypass is located outside of the DRO/Monterey MRA and was not shown in the figures provided during the public meeting.

4. REFERENCES

CMS Environmental, Inc. (CMS). 1995. CEHND Approved OEW Sampling and Removal Action Work Plan, Fort Ord, California. August 22. (Fort Ord Administrative Record No. OE-0130)

Environmental Services Cooperative Agreement Remediation Program Team (ESCA RP Team). 2008. Final Summary of Existing Data Report, Former Fort Ord, Monterey County, California. November 26. (Fort Ord Administrative Record No. ESCA-0130)

_____, 2009. Final Group 3 Remedial Investigation/Feasibility Study Work Plan, Former Fort Ord, Monterey, California. November 13. (Fort Ord Administrative Record No. ESCA-0241)

_____, 2012. Final Group 3 Remedial Investigation/Feasibility Study, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California. July 31. (Fort Ord Administrative Record No. ESCA-0249B)

Fort Ord Reuse Authority (FORA), 1997. Fort Ord Reuse Plan. June 13.

Human Factors Applications, Inc. (HFA). 1994. OEW Sampling and OEW Removal Action. Ft. Ord Final Report. December 1. (Fort Ord Administrative Record No. OE-0012)

Malcolm-Pirnie, 2002. Final Fort Ord Ordnance and Explosives Risk Assessment Protocol. October. (Fort Ord Administrative Record No. OE-0402G)

Shaw Environmental, Inc. (Shaw), 2005. Final After Action Report, Time Critical Removal Action and Military Munitions Reconnaissance, Eucalyptus Fire Area, Former Fort Ord, California. Revision O. January 20. (Fort Ord Administrative Record No. OE-0499G)

Shaw Environmental, Inc./MACTEC Engineering and Consulting, Inc. (Shaw/MACTEC), 2009. Final Comprehensive Basewide Range Assessment Report. Former Fort Ord, California, Revision 1. June 9. (Fort Ord Administrative Record No. BW-2300J)

U.S. Army Corps of Engineers (USACE), 1997a. Revised Archive Search Report, Former Fort Ord, California, Monterey County, California. (Fort Ord Administrative Record No. OE-0022)

_____, 1997b. Installation-Wide Multispecies Habitat Management Plan for Former Fort Ord, California (HMP). April. With technical assistance from Jones and Stokes Associates, Sacramento, California. (Fort Ord Administrative Record No. BW-1787)

U.S. Department of the Army (Army), 2000. Notice of Intent, Removal Action at Sites OE-15DRO.2 and OE-43, Former Fort Ord, California. March 6. (Fort Ord Administrative Record No. OE-0279)

_____, 2004. Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification. August 3. (Fort Ord Administrative Record No. BW- 2180A)

_____, 2007. Final Finding of Suitability for Early Transfer (FOSET), Former Fort Ord, California, Environmental Services Cooperative Agreement (ESCA) Parcels and Non-ESCA Parcels (Operable Unit Carbon Tetrachloride Plume; FOSET 5). November 15. (Fort Ord Administrative Record No. FOSET-004J)

_____, 2013. Superfund Proposed Plan: Remedial Action is Proposed for Group 3 Munitions Response Areas, Track 2 Munitions Response Remedial Investigation/Feasibility Study, Former Fort Ord, California. January 11. (Fort Ord Administrative Record No. ESCA-0265)

U.S. Environmental Protection Agency (EPA), 1988. Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA. Interim Final. EPA/540/G-89/001. October.

_____, 1995. Land Use in the CERCLA Remedy Selection Process. OSWER Directive No. 9355.7-04. May.

USA Environmental, Inc. (USA). 2000a. Final OE Removal Action, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-29. December 30. (Fort Ord Administrative Record No. OE-0226A)

_____, 2000b. Final After Action Report, 100% OE Removal, Inland Range Contract, Former Fort Ord, California, Site OE-47. November 9. (Fort Ord Administrative Record No. OE-0213A-B)

_____, 2001a. Final After Action Report, Site OE-14D (14 West), Former Fort Ord, California. April 19. (Fort Ord Administrative Record No. OE-0301A)

_____, 2001b. Final After Action Report, Geophysical Sampling, Investigation & Removal, Inland Range Contract, Former Fort Ord, California, Site Del Rey Oaks Group. April 24. (Fort Ord Administrative Record No. OE-0293A)

_____, 2001c. Final OE Removal Action, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-14A (Lookout Ridge II). April 26. (Fort Ord Administrative Record No. OE-0296C)

_____, 2001d. Final SS/GS and 100% Grid Sampling, After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-28. August 17. (Fort Ord Administrative Record No. OE-0314)

_____, 2001e. Final GridStats/SiteStats Sampling After Action Report, Inland Range Contract, Former Fort Ord, California, Site OE-43 and OE-15DRO.1. August 30. (Fort Ord Administrative Record No. OE-0336)

UXB International, Inc. (UXB). 1995a. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Lookout Ridge II. November 1. (Fort Ord Administrative Record No. OE-0109)

_____, 1995b. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Laguna Seca Bus Turn-around (LSBT). November 1. (Fort Ord Administrative Record No. OE-0107)

_____, 1995c. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Laguna Seca Turn 11 (LST11). November 1. (Fort Ord Administrative Record No. OE-0108)

_____, 1995d. Final Report for Ordnance and Explosives Removal Action, Fort Ord, California, Wolf Hill. November 1. (Fort Ord Administrative Record No. OE-0125)

Zander Associates (Zander) 2002. Assessment, East Garrison – Parker Flats Land Use Modifications, Fort Ord, California. May 1. (Fort Ord Administrative Record No. BW-2180)

TABLES

**Table 1. Summary of Munitions Response Site (MRS) Investigations
Record of Decision, Group 3 Munitions Response Areas,
Former Fort Ord, California**

MRS Site Number	Site Acreage ¹	Site Name	Past Use	Site Investigation Status ²
DRO/Monterey MRA				
MRS-43 ³	29	South Boundary Area	Artillery training (37mm projectiles)	MEC removal to 4 feet bgs and/or to depth of detection completed.
Laguna Seca Parking MRA				
MRS-14A	169	Lookout Ridge	Artillery training (projectiles), mortar training (projectiles), troop training, basic maneuvers	MEC removal to 1 foot bgs on western and eastern slopes and to 4 feet bgs in remainder of MRS completed, except in two whole 100- by 100-foot grids, four partial 100- by 100-foot grids, and beneath a paved ditch along Lookout Ridge Road.
MRS-29	21	Laguna Seca Bus Turn Around	Troop training, basic maneuvers	MEC removal to 4 feet bgs completed.
MRS-30	4	Laguna Seca Turn 11	Troop training, basic maneuvers	MEC removal to 4 feet bgs completed.
MRS-47	74	Wolf Hill	Artillery training (projectiles), mortar training (projectiles)	MEC removal to 4 feet bgs completed.
MOUT Site MRA				
MRS-27O ⁴	1	Training Site	Basic maneuvers	MEC removal at ground surface completed.
MRS-28	51	MOUT Training Area	Infantry training, hand grenade training, rocket launcher firing point, hand-to-hand combat, combat pistol training, assault course, squad tactics, night defense training	MEC removal at ground surface and to 4 feet bgs in 13 100- by 100-foot grids completed.

Acronyms

MRA = munitions response area

MRS = munitions response site

DRO = Del Rey Oaks

MOUT = Military Operations in Urban Terrain

MEC = munitions and explosives of concern

bgs = below ground surface

mm = millimeters

Footnotes:

1. Acreage stated is the portion of the MRS contained within the designated MRA.
2. All detected anomalies (i.e., ferromagnetic material) were investigated and all detected MEC were removed during MEC removal actions. This does not apply to the 1-foot removal portion of MRS-14A and the SiteStat/GridStat grids investigated in MRS-28.
3. DRO/Monterey MRA contains a portion of MRS-43.
4. MOUT Site MRA contains a portion of MRS-27O.

**Table 2. Summary of Group 3 MRA Transfer Parcels
Record of Decision, Group 3 Munitions Response Areas,
Former Fort Ord, California**

Transfer Parcel No.	Approx. Acreage	Planned Reuse *
DRO/Monterey MRA		
E29.1	23	Business Park / Light Industrial and Office / Research & Development
L6.2	7	Habitat Management
L20.13.1.2	0.245	South Boundary Road and Associated Right of Way
L20.13.3.1	5	South Boundary Road and Associated Right of Way
Laguna Seca Parking MRA		
L20.3.1	44	Open Space / Recreation / Highway 68 Bypass Right of Way
L20.3.2	36	Open Space / Recreation
L20.5.1	131	Open Space / Recreation
L20.5.2	55	Open Space / Recreation / Highway 68 Bypass Right of Way
L20.5.3	10	Open Space / Recreation
L20.5.4	0.51	Open Space / Recreation
MOUT Site MRA		
F1.7.2	51	MOUT Training Area
L20.8	7	Barloy Canyon Road and Associated Right of Way

Acronyms

MRA = munitions response area

DRO = Del Rey Oaks

MOUT = Military Operations in Urban Terrain

Footnotes

* Planned use information obtained from the *FORA Fort Ord Reuse Plan* (FORA 1997).

**Table 3. Summary of Remedial Alternatives Evaluation and Comparison
for Del Rey Oaks/Monterey Munitions Response Area
Record of Decision, Group 3 Munitions Response Areas, Former Fort Ord, California**

Remedial Alternative	EPA'S 9 CERCLA EVALUATION CRITERIA								
	Threshold Criteria		Balancing Criteria					Modifying Criteria	
	Overall Protectiveness of Human Health and the Environment	Compliance with ARARs	Short-Term Effectiveness	Long-Term Effectiveness & Permanence	Reduction of Toxicity, Mobility, or Volume Through Treatment ¹	Implementability	Cost	State Acceptance	Community Acceptance
Alternative 1 - No Further Action	Not protective; does not mitigate potentially remaining MEC risks to surface receptors or intrusive workers	No ARARs identified for this alternative	Not effective in the short-term; no MEC risk mitigation	Not effective in the long-term; no MEC risk mitigation	No reduction in volume because no further MEC removals would be conducted	Not administratively feasible	Minimal	Not acceptable	Not acceptable
Alternative 2 - Land Use Controls	Protective to construction and maintenance workers (intrusive workers); prohibits use for residential reuse	Continued implementation of land use restrictions with no ARARs identified for this alternative	Effective in the short-term; implementation of LUCs to mitigate MEC risk to construction and maintenance workers (intrusive workers)	Required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers) until evaluation determines LUCs no longer necessary	No reduction in volume because no further MEC removals would be conducted	Administratively feasible; moderate technical effort required to implement	\$757,000	Accepted as the preferred alternative	Acceptable to some community members
Alternative 3 - Additional MEC Remediation	Protective of human health and the environment	Implementation would require compliance with ARARs	May be effective in the short-term; MEC removals would be conducted	May or may not be effective in the long-term; additional risk mitigation may be needed after additional MEC remediation	May result in MEC reduction if additional MEC is discovered and removed during remediation	Administratively feasible; high level of technical effort required to implement	\$1,045,000	Not selected	Acceptable to some community members
Alternative 4 - Additional Subsurface MEC Remediation in Selected Areas of the MRA and Land Use Controls	Protective to construction and maintenance workers (intrusive workers); protective of human health and the environment	Implementation would require compliance with ARARs	Effective in the short-term; required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers)	Effective in the long-term; required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers); may reduce MEC risks	May result in MEC reduction if additional MEC is discovered and removed during remediation	Technically and administratively feasible to implement	\$983,000	Not selected	Acceptable to some community members

Acronyms

ARARs = applicable or relevant and appropriate requirements
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
 EPA = U.S. Environmental Protection Agency
 LUCs = Land Use Controls
 MEC = munitions and explosives of concern
 MRA = munitions response area

Footnotes

¹ = Completed MEC removal actions already provide for reduction of volume.

**Table 4. Summary of Remedial Alternatives Evaluation and Comparison
for Laguna Seca Parking Munitions Response Area
Record of Decision, Group 3 Munitions Response Areas, Former Fort Ord, California**

Remedial Alternative	EPA'S 9 CERCLA EVALUATION CRITERIA								
	Threshold Criteria		Balancing Criteria					Modifying Criteria	
	Overall Protectiveness of Human Health and the Environment	Compliance with ARARs	Short-Term Effectiveness	Long-Term Effectiveness & Permanence	Reduction of Toxicity, Mobility, or Volume Through Treatment ¹	Implementability	Cost	State Acceptance	Community Acceptance
Alternative 1 - No Further Action	Not protective; does not mitigate potentially remaining MEC risks to surface receptors or intrusive workers	No ARARs identified for this alternative	Not effective in the short-term; no MEC risk mitigation	Not effective in the long-term; no MEC risk mitigation	No reduction in volume because no further MEC removals would be conducted	Not administratively feasible	Minimal	Not acceptable	Not acceptable
Alternative 2 - Land Use Controls	Protective to construction and maintenance workers (intrusive workers); prohibits use for residential use	Continued implementation of land use restrictions with no ARARs identified for this alternative	Effective in the short-term; implementation of LUCs to mitigate MEC risk to construction and maintenance workers (intrusive workers)	Required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers) until evaluation determines LUCs no longer necessary	No reduction in volume because no further MEC removals would be conducted	Administratively feasible; moderate technical effort required to implement	\$757,000	Accepted as the preferred alternative	Acceptable to some community members
Alternative 3 - Additional MEC Remediation	Protective of human health and the environment	Implementation would require compliance with ARARs	May be effective in the short-term; MEC removals would be conducted	May or may not be effective in the long-term; additional risk mitigation may be needed after additional MEC remediation	May result in MEC reduction if additional MEC is discovered and removed during remediation	Administratively feasible; high level of technical effort required to implement	\$5,767,000	Not selected	Acceptable to some community members

Acronyms

ARARs = applicable or relevant and appropriate requirements
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
 EPA = U.S. Environmental Protection Agency
 LUCs = Land Use Controls
 MEC = munitions and explosives of concern
 MRA = munitions response area

Footnotes

¹ = Completed MEC removal actions already provide for reduction of volume.

**Table 5. Summary of Remedial Alternatives Evaluation and Comparison
for Military Operations in Urban Terrain Site Munitions Response Area
Record of Decision, Group 3 Munitions Response Areas, Former Fort Ord, California**

Remedial Alternative	EPA'S 9 CERCLA EVALUATION CRITERIA								
	Threshold Criteria		Balancing Criteria					Modifying Criteria	
	Overall Protectiveness of Human Health and the Environment	Compliance with ARARs	Short-Term Effectiveness	Long-Term Effectiveness & Permanence	Reduction of Toxicity, Mobility, or Volume Through Treatment ¹	Implementability	Cost	State Acceptance	Community Acceptance
Alternative 1 - No Further Action	Not protective; does not mitigate potentially remaining MEC risks to surface receptors or intrusive workers	No ARARs identified for this alternative	Not effective in the short-term; no MEC risk mitigation	Not effective in the long-term; no MEC risk mitigation	No reduction in volume because no further MEC removals would be conducted	Not administratively feasible	Minimal	Not acceptable	Not acceptable
Alternative 2 - Land Use Controls	Protective to construction and maintenance workers (intrusive workers); prohibits use for residential reuse	Continued implementation of land use restrictions with no ARARs identified for this alternative	Effective in the short-term; implementation of LUCs to mitigate MEC risk to construction and maintenance workers (intrusive workers)	Required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers) until evaluation determines LUCs no longer necessary	No reduction in volume because no further MEC removals would be conducted	Administratively feasible; moderate technical effort required to implement	\$757,000	Accepted as the preferred alternative	Acceptable to some community members
Alternative 3 - Additional MEC Remediation	Protective of human health and the environment	Implementation would require compliance with ARARs	May be effective in the short-term; MEC removals would be conducted	May or may not be effective in the long-term; additional risk mitigation may be needed after additional MEC remediation; may interfere with continued use of area for training	May result in MEC reduction if additional MEC is discovered and removed during remediation	Administratively feasible; high level of technical effort required to implement	\$1,621,000	Not selected	Acceptable to some community members
Alternative 4 - Additional Subsurface MEC Remediation in Selected Areas of the MRA and Land Use Controls	Protective to construction and maintenance workers (intrusive workers); protective of human health and the environment	Implementation would require compliance with ARARs	Effective in the short-term; required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers)	Effective in the long-term; required training and construction support would mitigate risks to construction and maintenance workers (intrusive workers); may reduce MEC risks	May result in MEC reduction if additional MEC is discovered and removed during remediation	Technically and administratively feasible to implement	\$1,148,000	Not selected	Acceptable to some community members

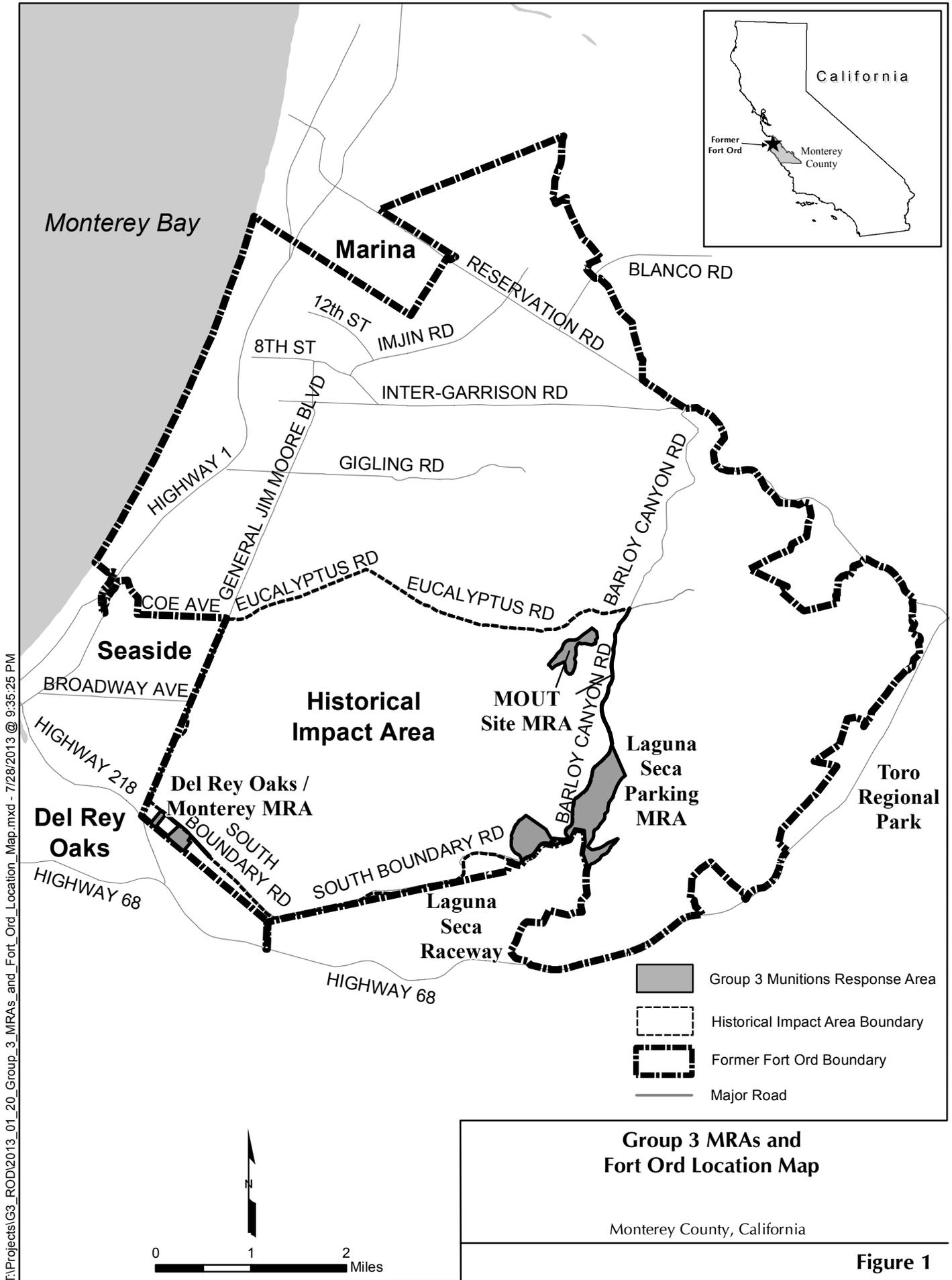
Acronyms

ARARs = applicable or relevant and appropriate requirements
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
 EPA = U.S. Environmental Protection Agency
 LUCs = Land Use Controls
 MEC = munitions and explosives of control
 MOUT = Military Operations in Urban Terrain
 MRA = munitions response area

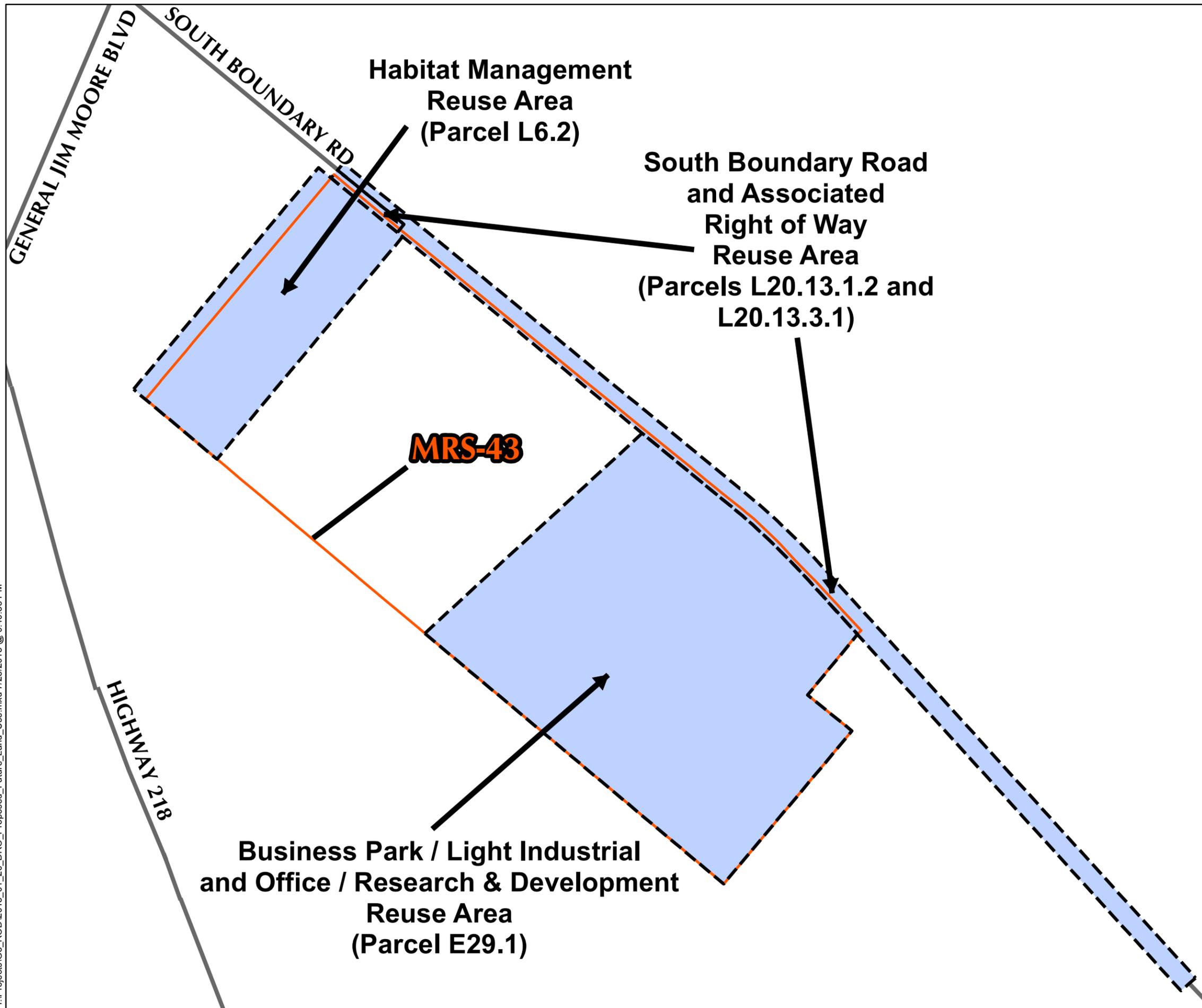
Footnotes

¹ = Completed MEC removal actions already provide for reduction of volume.

