

NATURAL RESOURCE IMPACT MITIGATION CHECKLIST

Checklist No. 1

Revision 1

Notify the Environmental Services Cooperative Agreement Remediation Program (ESCA RP) Senior Qualified Biologist (SQB, 805-478-0727) before proceeding if it is proposed that work boundaries change, types of equipment change, additional vegetation removal is necessary, vegetation cutting methods change, or any other conditions change.

ESCA MRA:	Parker Flats MRA, Residential Quality Assurance (RQA) Level 2 Digital Geophysical Mapping (DGM) Baseline Survey	Date:	19-Oct-12 [Updated from 25-Mar-09]
Work to be conducted:	This work implements the ESCA RQA Process addressing regulatory agency concerns regarding residual munitions and explosives of concern (MEC) risk in areas designated for future residential reuse after MEC investigations and removal actions have been completed. Approximately 12 acres of the Parker Flats MRA proposed residential reuse areas are recommended for further assessment during the RQA Pilot Study Implementation Phase Level 2 Baseline Digital Geophysical Mapping (DGM) Survey (Figure 1). Potential activities include: field staking; tree surveys and identification of dead or diseased trees and limbs by the Project Arborist; removal of surface vegetation including brush; tree limbing, cutting or removal as coordinated with SQB/Project Arborist; chipping of vegetation debris on site or removal of debris from the work area; erosion control measures (if required); and MEC field activities including instrument-aided investigation, target-specific excavation (including hand tool and/or mechanized equipment soil removal) as required to investigate MEC, backfill of MEC investigation excavated soil, and field demolition of recovered MEC as required.		
Relevant Work Plan Reference and Section(s):	Final Group 1 Remedial Investigation/Feasibility Study (RI/FS) Work Plan Volume 2 – Sampling and Analysis Plan, Appendix F: RQA Pilot Study Work Plan December 2008. Field Variance Form (FVF) No. G1WP-004; Residential Quality Assurance Pilot Study Work Plan Addendum. Group 1 Remedial Investigation/Feasibility Study Work Plan, Seaside Munitions Response Area and Parker Flats Munitions Response Area Phase II, February 2011. FVF No. G1WP-008; RQA Pilot Study, ESCA RQA Process Implementation Study, Parker Flats MRA RQA Level 2 – DGM Baseline Survey and Evaluation, September		

FORA ESCA Remediation Program Team



FORA ESCA RP

	2012.
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1. LAND USE DESIGNATION:	<input type="checkbox"/> Habitat Reserve	Development <input type="checkbox"/> Non-Residential <input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Other (specify):
2. LAND OWNER:	<input type="checkbox"/> Army	Parcel No(s). and/or Location:	
	<input checked="" type="checkbox"/> FORA	Parcel No(s). and/or Location::	Parker Flats MRA, RQA Level 2 Baseline DGM Survey Areas, portions of E18.1.1, E18.1.2, E19a.1, and E19a.5 (Figure 1)

3. FEDERAL ESA SPECIES REPORTED IN PARCEL(S):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Reported ESA Species [common name(s)]:	Monterey (sand) gilia and Monterey spineflower. California tiger salamander (CTS) potential upland habitat (Figure 1).		
Reported Species' Location(s):	<p>Monterey (sand) gilia and Monterey spineflower populations have been reported from open sandy areas in maritime chaparral and nearby grassland and oak woodland habitat in Parcels E18.1, E19a.1, E19a.5 (HMP 1997). Monterey spineflower has been observed by ESCA RP Biologists in Parcel E19a.1 in open areas.</p> <p>Portions of parcels E19a.5 and E19a.1 Level 2 Baseline DGM Survey are within potential CTS upland habitat (within 2 km CTS habitat Buffer zone, Figure 1). If present in an area, adults may migrate on the surface at night during October 15 through December 31 and during January 1 through March 15, after/during rainfall. If present in a nearby breeding site, juveniles may migrate on the surface at night from the aquatic feature to upland areas during May 15 – August 15.</p>		
Grid Numbers:	NA		