FIGURES

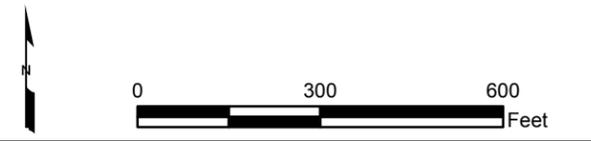
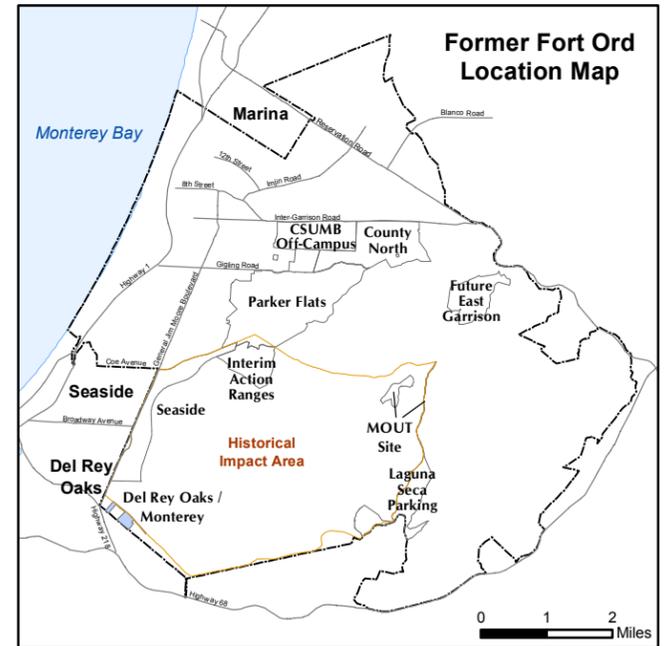


T:\Projects\G3_ROD\2013_01_20_DRO_Proposed_Future_Land_Use.mxd 7/28/2013 @ 9:40:55 PM



Legend

- Munitions Response Area (area subject to Land Use Controls)
- USACE Parcel
- MRS-43
- Major Road

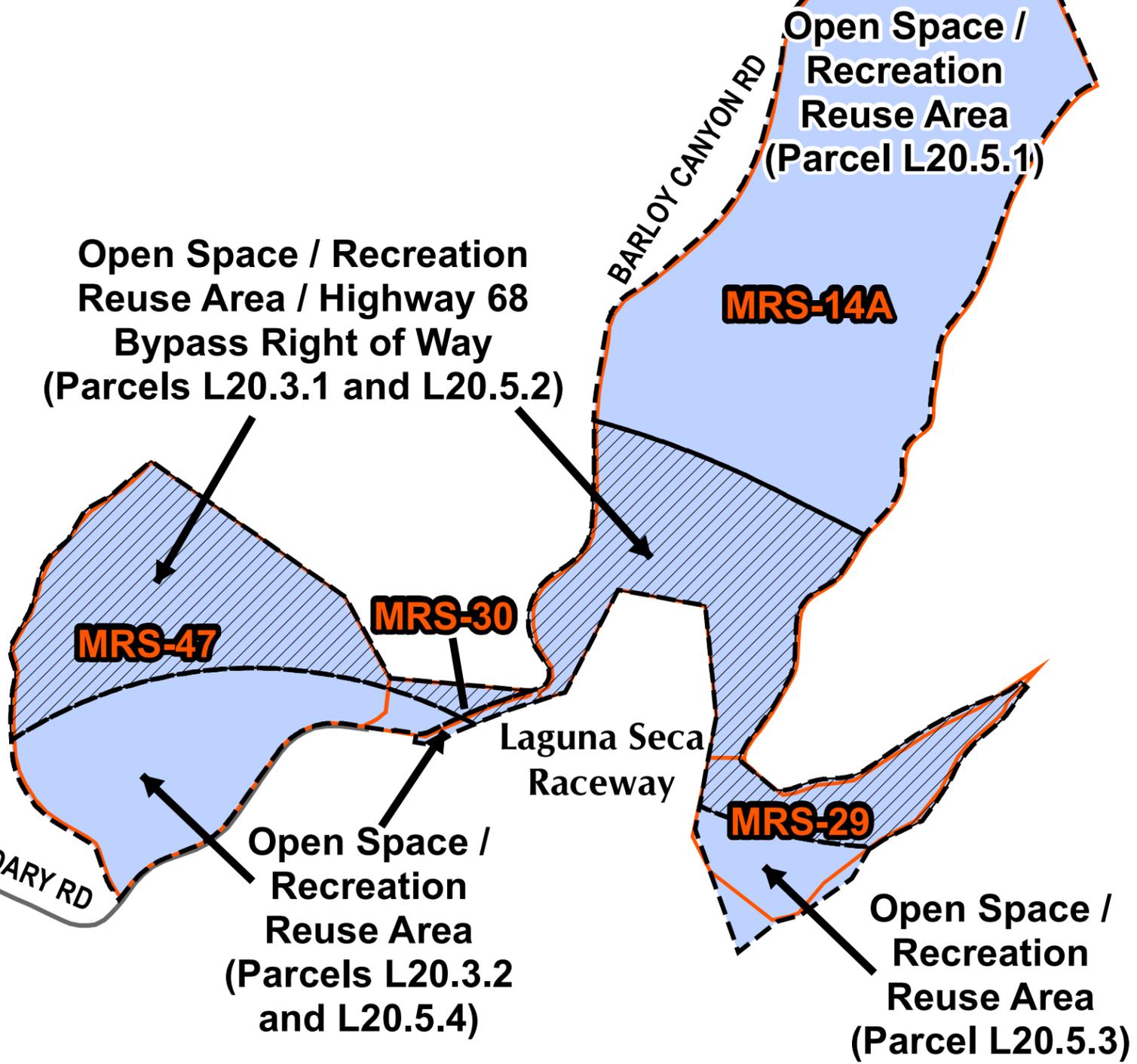


Del Rey Oaks / Monterey MRA Reuse Areas and Munitions Response Sites

Monterey County, California

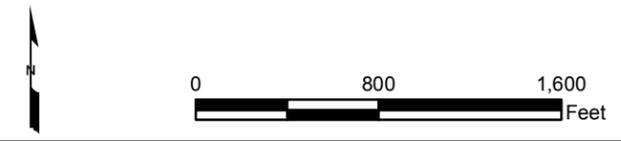
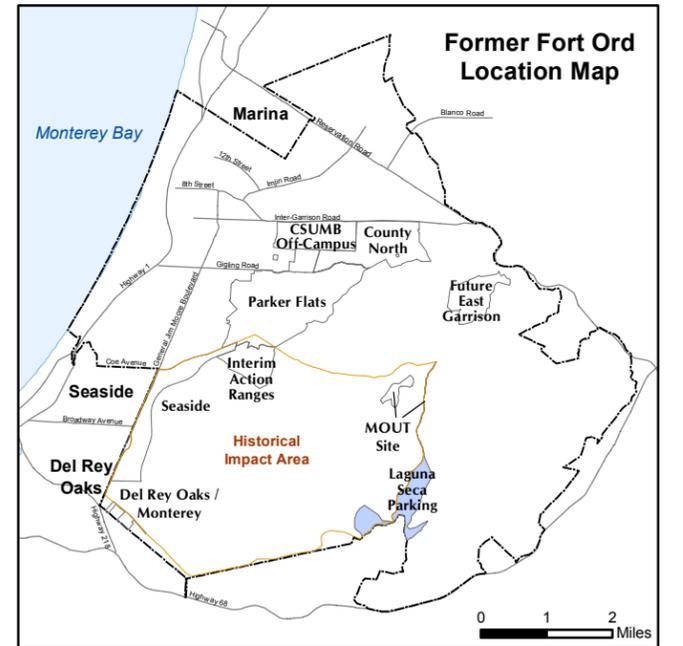
Figure 2

T:\Projects\G3_ROD\2013_01_20_LSP_Proposed_Future_Land_Use.mxd 7/28/2013 @ 9:43:44 PM



Legend

- Munitions Response Area (area subject to Land Use Controls)
- USACE Parcel
- Munitions Response Site
- Highway 68 Bypass Right of Way
- Major Road

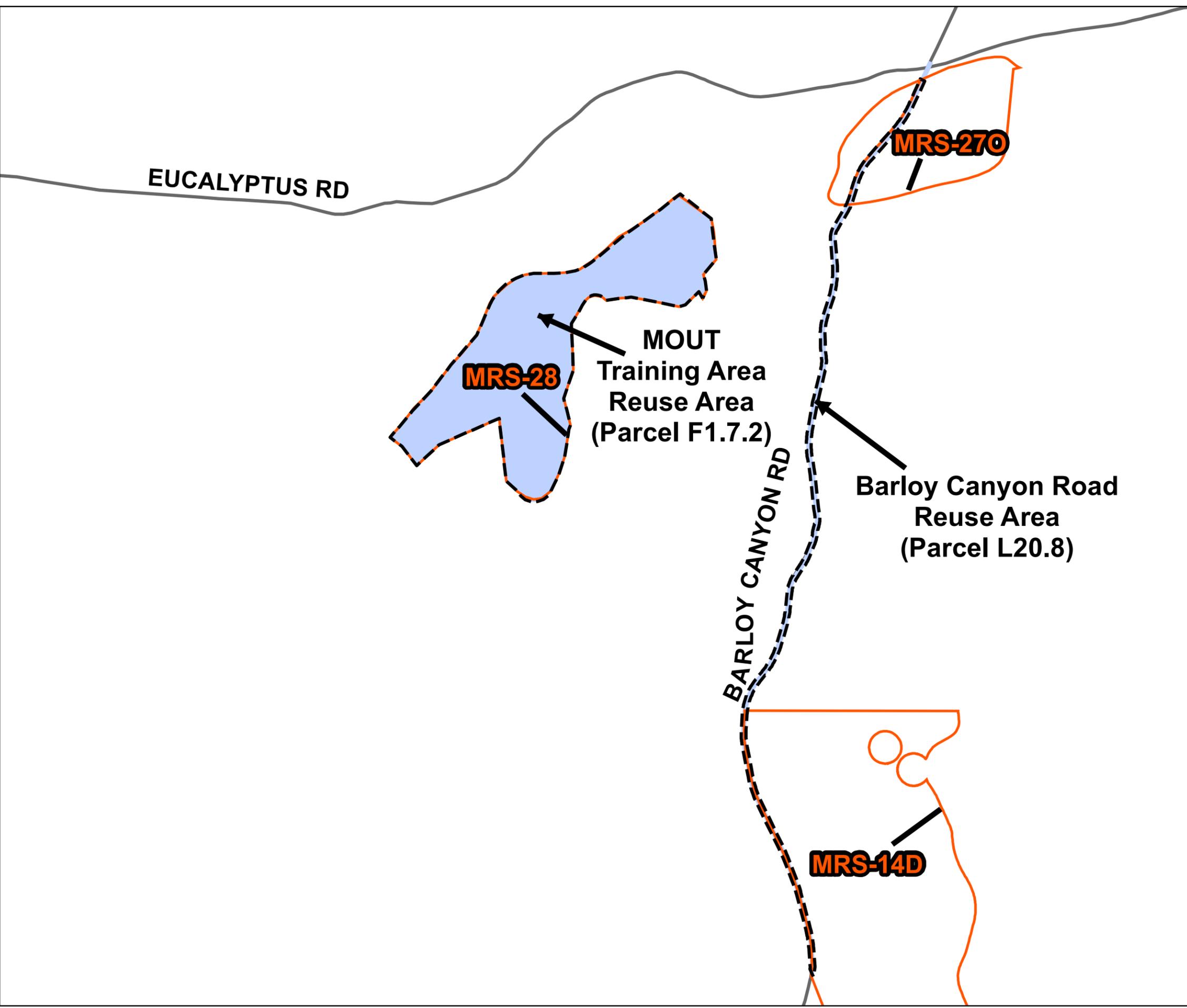


Laguna Seca Parking MRA Reuse Areas and Munitions Response Sites

Monterey County, California

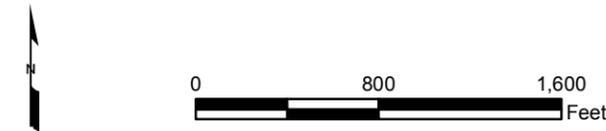
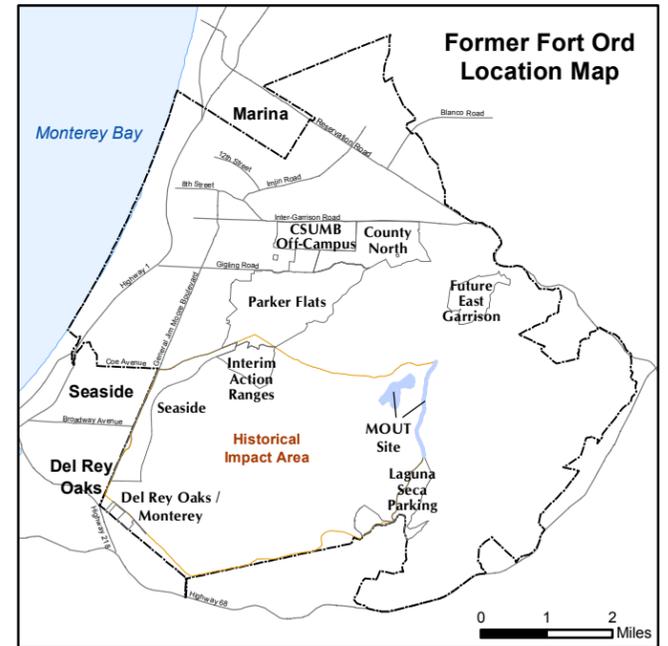
Figure 3

T:\Projects\G3_ROD\2013_01_20_MOUT_Proposed_Future_Land_Use.mxd 7/28/2013 @ 9:44:05 PM



Legend

- Munitions Response Area (area subject to Land Use Controls)
- USACE Parcel
- Munitions Response Site
- Major Road



MOUT Site MRA Reuse Areas and Munitions Response Sites

Monterey County, California

Figure 4

APPENDIX A

GLOSSARY OF MILITARY MUNITIONS RESPONSE PROGRAM TERMS

APPENDIX A

Glossary of Military Munitions Response Program Terms

Administrative Record – A compilation of all documents relied upon to select a remedial action pertaining to the investigation and cleanup of the former Fort Ord. *Source:* (1).

After Action Report (AAR) – A report presenting the results of munitions and explosives of concern (MEC) investigation, sampling and/or removal actions conducted at a site pertaining to the investigation and cleanup of the former Fort Ord. *Source:* (1).

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund) – CERCLA authorizes federal action to respond to the release or threatened release of hazardous substances into the environment or a release or threatened release of a pollutant or contaminant into the environment that may present an imminent or substantial danger to public health or welfare. *Source:* (1).

Construction Support – Assistance provided by the Department of Defense (DOD), explosive ordnance disposal (EOD) or unexploded ordnance (UXO)-qualified personnel and/or by personnel trained and qualified for operations involving chemical agents (CA), regardless of configuration, during intrusive construction activities on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., discarded military munitions [DMM]), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to ensure the safety of personnel or resources from any potential explosive or CA hazards. *Source:* (3).

Discarded Military Munitions (DMM) – Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance (UXO), military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2)).

For the purposes of the basewide Military Munitions Response Program (MMRP) being conducted at the former Fort Ord, DMM does not include small arms ammunition (.50 caliber and below).

Engineering Control (EC) – A variety of engineered remedies to contain and/or reduce contamination, and/or physical barriers intended to limit access to property. Some examples of ECs include fences, signs, guards, landfill caps, soil covers, provision of potable water, slurry walls, sheet pile (vertical caps), pumping and treatment of groundwater, monitoring wells, and vapor extraction systems. *Source:* (5).

Expended – The state of munitions debris (MD) in which the main charge has been expended leaving the inert carrier. *Source:* (1).

Feasibility Study (FS) – An evaluation of potential remedial technologies and treatment options that can be used to clean up a site. *Source:* (1).

Historical Impact Area – The historical impact area consists of approximately 8,000 acres in the southwestern portion of former Fort Ord, bordered by Eucalyptus Road to the north, Barloy Canyon Road to the east, South Boundary Road to the south, and North-South Road (renamed General Jim Moore Boulevard) to the west. *Source:* (1).

Institutional Control (IC) – (a) Non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use; (b) are

generally to be used in conjunction with, rather than in lieu of, engineering measures such as waste treatment or containment; (c) can be used during all stages of the cleanup process to accomplish various cleanup-related objectives; and (d) should be “layered” (i.e., use multiple ICs) or implemented in a series to provide overlapping assurances of protection from contamination. *Source:* (6).

Land Use Controls (LUCs) – LUC are physical, legal, or administrative mechanisms that restrict the use of, or limit access to, real property, to manage risks to human health and the environment. Physical mechanisms encompass a variety of engineering remedies to contain or reduce contamination and/or physical barriers to limit access to real property, such as fences or signs. *Source:* (3).

Magnetometer – An instrument used to detect ferromagnetic (iron-containing) objects. Total field magnetometers measuring the strength of the earth’s natural magnetic field at the magnetic sensor location. Gradient magnetometers, sensitive to smaller near-surface metal objects, use two sensors to measure the difference in magnetic field strength between the two sensor locations. Vertical or horizontal gradients can be measured. *Source:* (4).

Military Munitions – Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense (DOD), the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components of the above.

The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(4)(A through C)).

Military Munitions Response Program (MMRP) – Department of Defense (DOD)-established program to manage the environmental, health and safety issues presented by munitions and explosives of concern (MEC). *Source:* (1).

Mortar – Mortars typically range from approximately 1 inch to 11 inches in diameter or larger, and can be filled with explosives, toxic chemicals, white phosphorus or illumination flares. Mortars generally have thinner metal casing than projectiles but use the same types of fuzing and stabilization. *Source:* (2).

Munitions Constituents (MC) – Any materials originating from unexploded ordnance (UXO), discarded military munitions (DMM), or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions (10 U.S.C. 2710 (e) (3)).

Munitions Debris (MD) – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal. *Source:* (3).

Munitions and Explosives of Concern (MEC) – Distinguishes specific categories of military munitions that may pose unique explosives safety risks, such as: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. 101(e)(5)(A through C); (B) discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e) (2); or (C) munitions constituents (e.g., Trinitrotoluene [TNT], Cyclotrimethylene trinitramine

[RDX]), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard. (32 CFR 179.3).

For the purposes of the basewide Military Munitions Response Program (MMRP) being conducted for the former Fort Ord, MEC does not include small arms ammunition (.50 caliber and below).

Munitions Response Area (MRA) – Any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). Examples are former ranges and munitions burial areas. A MRA comprises of one or more munitions response sites (MRSs). (32 CFR 179.3).

Munitions Response Site (MRS) – A discrete location within a Munitions Response Area (MRA) that is known to require a munitions response. (32 CFR 179.3).

No Further Action – Determination following a remedial investigation or action that a site does not pose a significant risk and so requires no further activity under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). *Source:* (1).

Projectile – An object projected by an applied force and continuing in motion by its own inertia, as a bullet, bomb, shell, or grenade. Also applied to rockets and to guided missiles. *Source:* (2).

Proposed Plan – A plan that identifies the preferred alternative for a site cleanup, and is made available to the public for comment. *Source:* (1).

Record of Decision (ROD) – A ROD is the document used to record the remedial action decision made at a National Priorities List property. The ROD will be maintained in the project Administrative Record and project file. *Source:* (1).

Remedial Investigation (RI) – The RI is intended to “adequately characterize the site for the purpose of developing and evaluating an effective remedial alternative” (NCP, 40 CFR 300.430[d]). In addition, the RI provides information to assess the risks to human health, safety, and the environment that were identified during risk screening in the site investigation. *Source:* (1).

Superfund – See Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) above.

Unexploded Ordnance (UXO) – Military munitions that: (A) have been primed, fuzed, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or materials; and (C) remain unexploded, whether by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5)(A through C)).

For the purposes of the basewide Military Munitions Response Program (MMRP) being conducted for the former Fort Ord, UXO does not include small arms ammunition (.50 caliber and below).

UXO-Qualified Personnel – Personnel who have performed successfully in military explosives ordnance disposal (EOD) positions, or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, contractor positions: Unexploded Ordnance (UXO) Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist or Senior UXO Supervisor. *Source:* (3)

Sources:

(1) Non-standard definition developed to describe Fort Ord-specific items, conditions, procedures,

- principles, etc. as they apply to issues related to the munitions and explosives of concern (MEC) cleanup.
- (2) U.S. Department of Defense Environment, Safety and Occupational Health Network and Information Exchange. 1996. Unexploded Ordnance (UXO): An Overview. October.
 - (3) U.S. Department of Defense Manual Number 6055.09-M, Volume 8, SUBJECT: DoD Ammunition and Explosives Safety Standards: Glossary, Administratively Reissued. August 4, 2010.
 - (4) Survey of Munitions Response Technologies, June 2006. ITRC with ESTCP (Environmental Security and Technology Certification Program) and SERDP (Strategic Environmental Research and Development Program).
 - (5) Compendium of Department of Defense Acronyms, Terms, and Definitions. The Interstate Technology and Regulatory Council (ITRC) Work Group (Unexploded Ordnance Work Team), December 2000.
 - (6) Institutional Controls: A Site Managers' Guide to Identifying, Evaluating, and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups. US EPA Office of Solid Waste and Emergency Responses (OSWER) 9355.0-74FS-P, EPA 540-F-00-005. September, 2000.

APPENDIX B

Survey Plats

FOSET 5
Legal Description
Parcel E 29.1 W/EX

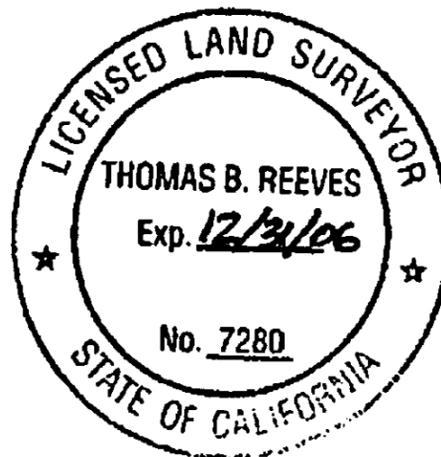
That portion of the former Fort Ord Military Reservation as shown on that certain map filed for record in Volume 19 of Surveys at Page 1 in the office of the County Recorder of Monterey County, being a portion of Parcel A in the City of Monterey, County of Monterey, State of California as shown on that certain map filed for record in Volume 25 of Surveys at page 3 in the office of the County Recorder of said County, described as follows:

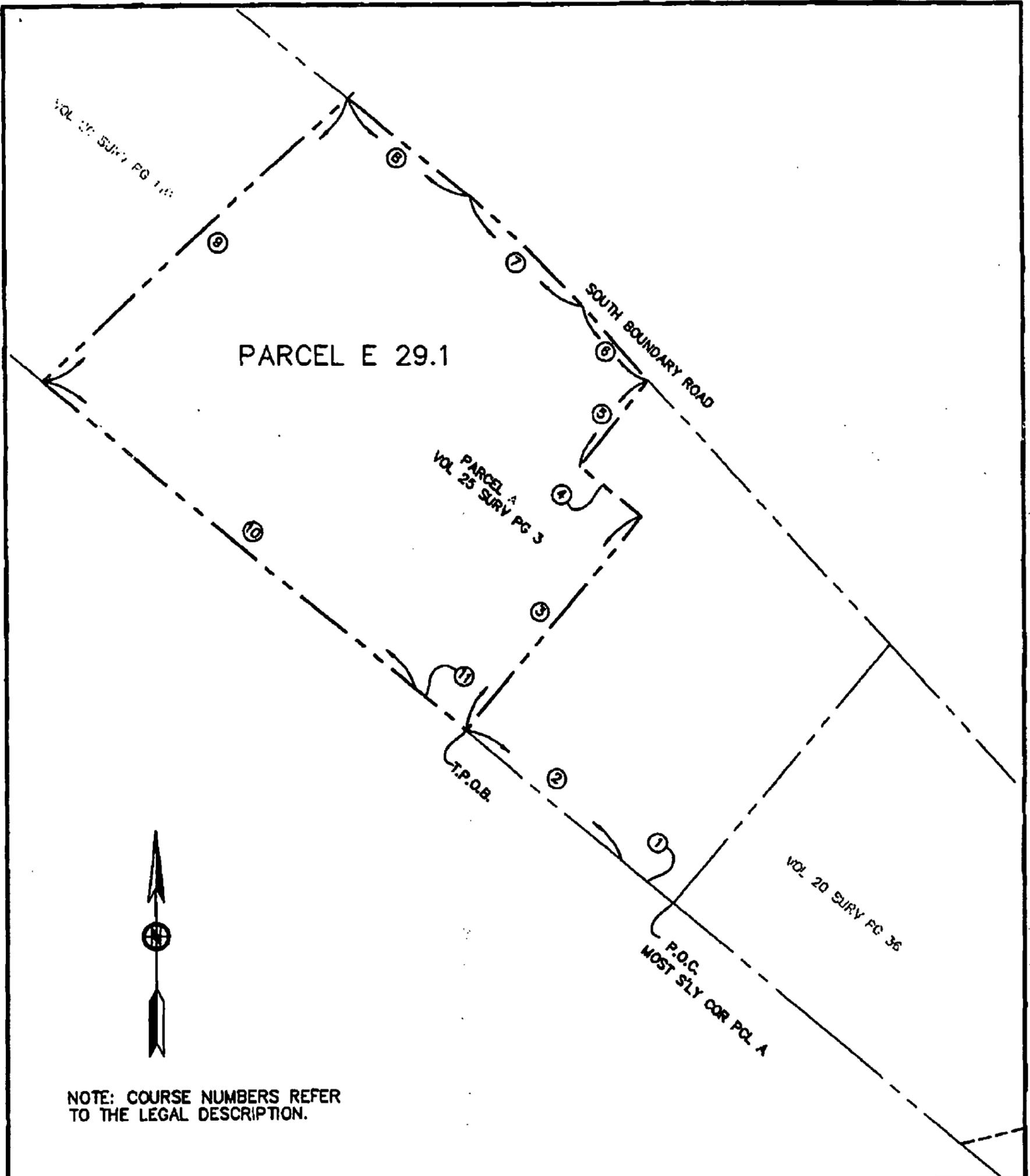
Commencing at the most southerly corner of said Parcel A; thence along the southwesterly line of said Parcel A the following 2 courses:

1. North 50°05'43" West 150.87 feet, And
2. North 50°05'33" West 453.00 feet to the **True Point of Beginning**; thence
3. North 39°54'27" East 616.76 feet; thence
4. North 51°14'48" West 176.71 feet; thence
5. North 39°17'34" East 244.15 feet to the northeasterly line of said Parcel A; thence along the northeasterly line of said Parcel A the following 3 courses:
6. North 42°17'00" West 219.74 feet; to the beginning of a curve concave southwesterly having a radius of 2370.00 feet;
7. Northwesterly 347.63 feet along said curve through a central angle of 8°24'15"; and
8. North 50°41'15" West 342.57 feet to the northwesterly line of said Parcel A; thence
9. South 47°25'32" West 913.49 feet along said northwesterly line to the southwesterly line of said Parcel A; thence along said southwesterly line the following 2 courses:
10. South 50°06'02" East 1061.00 feet; and
11. South 50°05'33" East 144.70 feet to the **True Point of Beginning**.

Contains an area of 22.457 Acres more or less.

Thomas B. Reeves
Thomas B. Reeves LS 7280





NOTE: COURSE NUMBERS REFER TO THE LEGAL DESCRIPTION.

CITY OF MONTEREY DEPARTMENT OF PUBLIC WORKS	
SKETCH TO ACCOMPANY A LEGAL DESCRIPTION PARCEL E 29.1	
DRAWN: BWM	APPROVED
SCALE: 1" = 300'	
DATE: 4-12-06	CITY ENGINEER REGIST. No. DATE

**Legal Description of
Parcel L6.2
For Monterey Peninsula Regional Park District**

Parcel L6.2:

That portion of the former Fort Ord, in the City of Del Rey Oaks, County of Monterey, State of California described as follows:

A portion of Parcel 1 as per map recorded in Volume 19, Page 1 of Surveys in the Office of the County Recorder of said county, more particularly described as follows:

Beginning at a point that bears South 50°05'20" East, 629.47 feet from a point on the westerly boundary of said Parcel 1, designated and shown as point two (2) on page 5 of 31 thereon; thence leaving said westerly boundary

- 1) **North 39°54'40" East, 892.03 feet to a point on the southwesterly boundary of South Boundary Road as per map recorded in Volume 20, Page 110 of Surveys in the Office of said County; thence southeasterly along said boundary of South Boundary Road**
- 2) **South 50°41'04" East, 336.52 feet to a point on the northwesterly boundary of Parcel 1 as per map recorded in Volume 23, Page 103 of Surveys in the Office of said County; thence leaving said boundary of South Boundary Road and along said northwesterly boundary**
- 1) **South 39°54'40" West, 895.53 feet to a point on said westerly boundary of said Parcel 1 as per said map recorded in said Volume 19, Page 1 of Surveys; thence northwesterly along last said boundary**
- 3) **North 50°05'20" West, 336.50 feet to the POINT OF BEGINNING.**

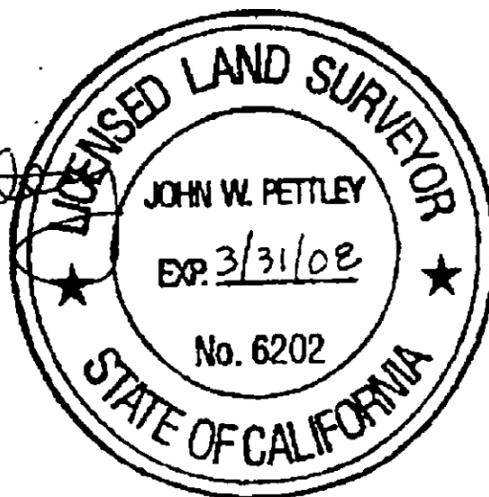
Containing 8.90 acres, more or less.

Bearings cited herein are based on monuments found along the westerly boundary of Parcel 1 as per map recorded in Volume 19, Page 1 of Surveys in the Office of the County Recorder, County of Monterey, California.

Dated: January 9, 2007

Bestor Engineers, Inc.

John W. Pettley
John W. Pettley
LS 6202
Exp: 3/31/08
W.O. 6640.00



THE BEARING OF S 50°05'20" E AS MEASURED BETWEEN THE MONUMENTS FOUND ALONG THE SOUTHWESTERLY BOUNDARY OF PARCEL 1 PER THE MAP FILED IN VOLUME 19, PAGE 1 OF SURVEYS, RECORDS OF MONTEREY COUNTY, CALIFORNIA AND SHOWN HEREON, IS THE BASIS OF BEARINGS FOR THIS SURVEY.

- DISTANCES SHOWN HEREON ARE EXPRESSED IN FEET AND DECIMALS THEREOF.
- POINTS FOUND OR SET ARE SO NOTED. ALL OTHER POINTS ARE FOR REFERENCE ONLY.
- ENTITLEMENTS OR ENCUMBRANCES AFFECTING THIS PROPERTY MAY NOT BE SHOWN.
- THIS MAP HAS BEEN PREPARED FROM FIELD DATA COLLECTED IN NOVEMBER, 2006.