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Restrictions:	<p><u>General:</u> Level 2 Baseline DGM Survey and associated activities shall be conducted in such a manner as to minimize impacts to ESA-listed species and their habitats to the extent feasible. Field supervisors shall coordinate with the ESCA RP Biologists to implement this general requirement.</p> <p><u>Vehicle and mechanized equipment operations:</u> Access to the site shall be by means of existing roads and trails, whenever feasible. Off-road and off-trail ingress/egress pathways to/from work areas shall be minimized to the greatest extent possible.</p> <p><u>Brush cutting:</u> Brush cutting activities will be conducted as required in support of Level 2 Baseline DGM Survey and associated activities. To the extent feasible, significant efforts will be made to minimize impacts to the habitat and to limit root disturbance during vegetation removal. An ESCA RP Biologist will be consulted during the brush cutting activities.</p> <p><u>CTS Measures:</u> Site work will occur during daylight hours. Between October 15 and March 31, any work materials, vehicles and mechanized equipment touching the ground and left onsite overnight shall be inspected by site personnel for CTS presence in the morning prior to commencement of work after the occurrence of a rainfall event of at least ½ inch of rain falling within the prior 24-hour period. If a CTS or possible CTS is observed, the animal shall not be disturbed, and a Qualified Biologist (QB, a biologist approved by USFWS to rescue/handle CTS at former Fort Ord per the applicable Biological Opinion) shall be immediately contacted to move the animal to a safe location. No personnel other than a QB may touch or handle CTS. If CTS are encountered, a QB will: take appropriate actions to avoid or minimize take of the species as authorized by USFWS, notify the U.S. Army and record the information on the appropriate reporting form.</p>
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4. HMP (NON-FEDERAL ESA) SPECIES REPORTED IN PARCEL(S):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Reported HMP Species [common name(s)]:	Sandmat manzanita, Hooker’s manzanita, Toro manzanita, Monterey ceanothus, California black legless lizard, and Monterey ornate shrew		
Reported Species’ Location(s):	Sandmat manzanita, Hooker’s manzanita, Toro manzanita, Monterey ceanothus are HMP shrubs that occur in maritime chaparral in the Monterey region and are reported from Parcels E18.1.2, E19a.1, and E19a.5. California black legless lizard and Monterey ornate shrew are also reported from these parcels. In addition, Monterey ceanothus, California black legless lizard and Monterey ornate shrew have been observed in Parcels 18.1.1 and 18.1.3 (HMP 1997).		
Grid Numbers:	NA		

FORA ESCA RP

Restrictions:	<p><u>General:</u> Level 2 Baseline DGM Survey and associated activities shall be conducted in such a manner as to minimize impacts to HMP non-Federal ESA-listed species and their habitats to the extent feasible. Field supervisors shall coordinate with the ESCA RP Biologist to implement this general requirement.</p> <p><u>Vehicle and mechanized equipment operation:</u> Activities shall be conducted in such a manner as to minimize impacts to HMP non-Federal ESA-listed species and their habitats to the extent feasible. Field supervisors shall coordinate with the ESCA RP Biologists.</p> <p><u>Brush cutting:</u> Brush cutting equipment and activities will be operated as required in support of the RQA Pilot Study Implementation Phase Level 2 DGM Baseline Survey and associated activities. To the extent feasible, significant efforts will be made minimize impacts to the HMP non-Federal ESA-listed species and their habitats, and to limit root disturbance during vegetation removal. An ESCA RP Biologist will be consulted during brush cutting activities. and intrusive MEC investigation activities.</p>
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5. AQUATIC FEATURES (i.e., VERNAL POOLS/PONDS) PRESENT:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Location(s):	No known aquatic features are located in the Level 2 Baseline DGM Survey areas. Aquatic features are located within 2 kilometers of portions of the Parker Flats MRA RQA Level 2 Baseline DGM Survey areas (Figure 1).		
Grid Number(s):	NA		
Work can proceed in pools/ponds?: N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Restrictions:	NA		

6. VEGETATION REMOVAL		
<input type="checkbox"/> None	Location(s):	Parker Flats MRA, RQA Level 2 Baseline DGM Survey Areas (Figure 1)

FORA ESCA RP

<input checked="" type="checkbox"/> Manual Removal	Location(s):	Manual removal is allowed in designated work areas.
Restrictions:	None	
<input checked="" type="checkbox"/> Mechanical Removal	Location(s):	Mechanical removal is allowed in all work areas.
Restrictions:	<p>Parcels E18.1.1, 18.1.2, E19a.1, and E19a.5 support stands of native coast live oak trees which are neither endangered nor threatened under Federal or State law. Although there are no restrictions on vegetation removal for the proposed residential reuse parcels of the Parker Flats MRA, overall impacts to the area will be minimized to the extent possible. Trees will be preserved if possible; however, tree removal during field activities may be unavoidable to complete the field activities. An ESCA RP Biologist will be consulted during tree removal activities.</p> <p>Brush cutting equipment and activities will be operated in areas where brush cutting is required in support of Level 2 Baseline DGM Survey and associated activities. Efforts will be made to limit root disturbance during vegetation removal. An ESCA RP Biologist will be consulted during brush cutting activities a.</p>	

7. EROSION CONCERNS/SITE RESTORATION:

Areas where vegetation removal, surface soil disturbance and/or MEC investigation operations are conducted will be subject to the provisions of the:

Stormwater Management and Erosion Control Plan (Internal Use) for Parker Flats Munitions Response Area, January 30, 2008, Revised March 30, 2009.

Note: Best management practices (BMPs) will be implemented and maintained to reduce or eliminate soil erosion and storm water runoff; and to prevent sediment being transported off of the Parker Flats MRA and onto adjacent properties or across the borderland development areas along the Natural Resource Management Area Interface..

8. SITE ACCESS: The MRA is accessed via Parker Flats Road, and 8th Avenue.

9. ADDITIONAL SITE CONCERNS:

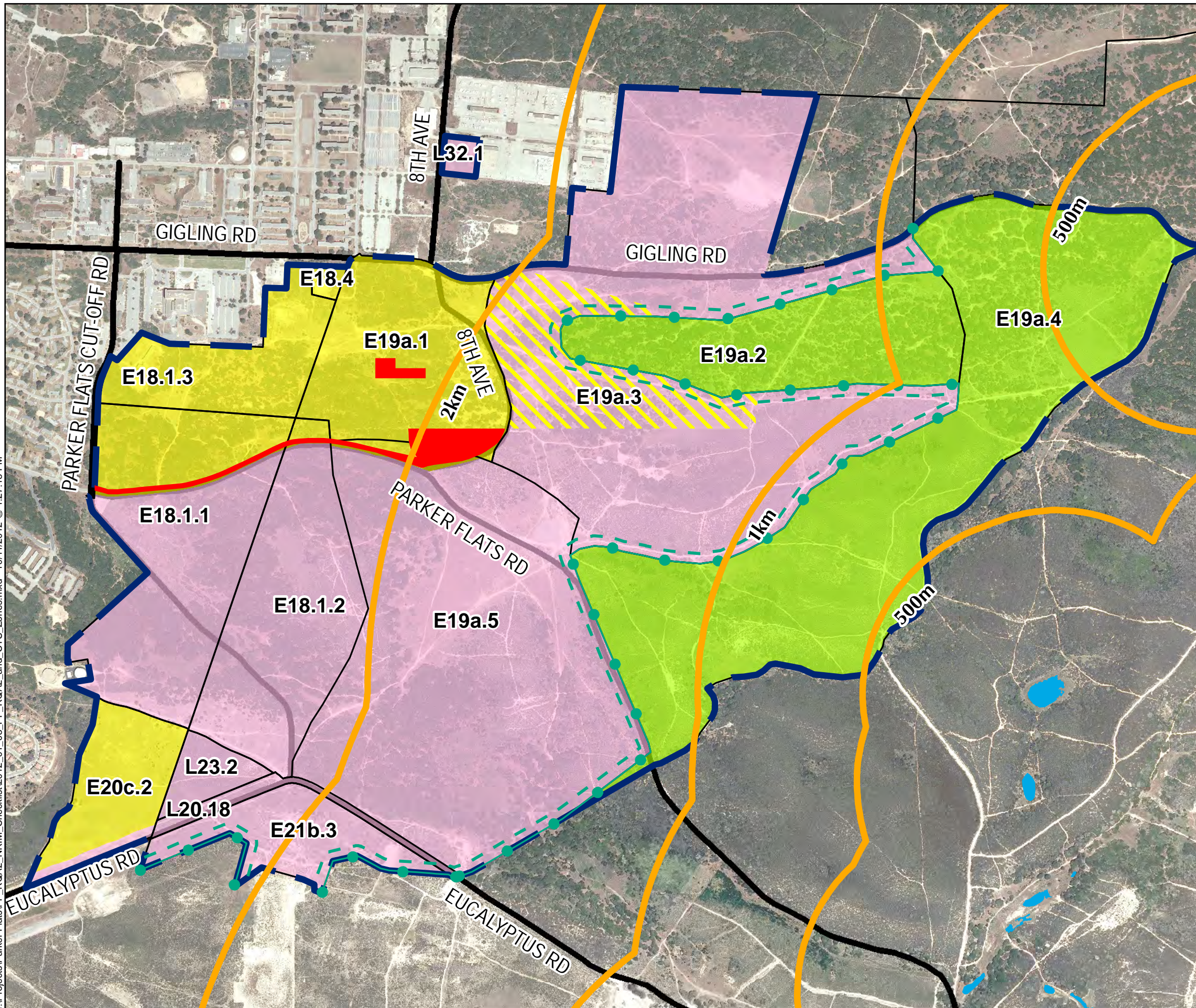
Materials, tools and equipment mobilized to the work area shall be free of offsite soil and plant material to minimize potential introduction of soil micro-organisms and weeds.