- SET 3/4" IRON PIPE RCE 29811
- FOUND 1" IRON PIPE RCE 15310 UNLESS NOTED OTHERWISE
- R1 VOLUME 19, PAGE 1 OF SURVEYS
- R2 VOLUME 20, PAGE 110 OF SURVEYS
- R3 VOLUME 23, PAGE 103 OF SURVEYS
- (R4) RECORD DATA
- (T) TOTAL DISTANCE
- N 01°02'03" E 45.67' = MEASURED DATA

FILED THIS _____ DAY OF _____ 20____
 AT _____ M IN VOLUME _____ OF SURVEY MAPS AT PAGE _____
 RECORDS OF MONTEREY COUNTY, CALIFORNIA, AT THE
 REQUEST OF BESTOR ENGINEERS, INC.

STEPHEN L. VAGNINI
 COUNTY RECORDER
 MONTEREY COUNTY, CALIFORNIA
 BY: _____ DEPUTY
 SERIAL NO.: _____
 FEE: \$ _____

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH SECTION 8766
 OF THE PROFESSIONAL LAND SURVEYORS' ACT THIS
 DAY OF _____ 2007.

COUNTY SURVEYOR _____ BY: _____ DEPUTY COUNTY SURVEYOR

SOUTH BOUNDARY ROAD

GENERAL JIM MOORE BOULEVARD

PRELIMINARY

PRELIMINARY

PARCEL 1
 VOLUME 23, PAGE 103
 OF SURVEYS

13.27 AC.

6.90 AC.

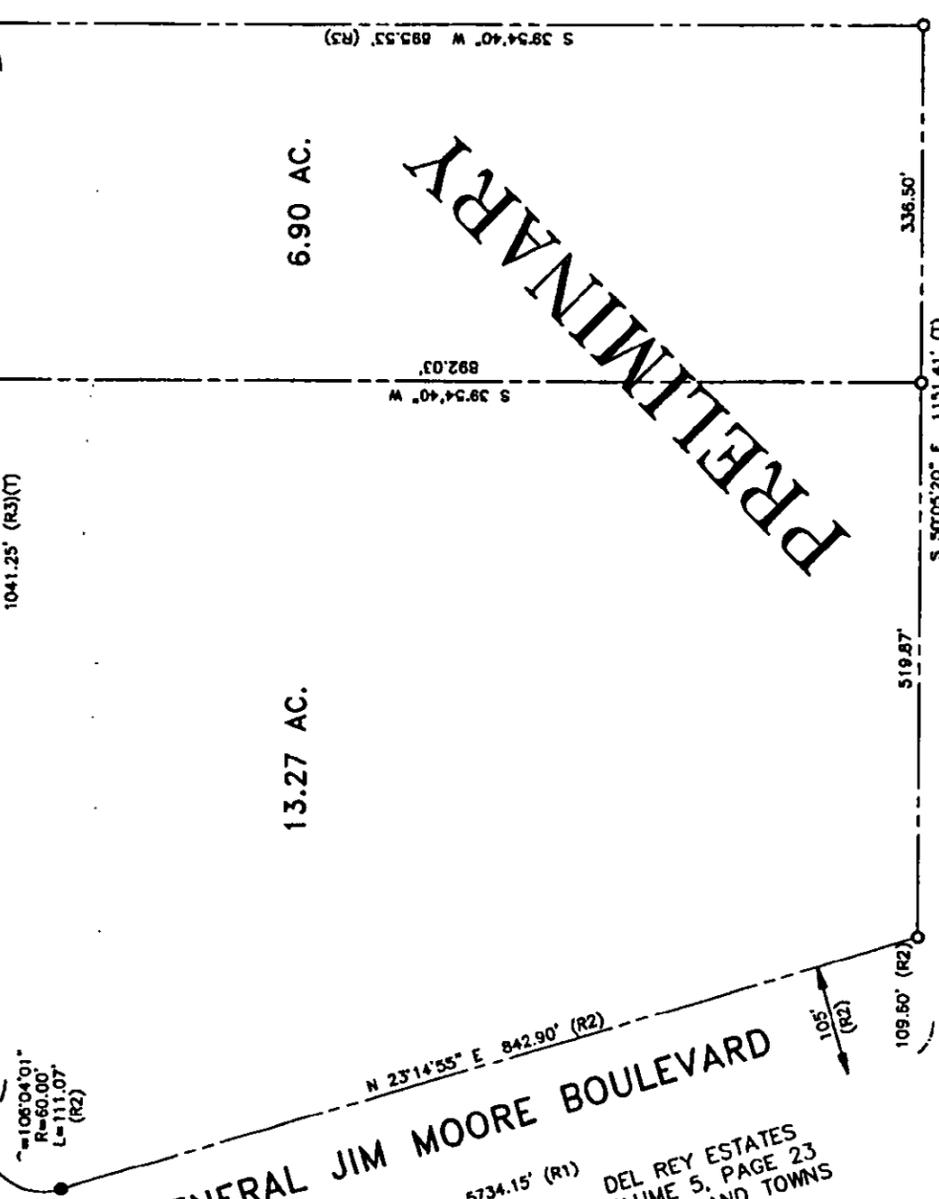
108°04'01"
 R=60.00'
 L=111.07'
 (R2)

704.73'

S 50°41'04" E 1690.09' (1690.00') (R2) (T)

648.84' (648.75') (R2) (R3)

60' (R2)



THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR
 UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS
 OF THE PROFESSIONAL LAND SURVEYORS' ACT AT THE REQUEST OF
 MONTEREY PENINSULA REGIONAL PARK DISTRICT IN FEBRUARY, 2006.

H. PATRICK WARD
 RCE #29811
 STATE OF CALIFORNIA
 EXPIRES 31 MARCH 2007

DATE



RECORD OF SURVEY

SHOWING

FOR

BY



BESTOR ENGINEERS, INC.
 CIVIL ENGINEERING - SURVEYING - LAND PLANNING
 9701 JULIUS LARSEN DRIVE, MONTEREY, CALIFORNIA 93940
 SCALE: 1"=100' DATE: 2 NOVEMBER 2006 NO: 0640.00

SHEET 1 OF 1

PARCEL 1
 VOLUME 23, PAGE 103
 OF SURVEYS

FOUND IRON PIPE WITH
 2" BRASS END
 CITY OF MONTEREY
 S 30°54'00" W
 200' FROM LINE
 (R1)

FOUND
 4" X 4" WITH
 BRASS PIN
 TOP BURIED OFF
 (R1)

S 50°05'20" E 344.09' (R1)

REEL 1138 OR 361

185.44'

336.50'

S 50°05'20" E 1151.41' (T)

519.87'

109.60' (R2)

105' (R2)

S 38°34'40" W 893.53' (R3)

S 38°34'40" W 892.03'

1041.25' (R3)(T)

N 23°14'55" E 842.90' (R2)

S 23°14'55" W 5734.15' (R1)

**COE PARCELS L20.3.1 AND L 20.3.2
DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California, particularly described as follows:

COMMENCING at a point on the southerly perimeter boundary of that certain "Parcel 1" of the Fort Ord Military Reservation, as said parcel is shown and so designated on that certain Record of Survey Map filed September 7, 1994 in Volume 19 of Surveys, at Page 1, Records of Monterey County, California, said point also being Corner numbered 14 as shown on said map and described as "Found 1½" iron pipe with brass disk " R.C.E. 15310"; thence leaving said boundary

- (a) S. 59° 43' 54" W., 119.19 feet to the TRUE POINT OF BEGINNING; thence
- (1) N. 34° 31' 04" W., 61.26 feet; thence
- (2) Northwesterly, 115.85 feet along the arc of a tangent curve to the right having a radius of 420.00 feet, through a central angle of 15° 48' 16"; thence tangentially
- (3) N. 18° 42' 48" W., 128.06 feet; thence
- (4) Northwesterly, 74.69 feet along the arc of a tangent curve to the left having a radius of 105.00 feet, through a central angle of 40° 45' 28"; thence tangentially
- (5) N. 59° 28' 16" W., 244.53 feet; thence
- (6) Northwesterly, 138.76 feet along the arc of a tangent curve to the right having a radius of 345.00 feet, through a central angle of 23° 02' 39"; thence tangentially
- (7) N. 36° 25' 37" W., 55.37 feet; thence
- (8) Northwesterly, 123.62 feet along the arc of a tangent curve to the right having a radius of 545.00 feet, through a central angle of 12° 59' 46"; thence tangentially
- (9) N. 23° 25' 51" W., 19.72 feet; thence
- (10) Northerly, 126.08 feet along the arc of a tangent curve to the right having a radius of 370.00 feet, through a central angle of 19° 31' 25"; thence tangentially
- (11) N. 03° 54' 26" W., 113.05 feet; thence
- (12) Northerly, 187.44 feet along the arc of a tangent curve to the right having a radius of 1220.00 feet, through a central angle of 08° 48' 10"; thence tangentially
- (13) N. 04° 53' 44" E., 51.22 feet; thence
- (14) Northerly, 47.69 feet along the arc of a tangent curve to the right having a radius of 420.00 feet, through a central angle of 06° 30' 20"; thence tangentially
- (15) N. 11° 24' 04" E., 44.03 feet; thence
- (16) Northerly, 21.00 feet along the arc of a tangent curve to the left having a radius of 180.00 feet, through a central angle of 06° 41' 05"; thence tangentially
- (17) N. 04° 42' 59" E., 6.90 feet; thence

**COE PARCELS L20.3.1 AND L 20.3.2
DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

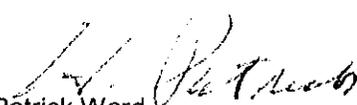
DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL, PAGE 2

- (18) Northerly, 23.13 feet along the arc of a tangent curve to the left having a radius of 60.00 feet, through a central angle of 22° 05' 10"; thence tangentially
- (19) N. 17° 22' 11" W., 61.94 feet; thence
- (20) Northerly, 117.52 feet along the arc of a tangent curve to the right having a radius of 145.00 feet, through a central angle of 46° 26' 17"; thence tangentially
- (21) N. 29° 04' 06" E., 176.53 feet; thence
- (22) Northerly, 56.83 feet along the arc of a tangent curve to the left having a radius of 230.00 feet, through a central angle of 14° 09' 21"; thence tangentially
- (23) N. 14° 54' 45" E., 171.95 feet; thence
- (24) Northeasterly, 188.99 feet along the arc of a tangent curve to the right having a radius of 295.00 feet, through a central angle of 36° 42' 21"; thence tangentially
- (25) N. 51° 37' 06" E., 70.71 feet; thence
- (26) Northeasterly, 12.09 feet along the arc of a tangent curve to the left having a radius of 30.00 feet, through a central angle of 23° 05' 34"; thence tangentially
- (27) N. 28° 31' 32" E., 111.64 feet; thence
- (28) Northeasterly, 53.32 feet along the arc of a tangent curve to the right having a radius of 420.00 feet, through a central angle of 07° 16' 27"; thence tangentially
- (29) N. 35° 47' 59" E., 17.19 feet; thence
- (30) Northeasterly, 41.28 feet along the arc of a tangent curve to the right having a radius of 95.00 feet, through a central angle of 24° 53' 44"; thence tangentially
- (31) N. 60° 41' 43" E., 100.44 feet; thence
- (32) Northeasterly, 73.87 feet along the arc of a tangent curve to the left having a radius of 380.00 feet, through a central angle of 11° 08' 19"; thence tangentially
- (32) N. 49° 33' 24" E., 274.65 feet; thence
- (33) S. 55° 08' 44" E., 1377.76 feet; thence
- (34) S. 29° 09' 04" E., 537.48 feet; thence
- (35) S. 84° 54' 10" E., 820.96 feet; thence
- (36) S. 72° 46' 28" W., 72.15 feet; thence
- (37) Westerly, 419.04 feet along the arc of a tangent curve to the left having a radius of 3020.00 feet, through a central angle of 07° 57' 00"; thence tangentially
- (38) S. 64° 49' 28" W., 153.97 feet; thence

COE PARCELS L20.3.1 AND L 20.3.2
DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA

DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL, PAGE 3

- (39) Westerly, 71.98 feet along the arc of a tangent curve to the right having a radius of 120.00 feet, through a central angle of 34° 22' 00"; thence tangentially
- (40) N. 80° 48' 32" W., 112.41 feet; thence
- (41) Westerly, 27.36 feet along the arc of a tangent curve to the left having a radius of 60.00 feet, through a central angle of 26° 07' 46"; thence tangentially
- (42) Westerly, 9.05 feet along the arc of a reverse curve to the right having a radius of 20.00 feet, through a central angle of 25° 54' 59"; thence tangentially
- (43) N. 81° 01' 19" W., 265.74 feet; thence
- (44) Westerly, 453.90 feet along the arc of a tangent curve to the left having a radius of 410.00 feet, through a central angle of 63° 25' 51"; thence tangentially
- (45) S. 35° 32' 50" W., 467.34 feet; thence
- (46) Southwesterly, 278.97 feet along the arc of a tangent curve to the right having a radius of 480.00 feet, through a central angle of 33° 18' 00"; thence tangentially
- (47) S. 68° 50' 50" W., 158.42 feet; thence
- (48) Southwesterly, 262.54 feet along the arc of a tangent curve to the left having a radius of 495.00 feet, through a central angle of 30° 23' 18"; thence tangentially
- (49) S. 38° 27' 32" W., 118.24 feet to the TRUE POINT OF BEGINNING.


H. Patrick Ward
Registered Civil Engineer #29811
State of California
Expires: 31 March 2009



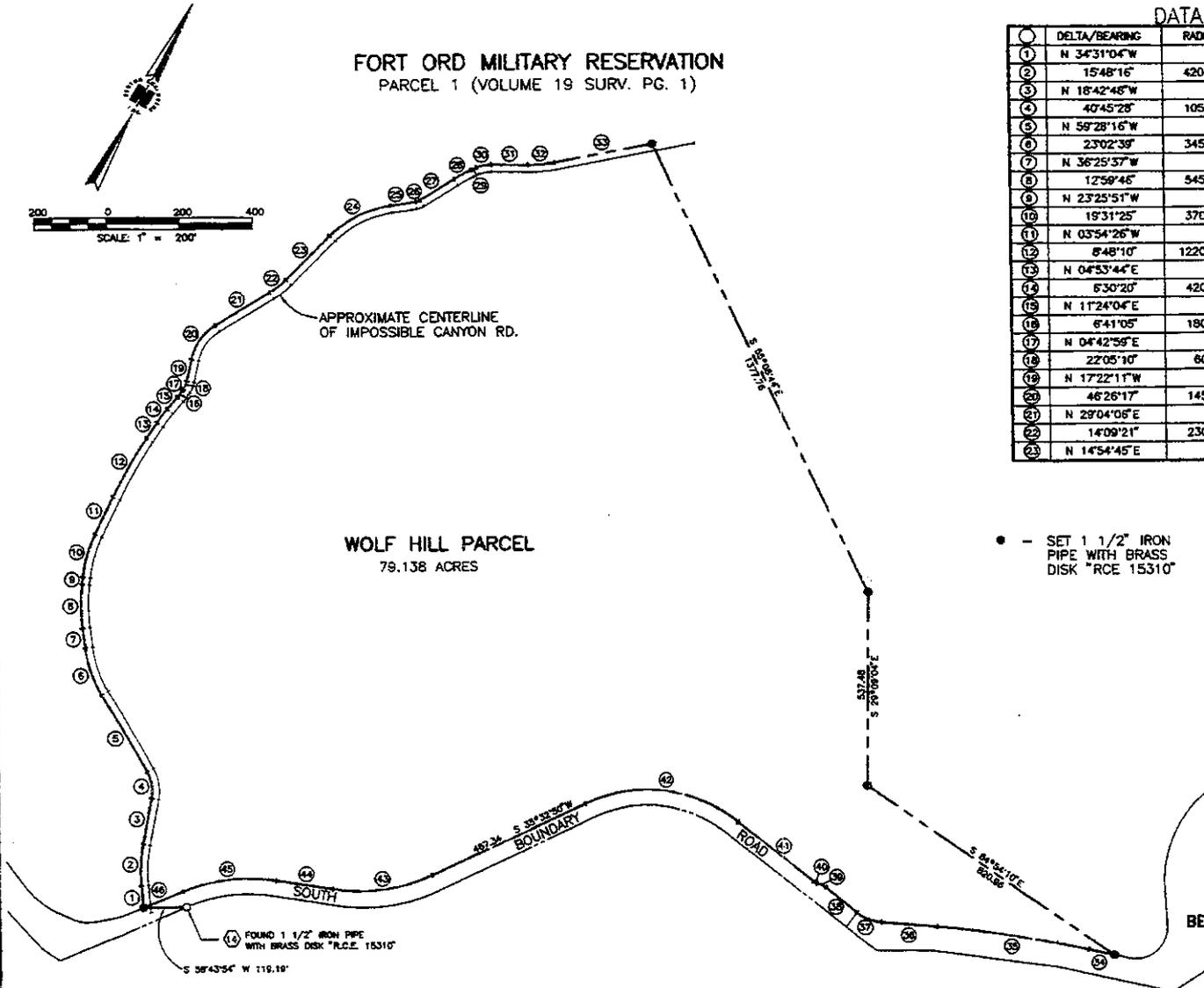
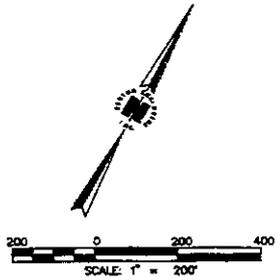
6 April 07
W.O. 5443.06
HPW/jf.L:/5443/544306/070406 Description of Wolf Hill.doc

COE PARCELS L20.3.1 and L20.3.2
DESCRIPTION OF 79.138 ACRE (WOLF HILL) PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA Vol. 19 Surv. Pg. 88

FORT ORD MILITARY RESERVATION
 PARCEL 1 (VOLUME 19 SURV. PG. 1)

WOLF HILL PARCEL
 79.138 ACRES

LAGUNA SECA RECREATIONAL AREA
 (VOLUME 11 SURV. PG. 29)



DATA			
NO.	DELTA/BEARING	RADIUS	LEN./DIST.
1	N 34°31'04"W		61.26
2	15°48'16"	420.00	115.85
3	N 18°42'48"W		128.06
4	40°45'28"	105.00	74.69
5	N 59°28'16"W		244.53
6	23°02'39"	345.00	138.76
7	N 36°25'57"W		55.37
8	12°59'45"	545.00	123.62
9	N 23°25'51"W		19.72
10	19°31'25"	370.00	126.08
11	N 03°54'26"W		113.05
12	8°48'10"	1220.00	187.44
13	N 04°53'44"E		51.22
14	6°30'20"	420.00	47.69
15	N 1°24'04"E		44.03
16	6°41'05"	180.00	21.00
17	N 04°42'59"E		6.90
18	22°05'10"	60.00	23.13
19	N 17°22'11"W		61.94
20	46°26'17"	145.00	117.52
21	N 29°04'08"E		176.53
22	14°09'21"	230.00	56.83
23	N 14°54'45"E		171.95

DATA			
NO.	DELTA/BEARING	RADIUS	LEN./DIST.
24	36°42'21"	295.00	188.99
25	N 51°37'06"E		70.71
26	23°05'34"	30.00	12.09
27	N 28°31'32"E		111.64
28	7°16'27"	420.00	53.32
29	N 35°47'59"E		17.19
30	24°53'44"	95.00	41.28
31	N 60°41'43"E		100.44
32	1°08'19"	380.00	73.87
33	N 49°33'24"E		274.65
34	S 72°46'28"W		72.15
35	7°57'00"	3020.00	419.04
36	S 64°49'28"W		153.97
37	34°22'00"	120.00	71.98
38	N 80°48'32"W		112.41
39	26°07'46"	60.00	27.36
40	25°54'59"	20.00	9.05
41	N 81°01'19"W		265.74
42	63°25'51"	410.00	453.90
43	33°18'00"	480.00	278.97
44	S 68°50'50"W		158.42
45	30°23'18"	495.00	262.54
46	S 38°27'32"W		118.24

RECORD OF SURVEY

SHOWING
 65.874 & 79.138 ACRE PARCELS OF LAND
 BEING A PORTION OF THE FORT ORD MILITARY RESERVATION
 INCLUDING PORTIONS OF
 MONTEREY CITY LANDS TRACT NO. 1 AND
 THE RANCHO EL CHAMISAL AND
 TOWNSHIP 15 SOUTH, RANGE 2 EAST M.D.B. AND M.
 MONTEREY COUNTY, CALIFORNIA
 BY



BESTOR ENGINEERS, INC.

CIVIL ENGINEERING - SURVEYING - LAND PLANNING
 8701 BLUK LAKESIDE LANE, MONTEREY, CALIFORNIA 93940

SCALE: 1"=200' DATE: JUNE 1995 W.O.: 5443.06

SHEET
 3 OF 3

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

CERTAIN real property situated in Monterey City Lands Tract No. 1 and Rancho El Chamisal, County of Monterey, State of California, Particularly described as follows:

BEGINNING at point on the southerly perimeter boundary of that certain "Parcel 1" of the Fort Ord Military Reservation, as said parcel is shown and so designated on that certain Record of Survey Map filed September 7, 1994 in Volume 19 of Surveys, at Page 1, Records of Monterey County, California, said point also being Corner numbered 29 as shown on said map and described as "Found 1" iron pipe with plastic plug marked "Monterey County"; thence along said boundary

- (1) N. 19° 24' 53" W., 635.06 feet to Corner numbered 28, as shown on said map; thence
- (2) N. 19° 30' 25" W., 119.39 feet to Corner numbered 27, as shown on said map; thence
- (3) N. 10° 32' 25" E., 666.50 feet to Corner numbered 26, as shown on said map; thence
- (4) N. 05° 46' 37" W., 643.24 feet to Corner numbered 25, as shown on said map; thence
- (5) N. 79° 53' 53" W., 512.80 feet to Corner numbered 24, as shown on said map; thence
- (6) S. 27° 22' 32" W., 668.29 feet to Corner numbered 23, as shown on said map; thence
- (7) S. 72° 49' 35" W., 332.97 feet to Corner numbered 22, as shown on said map; thence
- (8) S. 67° 39' 05" W., 338.33 feet to Corner numbered 21, as shown on said map; thence
- (9) S. 60° 12' 34" W., 155.84 feet to Corner numbered 20, as shown on said map; thence
- (10) N. 81° 16' 14" W., 106.74 feet; thence leaving said boundary
- (11) N. 09° 11' 28" E., 50.43 feet; thence
- (12) Easterly, 71.98 feet along the arc of a non-tangent curve to the left having a radius of 120.00 feet whose center bears N. 09° 11' 28" E., through a central angle of 34° 22' 00"; thence tangentially
- (13) N. 64° 49' 28" E., 153.97 feet; thence
- (14) Easterly, 419.04 feet along the arc of a tangent curve to the right having a radius of 3020.00 feet, through a central angle of 07° 57' 00"; thence tangentially
- (15) N. 72° 46' 28" E., 113.20 feet; thence
- (16) Northeasterly and Northerly, 167.02 feet along the arc of a tangent curve to the left having a radius of 90.00 feet, through a central angle of 106° 19' 49"; thence tangentially

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

DESCRIPTION OF 196.093 ACRE PARCEL, CONTINUED, PAGE 2

- (17) N. 33° 33' 21" W., 97.98 feet; thence
- (18) Northerly, 505.07 feet along the arc of a tangent curve to the right having a radius of 320.00 feet, through a central angle of 90° 25' 58"; thence tangentially
- (19) N. 56° 52' 37" E., 96.39 feet; thence
- (20) Northeasterly, 304.72 feet along the arc of a tangent curve to the left having a radius of 320.00 feet, through a central angle of 54° 33' 34"; thence tangentially
- (21) N. 02° 19' 03" E., 244.58 feet; thence
- (22) Northerly, 109.35 feet along the arc of a tangent curve to the left having a radius of 2380.00 feet, through a central angle of 02° 37' 57"; thence tangentially
- (23) N. 00° 18' 54" W., 212.24 feet; thence
- (24) Northerly, 192.81 feet along the arc of a tangent curve to the right having a radius of 1170.00 feet, through a central angle of 09° 26' 32"; thence tangentially
- (25) N. 09° 07' 38" E., 363.12 feet; thence
- (26) Northeasterly, 262.98 feet along the arc of a tangent curve to the right having a radius of 295.00 feet, through a central angle of 51° 04' 36"; thence tangentially
- (27) N. 60° 12' 14" E., 11.73 feet; thence
- (28) Northeasterly, 193.21 feet along the arc of a tangent curve to the left having a radius of 980.00 feet, through a central angle of 11° 17' 46"; thence tangentially
- (29) N. 48° 54' 28" E., 287.39 feet; thence
- (30) Northeasterly, 755.17 feet along the arc of a tangent curve to the left having a radius of 1255.00 feet, through a central angle of 34° 28' 35"; thence tangentially
- (31) N. 14° 25' 53" E., 263.22 feet; thence
- (32) Northerly, 240.99 feet along the arc of a tangent curve to the left having a radius of 1455.00 feet, through a central angle of 09° 29' 24"; thence tangentially
- (33) Northeasterly, 364.77 feet along the arc of a reverse curve to the right having a radius of 450.00 feet, through a central angle of 46° 26' 40"; thence tangentially

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

DESCRIPTION OF 196.093 ACRE PARCEL, CONTINUED, PAGE 3

- (34) N. 51° 23' 09" E., 308.19 feet; thence
- (35) Northeasterly, 100.46 feet along the arc of a tangent curve to the left having a radius of 755.00 feet, through a central angle of 07° 37' 25"; thence tangentially
- (36) N. 43° 45' 44" E., 570.59 feet; thence
- (37) Northeasterly, 163.06 feet along the arc of a tangent curve to the left having a radius of 355.00 feet, through a central angle of 26° 19' 04"; thence tangentially
- (38) N. 17° 26' 40" E., 196.66 feet; thence
- (39) Northerly, 40.24 feet along the arc of a tangent curve to the left having a radius of 380.00 feet, through a central angle of 06° 04' 01"; thence tangentially
- (40) N. 11° 22' 39" E., 182.54 feet; thence
- (41) S. 23° 25' 50" E., 1902.07 feet; thence
- (42) S. 64° 00' 53" W., 48.03 feet; thence
- (43) Southwesterly, 177.61 feet along the arc of a tangent curve to the left having a radius of 375.00 feet, through a central angle of 27° 08' 11"; thence tangentially
- (44) S. 36° 52' 42" W., 127.05 feet; thence
- (45) Southwesterly, 121.03 feet along the arc of a tangent curve to the left having a radius of 920.00 feet, through a central angle of 07° 32' 15"; thence tangentially
- (46) S. 29° 20' 27" W., 280.09 feet; thence
- (47) Southerly, 154.17 feet along the arc of a tangent curve to the left having a radius of 920.00 feet, through a central angle of 09° 36' 04"; thence tangentially
- (48) S. 19° 44' 23" W., 371.56 feet; thence
- (49) Southwesterly, 308.19 feet along the arc of a tangent curve to the right having a radius of 880.00 feet, through a central angle of 20° 03' 57"; thence tangentially
- (50) S. 39° 48' 20" W., 72.09 feet; thence
- (51) Southerly, 181.42 feet along the arc of a tangent curve to the left having a radius of 335.00 feet, through a central angle of 31° 01' 46"; thence tangentially