The identified Level 2 Baseline DGM Survey areas are designated as proposed residential reuse parcels. No resource conservation requirements are associated with these parcels per the Installation-Wide Habitat Management Plan (HMP). However, overall impacts to the area will be minimized to the extent possible.

Attachments

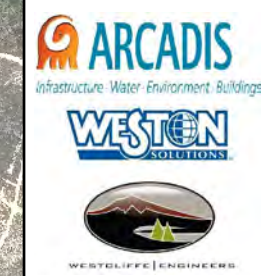
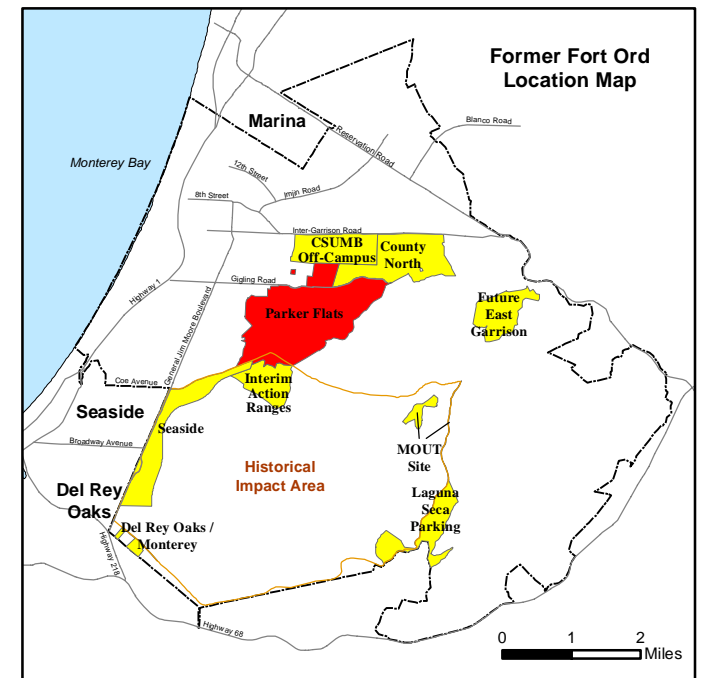
Figure 1. Parker Flats MRA, RQA Level 2 Potential CTS Habitat Zone Natural Resource Impact Mitigation Checklist.

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Legend

- California Tiger Salamander (CTS) Buffer
- RQA Level 2 Work Area
- Aquatic Features
- Munitions Response Area
- Borderland Interface
- 100-Foot Buffer from Borderland Interface
- Major Road
- USACE Parcel
- Proposed Future Land Use**
- Residential
- Mixed Use
- Non-Residential
- Habitat Reserve



**Parker Flats MRA - RQA Level 2
Potential CTS Habitat Zone
Natural Resource Impact
Mitigation Checklist**
FORA ESCA RP
Monterey County, California

DRAFT Figure 1

NATURAL RESOURCE IMPACT MITIGATION CHECKLIST

Checklist No. 2

Revision 01

Title: Seaside MRA Residential Quality Assurance (RQA) Level 2 Baseline Digital Geophysical Mapping (DGM) Survey.

AND

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

Notify the Senior Qualified Biologist (805-478-0727) before proceeding if it is proposed that work boundaries change, types of equipment change, additional vegetation removal is necessary, vegetation cutting methods change, or any other conditions change.

ESCA MRA:	Seaside Munitions Response Area (MRA)	Date:	03/01/2013
Work to be conducted:	<p>RQA Level 2 Baseline DGM Survey: Mobilization, field staking to establish site boundaries, erosion control measure installation (if required), mechanical vegetation removal, visual surface clearance, , DGM activities, and manual and mechanical anomaly excavation to depth.</p> <p>RQA Level 3 Soil Scrape and Post-scrape DGM Survey: Mobilization, field staking to establish site boundaries, erosion control measure installation (if required), mechanical vegetation removal to ground surface (including trees), visual surface clearance, soil scraping, stockpiling of 6-12 inch lifts of soil, post-excavation DGM survey, manual and mechanical anomaly excavation to depth, and where necessary, screening of stockpiled soil. If residual munitions and explosive of concern (MEC) concerns are not resolved, Level 3 Soil Scrape and Post-scrape activities will continue until the data collected indicates that the area is acceptable for residential reuse with appropriate institutional controls</p>		
Relevant Work Plan Reference and Section(s):	<p>Final Group 1 Remedial Investigation/Feasibility Study (RI/FS) Work Plan Volume 2 – Sampling and Analysis Plan, Appendix F: Residential Quality Assurance (RQA) Pilot Study Work Plan, December 2008.</p> <p>Field Variance Form (FVF) G1WP-005, RQA Pilot Study, ESCA RQA Process Implementation Study (Phase II), Seaside Munitions Response Area (MRA) RQA Level 2 – Digital Geophysical Mapping (DGM) Baseline Survey and Evaluation</p> <p>FVF-G1WP-007, RQA Pilot Study, Environmental Services Cooperative Agreement (ESCA) RQA Process Implementation Study (Phase II), Seaside Munitions Response Area (MRA) RQA Level 2 – Digital Geophysical Mapping (DGM) Baseline Survey and Evaluation – Additional Level 2 Acreage Recommended in Seaside MRA</p> <p>FVF-G1WP-009 (in development), RQA Pilot Study, ESCA RQA Process</p>		

FORA ESCA Remediation Program Team



FORA ESCA RP

IMPACT MITIGATION CHECKLIST No. 2, Rev. 01

Confidential Business Information

Seaside MRA RQA Level 2 Baseline DGM Survey

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

	Implementation Study (Phase II), Seaside Munitions Response Area (MRA) RQA Level 3 – Scrape and Post Scrape Digital Geophysical Mapping (DGM) Survey and Evaluation
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1. LAND USE DESIGNATION:	<input type="checkbox"/> Habitat Reserve	Development <input checked="" type="checkbox"/> Non-Residential <input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Other (specify):
2. LAND OWNER:	<input type="checkbox"/> Army	Parcel No(s). and/or Location:	
	<input checked="" type="checkbox"/> FORA	Parcel No(s). and/or Location::	Figure 1: Seaside MRA RQA Level 2 Area (Parcels E23.1, E23.2, and E24) Seaside MRA RQA Level 3 Area Parcel E24