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

DESCRIPTION OF 196.093 ACRE PARCEL, CONTINUED, PAGE 4

- (52) S. 08° 46' 34" W., 234.25 feet; thence
- (53) Southerly, 77.13 feet along the arc of a tangent curve to the left having a radius of 820.00 feet, through a central angle of 05° 23' 21"; thence tangentially
- (54) S. 03° 23' 13" W., 78.15 feet; thence
- (55) Southwesterly, 64.78 feet along the arc of a tangent curve to the right having a radius of 80.00 feet, through a central angle of 46° 23' 45"; thence tangentially
- (56) S. 49° 46' 58" W., 96.14 feet; thence
- (57) Southerly, 153.25 feet along the arc of a tangent curve to the left having a radius of 170.00 feet, through a central angle of 51° 39' 06"; thence tangentially
- (58) S. 01° 52' 08" E., 38.06 feet; thence
- (59) Southerly, 282.23 feet along the arc of a tangent curve to the right having a radius of 360.00 feet, through a central angle of 44° 55' 06"; thence tangentially
- (60) S. 43° 02' 58" W., 137.72 feet; thence
- (61) Southwesterly, 80.13 feet along the arc of a tangent curve to the left having a radius of 395.00 feet, through a central angle of 11° 37' 23"; thence tangentially
- (62) S. 31° 25' 35" W., 211.79 feet; thence
- (63) Southwesterly, 86.08 feet along the arc of a tangent curve to the right having a radius of 180.00 feet, through a central angle of 27° 24' 00"; thence tangentially
- (64) S. 58° 49' 35" W., 114.52 feet; thence
- (65) Southwesterly, 215.46 feet along the arc of a tangent curve to the left having a radius of 220.00 feet, through a central angle of 56° 06' 45"; thence tangentially
- (66) S. 02° 42' 50" W., 192.34 feet; thence
- (67) Southerly, 153.24 feet along the arc of a tangent curve to the right having a radius of 330.00 feet, through a central angle of 26° 36' 24"; thence tangentially
- (68) S. 29° 19' 14" W., 72.41 feet; thence

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

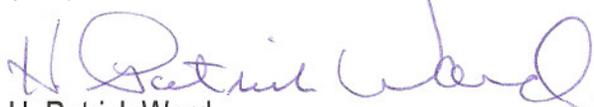
DESCRIPTION OF 196.093 ACRE PARCEL, CONTINUED, PAGE 5

- (69) Southwesterly, 264.59 feet along the arc of a tangent curve to the right having a radius of 1730.00 feet, through a central angle of 08° 45' 47"; thence tangentially
- (70) S. 38° 05' 01" W., 47.82 feet; thence
- (71) Southwesterly, 109.99 feet along the arc of a tangent curve to the left having a radius of 395.00 feet, through a central angle of 15° 57' 17"; thence tangentially
- (72) S. 22° 07' 44" W., 40.15 feet; thence
- (73) S. 50° 28' 45" E., 277.36 feet; thence
- (74) N. 88° 36' 10" E., 41.00 feet; thence
- (75) Easterly, 70.42 feet along the arc of a tangent curve to the left having a radius of 210.00 feet, through a central angle of 19° 12' 48"; thence tangentially
- (76) N. 69° 23' 22" E., 74.81 feet; thence
- (77) Easterly, 124.23 feet along the arc of a tangent curve to the right having a radius of 415.00 feet, through a central angle of 17° 09' 05"; thence tangentially
- (78) N. 86° 32' 27" E., 70.96 feet; thence
- (79) Easterly, 168.66 feet along the arc of a tangent curve to the left having a radius of 310.00 feet, through a central angle of 31° 10' 20"; thence tangentially
- (80) N. 55° 22' 07" E., 261.49 feet; thence
- (81) Northeasterly, 389.91 feet along the arc of a tangent curve to the right having a radius of 2230.00 feet, through a central angle of 10° 01' 05"; thence tangentially
- (82) Easterly, 153.97 feet along the arc of a compound curve to the right having a radius of 2030.00 feet, through a central angle of 04° 20' 45"; thence tangentially
- (83) N. 69° 43' 57" E., 78.18 feet; thence
- (84) Northeasterly, 146.62 feet along the arc of a tangent curve to the left having a radius of 345.00 feet, through a central angle of 24° 20' 57"; thence tangentially
- (85) S. 44° 37' 00" E., 50.00 feet; thence

**COE PARCELS L20.5.1, L20.5.2, L20.5.3 AND L20.5.4
DESCRIPTION OF 196.093 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1 AND RANCHO EL CHAMISAL
MONTEREY COUNTY, CALIFORNIA**

DESCRIPTION OF 196.093 ACRE PARCEL, CONTINUED, PAGE 6

- (86) Southwesterly, 65.00 feet along the arc of a non-tangent curve to the left having a radius of 345.00 feet whose center bears S. 44° 37' 00" E., through a central angle of 10° 47' 41"; thence tangentially
- (87) S. 34° 35' 19" W., 101.14 feet; thence
- (88) Southwesterly, 91.50 feet along the arc of a tangent curve to the right having a radius of 345.00 feet, through a central angle of 15° 11' 47"; thence tangentially
- (89) S. 49° 47' 06" W., 135.28 feet; thence
- (90) Southwesterly, 244.59 feet along the arc of a tangent curve to the left having a radius of 620.00 feet, through a central angle of 22° 36' 10"; thence tangentially
- (91) S. 27° 10' 56" W., 44.30 feet; thence
- (92) Southwesterly, 146.74 feet along the arc of a tangent curve to the right having a radius of 920.00 feet, through a central angle of 09° 08' 19"; thence tangentially
- (93) S. 36° 19' 15" W., 99.30 feet; thence
- (94) S. 37° 05' 30" W., 62.85 feet; thence
- (95) S. 64° 03' 14" W., 247.29 feet; thence
- (96) S. 56° 14' 40" W., 99.46 feet; thence
- (97) S. 30° 58' 07" W., 196.51 feet; thence
- (98) S. 54° 23' 54" W., 371.35 feet; thence
- (99) S. 75° 53' 37" W., 133.70 feet; thence
- (100) S. 51° 47' 35" W., 288.63 feet to the POINT OF THE BEGINNING



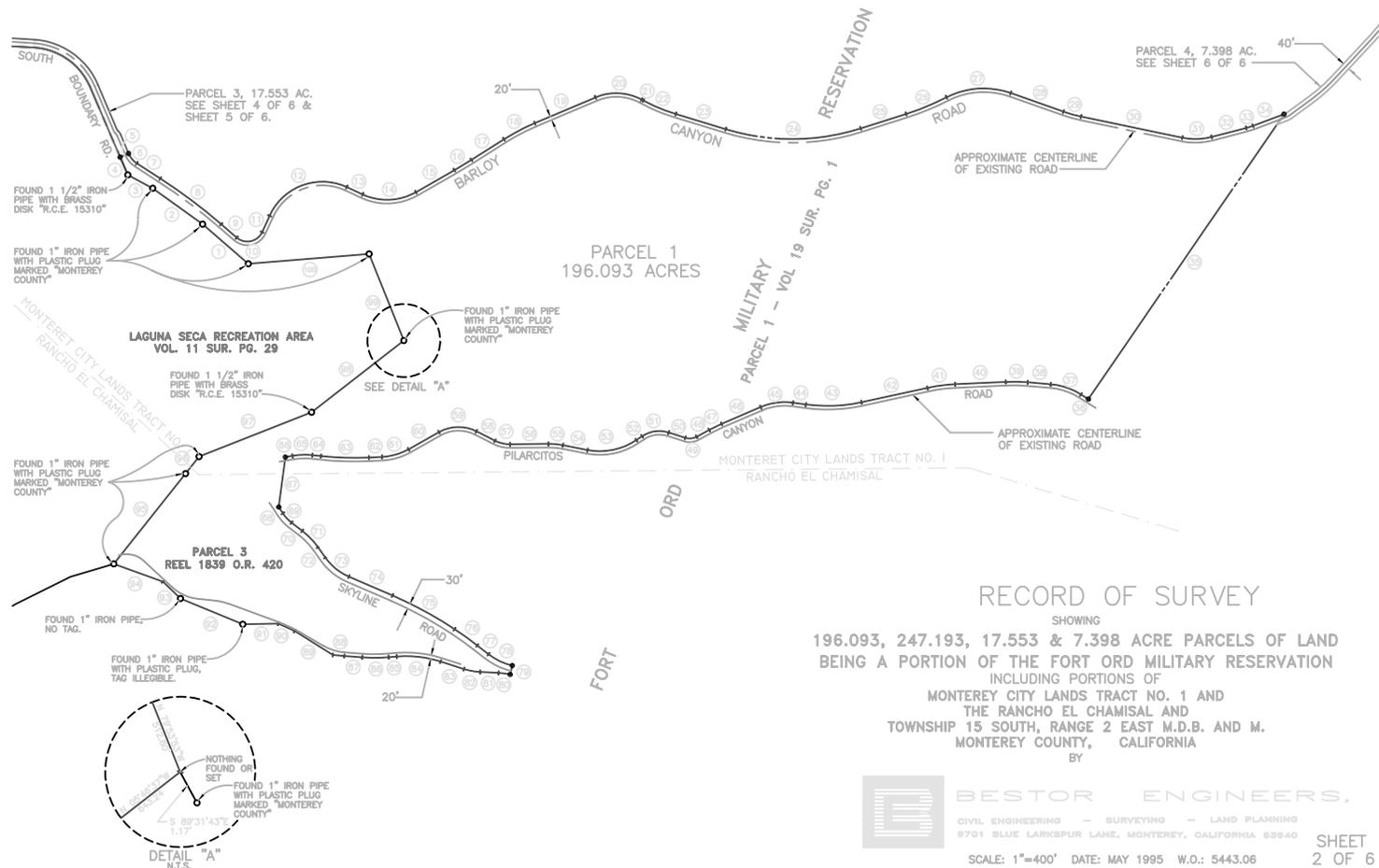
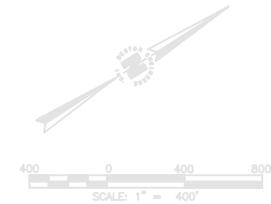
H. Patrick Ward
Registered Civil Engineer #29811
State of California
Expires: 31 March 2009

DATA			
○	DELTA/BEARING	RADIUS	LEN./DIST.
1	S 72°49'35"W		332.97
2	S 67°39'05"W		338.33
3	S 60°12'34"W		155.84
4	N 81°16'14"W		106.74
5	N 09°11'28"E		50.43
6	34°22'00"	120.00	71.98
7	N 64°49'28"E		153.97
8	7°57'00"	3020.00	419.04
9	N 72°48'28"E		113.20
10	108°19'49"	90.00	167.02
11	N 33°33'21"W		97.98
12	90°25'58"	320.00	505.07
13	N 56°52'37"E		98.39
14	54°33'34"	320.00	304.72
15	N 02°19'03"E		244.58
16	2°37'57"	2380.00	109.35
17	N 00°18'54"W		212.24
18	9°26'32"	1170.00	192.81
19	N 09°07'38"E		363.12
20	51°04'36"	295.00	262.98
21	N 60°12'14"E		11.73
22	11°17'46"	980.00	193.21
23	N 48°54'28"E		287.39
24	34°28'35"	1255.00	755.17
25	N 14°25'53"E		263.22
26	9°29'24"	1455.00	240.99
27	46°26'40"	450.00	364.77
28	N 51°23'09"E		308.19
29	7°37'25"	755.00	100.46
30	N 43°45'44"E		570.59
31	26°19'04"	355.00	163.06
32	N 17°28'40"E		196.66
33	8°04'01"	380.00	40.24
34	N 11°22'39"E		182.54
35	S 23°25'50"E		1902.07
36	S 64°00'53"W		48.03
37	27°08'11"	375.00	177.61
38	S 36°52'42"W		127.05
39	7°32'15"	920.00	121.03
40	S 29°20'27"W		280.09
41	9°36'04"	920.00	154.17
42	S 19°44'23"W		371.56
43	20°03'57"	880.00	308.19
44	S 39°48'20"W		72.09
45	31°01'46"	335.00	181.42
46	S 08°46'34"W		234.25
47	5°23'21"	820.00	77.13
48	S 03°23'13"W		78.15
49	46°23'45"	80.00	64.78
50	S 49°46'58"W		98.14
51	51°39'06"	170.00	153.25
52	S 01°52'08"E		38.06
53	44°55'06"	360.00	282.23
54	S 43°02'58"W		137.72
55	11°37'23"	395.00	80.13
56	S 31°25'35"W		211.79
57	27°24'00"	180.00	88.08
58	S 58°49'35"W		114.52
59	56°06'45"	220.00	215.46
60	S 02°42'50"W		192.34
61	26°36'24"	330.00	153.24

DATA			
○	DELTA/BEARING	RADIUS	LEN./DIST.
62	S 29°19'14"W		72.41
63	8°45'47"	1730.00	264.59
64	S 38°05'01"W		47.82
65	15°57'17"	395.00	109.99
66	S 22°07'44"W		40.15
67	S 50°28'45"E		277.36
68	N 88°36'10"E		41.00
69	19°12'48"	210.00	70.42
70	N 69°23'22"E		74.81
71	17°09'05"	415.00	124.23
72	N 86°32'27"E		70.96
73	31°10'20"	310.00	168.68
74	N 55°22'07"E		261.49

DATA			
○	DELTA/BEARING	RADIUS	LEN./DIST.
75	10°01'05"	2230.00	389.91
76	4°20'45"	2030.00	153.97
77	N 69°43'57"E		76.16
78	24°20'57"	345.00	146.62
79	S 44°37'00"E		50.00
80	10°47'41"	345.00	65.00
81	S 34°35'19"W		101.14
82	15°11'47"	345.00	91.50
83	S 49°47'06"W		135.28
84	22°38'10"	620.00	244.59
85	S 27°10'56"W		44.30
86	9°08'19"	920.00	146.74
87	S 36°19'15"W		99.30

DATA			
○	DELTA/BEARING	RADIUS	LEN./DIST.
88	S 37°05'30"W		82.85
89	S 64°03'14"W		247.29
90	S 56°14'40"W		99.46
91	S 30°58'07"W		196.51
92	S 54°23'54"W		371.35
93	S 75°53'37"W		133.70
94	S 51°47'35"W		288.63
95	N 19°24'53"W		635.06
96	N 19°30'25"W		119.39
97	N 10°32'25"E		666.50
98	N 05°46'37"W		643.24
99	N 79°53'53"W		512.80
100	S 27°22'32"W		668.29



RECORD OF SURVEY
 SHOWING
 196.093, 247.193, 17,553 & 7,398 ACRE PARCELS OF LAND
 BEING A PORTION OF THE FORT ORD MILITARY RESERVATION
 INCLUDING PORTIONS OF
 MONTEREY CITY LANDS TRACT NO. 1 AND
 THE RANCHO EL CHAMISAL AND
 TOWNSHIP 15 SOUTH, RANGE 2 EAST M.D.B. AND M.
 MONTEREY COUNTY, CALIFORNIA
 BY


BESTOR ENGINEERS, INC.
 CIVIL ENGINEERING - SURVEYING - LAND PLANNING
 8701 BLUE LARKSPUR LAKE, MONTEREY, CALIFORNIA 93840
 SCALE: 1"=400' DATE: MAY 1995 W.O.: 5443.06 **SHEET 2 OF 6**

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California, particularly described as follows:

COMMENCING at an angle point on the southeasterly perimeter boundary of that certain "Parcel 1" of the Fort Ord Military Reservation, as said boundary and parcel are shown and so designated on that certain Record of Survey Map filed September 3, 1994 in Volume 19 of Surveys, at Page 1, Records of Monterey County, California, said point also being Corner numbered (72) as shown and designated on said map and described as "Found 1¼" Iron Pipe with Brass Tag, RCE 1215"; thence leaving said perimeter boundary

- (a) N. 40° 11' 57" W., 8450.48 feet to the TRUE POINT OF BEGINNING; thence
- (1) N. 23° 25' 50" W., 70.07 feet; thence
- (2) Northerly, 21.60 feet along the arc of a non-tangent curve to the left having a radius of 80.00 feet whose center bears N. 78° 37' 21" W., through a central angle of 15° 28' 11"; thence tangentially
- (3) N. 04° 05' 32" W., 147.19 feet; thence
- (4) Northerly, 164.86 feet along the arc of a tangent curve to the left having a radius of 880.00 feet, through a central angle of 10° 44' 01"; thence tangentially
- (5) N. 14° 49' 33" W., 300.42 feet; thence
- (6) Northerly, 115.84 feet along the arc of a tangent curve to the left having a radius of 980.00 feet, through a central angle of 06° 46' 21"; thence tangentially
- (7) N. 21° 35' 54" W., 206.25 feet; thence
- (8) Northerly, 77.40 feet along the arc of a tangent curve to the left having a radius of 980.00 feet, through a central angle of 04° 31' 30"; thence tangentially
- (9) N. 26° 07' 24" W., 408.35 feet; thence
- (10) Northerly, 244.49 feet along the arc of a tangent curve to the right having a radius of 920.00 feet, through a central angle of 15° 13' 35"; thence tangentially
- (11) N. 10° 53' 49" W., 244.21 feet; thence
- (12) Northerly, 153.80 feet along the arc of a tangent curve to the right having a radius of 620.00 feet, through a central angle of 14° 12' 46"; thence tangentially
- (13) N. 03° 18' 57" E., 123.57 feet; thence
- (14) Northerly, 326.49 feet along the arc of a tangent curve to the right having a radius of 520.00 feet, through a central angle of 35° 58' 25"; thence tangentially

Description of 7.245 Acre Parcel, Page 1

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

- (15) N. 39° 17' 22" E., 70.84 feet; thence
- (16) Northeasterly, 271.50 feet along the arc of a tangent curve to the left having a radius of 680.00 feet, through a central angle of 22° 52' 33"; thence tangentially
- (17) N. 16° 24' 49" E., 164.73 feet; thence
- (18) Northerly, 126.39 feet along the arc of a tangent curve to the left having a radius of 680.00 feet, through a central angle of 10° 38' 59"; thence tangentially
- (19) N. 05° 45' 50" E., 141.53 feet; thence
- (20) Northerly, 152.14 feet along the arc of a tangent curve to the right having a radius of 320.00 feet, through a central angle of 27° 14' 29"; thence tangentially
- (21) N. 33° 00' 19" E., 108.88 feet; thence
- (22) Northeasterly, 86.50 feet along the arc of a tangent curve to the left having a radius of 480.00 feet, through a central angle of 10° 19' 31"; thence tangentially
- (23) N. 22° 40' 48" E., 105.98 feet; thence
- (24) Northerly, 86.39 feet along the arc of a tangent curve to the left having a radius of 280.00 feet, through a central angle of 17° 40' 43"; thence tangentially
- (25) Northerly, 49.98 feet along the arc of a reverse curve to the right having a radius of 220.00 feet, through a central angle of 13° 01' 04"; thence tangentially
- (26) Northerly, 108.24 feet along the arc of a reverse curve to the left having a radius of 230.00 feet, through a central angle of 26° 57' 51"; thence tangentially
- (27) Northerly, 72.67 feet along the arc of a reverse curve to the right having a radius of 1520.00 feet, through a central angle of 02° 44' 22"; thence tangentially
- (28) N. 06° 12' 20" W., 218.35 feet; thence
- (29) Northerly, 157.39 feet along the arc of a tangent curve to the left having a radius of 1980.00 feet, through a central angle of 04° 33' 16"; thence tangentially
- (30) Northerly, 265.52 feet along the arc of a reverse curve to the right having a radius of 720.00 feet, through a central angle of 21° 07' 47"; thence tangentially
- (31) N. 10° 22' 11" E., 222.60 feet; thence
- (32) Northerly, 31.21 feet along the arc of a tangent curve to the right having a radius of 520.00 feet, through a central angle of 03° 26' 21"; thence tangentially

Description of 7.245 Acre Parcel, Page 2

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

- (33) N. 13° 48' 32" E., 253.08 feet; thence
- (34) Northerly, 103.33 feet along the arc of a tangent curve to the left having a radius of 280.00 feet, through a central angle of 21° 08' 40"; thence tangentially
- (35) Northerly, 123.40 feet along the arc of a reverse curve to the right having a radius of 1020.00 feet, through a central angle of 06° 55' 53"; thence tangentially
- (36) N. 00° 24' 15" W., 69.59 feet; thence
- (37) Northerly, 145.77 feet along the arc of a tangent curve to the right having a radius of 470.00 feet, through a central angle of 17° 46' 12"; thence tangentially
- (38) N. 17° 21' 57" E., 153.25 feet; thence
- (39) Northerly, 298.62 feet along the arc of a tangent curve to the left having a radius of 780.00 feet, through a central angle of 21° 56' 07"; thence tangentially
- (40) N. 04° 34' 10" W., 196.72 feet; thence
- (41) Northerly, 103.43 feet along the arc of a tangent curve to the right having a radius of 170.00 feet, through a central angle of 34° 51' 32"; thence tangentially
- (42) N. 30° 17' 22" E., 185.03 feet; thence
- (43) Northerly, 88.63 feet along the arc of a tangent curve to the left having a radius of 380.00 feet, through a central angle of 13° 21' 50"; thence tangentially
- (44) N. 16° 55' 32" E., 141.24 feet; thence
- (45) Northeasterly, 232.82 feet along the arc of a tangent curve to the right having a radius of 550.00 feet, through a central angle of 24° 15' 12"; thence tangentially
- (46) N. 41° 10' 44" E., 331.84 feet; thence
- (47) Northeasterly, 247.31 feet along the arc of a tangent curve to the left having a radius of 855.00 feet, through a central angle of 16° 34' 22"; thence tangentially
- (48) N. 24° 36' 22" E., 215.90 feet; thence
- (49) S. 65° 23' 38" E., 40.00 feet; thence along a line drawn parallel with and 40.00 feet southeasterly of the following forty-six courses
- (50) S. 24° 36' 22" W., 215.90 feet; thence
- (51) Southwesterly, 258.88 feet along the arc of a tangent curve to the right having a radius of 895.00 feet, through a central angle of 16° 34' 22"; thence tangentially

Description of 7.245 Acre Parcel, Page 3

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

- (52) S. 41° 10' 44" W., 331.84 feet; thence
- (53) Southwesterly, 215.88 feet along the arc of a tangent curve to the left having a radius of 510.00 feet, through a central angle of 24° 15' 12"; thence tangentially
- (54) S. 16° 55' 32" W., 141.24 feet; thence
- (55) Southerly, 97.96 feet along the arc of a tangent curve to the right having a radius of 420.00 feet, through a central angle of 13° 21' 50"; thence tangentially
- (56) S. 30° 17' 22" W., 185.03 feet; thence
- (57) Southerly, 79.09 feet along the arc of a tangent curve to the left having a radius of 130.00 feet, through a central angle of 34° 51' 32"; thence tangentially
- (58) S. 04° 34' 10" E., 196.72 feet; thence
- (59) Southerly, 313.93 feet along the arc of a tangent curve to the right having a radius of 820.00 feet, through a central angle of 21° 56' 07"; thence tangentially
- (60) S. 17° 21' 57" W., 153.25 feet; thence
- (61) Southerly, 133.36 feet along the arc of a tangent curve to the left having a radius of 430.00 feet, through a central angle of 17° 46' 12"; thence tangentially
- (62) S. 00° 24' 15" E., 69.59 feet; thence
- (63) Southerly, 118.56 feet along the arc of a tangent curve to the left having a radius of 980.00 feet, through a central angle of 06° 55' 53"; thence tangentially
- (64) Southerly, 118.09 feet along the arc of a reverse curve to the right having a radius of 320.00 feet, through a central angle of 21° 08' 40"; thence tangentially
- (65) S. 13° 48' 32" W., 253.08 feet; thence
- (66) Southerly, 28.81 feet along the arc of a tangent curve to the left having a radius of 480.00 feet, through a central angle of 03° 26' 21"; thence tangentially
- (67) S. 10° 22' 11" W., 222.60 feet; thence
- (68) Southerly, 250.77 feet along the arc of a tangent curve to the left having a radius of 680.00 feet, through a central angle of 21° 07' 47"; thence tangentially
- (69) Southerly, 160.57 feet along the arc of a reverse curve to the right having a radius of 2020.00 feet, through a central angle of 04° 33' 16"; thence tangentially
- (70) S. 06° 12' 20" E., 218.35 feet; thence

Description of 7.245 Acre Parcel, Page 4

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

- (71) Southerly, 70.76 feet along the arc of a tangent curve to the left having a radius of 1480.00 feet, through a central angle of 02° 44' 22"; thence tangentially
- (72) Southerly, 127.07 feet along the arc of a reverse curve to the left having a radius of 270.00 feet, through a central angle of 26° 57' 51"; thence tangentially
- (73) Southerly, 40.90 feet along the arc of a reverse curve to the right having a radius of 320.00 feet, through a central angle of 17° 40' 43"; thence tangentially
- (74) Southerly, 98.74 feet along the arc of a reverse curve to the right having a radius of 320.00 feet, through a central angle of 17° 40' 43"; thence tangentially
- (75) S. 22° 40' 48" W., 105.98 feet; thence
- (76) Southwesterly, 93.71 feet along the arc of a tangent curve to the right having a radius of 520.00 feet, through a central angle of 10° 19' 31"; thence tangentially
- (77) S. 33° 00' 19" W., 108.88 feet; thence
- (78) Southerly, 133.13 feet along the arc of a tangent curve to the left having a radius of 280.00 feet, through a central angle of 27° 14' 29"; thence tangentially
- (79) S. 05° 45' 50" W., 141.53 feet; thence
- (80) Southerly, 133.83 feet along the arc of a tangent curve to the right having a radius of 720.00 feet, through a central angle of 10° 38' 59"; thence tangentially
- (81) S. 16° 24' 49" W., 164.73 feet; thence
- (82) Southwesterly, 287.47 feet along the arc of a tangent curve to the right having a radius of 720.00 feet, through a central angle of 22° 52' 33"; thence tangentially
- (83) S. 39° 17' 22" W., 70.84 feet; thence
- (84) Southerly, 301.37 feet along the arc of a tangent curve to the left having a radius of 480.00 feet, through a central angle of 35° 58' 25"; thence tangentially
- (85) S. 03° 18' 57" W., 123.57 feet; thence
- (86) Southerly, 143.87 feet along the arc of a tangent curve to the left having a radius of 580.00 feet, through a central angle of 14° 12' 46"; thence tangentially
- (87) S. 10° 53' 49" E., 244.21 feet; thence
- (88) Southerly, 233.86 feet along the arc of a tangent curve to the left having a radius of 880.00 feet, through a central angle of 15° 13' 35"; thence tangentially

Description of 7.245 Acre Parcel, Page 5

**COE PARCEL L20.8
DESCRIPTION OF 7.25 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

- (89) S. 26° 07' 24" E., 408.35 feet; thence
- (90) Southerly, 80.56 feet along the arc of a tangent curve to the right having a radius of 1020.00 feet, through a central angle of 04° 31' 30"; thence tangentially
- (91) S. 21° 35' 54" E., 206.25 feet; thence
- (92) Southerly, 120.57 feet along the arc of a tangent curve to the right having a radius of 1020.00 feet, through a central angle of 06° 46' 21"; thence tangentially
- (93) S. 14° 49' 33" E., 300.42 feet; thence
- (94) Southerly, 172.35 feet along the arc of a tangent curve to the right having a radius of 920.00 feet, through a central angle of 10° 44' 01"; thence tangentially
- (95) S. 04° 05' 32" E., 147.19 feet; thence
- (96) Southerly, 32.40 feet along the arc of a tangent curve to the right having a radius of 120.00 feet, through a central angle of 15° 28' 11"; thence tangentially
- (97) S. 11° 22' 39" W., 57.53 feet to the TRUE POINT OF BEGINNING

H. Patrick Ward
H. Patrick Ward
Registered Civil Engineer #29811
State of California
Expires: 31 March 2009

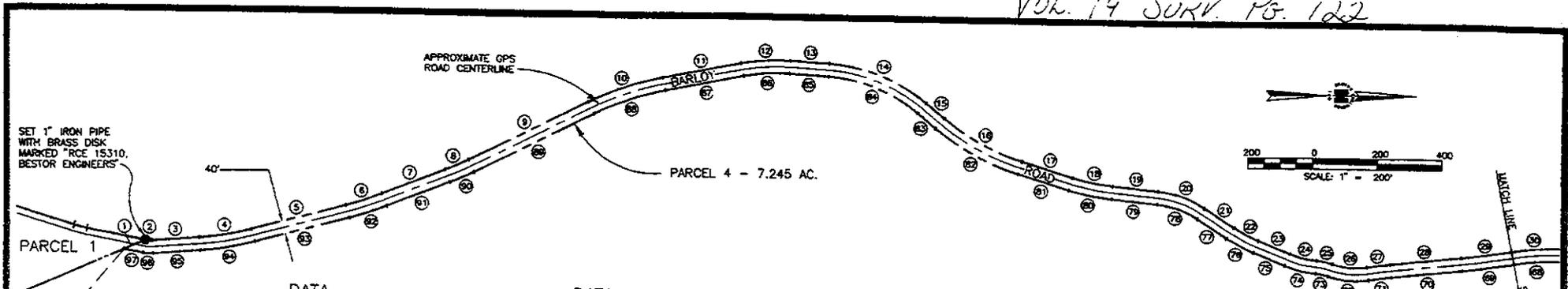


Description of 7.245 Acre Parcel, Page 6

6 April 07
W.O. 5443.06
HPW/jf.L:/5443/544306/Docs/070406 Description of Monterey City Lands.doc

**COE PARCEL L20.8
DESCRIPTION OF 7.245 ACRE PARCEL
BEING A PORTION OF PARCEL 1 (VOLUME 19 SURVEYS PAGE 1)
IN MONTEREY CITY LANDS TRACT NO. 1
MONTEREY COUNTY, CALIFORNIA**

Vol. 19 SURV. PG. 122



DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
1	N 23°29'50"W		70.07
2	15°28'11"	80.00	21.80
3	N 04°05'32"W		147.19
4	10°44'01"	880.00	164.86
5	N 1°49'33"W		300.42
6	6°48'21"	960.00	115.84
7	N 21°35'54"W		206.25
8	4°31'30"	980.00	77.40
9	N 28°07'24"W		408.35
10	15°13'35"	920.00	244.49
11	N 10°53'49"W		244.21
12	14°12'46"	820.00	153.80
13	N 03°18'57"E		123.57
14	35°58'25"	520.00	328.49
15	N 39°17'22"E		70.84

DATA

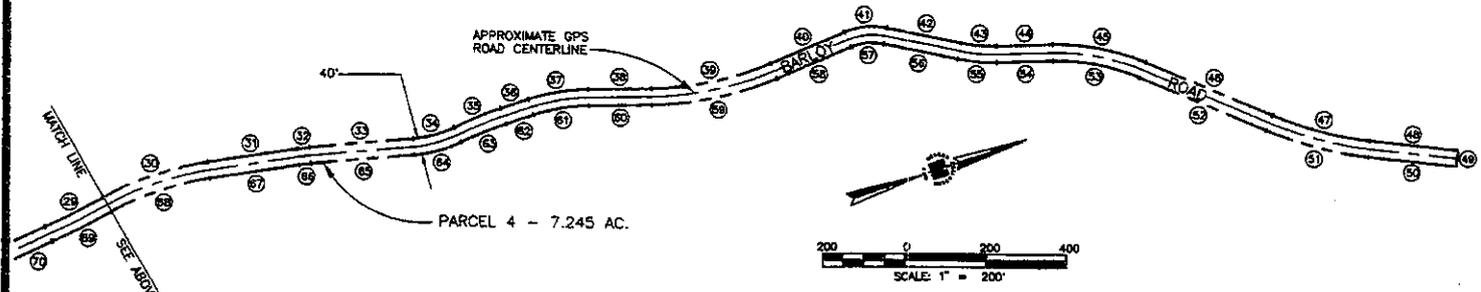
○	DELTA/BEARING	RADIUS	LEN./DIST.
16	22°52'33"	660.00	271.50
17	N 16°24'48"E		164.73
18	10°38'59"	680.00	128.39
19	N 05°45'50"E		141.53
20	27°14'29"	320.00	152.14
21	N 33°00'19"E		108.88
22	10°19'31"	480.00	88.50
23	N 22°40'46"E		105.98
24	17°40'45"	280.00	86.39
25	13°01'04"	220.00	49.98
26	28°57'51"	230.00	106.24
27	2°44'22"		72.67
28	N 06°12'20"W		218.35
29	4°33'16"	1980.00	157.36
30	21°07'47"	720.00	265.52

DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
31	21°07'47"	680.00	250.77
32	4°33'16"	2020.00	180.57
33	S 06°12'20"E		218.35
34	2°44'22"	1480.00	70.76
35	26°57'51"	270.00	127.07
36	13°01'04"	180.00	40.90
37	17°40'43"	320.00	98.74
38	S 22°40'48"W		105.98
39	10°19'31"	520.00	93.71
40	S 33°00'19"W		108.88
41	27°14'29"	280.00	133.13
42	S 05°45'50"W		141.53
43	10°38'59"	720.00	133.83
44	S 18°24'49"W		164.73
45	22°52'33"	720.00	267.47

DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
46	S 39°17'22"W		70.84
47	S 35°58'25"	480.00	301.37
48	S 03°18'57"W		123.57
49	14°12'46"	580.00	143.87
50	S 10°53'49"E		244.21
51	15°13'35"	880.00	233.86
52	S 28°07'24"E		408.35
53	4°31'30"	1020.00	80.56
54	S 21°35'54"E		206.25
55	6°48'21"	1020.00	120.57
56	S 1°49'33"E		300.42
57	10°44'01"	920.00	172.35
58	S 04°05'32"E		147.19
59	15°28'11"	120.00	32.40
60	S 11°22'39"W		57.53



DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
28	4°33'16"	1980.00	157.36
29	21°07'47"	720.00	265.52
30	N 10°22'11"E		222.80
31	3°26'21"	520.00	31.21
32	N 13°48'32"E		253.06
33	21°08'40"	280.00	103.33
34	6°55'53"	1020.00	123.40
35	N 00°24'15"W		69.59
36	17°48'12"	470.00	145.77
37	N 17°21'57"E		153.25
38	21°56'07"	780.00	298.62
39	N 04°34'10"W		196.72
40	34°51'32"	170.00	103.43
41	N 30°17'22"E		185.03

DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
42	S 41°10'44"E		331.84
43	S 41°10'44"E		331.84
44	N 16°55'32"E		141.24
45	24°15'12"	550.00	232.82
46	N 41°10'44"E		331.84
47	16°34'22"	655.00	247.31
48	N 24°36'22"E		215.90
49	S 85°23'38"E		40.00
50	S 24°36'22"W		215.90
51	16°34'22"	895.00	258.68
52	S 41°10'44"E		331.84
53	S 24°15'12"	510.00	215.88
54	S 16°55'32"E		141.24
55	13°21'30"	420.00	97.96
56	S 30°17'22"W		185.03

DATA

○	DELTA/BEARING	RADIUS	LEN./DIST.
57	34°51'32"	130.00	79.09
58	S 04°34'10"E		196.72
59	21°56'07"	820.00	313.83
60	S 17°21'57"W		153.25
61	17°48'12"	430.00	133.36
62	S 00°24'15"E		69.59
63	6°55'53"	960.00	118.56
64	21°08'40"	320.00	118.03
65	S 13°48'32"W		253.06
66	3°26'21"	480.00	28.61
67	S 10°22'11"W		222.80
68	21°07'47"	680.00	250.77
69	4°33'16"	2020.00	180.57
70	S 06°12'20"E		218.35

RECORD OF SURVEY

SHOWING
196.093, 247.193, 17.553 & 7.245 ACRE PARCELS OF LAND
BEING A PORTION OF THE FORT ORD MILITARY RESERVATION
INCLUDING PORTIONS OF
MONTEREY CITY LANDS TRACT NO. 1 AND
THE RANCHO EL CHAMISAL AND
TOWNSHIP 15 SOUTH, RANGE 2 EAST M.D.B. AND M.
MONTEREY COUNTY, CALIFORNIA
BY



BESTOR ENGINEERS, INC.

CIVIL ENGINEERING - SURVEYING - LAND PLANNING
9701 BLUE LARKSPUR LANE, MONTEREY, CALIFORNIA 93940

SCALE: 1"=200' DATE: MAY 1995 W.O.: 5443.06

PBC Parcel F1.7.2
FOSET 5
Fort Ord Military Reservation
Monterey County, California

SITUATE in a portion of the former Fort Ord Military Reservation as it is shown on that certain map recorded in Volume 19 of Surveys at Page 1, Official Records of Monterey County, being within Monterey City Lands Tract No. 1, County of Monterey, State of California; being more particularly described as follows:

BEGINNING at a point from which Monument No. 1, a granite monument marked "NB4A", on the Perimeter Boundary of the former Fort Ord Military Reservation, as it is shown on that certain map recorded in Vol. 19 of Surveys at Page 1, bears North $81^{\circ} 45' 31''$ West a distance of 17,968.22 feet; thence from said Point of Beginning

1. North $40^{\circ} 13' 06''$ East for a distance of 287.87 feet; thence
2. North $43^{\circ} 01' 43''$ East for a distance of 227.34 feet; thence
3. North $37^{\circ} 15' 12''$ East for a distance of 267.60 feet; thence
4. North $41^{\circ} 10' 12''$ East for a distance of 332.51 feet; thence
5. North $23^{\circ} 20' 24''$ East for a distance of 275.58 feet to the beginning of a tangent curve; thence
6. Along a curve to the right, through a central angle of $64^{\circ} 24' 10''$, having a radius of 419.00 feet, for an arc length of 470.97 feet, and whose long chord bears North $55^{\circ} 32' 29''$ East for a distance of 446.57 feet to a point of intersection with a tangent line; thence
7. North $87^{\circ} 44' 34''$ East for a distance of 14.60 feet; thence
8. North $89^{\circ} 46' 29''$ East for a distance of 180.02 feet to the beginning of a tangent curve; thence
9. Along a curve to the left, through a central angle of $37^{\circ} 50' 30''$, having a radius of 461.00 feet, for an arc length of 304.47 feet, and whose long chord bears North $70^{\circ} 51' 14''$ East for a distance of 298.97 feet to a point of intersection with a tangent line; thence
10. North $51^{\circ} 55' 59''$ East for a distance of 7.01 feet; thence
11. North $50^{\circ} 32' 05''$ East for a distance of 326.64 feet; thence
12. North $54^{\circ} 38' 14''$ East for a distance of 396.86 feet; thence
13. North $50^{\circ} 59' 24''$ East for a distance of 196.40 feet; thence

PBC Parcel F1.7.2
FOSET 5
Fort Ord Military Reservation
Monterey County, California

14. South $51^{\circ} 23' 11''$ East for a distance of 331.15 feet; thence
15. South $06^{\circ} 55' 36''$ East for a distance of 339.39 feet; thence
16. South $40^{\circ} 05' 20''$ West for a distance of 166.04 feet; thence
17. South $15^{\circ} 48' 13''$ East for a distance of 55.07 feet; thence
18. South $07^{\circ} 42' 13''$ East for a distance of 81.71 feet; thence
19. South $26^{\circ} 30' 43''$ West for a distance of 71.55 feet; thence
20. North $29^{\circ} 46' 55''$ West for a distance of 64.55 feet; thence
21. South $46^{\circ} 01' 07''$ West for a distance of 154.19 feet; thence
22. South $72^{\circ} 19' 25''$ West for a distance of 52.51 feet; thence
23. North $79^{\circ} 01' 05''$ West for a distance of 409.46 feet; thence
24. South $83^{\circ} 05' 59''$ West for a distance of 208.51 feet; thence
25. North $43^{\circ} 19' 16''$ West for a distance of 19.17 feet to the beginning of a tangent curve;
thence
26. Along a curve to the left, through a central angle of $104^{\circ} 56' 60''$, having a radius of 100.00 feet, for an arc length of 183.17 feet, and whose long chord bears South $84^{\circ} 12' 14''$ West for a distance of 158.62 feet to a point of intersection with a tangent line; thence
27. South $31^{\circ} 43' 44''$ West for a distance of 224.42 feet; thence
28. South $02^{\circ} 31' 11''$ East for a distance of 385.38 feet; thence
29. South $19^{\circ} 01' 30''$ West for a distance of 248.61 feet; thence
30. South $14^{\circ} 39' 17''$ East for a distance of 229.41 feet; thence
31. South $23^{\circ} 50' 00''$ West for a distance of 37.21 feet; thence
32. South $08^{\circ} 29' 01''$ West for a distance of 230.50 feet; thence
33. South $18^{\circ} 40' 02''$ West for a distance of 156.18 feet; thence

PBC Parcel F1.7.2
FOSET 5
Fort Ord Military Reservation
Monterey County, California

- 34. South 24° 51' 08" West for a distance of 152.10 feet to the beginning of a tangent curve; thence
- 35. Along a curve to the right, through a central angle of 120° 15' 38", having a radius of 153.00 feet, for an arc length of 321.14 feet, and whose long chord bears South 84° 58' 57" West for a distance of 265.35 feet to a point of intersection with a tangent line; thence
- 36. North 34° 53' 14" West for a distance of 22.16 feet; thence
- 37. North 47° 09' 19" West for a distance of 130.89 feet; thence
- 38. North 06° 16' 21" West for a distance of 522.12 feet; thence
- 39. South 66° 30' 03" West for a distance of 544.15 feet; thence
- 40. South 46° 52' 48" West for a distance of 256.14 feet; thence
- 41. North 37° 32' 29" West for a distance of 201.82 feet; thence
- 42. North 52° 34' 51" West a distance of 123.44 feet to the POINT OF BEGINNING.

Containing an area of 51.206 acres, more or less.

This legal description was prepared by



Lynn A. Kovach L.S. 5321
My license expires December 31, 2007



EXHIBIT

of

PBC Parcel F1.7.2

Fort Ord FOSET 5

Lying within the Fort Ord Military Reservation

as shown on Vol. 19 of Surveys at Page 1

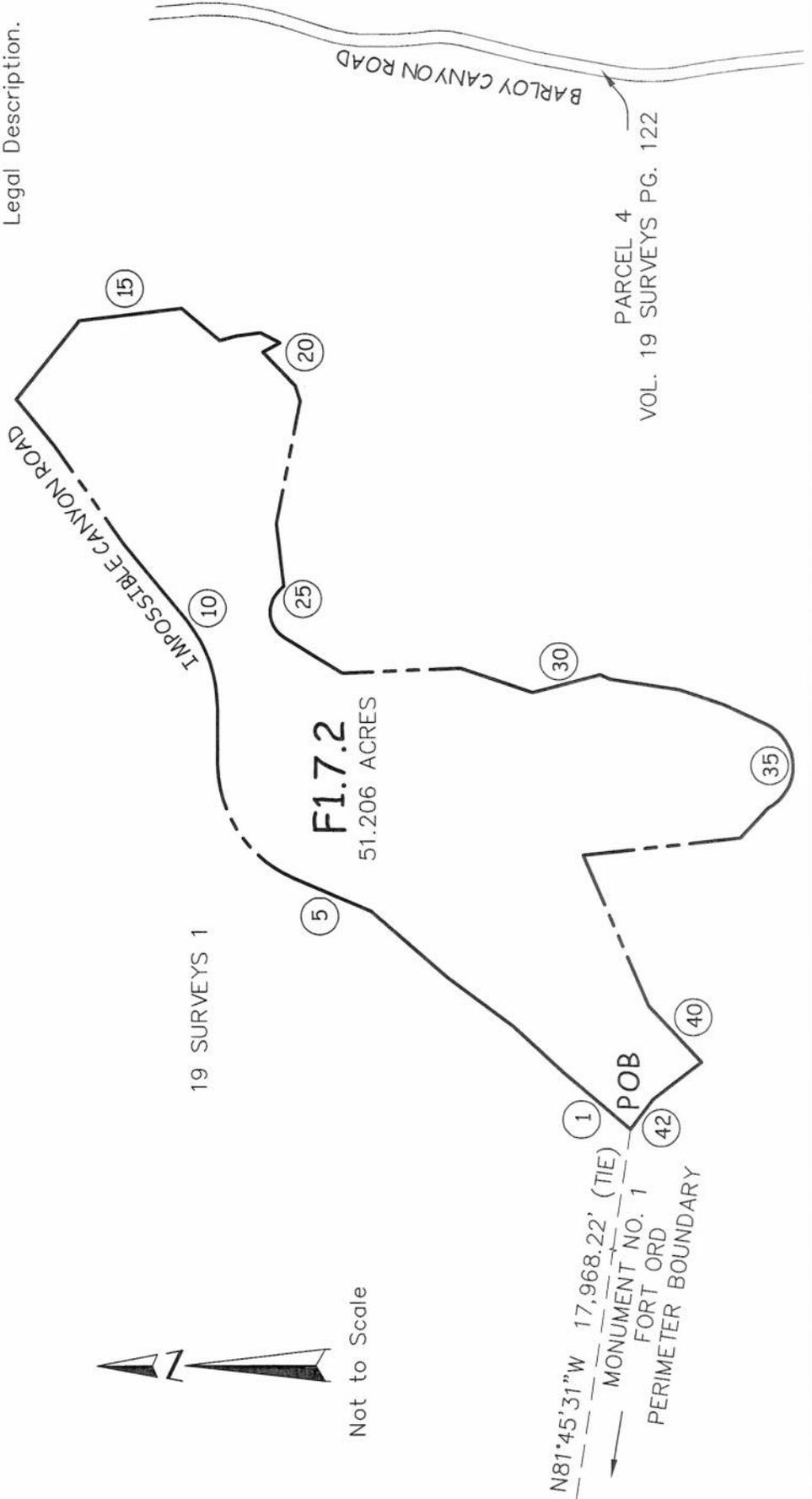
Being also within Monterey City Lands Tract No. 1

Monterey County, California

Note: Course Numbers Refer to the
Legal Description.



Not to Scale



APPENDIX C

Memorandum of Agreement Among The Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College and the Department of Toxic Substance Control Concerning Monitoring and Reporting on Environmental Restrictions on The Former Fort Ord, Monterey California

**MEMORANDUM OF AGREEMENT AMONG THE
FORT ORD REUSE AUTHORITY, MONTEREY COUNTY AND CITIES OF
SEASIDE, MONTEREY, DEL REY OAKS AND MARINA, CALIFORNIA STATE
UNIVERSITY MONTEREY BAY, UNIVERSITY OF CALIFORNIA SANTA CRUZ,
MONTEREY PENINSULA COLLEGE, AND THE
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
CONCERNING MONITORING AND REPORTING ON ENVIRONMENTAL
RESTRICTIONS ON
THE FORMER FORT ORD, MONTEREY COUNTY, CALIFORNIA (HEREINAFTER
REFERRED TO AS "AGREEMENT")**

This Agreement is made and entered into, by and among the State Department of Toxic Substances Control ("Department"), and the Respondents including the Fort Ord Reuse Authority ("FORA"), Monterey County ("County"), the City of Seaside ("Seaside"), the City of Monterey ("Monterey"), the City of Del Rey Oaks ("Del Rey Oaks"), the City of Marina ("Marina"), California State University Monterey Bay ("CSUMB"), University of California Santa Cruz ("UCSC"), and Monterey Peninsula College ("MPC") pursuant to Health and Safety Code section 25355.5 (a)(1)(c). The cities, County, CSUMB, UCSC, and MPC are collectively referred to as "jurisdictions." This agreement:

- Requires the jurisdictions to monitor compliance with all land use covenants ("LUCs"), including those imposed after this Agreement is executed, for all property on the former Fort Ord, except Fort Ord Dunes State Park, which will be transferred to the State of California Department of Parks and Recreation.
- Requires the jurisdictions to report to FORA or the County concerning their compliance with all recorded LUCs within their jurisdiction.
- Requires FORA or the County to compile data in the jurisdiction reports and transmit those data in a report to the Department. FORA or the County will report to the Department from the effective date of this Agreement until FORA ceases to exist. The possibility of extending FORA's existence will be explored in 2013. If the Legislature extends FORA's existence, FORA will remain the reporting agency for this agreement after June 20, 2014 or until FORA ceases to exist. When FORA ceases to exist, the County will become responsible for compiling the jurisdictions' monitoring reports and transmittal of the compiled report to the Department.
- Provides funding for the Department's review and oversight costs relating to this agreement and all covenants referred to above (see Section 1.16 below).

1.0 Background

- 1.1 Fort Ord was selected for closure in 1991 under Public Law 101-510, the Base Realignment and Closure Act of 1990. Soldiers remained on the base until

1993. Some of the former Fort Ord property is owned by the United States Army ("Army"). Some former Fort Ord property has transferred and will transfer to various cities, other entities and the County. A detailed map of the former Fort Ord with affected Parcels identified is provided as Attachment 1. This map will be updated annually by FORA/the County as part of the annual report.

- 1.2 In 1990, Fort Ord was listed on the National Priorities List ("Superfund"). In 1990, the Fort Ord Federal Facility Agreement was signed by the Army, the United States Environmental Protection Agency, the Department and the California Regional Water Quality Control Board, Central Coast Region. The entire Property is undergoing, or has undergone, the federal Comprehensive Environmental Compensation and Liability Act ("CERCLA") remediation process.
- 1.3 LUCs are required under state law for any properties having remnant hazardous materials. Covenants are placed on such properties being transferred from the federal government to a subsequent owner. Portions of Fort Ord were used as practice ranges and/or maneuver areas for military munitions training. The Army and/or private professionals have and will continue to investigate and clean up the munitions and explosives of concern ("MEC"). FORA cannot find all MEC using current technology. FORA cannot safely remove MEC until it is found. FORA's goals for the subject Environmental Services Cooperative Agreement property are to: a) locate and remove as much MEC as possible, and b) minimize MEC-related risk. FORA is committed to achieving those goals to a level established by the Department before it transfers former munitions areas to local jurisdictions for reuse. Remedies for several MEC areas and potential MEC areas have been selected in the following Records of Decision:

- Interim Action For Ordnance and Explosives at Ranges 43-48, Range 30A and MRS-16 (dated September 13, 2002, signed September 26, 1994)
- No Further Action Related to Munitions and Explosives of Concern, Track 1 Sites, No Further Remedial Action with Monitoring for Risks from Chemical Contamination at Site 3 (MRS-22) (dated March 10, 2005, signed April 6, 2005) (Track 1)

The parties to this Agreement anticipate the following Records of Decision for MEC to be signed in 2007:

- Track 2 Munitions Response Parker Flats Munitions Response Area
- Track 3 Impact Area Munitions Response Area

- 1.4 The County adopted Ordinance No. 5012¹, amending the County Code to include Chapter 16.10, titled “*Digging and Excavation on the Former Fort Ord.*” The ordinance prohibits excavation, digging, development or ground disturbance of any type that involves the displacement of ten (10) cubic yards or more of soil without a permit. Chapter 16.10 also indicates that the County will also enter into an Agreement with the Department to provide additional safety measures and reporting (Ordinance 5012 § 1 (part), 2005). This Memorandum of Agreement fulfills that reporting requirement.
- 1.5 The City of Marina adopted Ordinance No. 98-04 amending the Municipal Code to add Chapter 15.56. That Ordinance prohibits excavation, digging, development or ground disturbance of any type on the former Fort Ord that involves the displacement of ten (10) cubic feet or more of soil without a permit. The parties anticipate that the City of Marina will amend Municipal Code to add Chapter 15.56 to prohibit excavation, digging, development or ground disturbance of any type that involves the displacement of ten (10) cubic yards or more of soil without a permit to be consistent with adjacent jurisdictions’ municipal codes.
- 1.6 The City of Del Rey Oaks adopted Ordinance No. 259 amending the Municipal Code to add Chapter 15.48. The ordinance prohibits excavation, digging, development or ground disturbance of any type on the former Fort Ord that involves the displacement of ten (10) cubic yards or more of soil without a permit.
- 1.7 The City of Seaside adopted Ordinance No. 924, amending the Municipal Code to add Chapter 15.34. The ordinance prohibits excavation, digging, development or ground disturbance of any type that involves the displacement of ten (10) cubic yards or more of soil without a permit on the former Fort Ord.
- 1.8 The City of Monterey adopted Ordinance No. 3384, amending the Municipal Code to add Chapter 9 Article 8. The ordinance prohibits excavation, digging, developing or ground disturbing activities of any type that involves the displacement of ten (10) cubic feet or more of soil without a permit on the former Fort Ord.
- 1.9 FORA Resolution 98-1 contains measures that avoid/ minimize impacts from hazardous material (See Attachment 2, FORA Resolution 98-1).
- 1.10 Non-MEC hazardous waste and/or hazardous substances were disposed of in various locations throughout Fort Ord. The Army remediated many of these locations. There are, however, locations where wastes remain, such as Operable Unit 2 (“OU2”) Landfill. Measures must be taken at these locations to assure that they can be safely used. The Department requires LUCs in

¹ As the State of California acting in a higher education capacity, CSUMB, UCSC, and MPC are not bound by local regulations and specifically the ordinances and regulations discussed in Sections 1.4—1.9 and 1.12—1.14.

these cases. Remedies for these sites, which may include institutional controls including LUCs, were selected in the following Records of Decision ("ROD"):

- Interim Action ROD, Contaminated Surface Soil Remediation (dated February 23, 1994, signed March 15, 1994)
- OU2, Fort Ord Landfills (dated July 15, 1994, signed August 23, 1994)
- Remedial Investigation Sites (dated January 13, 1997, signed January 24, 1997)

1.11 Portions of Fort Ord overlie contaminated groundwater. The contaminated groundwater at OU1, OU2 and Sites 2/12 is currently being remediated by the Army via comprehensive pumping and treatment systems. Activities which may affect the groundwater monitoring, pumping and treatment systems must be prevented. To achieve that goal, authorized representatives must be allowed to enter these areas. Well drilling in contaminated areas and consumption of unsafe groundwater must also be prevented. Remedies for these sites, which include institutional controls, were selected in the following Records of Decision:

- Operable Unit 1 ("OU1") Fritzsche Army Airfield, Fire Drill Area (dated July 25, 1995, signed May 8, 1996)
- OU2, Fort Ord Landfills (dated July 15, 1994, signed August 23, 1994)
- Remedial Investigation Sites, including Sites 2/12 Groundwater Remedy (dated January 13, 1997, signed January 24, 1997)

The parties expect the following Groundwater ROD will be signed in 2007:

- Operable Unit Carbon Tetrachloride Plume ("OUCTP")

1.12 The County adopted Ordinance No. 4011. Ordinance 4011, which amends and adds to Chapter 15.08 of Title 15 of the County Code, indicates that *"in areas overlying or adjacent to the contaminant plumes on the former Fort Ord ("Prohibition Zone"), water well construction shall be prohibited and no application for a ministerial well permit shall be accepted for any real properties within the Prohibition Zone area. The Prohibition Zone area is identified on the former Fort Ord, Special Ground Water Protection Zone Map, prepared and maintained by the United States Army and on file in the County of Monterey, Department of Health."*

- 1.13 Chapter 13.12 of the City of Marina Municipal Code regulates the construction of water wells so as to protect the quality of groundwater. Section 13.12.030 of the City Code requires a written permit to construct a water well first be obtained from the County.
- 1.14 Chapter 8.24 of the City of Seaside Municipal Code regulates the construction of water wells so as to protect the quality of groundwater and requires a written permit to construct a water well to be approved by the health officer.
- 1.15 The Army and the Department have or will enter into, Covenants to Restrict Use of Property (hereinafter referred to as "Covenants") prior to transfer of the Property. The purpose of these Covenants is to prohibit certain land uses on Fort Ord. FORA and other entities may also enter into such covenants directly with the Department. After EPA has selected one or more remedies for the Property in a ROD(s), the then-current land owner, the Department and Regional Water Quality Control Board ("RWQCB") may, if appropriate, modify or remove the restrictions in the LUC to be consistent with the land and water use restrictions, if any, selected in the ROD(s). The land use covenants variously include restrictions based on MEC, lead based paint, groundwater contamination and proximity to the landfill.
- 1.16 FORA, the County and the jurisdictions enter into this agreement to monitor and report on compliance with all covenants, past, present and future, signed for all former Fort Ord property except for Fort Ord Dunes State Park. FORA will pay the Department's invoices from the effective date of this agreement until FORA ceases to exist. (See California Code of Regulations (hereinafter referred to as "CCR"), Title 22, Division 4.5, Chapter 39, section 67391.1 and Health and Safety Code section 25355.5 (a)(1)(c)). The County agrees to pay the Department's costs from and after the date FORA ceases to exist (See Section 3.14).
- 1.17 Attachment 3 (Table 3-1) contains a summary of the recorded LUCs as of the date of this agreement. The summary also lists the restrictions in the covenant and the associated monitoring requirements.
- 1.18 FORA will supplement the property descriptions as set forth in the LUCs with specific GPS coordinates. These GPS coordinates will be included in the annual report.
- 1.19 The references to "schools" in this agreement and in Attachment 4 do not include post-secondary schools.

The Parties agree as follows:

2.0 Implementation of This Agreement

- 2.1 The above recitals are incorporated into this Agreement. FORA, the County

and the jurisdictions agree that this Agreement applies to all properties on the former Fort Ord except Fort Ord Dunes State Park. The parties agree to perform the following tasks:

2.1.1 Annual Review of Compliance with LUCs

Annually (starting on July 1 and being completed by June 30 of each year), the jurisdictions shall:

- a. Inspect each property within their jurisdiction for which a covenant has been signed, to assure compliance with all restrictions, and report findings to FORA/County in the report format provided in Attachment 4. CSUMB, UCSC, and MPC will report findings directly to FORA/County. The City of Marina, the City of Seaside, the City of Del Rey Oaks, the City of Monterey, and Monterey County will not report on CSUMB, UCSC, and MPC's properties, explicitly defined in Attachment 3 "Table 3-1 Summary of Land Use Covenants." If property owners other than CSUMB, UCSC, and MPC have multiple parcels within multiple jurisdictions, each jurisdiction will be responsible to report on only those properties within their jurisdiction. The number of annual reports to be provided by the local jurisdictions will be based on the initial land conveyance parcels as described in Table 3-1, and the total number of reports will not increase over time as land is subsequently sold and subdivided (i.e. the Department does not expect one report for each subsequent Assessor's Parcel Number).
- b. Check with the applicable building departments or campus planning and development departments to ensure no structures were approved or built in violation of any covenant and report findings to FORA/County.
- c. Check with the applicable planning departments or campus planning and development departments to assure no uses were approved in violation of any covenant.
- d. All jurisdictions shall review the jurisdiction well permit applications or the institution records, in the case of CSUMB, UCSC, and MPC, to ensure no wells have been approved, dug or installed in violation of the ordinance or the covenants.

2.1.2 Annual Review of Local Ordinances²

- a. Summarize compliance with the jurisdictions' digging ordinances, including the number of permits issued.

² Section 2.1.2 does not apply to CSUMB, UCSC, and MPC.

- b. Document any changes to the jurisdictions' excavation/grading ordinances.
- c. Document any changes to the jurisdiction well permit ordinances.
- d. FORA and the County, in conjunction with the Department and in consultation with RWQCB, will annually, prior to June 30th, update and distribute copies to the other parties to this agreement:
 1. The map illustrating parcels with LUCs (Attachment 1)
 2. Table 3-1 summarizing LUCs for the Fort Ord property (Attachment 3)
 3. Changes to County Digging and Excavation on the former Fort Ord Ordinance No. 5012
 4. Changes to the County Groundwater Ordinance No. 4011

2.2 MEC Incident Reporting (*pending Department discussions with Army*)

For parcels that have been transferred and are not being regulated under the former Fort Ord Munitions Response Site (hereinafter referred to as "MRS") Site Security Plan, the Department requests FORA and the County to provide data regarding MEC found at the parcels. The Department requests to track MEC found at parcels where cleanup has been completed, although some MEC may remain in place at depth.

On an annual basis, the jurisdictions agree to report 911 call data for MEC found, including but not limited to:

- a) date and time of the call,
- b) contact name,
- c) location of MEC finding,
- d) type of munitions, if available and
- e) response of jurisdiction law enforcement agency.

2.3 Annual Report

No later than September 1 of each year, FORA agrees to submit a report to the Department describing compliance with each of the prohibited activities and uses listed in the covenants. The County agrees to submit this report when FORA ceases to exist. The letter report will summarize the annual reviews conducted under 2.1 and 2.2 above. A Draft Annual Report outline is provided in Attachment 4. This report outline provides the minimum requirements for the annual report. Other information gathered during inspections or records searches should be attached (i.e., inspection notes and photos of violations, excavation permits, applicable County well records, and other relevant data). Each jurisdiction will certify the accuracy and

validity of its annual land use monitoring report. Except for land in the County's jurisdiction, the Department does not expect FORA or the County to:

- a. verify the accuracy of the local jurisdiction reports prior to submittal to Department;
 - b. perform monitoring or testing relative to these annual reports; or
 - c. accept responsibility for enforcement of the provisions of the LUCs.
- 2.4 The Department's activities will include, but not be limited to, review and comment on annual reports, travel to the Properties, inspection of implementation and compliance with this Agreement and the covenants as outlined in Attachment 5. The Department will notify FORA and the County of the change in scope and cost if it determines that it must undertake additional work to oversee compliance with this MOA and LUCs. FORA and the County agree to pay those additional costs.
- 2.5 FORA and the County have no responsibility for enforcement of this Agreement if a local jurisdiction fails to submit its annual reports to FORA or the County on time or at all. Local jurisdictions have no responsibility for enforcement of this Agreement if FORA or the County fail to compile and submit their annual report to the Department. The Department is responsible for enforcing compliance with this Agreement.

3.0 General Provisions

- 3.1 Any Notice given under this Agreement, including any communication with respect to this Agreement must be in writing. It will be deemed effective: (1) when delivered, if personally delivered to the person being served, or (2) three business days after deposit in the United States mail, postage paid, certified, return receipt requested. Such Notices must be addressed as follows:

To Monterey County: Director of Health
Monterey County Health Department
2170 Natividad Road
Salinas, California 93901

To FORA: Executive Officer
Fort Ord Reuse Authority (FORA)
100 12th Street
Building 2880
Marina, California 93933

To City Of Monterey: City Manager
City of Monterey
City Hall
Monterey, California 93940

To City Of Marina	City Manager City of Marina 211 Hillcrest Avenue Marina, California 93933
To City Of Seaside	City Manager City of Seaside 440 Harcourt Avenue Seaside, California 93955
To City Of Del Rey Oaks	City Manager City of Del Rey Oaks 650 Canyon Del Rey Del Rey Oaks, California 93940
To University of California Santa Cruz	Chancellor University of California Santa Cruz 1156 High Street Santa Cruz, California 95064
To California State University Monterey Bay	<i>VICE</i> President <i>for ADMIN. & FINANCE</i> CSU Monterey Bay 100 Campus Center Seaside, California 93955
To Monterey Peninsula College	Superintendent/President Monterey Peninsula College 980 Fremont Street Monterey, California 93940
To Department:	Anthony Landis, Chief Northern California Operations Office of Military Facilities Department of Toxic Substances Control 8800 Cal Center Drive Sacramento, California 95826

3.2 Obligations of the Department. The Department agrees to review and oversee the measures to be performed by FORA, jurisdictions and the County under this Agreement.

3.3 Coordinator. The FORA Coordinator is the Executive Officer. The Coordinator is responsible for receiving and submitting all notices, comments, approvals, and other communications to and from the Department until FORA

ceases to exist. The County Coordinator is the Monterey County Health Department Director of Health. The County Coordinator will receive and submit all notices, comments, approvals, and other communications from and to the Department after FORA ceases to exist.

- 3.4 Submittals. All submittals, reports and notifications from FORA and the County that are required by this Agreement shall be sent to:

Anthony Landis, Chief
Northern California Operations
Office of Military Facilities
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826

- 3.5 Communications. FORA and the County may not be relieved of their obligation to obtain formal approvals by informal advice, guidance, suggestions or comments given by the Department regarding reports, plans, specifications, schedules or any other writings by FORA, County and jurisdictions.
- 3.6 Department Review and Approval. If the Department determines that any report, plan, schedule or other document submitted to the Department for approval under this Agreement fails to comply with this Agreement or fails to protect public health or safety or the environment, the Department may return comments to FORA, the County and or jurisdictions with recommended changes and a date by which a revised document must be submitted to the Department incorporating the recommended changes.
- 3.7 Compliance with Applicable Laws. FORA, the County and jurisdictions shall carry out this Agreement in compliance with all applicable local, state, and federal requirements, including, but not limited to, requirements to obtain permits and to assure worker safety. CSUMB, UCSC, and MPC are not bound by local regulations when they act in their higher education capacity.
- 3.8 Liabilities. This Agreement does not satisfy or release FORA, the County or jurisdictions from liability for any conditions or claims arising as a result of their current or future operations. This Agreement does not limit or preclude the Department from taking any lawful act to protect public health or safety or the environment and recovering the cost thereof. Notwithstanding compliance with this Agreement, the Department may require FORA, the County and jurisdictions to take further actions necessary to protect public health and the environment.
- 3.9 Record Retention. All data, reports and other documents including email, and electronic deliverables required by this Agreement shall be transferred to the County within 90 days after the FORA agreement period ends (i.e., six years

and three months unless FORA's existence is extended). The County shall preserve the records for a minimum of ten (10) years after the conclusion of all activities under this Agreement. If the Department requests that some or all of these documents be preserved for a longer period of time, FORA and the County shall either comply with that request or deliver the documents to the Department, or permit the Department to copy the documents prior to destruction. FORA and the County shall notify the Department in writing at least six (6) months prior to destroying any documents prepared pursuant to this Agreement.

- 3.10 State Liabilities. The State of California is not liable for personal injuries or property damage resulting from acts or omissions by FORA, the County and/or the jurisdictions, in carrying out activities pursuant to this Agreement, nor shall the State of California be held as a party to any contract entered into by FORA, the County, the jurisdictions or its agents in carrying out this Agreement.
- 3.11 Severability. The requirements of this Agreement are severable, and FORA, the County and the jurisdictions and/or shall comply with each and every provision hereof notwithstanding the effectiveness of any other provision.
- 3.12 Modification and Termination. FORA, the County and/or the jurisdictions may, upon written request, seek modification or termination of this Agreement at any time. In addition to modification as provided elsewhere in this Agreement, this Agreement may only be modified or terminated by mutual written agreement of the parties at any time.
- 3.13 Parties Bound. This Agreement applies to and is binding upon FORA, the County and jurisdictions and its officers, directors, agents, employees, successors and assignees, including but not limited to individuals, partners, and subsidiary and parent corporations, and upon any successor agency of the State of California that may have responsibility for and jurisdiction over the subject matter of this Agreement. FORA, the County and the jurisdictions shall provide a copy of this Agreement to any successor or assignee.
- 3.14 Cost Recovery. FORA and the County as FORA's successor are liable for all of the Department's costs incurred in reviewing and overseeing compliance with this MOA and all past, present and/or future LUCs. FORA will pay the Department's and its own costs for their activities under this MOA. FORA will recover these costs from each local jurisdiction through payment of the local agencies' FORA "dues." FORA "dues" are funds that FORA collects annually from agencies represented on the board in accordance with SB 899, Title 7.85 Section 67690. FORA will pay for costs incurred by the department and FORA for fiscal years 2008 and 2009 and will not seek cost recovery from the local jurisdictions for this initial two-year period. When FORA ceases to exist and the County assumes FORA's responsibilities under this Agreement, the other parties to this agreement shall pay the Department and the County costs

as determined in this Section to the County. If any party defaults on such payment, the Department shall pursue collection of the Department's costs directly from that party. FORA's and the County's cost recovery will be based on the Department's accounting of its actual costs, broken down by jurisdiction, and will include an additional 15% cost for FORA's or the County's administrative activities. The cost estimate for Department services is provided in Attachment 5. The estimate is based on the attached 2007 Department Contract Estimation Rates for the time period between July 1, 2006 and June 30, 2007 (see Attachment 5A). Actual charges will be based on each employee's salary and benefits, actual per diem, mileage rates and expenses. The Department will send quarterly "time and materials" invoices. Title 22 California Code of Regulations section 67391.1(h) provides: "The Department shall require responsible parties, facility owners or operators, or project proponents involved in land use covenants to pay all costs associated with the administration of such controls." Cost recovery may also be pursued by the Department under CERCLA, Health and Safety Code Section 25360, or any other applicable state or federal statute or common law.

On an annual basis, the Department will compare this cost estimate with actual charges. If the invoice variance is greater than 20% from the original cost estimate for any jurisdiction, the Department will notify FORA and prepare an addendum to this cost estimate. Agreements to distribute financial liability between the jurisdictions, the County or FORA are beyond the scope of this agreement.

Invoices shall be transmitted to:

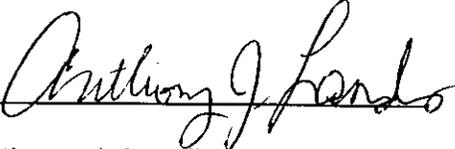
Mr. Michael Houlemard, Jr.
Executive Officer
Fort Ord Reuse Authority (FORA)
100 12th Street
Building 2880
Marina, California 93933

County of Monterey
Director of Health
Monterey County Health Department
2170 Natividad Road
Salinas, California 93901

- 3.15 Effective Date. The effective date of this Agreement is the date of signature by the Department's authorized representative.
- 3.16 Representative Authority. Each undersigned representative of the parties to this Agreement certifies that she or he is authorized to enter into the terms and conditions of this Agreement and to execute and legally bind the parties to this Agreement.

IN WITNESS WHEREOF, the authorized representatives below have executed this Memorandum of Agreement among FORA, the County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, CSUMB, UCSC, MPC and the Department concerning monitoring and reporting on environmental restrictions on the former Fort Ord on the dates set forth below at Sacramento, California.

DEPARTMENT OF TOXIC SUBSTANCES CONTROL



Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities
Department of Toxic Substances Control



Date

IN WITNESS WHEREOF, the authorized representatives below have executed this Memorandum of Agreement among FORA, the County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, CSUMB, UCSC, MPC and the Department concerning monitoring and reporting on environmental restrictions on the former Fort Ord on the dates set forth below at _____, California.

COUNTY OF MONTEREY

Dave Potter
Chair, Board of Supervisors
168 W. Alisal Street
Salinas, California 93901

10-16-07

Date

CITY OF MONTEREY

Felipe
APPROVED BY City Manager
City Hall
Monterey, California 93940
City Attorney's Office

2-25-2009

Date

CITY OF MARINA

[Signature]
City Manager
211 Hillcrest Avenue
Marina, California 93933

11.29.07

Date

CITY OF SEASIDE

[Signature]
City Manager
440 Harcourt Avenue
Seaside, California 93955

2.27-08

Date

CITY OF DEL REY OAKS

[Signature]
City Manager
650 Canyon Del Rey
Del Rey Oaks, California 93940

2/27/08

Date

IN WITNESS WHEREOF, the authorized representatives below have executed this Memorandum of Agreement among FORA, the County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, CSUMB, UCSC, MPC and the Department concerning monitoring and reporting on environmental restrictions on the former Fort Ord on the dates set forth below at _____, California.

University of California Santa Cruz

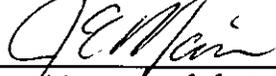


Chancellor
1156 High Street
Santa Cruz, California 95064

1/18/08

Date

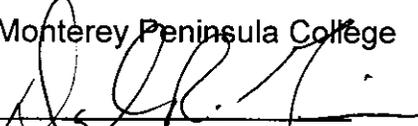
California State University Monterey Bay


VICE President *ADMIN. & FINANCE*
100 Campus Center
Seaside, California 93955

1-25-08

Date

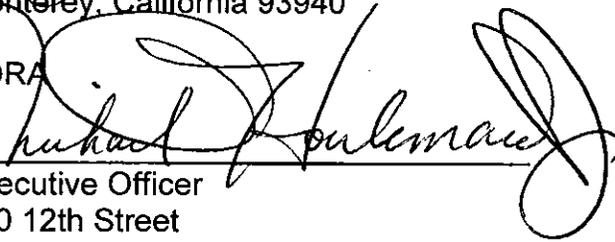
Monterey Peninsula College


Superintendent/President
980 Fremont Street
Monterey, California 93940

12-18-07

Date

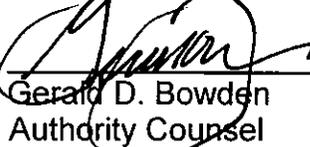
FORA


Executive Officer
100 12th Street
Building 2880
Marina, California 93933

11/28/07

Date

APPROVED AS TO FORM:


Gerald D. Bowden
Authority Counsel

12/8/07

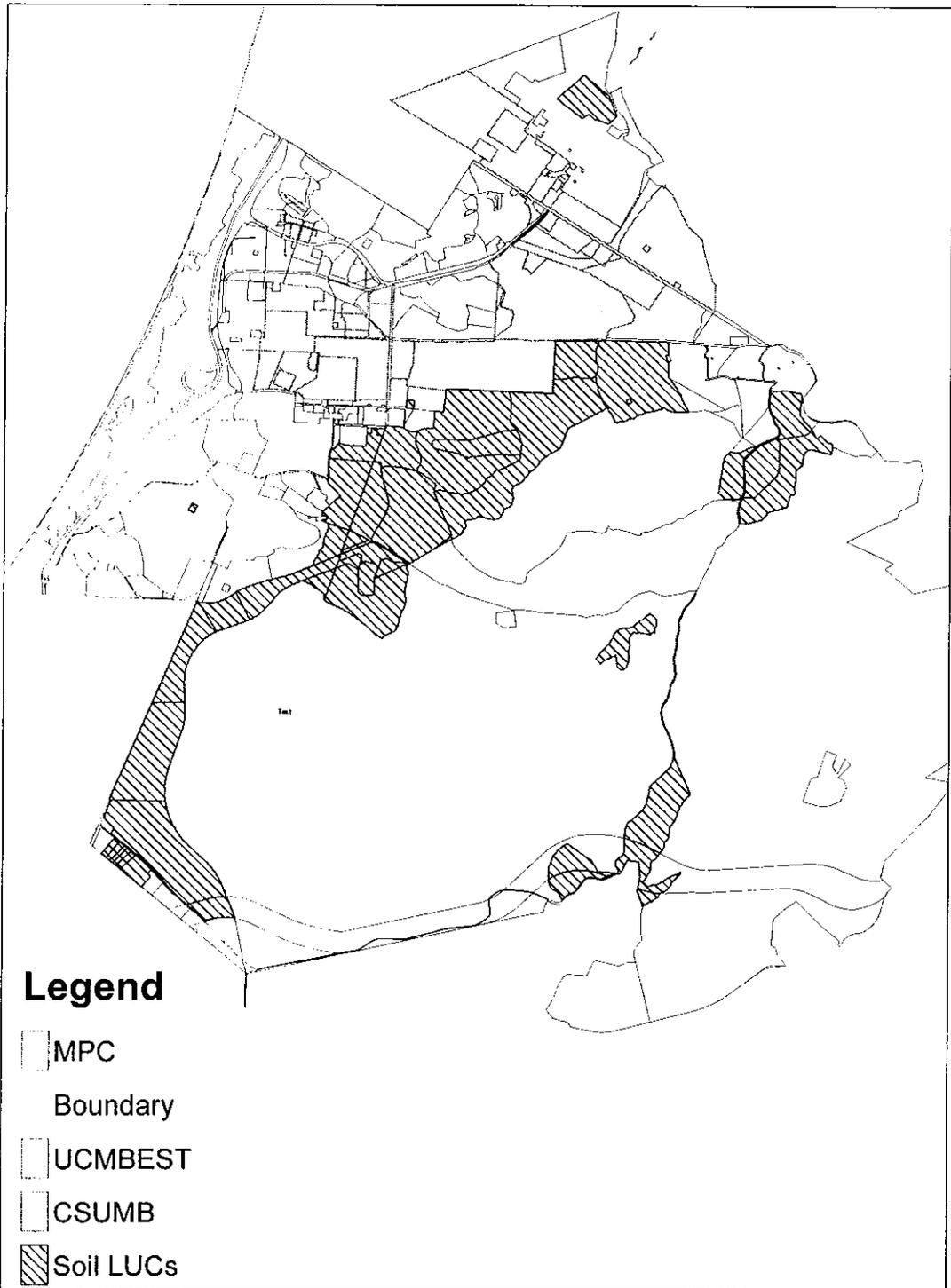
Date

ATTACHMENT "1"

LUC Parcel Maps

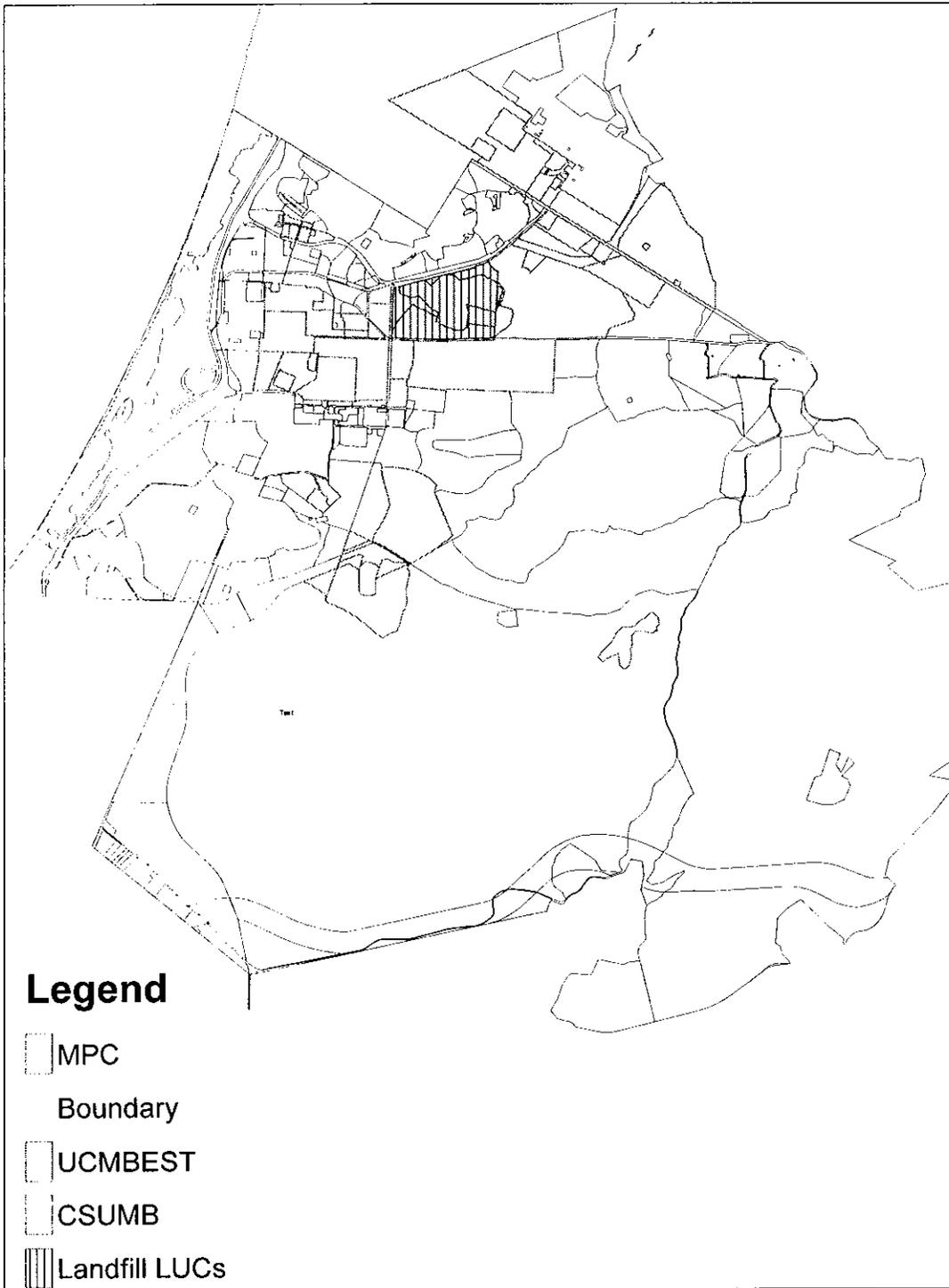
ATTACHMENT 1

Fort Ord LUCs - Soil



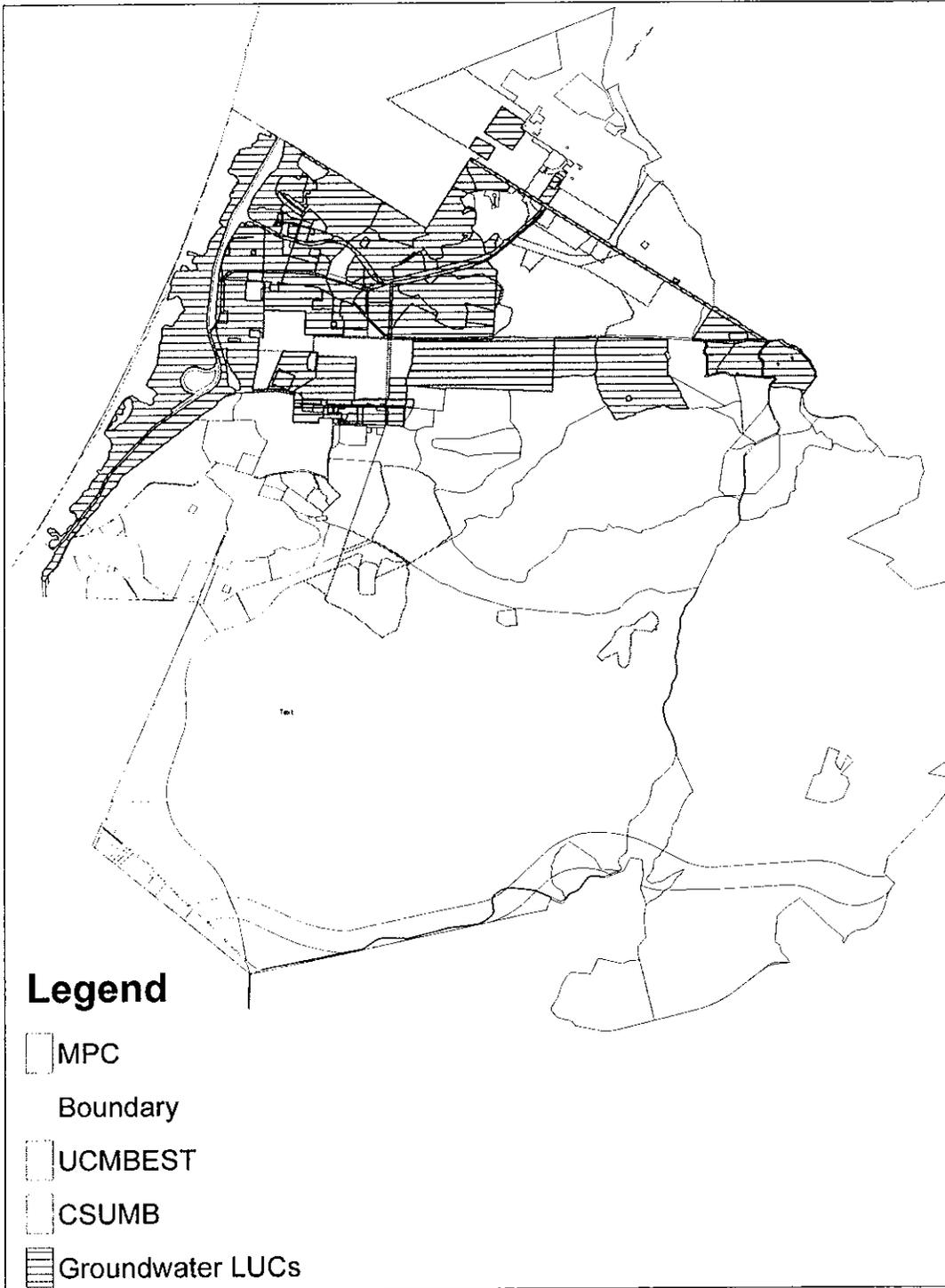
0 1,950 3,900 7,800 11,700 15,600 Feet

Fort Ord LUCs - Landfill



0 1,950,900 7,800 11,700 15,600 Feet

Fort Ord LUCs - Groundwater



0 1,9503,900 7,800 11,700 15,600 Feet

ATTACHMENT "2"

FORA, Resolution 98-1

ATTACHMENT 2

Resolution 98-1

A RESOLUTION OF THE FORT ORD REUSE AUTHORITY, AMENDING SECTION 1.01.050 AND ADDING CHAPTER 8 TO THE FORT ORD REUSE AUTHORITY MASTER RESOLUTION, RELATING TO BASE REUSE PLANNING AND CONSISTENCY DETERMINATIONS

Section 1. Section 1.01.050 of the Fort Ord Reuse Authority Master Resolution is amended by adding the following definitions to such section in alphabetical order:

“Affected territory” means property within the Fort Ord Territory that is the subject of a legislative land use decision or an application for a development entitlement and such additional territory within the Fort Ord Territory that may be subject to an adjustment in density or intensity of allowed development to accommodate development on the property subject to the development entitlement.

“Army urbanized footprint” means the Main Garrison Area and the Historic East Garrison Area as such areas are described in the Reuse Plan.

“Augmented water supply” means any source of potable water in excess of the 6,600 acre feet of potable water from the Salinas Basin as allowed under the Reuse Plan.

“Development entitlements” includes but is not limited to tentative and final subdivision maps, tentative, preliminary, and final parcel maps or minor subdivision maps, conditional use permits, administrative permits, variances, site plan reviews, and building permits. The term “development entitlement” does not include the term “legislative land use permits” as that term is defined in this Master Resolution. In addition, the term “development entitlement” does not include:

- 1) Construction of one single family house, or one multiple family house not exceeding four units, on a vacant lot within an area appropriately designated in the Reuse Plan.
- 2) Improvements to existing single family residences or to existing multiple family residences not exceeding four units, including remodels or room additions.
- 3) Remodels of the interior of any existing building or structure.
- 4) Repair and maintenance activities that do not result in an addition to, or enlargement of, any building or structure.
- 5) Installation, testing, and placement in service or the replacement of any necessary utility connection between an existing service facility and development approved pursuant to the Authority Act.
- 6) Replacement of any building or structure destroyed by a natural disaster with a comparable or like building or structure.
- 7) Final subdivision or parcel maps issued consistent with a development entitlement subject to previous review and approval by the Authority Board.
- 8) Building permit issued consistent with a development entitlement subject to previous review by the Authority Board.

"Fort Ord Territory" means all territory within the jurisdiction of the Authority.

"Habitat Management Plan" means the Fort Ord Installation-Wide Multi-Species Habitat Management Plan, dated April, 1997.

"Land use agency" means a member agency with land use jurisdiction over territory within the jurisdiction of the Authority Board.

"Legislative land use decisions" means general plans, general plan amendments, redevelopment plans, redevelopment plan amendments, zoning ordinances, zone district maps or amendments to zone district maps, and zoning changes.

"Noticed public hearing" means a public hearing noticed in the following manner

1. Notice of the public hearing shall be posted on the public meeting room at the FORA office at least 10 days before the date of the hearing; and
2. Notice of the public hearing shall be mailed or delivered at least 10 days prior to the affected land use agency, to any person who has filed an appeal, and to any person who has requested special notice; and
3. Notice of the public hearing shall be published at least 10 days before the date of the hearing in at least one newspaper of general circulation within the area that the real property that is the subject of the public hearing is located.

"Reuse Plan" means the plan for reuse and development of the territory within the jurisdiction of the Authority, as amended or revised from time to time, and the plans, policies, and programs of the Authority Board, including the Master Resolution.

Section 2. Chapter 8 is added to the Fort Ord Master Resolution to read:

**CHAPTER 8.
BASE REUSE PLANNING AND CONSISTENCY DETERMINATIONS.**

Article 8.01. GENERAL PROVISIONS.

8.01.010. REUSE PLAN

(a) The Authority Board shall prepare, adopt, review, revise from time to time, and maintain a Reuse Plan for the use and development of the territory within the jurisdiction of the Authority. Such plan shall contain the elements mandated pursuant to the Authority Act and such other elements, policies, and programs as the Authority Board may, in its sole discretion, consider and adopt.

Article 8.02. CONSISTENCY DETERMINATION CRITERIA

8.02.010. LEGISLATIVE LAND USE DECISION CONSISTENCY.

(a) In the review, evaluation, and determination of consistency regarding legislative land use decisions, the Authority Board shall disapprove any legislative land use decision for which there is substantial evidence supported by the record, that

- (1) Provides a land use designation that allows more intense land uses than the uses permitted in the Reuse Plan for the affected territory;
- (2) Provides for a development more dense than the density of uses permitted in the Reuse Plan for the affected territory;
- (3) Is not in substantial conformance with applicable programs specified in the Reuse Plan and Section 8.02.020 of this Master Resolution.
- (4) Provides uses which conflict or are incompatible with uses permitted or allowed in the Reuse Plan for the affected property or which conflict or are incompatible with open space, recreational, or habitat management areas within the jurisdiction of the Authority;
- (5) Does not require or otherwise provide for the financing and/or installation, construction, and maintenance of all infrastructure necessary to provide adequate public services to the property covered by the legislative land use decision; and
- (6) Does not require or otherwise provide for implementation of the Fort Ord Habitat Management Plan.

(b) FORA shall not preclude the transfer of intensity of land uses and/or density of development involving properties within the affected territory as long as the land use decision meets the overall intensity and density criteria of Sections 8.02.010(a)(1) and (2) above as long as the cumulative net density or intensity of the Fort Ord Territory is not increased.

(c) The Authority Board, in its discretion, may find a legislative land use decision is in substantial compliance with the Reuse Plan when the Authority Board finds that the applicant land use agency has demonstrated compliance with the provisions specified in this section and Section 8.020.020 of this Master Resolution.

8.02.020. SPECIFIC PROGRAMS AND MITIGATION MEASURES FOR INCLUSION IN LEGISLATIVE LAND USE DECISIONS.

(a) Prior to approving any development entitlements, each land use agency shall act to protect natural resources and open spaces on Fort Ord Territory

by including the open space and conservation policies and programs of the Reuse Plan, applicable to the land use agency, into their respective general, area, and specific plans.

- (1) Each land use agency shall review each application for a development entitlement for compatibility with adjacent open space land uses and require suitable open space buffers to be incorporated into the development plans of any potentially incompatible land uses as a condition of project approval.
- (2) When buffers are required as a condition of approval adjacent to Habitat Management areas, the buffer shall be designed in a manner consistent with those guidelines set out in the Habitat Management Plan. Roads shall not be allowed within the buffer area adjacent to Habitat Management areas except for restricted access maintenance or emergency access roads.

(b) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that will ensure consistency of future use of the property within the coastal zone through the master planning process of the California Department of Parks and Recreation, if applicable. All future use of such property shall comply with the requirements of the Coastal Zone Management Act and the California Coastal Act and the coastal consistency determination process.

(c) Monterey County shall include policies and programs in its applicable general, area, and specific plans that will ensure that future development projects at East Garrison are compatible with the historic context and associated land uses and development entitlements are appropriately conditioned prior to approval.

(d) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that shall limit recreation in environmentally sensitive areas, including, but not limited to, dunes and areas with rare, endangered, or threatened plant or animal communities to passive, low intensity recreation, dependent on the resource and compatible with its long term protection. Such policies and programs shall prohibit passive, low-density recreation if the Board finds that such passive, low-density recreation will compromise the ability to maintain an environmentally sensitive resource.

(e) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that shall encourage land uses that are compatible with the character of the surrounding districts or neighborhoods and discourage new land use activities which are potential nuisances and/or hazards within and in close proximity to residential areas. Reuse of property in the Army urbanized footprint should be encouraged.

(f) Each land use agency with jurisdiction over property in the Army urbanized footprint shall adopt the cultural resources policies and programs of the Reuse Plan concerning historic preservation, and shall provide appropriate incentives for historic preservation and reuse of historic property, as determined by the affected land use agency, in their respective applicable general, area, and specific plans.

(g) The County of Monterey shall amend the Greater Monterey Peninsula Area Plan and designate the Historic East Garrison Area as an historic district in the County Reservation Road Planning Area. The East Garrison shall be planned and zoned for planned development mixed uses consistent with the Reuse Plan. In order to implement this aspect of the plan, the County shall adopt at least one specific plan for the East Garrison area and such specific plan shall be approved before any development entitlement shall be approved for such area.

(h) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that shall support all actions necessary to ensure that sewage treatment facilities operate in compliance with waste discharge requirements adopted by the California Regional Water Quality Control Board.

(i) Each land use agency shall adopt the following policies and programs:

- (1) A solid waste reduction and recycling program applicable to Fort Ord Territory consistent with the provisions of the California Integrated Waste Management Act of 1989, Public Resources Code Section 40000 *et seq.*
- (2) A program that will ensure that each land use agency carries out all action necessary to ensure that the installation of water supply wells comply with State of California Water Well Standards and well standards established by the Monterey County Health Department; and
- (3) A program that will ensure that each land use agency carries out all actions necessary to ensure that distribution and storage of potable and non-potable water comply with State Health Department regulations.

(j) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans to address water supply and water conservation. Such policies and programs shall include the following:

- (1) Identification of, with the assistance of the Monterey County Water Resources Agency and the Monterey Peninsula Water Management District, potential reservoir and water impoundment sites and zoning of such sites for watershed use, thereby precluding urban development;

- (2) Commence working with appropriate agencies to determine the feasibility of development additional water supply sources, such as water importation and desalination, and actively participate in implementing the most viable option or options;
- (3) Adoption and enforcement of a water conservation ordinance which includes requirements for plumbing retrofits and is at least as stringent as Regulation 13 of the Monterey Peninsula Water Management District, to reduce both water demand and effluent generation.
- (4) Active participation in support of the development of "reclaimed" or "recycled" water supply sources by the water purveyor and the Monterey Regional Water Pollution Control Agency to ensure adequate water supplies for the territory within the jurisdiction of the Authority.
- (5) Promotion of the use of on-site water collection, incorporating measures such as cisterns or other appropriate improvements to collect surface water for in-tract irrigation and other non-potable use.
- (6) Adoption of policies and programs consistent with the Authority's Development and Resource Management Plan to establish programs and monitor development of territory within the jurisdiction of the Authority to assure that it does not exceed resource constraints posed by water supply.
- (7) Adoption of appropriate land use regulations that will ensure that development entitlements will not be approved until there is verification of an assured long-term water supply for such development entitlements.
- (8) Participation in the development and implementation of measures that will prevent seawater intrusion into the Salinas Valley and Seaside groundwater basins.
- (9) Implementation of feasible water conservation methods where and when determined appropriate by the land use agency, consistent with the Reuse Plan, including; dual plumbing using non-potable water for appropriate functions; cistern systems for roof-top run-off; mandatory use of reclaimed water for any new golf courses; limitation on the use of potable water for golf courses; and publication of annual water reports disclosing water consumption by types of use.

(k) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that will require new development to demonstrate that all measures will be taken to ensure that storm water

runoff is minimized and infiltration maximized in groundwater recharge areas. Such policies and programs shall include:

- (1) Preparation, adoption, and enforcement of a storm water detention plan that identifies potential storm water detention design and implementation measures to be considered in all new development, in order to increase groundwater recharge and thereby reduce potential for further seawater intrusion and provide for an augmentation of future water supplies.
- (2) Preparation, adoption, and enforcement of a Master Drainage Plan to assess the existing natural and man-made drainage facilities, recommend area-wide improvements based on the approved Reuse Plan, and develop plans for the control of storm water runoff from future development. Such plans for control of storm water runoff shall consider and minimize any potential for groundwater degradation and provide for the long term monitoring and maintenance of all storm water retention ponds.

(l) Each land use agency shall adopt policies and programs that ensure that all proposed land uses on the Fort Ord Territory are consistent with the hazardous and toxic materials clean-up levels as specified by state and federal regulation.

(m) Each land use agency shall adopt and enforce an ordinance acceptable to the California Department of Toxic Substances Control ("DTSC") to control and restrict excavation or any soil movement on those parcels of the Fort Ord Territory, which were contaminated with unexploded ordnance, and explosives. Such ordinance shall prohibit any digging, excavation, development, or ground disturbance of any type to be caused or otherwise allowed to occur without compliance with the ordinance. A land use agency shall not make any substantive change to such ordinance without prior notice to and approval by DTSC.

(n) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that will help ensure an efficient regional transportation network to access the territory under the jurisdiction of the Authority, consistent with the standards of the Transportation Agency of Monterey County. Such policies and programs shall include:

- (1) Establishment and provision of a dedicated funding mechanism to pay for the "fair share" of the impact on the regional transportation system caused or contributed by development on territory within the jurisdiction of the Authority; and
- (2) Support and participate in regional and state planning efforts and funding programs to provide an efficient

regional transportation effort to access Fort Ord Territory.

(o) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that ensure that the design and construction of all major arterials within the territory under the jurisdiction of the Authority will have direct connections to the regional network consistent with the Reuse Plan. Such plans and policies shall include:

- (1) Preparation and adoption of policies and programs consistent with the Authority's Development and Resource Management Plan to establish programs and monitor development to assure that it does not exceed resource constraints posed by transportation facilities;
- (2) Design and construction of an efficient system of arterials in order to connect to the regional transportation system; and
- (3) Designate local truck routes to have direct access to regional and national truck routes and to provide adequate movement of goods into and out of the territory under the jurisdiction of the Authority.

(p) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans to provide regional bus service and facilities to serve key activity centers and key corridors within the territory under the jurisdiction of the Authority in a manner consistent with the Reuse Plan.

(q) Each land use agency shall adopt policies and programs that ensure development and cooperation in a regional law enforcement program that promotes joint efficiencies in operations, identifies additional law enforcement needs, and identifies and seeks to secure the appropriate funding mechanisms to provide the required services.

(r) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that ensure development of a regional fire protection program that promotes joint efficiencies in operations, identifies additional fire protection needs, and identifies and seeks to secure the appropriate funding mechanisms to provide the required services

(s) Each land use agency shall include policies and programs in their respective applicable general, area, and specific plans that will ensure that native plants from on-site stock will be used in all landscaping except for turf areas, where practical and appropriate. In areas of native plant restoration, all cultivars, including, but not limited to, manzanita and ceanothus, shall be obtained from stock originating on Fort Ord Territory.

(t) Each land use agency shall include policies and programs in their general, area, and specific plans that will ensure compliance with the 1997 adopted FORA Reuse Plan jobs/housing balance provisions. The policies and programs for the provision of housing must include flexible targets that generally correspond with expected job creation on the former Fort Ord. It is recognized that, in addressing the Reuse Plan jobs/housing balance, such flexible targets will likely result in the availability of affordable housing in excess of the minimum 20% local jurisdictional inclusionary housing figure, which could result in a range of 21% - 40% below market housing. Each land use agency should describe how their local inclusionary housing policies, where applicable, address the Reuse Plan jobs/housing balance provisions.

(1) Agencies submitting consistency determination requests to FORA should identify and describe, where applicable, any factors that impact production of housing. These factors may include, without limitation, public financing, water resources, land use regulations, and environmental conditions. Each jurisdiction should consider but not be limited to, the following in establishing its Reuse Plan jobs/housing balance policies and programs:

- (a) Earmarking of tax increment housing set aside funds for housing programs, production, and/or preservation linked to jobs;
- (b) Development and/or preservation of ownership or rental housing linked to jobs;
- (c) Incorporation of job creation targets in project specifications;
- (d) Linkage of existing housing resources with jobs created;
- (e) Development of agreements with such jurisdictions for Reuse Plan-enhancing job creation or housing programs, production, and/or preservation; and
- (f) Granting of incentives to increase additional below-market housing productions to meet job creation needs.

(2) As a reference and guide for determining income limits and housing affordability levels, each land use agency should use measures established by the U.S. Department of Housing and Urban Development, the California Department of Housing and Community Development, and/or the Association of Monterey Bay Area Governments when determining compliance for very low, low, median, moderate affordability and comparable affordability factors for below-market housing up to 180% of median as approved as FORA

policy guidelines at the January 9, 2004 FORA Board meeting.

8.02.030. DEVELOPMENT ENTITLEMENT CONSISTENCY.

(a) In the review, evaluation, and determination of consistency regarding any development entitlement presented to the Authority Board pursuant to Section 8.01.030 of this Resolution, the Authority Board shall withhold a finding of consistency for any development entitlement that:

- (1) Provides an intensity of land uses, which is more intense than that provided for in the applicable legislative land use decisions, which the Authority Board has found consistent with the Reuse Plan;
- (2) Is more dense than the density of development permitted in the applicable legislative land use decisions which the Authority Board has found consistent with the Reuse Plan;
- (3) Is not conditioned upon providing, performing, funding, or making an agreement guaranteeing the provision, performance, or funding of all programs applicable to the development entitlement as specified in the Reuse Plan and in Section 8.02.020 of this Master Resolution and consistent with local determinations made pursuant to Section 8.02.040 of this Resolution.
- (4) Provides uses which conflict or are incompatible with uses permitted or allowed in the Reuse Plan for the affected property or which conflict or are incompatible with open space, recreational, or habitat management areas within the jurisdiction of the Authority.
- (5) Does not require or otherwise provide for the financing and installation, construction, and maintenance of all infrastructure necessary to provide adequate public services to the property covered by the applicable legislative land use decision.
- (6) Does not require or otherwise provide for implementation of the Fort Ord Habitat Management Plan.
- (7) Is not consistent with the Highway 1 Scenic Corridor design standards as such standards may be developed and approved by the Authority Board.
- (8) Is not consistent with the jobs/housing balance requirements developed and approved by the Authority Board as provided in Section 8.02.020(t) of this Master Resolution.

8.03.080. CONFLICT DETERMINATIONS.

This article establishes procedural guidelines for the evaluation of the environmental factors concerning activities within the jurisdiction of the Authority and in accordance with State Guidelines. Where conflicts exist between this article and State Guidelines, the State Guidelines shall prevail except where this article is more restrictive.

Section 3. This resolution shall become effective upon adoption.

PASSED AND ADOPTED this 20 day of November, 1998, upon motion of Member MANEINI, seconded by Member RUCKER, and carried by the following vote:

AYES: 10

NOES: 2

ABSENT: 1

I, EDITH JOHNSEN, Chair Of the Board of Directors of the Fort Ord Reuse Authority of the County of Monterey, State of California, hereby certify that the foregoing is a true copy of an original order of the said Board of Directors duly made and entered in the minutes thereof at section 4a., page 2 of Minute Book
Nov. 20 1998 on Dec 2, 1998.

Dated: January 20, 1999

By: Edith Johnson
EDITH JOHNSEN
Chair, Board of Directors
Fort Ord Reuse Authority

ATTACHMENT "3"

*Table 3-1
Summary of Land Use Covenants*

ATTACHMENT 3

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
Del Rey Oaks	12/28/05	Soil 3	E29a		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without soil management plan 3. Notification of MEC 4. Access rights
			E29b.1		
			E31.b		
			E31a		
			E31c		
			E36		
	In Review	Soil 4	L20.13.1.2		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without soil management plan 3. Notification of MEC 4. Access rights
			L20.13.3.1		
L6.2					

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor)

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
Marina	10/12/01	Soil 1	L5.1.1		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Access rights
	05/22/02	Groundwater 1a	E17		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
			E4.1.1		
			E4.2		
			E4.3.1.1		
	09/17/03	Groundwater 1	L2.2.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
			L35.1		
			L35.2		
	09/22/03	Groundwater 2	E2B.1.1.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
			E2B.1.1.2		
			E2B.1.2		
			E2B.1.3		
			E2B.1.4		
			E2B.1.5		
			E2B.2.1		
			E2B.2.2		
			E2B.2.3		
			E2B.2.4		
			E2B.2.5		
			E2B.3.1.1		
			E2B.3.2		
			E2C.1		
			E2C.2		
			E2C.3.1		
			E2C.3.2		
			E2C.3.3		
			E2C.4.1.1		
E2C.4.2.1					
E2D.1					
E2D.2					
E2E.1					
E4.5					
L12.2.2					
L12.2.3					
L12.3					
L20.16.1					
L20.16.2					
L20.16.3					
L20.17.1					
L5.8.1					
L5.8.2					
S4.1.4					
09/28/04	Groundwater 3	S4.1.3		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area.	

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
	03/29/07	Groundwater 6	S4.1.5		3. Notify damages to remedy and monitoring systems. 4. Access rights.
	03/13/06	Groundwater 4	E2a E4.1.2.1 E4.1.2.2 E4.1.2.3 E4.3.1.2 E4.3.2.1 E4.6.1 L5.6.1 L5.6.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
	03/21/06	Groundwater 5	E2d.3.1 E5a.2 L5.10.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
	In Review	Groundwater 8	E4.3.2.2 E4.7.1 E5a.1 L5.10.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
	In Review	Groundwater TBA	E2c.4.1.2 E2c.4.2.2 E2c.4.3 E2c.4.4 E2d.3.2 L5.9.2 L20.17.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
	In Review	Groundwater TBA	L2.2.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor) media

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
City of Monterey	In Review	Soil 5	E29.1		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Notification of MEC 4. Access rights

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor) media

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
Monterey County	05/22/02	Groundwater 1a	L2.4.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
			L2.4.3.2		
	09/17/03	Groundwater 1	L35.3		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
			L35.6		
			L35.7		
			L35.8		
	9/28/04 and TBD	Groundwater 3 and Landfill 1	E8a.1.2		1. No construction of wells. 2. No disturbance or creation of recharge area. 3. No sensitive uses. 4. Notify damages to remedy and monitoring system. 5. Access rights. 6. No structures unless protective for LFG per Title 27
			E8a.1.3		
			E8a.1.4		
			E8a.1.5		
09/28/04	Groundwater 3	E11B.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.	
		E11B.2			
		E11B.3			
		E11B.4			
		E2E.2			
		L20.10.1.1			
		L20.10.1.2			
		L20.10.2			
		L20.14.1.2			
		L20.20			
		L20.21.1			
		L20.21.2			
		L20.22			
		L23.3.1			
L23.3.2.1					
L32.4.2					
S4.1.2.2					
06/26/06	Groundwater 6	E4.6.2		1. No construction of wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.	
6/26/2006 and TBD	Groundwater 6 and Landfill 2	E8a.1.1.2		1. No construction of wells. 2. No disturbance of systems or cap. 3. No sensitive uses. 4. No disturbance or creation of recharge area. 5. Notify damages to remedy and monitoring systems. 6. Access rights 7. No structures unless protective for LFG per Title 27	
10/18/06	Groundwater 7	S3.1.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.	
In Review	Groundwater 9	E4.7.2, L5.7, L20.2.1, L32.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.	
		E4.7.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.	

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
In Review		Soil TBD/GW 9	L5.7		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights. 5. No sensitive uses. 6. No soil disturbance or violation of ordinance without soil management plan 7. Notification of MEC
			L20.2.1		
			L32.1		
			E11.b.6.1		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without soil management plan 3. Notification of MEC 4. Access rights
			E11b.7.1.1		
			E11b.8		
			E18.1.2		
			E19a.1		
			E19a.2		
			E19a.3		
			E19a.4		
			E19a.5		
			E21b.3		
			E39		
			E40		
			E41		
			E42		
			F1.7.2		
			L20.3.1.		
			L20.3.2		
			L20.5.1		
			L20.5.2		
			L20.5.3		
L20.5.4					
L20.8					
L20.18					
L20.19.1.1					
L23.2					
TBD	Landfill 3 and Groundwater 11	E8a.2		1. No construction of wells. 2. No disturbance of systems or cap. 3. No sensitive uses. 4. No disturbance or creation of recharge area. 5. Notify damages to remedy and monitoring systems. 6. Access rights 7. No structures unless protective for LFG per Title 27	
		E8a.1.1.1			
TBD	Soil TBD	L23.3.2.2		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without soil management plan 3. Access rights	

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media
 Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media
 Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor)

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
Seaside	05/22/02	Groundwater 1a	L2.4.3.1		1. No construction of wells. 2. no disturbance or creation of recharge area 3. Notify damages to remedy and monitoring systems. 4. Access rights
			L32.4.1.2		
			L37		
	09/17/03	Groundwater 1	L1.1		1. No construction of wells. 2. no disturbance or creation of recharge area 3. Notify damages to remedy and monitoring systems. 4. Access rights
	09/22/03	Groundwater 2	E15.1		1. No construction of wells. 2. no disturbance or creation of recharge area 3. Notify damages to remedy and monitoring systems. 4. Access rights
			L19.2		
			L19.3		
			L19.4		
	03/22/04	Soil 2	F2.7.2		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Access rights
	09/28/04	Groundwater 3	L15.1		1. No construction of wells. 2. no disturbance or creation of recharge area 3. Notify damages to remedy and monitoring systems. 4. Access rights
			L20.19.2		
			L32.4.1.1		
			L36		
L7.8					
S4.1.2.1					
In Review	Soil 6	E18.1.1		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Notification of MEC 4. Access rights	
		E18.1.3			
		E18.4			
		E20c.2			
		E23.1			
		E23.2			
		E24			
E34					

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor) media

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
MPC (Marina)	09/28/04	Groundwater 3	L23.1.1		1. No construction of wells. 2. No disturbance or creation of recharge area 3. Notify damages to remedy and monitoring systems. 4. Access rights
			L23.1.2		
			L23.1.3		
			L23.1.4		
			L23.1.5		
			L23.4		
MPC (Seaside)			L23.6		
MPC (Monterey County)	In Review	Soil TBD	E19a.5		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Notification of MEC 4. Access rights
			E21b.3		
			E39		
			E40		
			E41		
			E42		
			F1.7.2		
L23.2					
MPC (Seaside)	In Review	Soil 6	E38		1. No sensitive uses. 2. No soil disturbance or violation of ordinance without a mangement plan 3. Notification of MEC 4. Access rights

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor) media

When an above described LUC contains parcels belonging to more than one jurisdiction, shading is used to clarify the jurisdiction.

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
CSUMB (Seaside)	05/22/02	Groundwater 1a	S1.4		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
CSUMB (Marina)			S1.5.1.1		
			S1.5.2		
			S1.5.1.1		
S1.5.2					
CSUMB (Monterey County)	09/17/03	Groundwater 1	L32.2.1		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
CSUMB (Seaside)			S1.3.3		
			L32.2.2		
			L32.3		
			L33.1		
L33.2					
CSUMB (Marina)			S1.5.1.2		
CSUMB (Monterey County)	In Review	Groundwater 9	S1.3.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor)

When an above described LUC contains parcels belonging to more than one jurisdiction, shading is used to clarify the jurisdiction.

**TABLE 3-1
SUMMARY OF LUCS BY JURISDICTION**

Jurisdiction	Date LUC Recorded	DTSC LUC Tracking Number	Parcel	GPS Coordinates	Restrictions
UCSC (Monterey County)	05/22/02	Groundwater 1a	S2.5.2.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
UCSC (Marina)			S2.1.3		
			S2.1.4.1		
			S2.5.1.1		
			S2.5.2.1		
UCSC (Monterey County)	09/17/03	Groundwater 1	F7.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.
UCSC (Marina)			S2.1.4.2		
UCSC (Marina)	TBD FOST 11	Groundwater 10 (UCSC, OU1 GW)	S2.1.2		1. No construction of groundwater wells. 2. No disturbance or creation of recharge area. 3. Notify damages to remedy and monitoring systems. 4. Access rights.

Explanations:

Soil = chemicals (such as metals) and Munitions and Explosives of Concern (MEC) are the primary concern in soil media

Groundwater = chemicals such as Volatile organic compounds (VOCs) are the primary concern in the groundwater media

Landfill = chemicals such as Volatile Organic Compounds (VOCs) are the primary concern in the landfill (soil) and landfill gas (vapor) media

When an above described LUC contains parcels belonging to more than one jurisdiction, shading is used to clarify the jurisdiction.

ATTACHMENT "4"

LUC Review Annual Report Outline

ATTACHMENT 4

Former Fort Ord

Land Use Covenant Report Outline

Annual Status Report for _____ (Jurisdiction) _____ on Land Use Covenants
Covering July 1, 2___ to June 30, 2___.

(See Parcel and LUC lists in Table 3-1)

This form is to be submitted by each Jurisdiction to:

Fort Ord Reuse Authority

by

August 1 of each year

DATE OF REPORT: _____

SUBMIT TO: Fort Ord Reuse Authority
Attn: _____
100 12th Street, Bldg. 2880
Marina, California 93933

GENERAL:

Has jurisdiction staff previously provided a compliance summary in regards to the local digging and excavation ordinances, including the number of permits issued?

yes or no

Has jurisdiction staff provided an annual update of any changes to applicable digging and excavation ordinances?

yes or no

Has jurisdiction staff provided an annual update of any changes to the Monterey County Groundwater Ordinance No. 4011?

yes or no

PARCELS:

Have any of the parcels with covenants in the jurisdiction split since the last annual report?

yes or no

If so, please reflect the split(s) in reporting on compliance with section 2.1.2 of the MOA in Table 3-1.

GROUND WATER COVENANTS:

Is a ground water covenant applicable in your jurisdiction? yes or no
(If no, skip questions 1 through 4)

1. Did jurisdiction staff visually inspect the parcels in your jurisdiction (see Table 3-1) with ground water covenants? Such visual inspection shall include observed groundwater wells, and any other activity that would interfere with or adversely affect the groundwater monitoring and remediation systems on the Property or result in the creation of a groundwater recharge area (e.g., unlined surface impoundments or disposal trenches).

yes or no

2. Did jurisdiction staff check with the applicable local building department (please list department name: _____) to ensure that no wells or recharge basins such as surface water infiltration ponds were built within your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department (please list department name: _____) to ensure that no well permits were granted or recharge basins requested within your jurisdiction?

yes or no

4. Did jurisdiction staff review the County well permit applications pertaining to your jurisdiction to ensure that no wells have been dug or installed in violation of the ordinance or the ground water covenants?

yes or no

If you answered yes to any questions 1 through 4 above, please note and describe violations with USACE parcel numbers and street addresses (Use additional sheets if needed).

LANDFILL BUFFER COVENANTS:

Is a landfill buffer covenant applicable in your jurisdiction? yes or no
(If no, skip questions 1 through 3)

1. Did jurisdiction staff visually inspect the parcels in your jurisdiction (see Table 3-1) with landfill buffer covenants? Such visual inspection shall include observation of any structures and any other activity that would interfere with the landfill monitoring and remediation systems on the Property.

yes or no

2.. Did jurisdiction staff check with the applicable local building department (please list department name: _____) to ensure that no sensitive uses such as residences, hospitals, day care or schools (not including post-secondary schools, as defined in Section 1.19 of the MOA), were built on the restricted parcels within your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department (please list department name: _____) to ensure that no other structures were built without protection for vapors in accordance with the landfill buffer covenants?

yes or no

If you answered yes to any questions 1 through 3 above, please note and describe violations with street addresses. (Use additional sheets if needed).

SOIL COVENANTS:

Is a soil covenant applicable in your jurisdiction?
(If no, skip questions 1 through 4)

yes or no

1. Did jurisdiction staff visually inspect the parcels (see Table 3-1) in your jurisdiction with soil covenants to assure no sensitive uses such as residences, hospitals, day care or schools (not including post-secondary schools, as defined in Section 1.19 of the MOA), were constructed or are occurring on the restricted parcels in your jurisdiction?

yes or no

2. Did jurisdiction staff check with the applicable local building department to ensure that no soil was disturbed without an approved soil management plan in accordance with the excavation and digging Ordinance in your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department for notification of MEC within your jurisdiction?

yes or no

4. Did jurisdiction staff review the 911 records of MEC observations and responses and provide a summary in annual report?

yes or no

If you answered yes to any questions 1 through 4 above, please provide the following information:
(Use additional sheets if needed).

- a) date and time of the call,
- b) contact name,
- c) location of MEC finding,
- d) type of munitions, if available and
- e) response of jurisdiction law enforcement agency.

Jurisdiction's Representative Compiling this Report: _____

Contact Information: **Phone:** _____
 Email: _____

Signature of Preparer: _____

Suggested Attachments to Annual LUC Report

1. Table summarizing inspections, parcels, restrictions and any deficiencies in the LUCs.
2. Inspection Notes for each parcel.
3. Inspection Photos for each parcel.
4. County and jurisdiction well records, permit reports.
5. Building department permit records.
6. Planning department permit records.
7. MEC findings (911 call records).
8. GPS coordinates for parcels.

ATTACHMENT "5"

DEPARTMENT'S Annual Cost Estimate

ATTACHMENT 5

Attachment

Cost Estimate The Department's LUC Oversight

The number of parcels anticipated to require LUCs are listed below and the restrictions are detailed in Section 4.0 of each LUC. The list of parcels and respective restrictions are summarized by jurisdiction in Table 3-1 of the Memorandum of Agreement (MOA) between the Department of Toxic Substances Control (DTSC), Fort Ord Reuse Authority (FORA), Monterey County (County), the City of Seaside (Seaside), the City of Monterey (Monterey), the City of Del Rey Oaks (Del Rey Oaks), the City of Marina (Marina) California State University Monterey Bay ("CSUMB"), University of California Santa Cruz ("UCSC"), and Monterey Peninsula College ("MPC"). The restrictions generally fall in one of three categories:

1. Prohibition of groundwater wells for injection or extraction and utilization of groundwater and any other activity that would interfere with or adversely affect the groundwater remediation systems on the former Fort Ord on property within the Prohibition Zone of the Special Groundwater Protection Zone.
2. Prohibition of sensitive land uses (residences, schools [not including post-secondary schools as defined in Section 1.19 of the MOA], hospitals, day care centers, etc.) and soil disturbance on property where Munitions and Explosives (MEC) may remain. These covenants will also have requirements for construction support, and reporting to DTSC if soil disturbance occurs.
3. Prohibition of sensitive land uses (residences, schools [not including post-secondary schools, as defined in Section 1.19 of the MOA], hospitals, day care centers, etc.) the Fort Ord Landfills and excavation activities (i.e. digging, drilling, or any other excavation or disturbance of the land surface or subsurface) or other activities, which may damage the OU2 Fort Ord Landfills soil cover and liners or landfill gas extraction and treatment systems.

Total Costs by Jurisdiction

Jurisdiction	# Parcels with Soil/MEC LUCs	# Parcels with Groundwater LUCs	# Parcels with Landfill LUCs	Annual DTSC oversight cost (includes FORA Administrative Costs of 15%)	Annual DTSC oversight cost (without FORA Administrative Costs)
Monterey County	2	55	7	\$6,081	\$5,288
City of Marina	<u>1</u>	<u>58</u>	0	\$5,633	\$4,898
City of Monterey	1	0	0	\$958	\$833
City of Del Rey Oaks	9	0	0	\$2,944	\$2,560
City of Seaside	<u>10</u>	15	0	\$3,036	\$2,640
CSUMB		11		\$1,213	\$1,055
UCSC		8		\$787	\$684
MPC	<u>1</u>	15		\$1,669	\$1,451
			Total Estimate	\$22,321	\$19,409

Estimate By Jurisdictions

Monterey County

DTSC Task	Hours per year	\$ per hour/day	Annual Total
Review the MOA and 13 LUCs for 70 parcels	<u>4</u>	117	\$468
Review Annual Report on compliance with MOA and LUCs	<u>6</u>	117	\$702
Annual inspection of 70 parcels (including travel)	<u>24</u>	117	\$2,805
Review of Property Transfer Documents	<u>4</u>	117	\$468
Mileage	<u>1</u>	\$205	\$205
Per Diem	<u>3</u>	\$138	\$414
Draft and complete inspection reports, and/or approval letter	<u>6</u>	117	\$702
Supervisor QA	<u>2</u>	166	\$332
Branch Chief Briefing	<u>1</u>	166	\$166
Clerical	<u>4</u>	58	\$232
Subtotal DTSC Costs in County	<u>24</u>		\$6,494
Subtotal Prorated County Costs 57/70 LUC parcels)			\$5,288
FORA Administrative Costs (15%)			\$793
Total County Costs			\$6,081

City of Marina

DTSC Task	Hours per year	\$ per hour	Annual Total
Review the MOA and 9 LUCs for 73 parcels	<u>4</u>	117	\$468
Review Annual Report on compliance with MOA and LUCs	<u>3</u>	117	\$351
Annual inspection of 73 parcels (including travel)	<u>24</u>	117	\$2,805
Draft and complete inspection reports, and/or approval letter	<u>6</u>	117	\$702
Mileage	<u>1</u>	\$205	\$205
Per Diem	<u>3</u>	\$138	\$414
Review of Property Transfer Documents	<u>4</u>	117	\$468
Supervisor QA	<u>2</u>	166	\$332
Branch Chief Briefing	<u>1</u>	166	\$166
Clerical	<u>4</u>	58	\$232
Subtotal DTSC Costs in Marina	<u>9</u>		\$6,143
Subtotal Prorated Marina Costs 59/74 LUC parcels			\$4,898
FORA Administrative Costs (15%)			\$735
Total Marina Costs			\$5,633

City of Monterey

DTSC Task	Hours per year	\$ per hour	Annual Total
Review 1 LUC for <u>1</u> parcel	<u>0.5</u>	117	\$58.5
Review Annual Report on compliance with MOA and LUC	<u>0.5</u>	117	\$58.5
Annual inspection of the parcel (no travel)	<u>1</u>	117	\$117
Mileage to Site and per diem	<u>0</u>	0	\$0
Review of Property Transfer Documents	<u>1</u>	117	\$117
Draft and complete inspection reports and/or approval letter	1	117	\$117
Supervisor QA	2	166	\$306
Branch Chief Briefing	0.5	166	\$83
Clerical	2	58	\$116
Subtotal DTSC Costs in Monterey	<u>24</u>		\$833
FORA Administrative Costs (15%)			\$125
Total Monterey Costs			\$958

City of Del Rey Oaks

DTSC Task	Hours per year	\$ per hour	Annual Total
Review the MOA and 2 LUCs for <u>9</u> parcels	<u>1</u>	117	\$117
Review Annual Report on compliance with MOA and LUCs	<u>4</u>	117	\$468
Annual inspection of <u>9</u> parcels (including travel)	<u>6</u>	117	\$702
Review of Property Transfer Documents	<u>1</u>	117	\$117
Mileage	<u>1</u>	\$102	\$102
Per Diem	<u>1</u>	\$138	\$138
Draft and complete inspection reports, and/or approval letter	4	117	\$468
Supervisor QA	1	166	\$166
Branch Chief Briefing	1	166	\$166
Clerical	2	58	\$116
Subtotal DTSC costs in Del Rey Oaks	<u>22</u>		\$2,560
FORA Administrative Costs (15%)			\$384
Total Del Rey Oaks Costs			\$2,944

City of Seaside

DTSC Task	Hours per year	\$ per hour	Annual Total
Review the MOA and 7 LUCs for <u>32</u> parcels	<u>2</u>	117	\$234
Review Annual Report on compliance with MOA and LUCs	<u>5</u>	117	\$585
Annual inspection of <u>32</u> parcels (including travel)	<u>10</u>	117	\$1,170
Review of Property Transfer Documents	<u>2</u>	117	\$234
Mileage	<u>1</u>	\$205	\$205
Per Diem	<u>1</u>	\$138	\$138

Draft and complete inspection reports and/or approval letter	4	117	\$468
Supervisor QA	<u>1</u>	166	\$166
Branch Chief Briefing	1	166	\$166
Clerical	<u>2</u>	58	\$116
Subtotal DTSC costs in Seaside	<u>28</u>		\$3,379
Subtotal Prorated Seaside Costs 25/32 LUC parcels			\$2,640
FORA Administrative Costs (15%)			\$396
Total Seaside Costs			\$3,036

CSUMB

Description	Factor	Annual Cost	Annual Total
Monterey County (Prorated 3/70 LUC parcels)	4.29%	\$6,494	\$278
Marina (Prorated 3/74 LUC parcels)	4.05%	\$6,143	\$249
Seaside (Prorated 5/32 LUC parcels)	15.63%	\$3,379	\$528
Subtotal CSUMB costs to DTSC			\$1,055
FORA Administrative Costs (15%)	15%	\$1,055	\$158
Total CSUMB Costs			\$1,213

UCSC

Description	Factor	Annual Cost	Annual Total
Monterey County (Prorated 2/70 LUC parcels)	<u>2.86%</u>	\$6,494	\$186
Marina (Prorated 6/74 LUC parcels)	8.11%	\$6,143	\$498
Subtotal UCSC costs to DTSC			\$684
FORA Administrative Costs (15%)	15%	\$684	\$103
Total UCSC Costs			\$787

MPC

Description	Factor	Annual Cost	Annual Total
Monterey County (Prorated 8/70 LUC parcels)	11.43%	\$6,494	\$742
Marina (Prorated 6/74 LUC parcels)	8.11%	\$6,143	\$498
Seaside (Prorated 2/32 LUC parcels)	<u>6.25%</u>	\$3,379	\$211
Subtotal MPC costs to DTSC			\$1,451
FORA Administrative Costs (15%)	15%	\$1,173	\$218
Total MPC Costs			\$1,669

Notes and Assumptions:

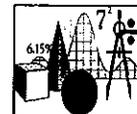
1. The estimates in the tables above are for DTSC's costs to oversee the LUCs on existing and anticipated future land transfers. These estimates based on the attached 2007 DTSC Contract Estimation Rates for the time period between July 1, 2006 and June 30, 2007. Actual charges will be based on actual individual salary and benefits of each employee, actual per diem, mileage rates and expenses and will be invoiced quarterly on a "time and materials" basis. On an annual basis, DTSC will compare this cost estimate with actual charges. If the invoice variance is greater than 20% from the original cost estimate for any jurisdiction, DTSC will notify FORA and prepare an addendum to this cost estimate. DTSC anticipates that staff time required to inspect parcels and review and approve annual reports may increase over time due to increased development and increase in the number of LUCs on newly transferred properties.
2. Pursuant to CCR Section 67391.1, a LUC Implementation and Enforcement Plan (IEP) is required. FORA and the jurisdictions are entering into the MOA, which describes each participant's roles and responsibilities and serves as the EIP.
3. The Army will continue to perform all operation and maintenance activities, monitoring, inspections and five-year reviews for the groundwater remediation and the OU 2 landfill as required by the FFA. DTSC's oversight costs for these tasks will continue to be paid by the Army via DSMOA or equivalent mechanism.
4. DTSC costs for variances, changes or termination of the covenant will be paid by the party requesting the action and are not included in this cost estimate.
5. This cost estimate is based on 2007 DTSC billing rates (attached) and expenses (i.e. mileage, per diem and expenses). Annually, DTSC publishes new billing rates; therefore, this cost estimate may change.

ATTACHMENT "5A"

DTSC Cost Estimation Rates

ATTACHMENT 5A

DEPARTMENT OF TOXIC SUBSTANCES CONTROL



Contract Estimation Rates
Effective 7/01/06 - 06/30/07

These rates are to be used to estimate contract costs for the 2006/07 Fiscal Year effective 7/1/06. The rates are based on the highest salary rate for the class including all pay and equity raises that DTSC is aware of as of 11/1/06. Actual costs will be determined by individual salary rates and benefits, which may be higher or lower than the rate shown.

Questions concerning these rates should be addressed to:
Lillian Haglo, Fiscal Systems at CALNET 8-454-6431 or (916) 324-6431

Rev 11/15/06

SITE MITIGATION AND BROWNFIELD REUSE	HAZARDOUS WASTE MANAGEMENT	SCIENCE POLLUTION PREVENTION & TECHNOLOGY
---	----------------------------------	--

Class Code	Class Name	ALL INCLUSIVE HOURLY RATE 175.11%	ALL INCLUSIVE HOURLY RATE 159.37%	ALL INCLUSIVE HOURLY RATE 194.36%
5871	Assistant Chief Counsel	\$212	\$200	\$227
4711	Associate Environmental Planner	\$115	\$108	\$123
5393	Associate Governmental Program Analyst	\$109	\$103	\$117
3856	Associate Industrial Hygienist	\$122	\$115	\$131
7941	Associate Toxicologist	\$131	\$123	\$140
3833	CEA II	\$176	\$166	\$188
8060	Chemist	\$112	\$105	\$120
7574	Criminal Investigator, DTSC	\$115	\$108	\$123
3756	Engineering Geologist	\$145	\$137	\$155
8054	Environmental Biochemist	\$151	\$142	\$162
3726	Hazardous Substances Engineer	\$145	\$136	\$155
3564	Hazardous Substances Scientist	\$117	\$110	\$125
4247	Health Program Audit Manager I, DHS	\$126	\$119	\$135
5278	Management Services Technician	\$70	\$66	\$75
1441	Office Assistant (General)	\$57	\$53	\$61
1379	Office Assistant (Typing)	\$58	\$54	\$62
1148	Office Services Supervisor I (Typing)	\$67	\$63	\$71
1150	Office Services Supervisor II (General)	\$73	\$69	\$79
1138	Office Technician (General)	\$66	\$62	\$70
1139	Office Technician (Typing)	\$67	\$63	\$71
5373	Public Participation, Specialist (DHS)	\$109	\$103	\$117
5372	Public Participation, Supervisor (DHS)	\$125	\$118	\$134
6001	Research Program Specialist II (Soil Erosion)	\$132	\$124	\$141
5581	Research Scientist II (Chemical Sciences)	\$131	\$123	\$140
5638	Research Scientist Sup 1	\$159	\$149	\$170
3751	Senior Engineering Geologist	\$166	\$157	\$178
4713	Senior Environmental Planner	\$138	\$130	\$147
3725	Senior Hazardous Substances Engineer	\$166	\$156	\$178
3565	Senior Hazardous Substances Scientist	\$134	\$127	\$144
3852	Senior Industrial Hygienist	\$139	\$131	\$149
7943	Senior Toxicologist	\$166	\$157	\$178
8068	Staff Chemist	\$122	\$115	\$131
5778	Staff Counsel	\$165	\$156	\$177
5795	Staff Counsel III (Specialist)	\$200	\$189	\$214
5815	Staff Counsel III (Supervisor)	\$201	\$189	\$215
5157	Staff Services Analyst (General)	\$91	\$86	\$97
4800	Staff Services Manager I	\$125	\$118	\$134
4801	Staff Services Manager II (Supervisor)	\$138	\$130	\$147
7978	Staff Toxicologist (Specialist)	\$158	\$149	\$169
8070	Supervising Chemist	\$123	\$116	\$131
7575	Supervising Criminal Investigator I, DTSC	\$126	\$119	\$135
7576	Supervising Criminal Investigator II, DTSC	\$142	\$134	\$152
3748	Supervising Engineering Geologist	\$182	\$172	\$195
3724	Supervising Hazardous Substances Engineer I	\$166	\$157	\$178
3723	Supervising Hazardous Substances Engineer II	\$182	\$172	\$195
3566	Supervising Hazardous Substances Scientist I	\$135	\$127	\$144
3567	Supervising Hazardous Substances Scientist II	\$155	\$146	\$166
1181	Word Processing Technician	\$61	\$57	\$65

APPENDIX D

Land Use Control Inspection Methodology

APPENDIX D

Land Use Control Inspection Methodology

An annual Land Use Controls (LUCs) compliance review will be required and implemented as part of the Long-Term Management Measures (LTMMs). A representative from the appropriate jurisdiction of the property or properties (e.g., the City of Seaside, City of Monterey, City of Del Rey Oaks, City of Marina, Monterey County, California State University Monterey Bay, University of California Santa Cruz and Monterey Peninsula College) will conduct the following actions beginning on July 1 and completed by June 30 of each year:

1. The representative from the appropriate jurisdiction will consult with the applicable building department(s) to ensure compliance of the deed restrictions and/or state land use covenants per the Memorandum of Agreement Amongst Fort Ord Reuse Authority, the County, the City of Seaside, Monterey, Del Rey Oaks, Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College, and Department of Toxic Substances Control Concerning Monitoring and Reporting on Environmental Restrictions on the Former Fort Ord, Monterey County, California, Attachment 4 – Land Use Covenant Report Outline. An updated version of the Land Use Covenant Report Outline is provided in Appendix E of this Land Use Controls Implementation Plan and Operation and Maintenance Plan (LUCIP/OMP).

The results of the annual inspections will be compiled and summarized in a letter report prepared by FORA and submitted to the Army, the United States Environmental Protection Agency (EPA), and DTSC no later than September 1st of each year. FORA will complete the LUC evaluation checklist, as part of the annual monitoring report, provided in Appendix D of this LUCIP/OMP. Monterey County will be responsible for compiling and preparing the summary letter report for submittal to the Army, EPA, and DTSC when FORA sunsets.

[this page intentionally left blank]

APPENDIX E

2014 Update to the Former Fort Ord Land Use Covenant Report Outline

Former Fort Ord

Land Use Covenant Report Outline

Annual Status Report for _____ (Jurisdiction) on
Land Use Covenants
Covering July 1, _____ to June 30, _____.

(See Parcel and LUC lists in MOA Table 3-1)

This form is to be submitted by each Jurisdiction to:

Fort Ord Reuse Authority

By

December 31, _____*

DATE OF REPORT: _____

SUBMIT TO: Fort Ord Reuse Authority
Attn: _____
920 2nd Avenue, Suite A
Marina, CA 93933

GENERAL:

Has jurisdiction staff previously provided a compliance summary in regards to the local digging and excavation ordinances, including the number of permits issued?

yes or no

Has jurisdiction staff provided an annual update of any changes to applicable digging and excavation ordinances?

yes or no

Has jurisdiction staff provided an annual update of any changes to the Monterey County Groundwater Ordinance No. 4011?

yes or no

PARCELS:

Have any of the parcels with covenants in the jurisdiction split since the last annual report?

yes or no

If so, please reflect the split(s) in reporting on compliance with section 2.1.2 of the MOA in Table 3-1.

*** The Jurisdictions are reminded that DTSC enforces compliance with the LUC MOA, including reporting submission deadlines. Failure to meet the LUC reporting deadlines may result in a reporting entity incurring additional costs for DTSC to complete the Jurisdiction's LUC reporting requirements.**

GROUND WATER COVENANTS:

Is a ground water covenant applicable in your jurisdiction? yes or no
(if no, skip questions 1 through 4)

1. Did jurisdiction staff visually inspect the parcels in your jurisdiction (see Table 3-1) with ground water covenants? Such visual inspection shall include observed groundwater wells, and any other activity that would interfere with or adversely affect the groundwater monitoring and remediation systems on the Property or result in the creation of a groundwater recharge area (e.g., unlined surface impoundments or disposal trenches).

yes or no

2. Did jurisdiction staff check with the applicable local building department (please list department name: _____) to ensure that no wells or recharge basins such as surface water infiltration ponds were built within your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department (please list department name: _____) to ensure that no well permits were granted or recharge basins requested within your jurisdiction?

yes or no

4. Did jurisdiction staff review the County well permit applications pertaining to your jurisdiction to ensure that no wells have been dug or installed in violation of the ordinance or the ground water covenants?

yes or no

If you answered yes to any questions 1 through 4 above, please note and describe violations with USACE parcel numbers and street addresses (Use additional sheets if needed.)

LANDFILL BUFFER COVENANTS:

Is a landfill buffer covenant applicable in your jurisdiction? yes or no
(if no, skip questions 1 through 3)

1. Did jurisdiction staff visually inspect the parcels in your jurisdiction (see Table 3-1) with landfill buffer covenants? Such visual inspection shall include observation of any structures and any other activity that would interfere with the landfill monitoring and remediation systems on the Property.

yes or no

2. Did jurisdiction staff check with the applicable local building department (please list department name: _____) to ensure that no sensitive uses such as residences, hospitals, day care or schools (not including post-secondary schools, as defined in Section 1.19 of the MOA) were built on the restricted parcels within your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department (please list department name: _____) to ensure that no other structures were built without protection for vapors in accordance with the landfill buffer covenants.

yes or no

If you answered yes to any questions 1 through 3 above, please note and describe violations with street addresses. (Use additional sheets if needed.)

SOIL COVENANTS:

Is a soil covenant applicable in your jurisdiction?
(if no, skip questions 1 through 4)

yes or no

1. Did jurisdiction staff visually inspect the parcels (see Table 3-1) in your jurisdiction with soil covenants to assure no sensitive uses such as residences, hospitals, day care or schools (not including post-secondary schools, as defined in Section 1.19 of the MOA) were constructed or are occurring on the restricted parcels in your jurisdiction?

yes or no

2. Did jurisdiction staff check with the applicable local building department to ensure that no soil was disturbed without an approved soil management plan in accordance with the excavation and digging Ordinance in your jurisdiction?

yes or no

3. Did jurisdiction staff check with the applicable local planning department for notification of MEC within your jurisdiction?

yes or no

4. Did jurisdiction staff review the 911 records of MEC observations and responses and provide a summary in annual report as required by the LUC MOA dated November 15, 2007?

yes or no

If you answered yes to any questions 1 through 4 above, please provide the following information:
(Use additional sheets if needed.)

- a) details on how the 911 records were reviewed (such as County point of contact requested 911 records from responsible County department and distributed 911 records to reporting entities),
- b) date and time of the call,
- c) contact name,
- d) location of MEC finding,
- e) type of munitions, if available, and
- f) response of jurisdiction law enforcement agency.

Jurisdiction's Representative Compiling this Report: _____

Contact Information: **Phone** _____
 Email _____

Signature of Preparer: _____

Suggested Attachments to Annual LUC Report

1. Table summarizing inspections, parcels, restrictions and any deficiencies in the LUCs.
2. Inspection Notes for each parcel.
3. Inspection Photos for each parcel.
4. County and jurisdiction well records, permit reports.
5. Building department permit records.
6. Planning department permit records.
7. MEC findings (911 call records).
8. GPS coordinates for parcels

APPENDIX F
Distribution List

<u>Print</u>	<u>CD</u>	<u>Name</u>	<u>Organization</u>	<u>Address</u>	<u>City and State</u>	<u>Zip</u>
1	1	Stan Cook	Fort Ord Reuse Authority	920 2 nd Avenue, Suite A	Marina, CA	93933
1	1	Michael Houlemard	Fort Ord Reuse Authority	920 2 nd Avenue, Suite A	Marina, CA	93933
1	1	Judy Huang	U.S. Environmental Protection Agency	75 Hawthorne Street, Mail SFD-8-3	San Francisco, CA	94105
1	1	Tom Hall	TechLaw, Inc.	7 Shore Point Road	North Little Rock, AR	72116
0	1	Terry Zdon	TechLaw, Inc.	90 New Montgomery Street	San Francisco, CA	94105
1	1	Ed Walker	California Department of Toxic Substances Control	8800 California Center Drive	Sacramento, CA	95826
2	2	William K. Collins	Department of the Army	BRAC, Bldg. #4463 Gigling Road	Seaside, CA	93955
1	1	Lindsay Alexander	Fort Ord Administrative Record	BRAC, Bldg. #4463 Gigling Road	Seaside, CA	93955
1	1	Mike Weaver	Fort Ord Community Advisory Group	52 Corral de Tierra Road	Salinas, CA	93908
0	1	Dan Amadeo	Marina in Motion	P.O. Box 1641	Marina, CA	93933
1	1	LeVonne Stone	Fort Ord Environmental Justice Network	P.O. Box 361	Marina, CA	93933
1	1	Carl Holm	Monterey County Resource Management Agency	168 West Alisal Street, Second Floor	Salinas, CA	93901
0	1	Project File	ARCADIS, Attention: Jane Thompson	100 Smith Ranch Road, Suite 329	San Rafael, CA	94903
1	1	Project Library	ARCADIS Project Office	3180 Imjin Road, Suite 152	Marina, CA	93933

Approved:



Christopher G. Spill, P.G.
 ESCA Technical Project Manager
 ARCADIS U.S., Inc.