3. FEDERAL ESA SPECIES REPORTED IN PARCEL(S):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Reported ESA Species [common name(s)]:	California tiger salamander (CTS), Monterey spineflower, and Monterey gilia (sand gilia).		
Reported Species' Location(s):	<u>CTS potential upland habitat:</u> The majority of Parcel E24 is within potential CTS upland habitat (within 2 km of CTS habitat buffer zone). The south west corner of Parcel E24 is within the 1 km CTS habitat buffer zone (Figure 1). Monterey spineflower and Monterey gilia (sand gilia) occur in sandy openings between shrubs in maritime chaparral, as well as in adjacent disturbed grassland areas; both of these species have been reported from Parcel E24. Monterey spineflower has also been reported from Parcel E23.2.		
Grid Numbers:	NA		

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IMPACT MITIGATION CHECKLIST No. 2, Rev. 01

Confidential Business Information

Seaside MRA RQA Level 2 Baseline DGM Survey

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

Restrictions:

General: RQA activities shall be conducted in such a manner as to avoid and minimize impacts to Federal ESA-listed species and their habitats to the greatest extent feasible. Impacts to Federal ESA-listed species shall be limited by minimizing investigations spatially and temporally, and by not performing work outside the work area.

Vehicle and mechanized equipment operations: Access to the site shall be by means of existing roads and trails, whenever feasible. Off-road and off-trail ingress/egress pathways to/from work areas shall be minimized to the greatest extent possible.

Brush cutting: Brush-cutting and removal equipment will operate in areas where brush cutting is required per FVF Numbers 005, 007 and 009.

Soil sifting: Scraped soil shall be stockpiled in designated areas.

California Tiger Salamander (CTS) Mitigation Measures:

An ESCA Remediation Program (RP) biologist who is approved by the U.S. Fish and Wildlife Service to handle CTS per this checklist is referred to as a "Qualified Biologist" or QB and shall report findings to the Senior Qualified Biologist.

Site work shall occur during daylight hours.

Between October 15 and March 31, all points of contact with the ground of work materials, vehicles and mechanized equipment left onsite overnight shall be inspected by site personnel for CTS presence in the morning prior to commencement of work if ½ inch or more of rain has fallen within the prior 24-hr period. If a CTS or possible CTS is observed, the animal shall not be disturbed, and a QB will be notified immediately. Only a QB may touch or handle CTS. If CTS are encountered, a QB will: take appropriate actions to avoid or minimize take of the species as authorized by USFWS, notify the U.S. Army within 24 hours, and record the information on the appropriate reporting form.

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IMPACT MITIGATION CHECKLIST No. 2, Rev. 01

Confidential Business Information

Seaside MRA RQA Level 2 Baseline DGM Survey

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

4. HMP (NON-FEDERAL ESA) SPECIES REPORTED IN PARCEL(S):		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Reported HMP Species [common name(s)]:	Eastwood’s ericameria, seaside bird’s beak, sandmat manzanita, Toro manzanita, Monterey ceanothus, coast wallflower, and California black legless lizard.			
Reported Species Location(s):	Eastwood’s ericameria, seaside bird’s beak, sandmat manzanita, Toro manzanita, and Monterey ceanothus are HMP shrubs that occur in maritime chaparral in the Monterey region. Seaside bird’s beak and coast wallflower, both HMP forbs, occur in openings between shrubs in maritime chaparral, as well as in adjacent disturbed grassland areas. California black legless lizard occurs in sparsely vegetated areas with leaf and branch litter in sandy soils and has been observed in Parcel E24. All of these species have been reported from Parcel E24. Eastwood’s ericameria, sandmat manzanita, Monterey ceanothus, and California black legless lizard have also been reported from Parcels E23.1 and E23.2.			
Grid Numbers:	NA			
Restrictions:	<p><u>General:</u> RQA activities shall be conducted in such a manner as to avoid and minimize impacts to HMP non-Federal ESA-listed species and their habitats to the greatest extent feasible. Field supervisors shall coordinate with the ESCA RP Biologist to implement this general requirement.</p> <p><u>Vehicle and mechanized equipment operation:</u> Same restrictions as for federal-listed ESA species.</p> <p><u>Ingress/egress:</u> Same restrictions as for Federal-listed ESA species.</p>			
5. AQUATIC FEATURES (i.e., VERNAL POOLS/PONDS) PRESENT:		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Flagged/Marked
Location(s):	No aquatic features are located in the Seaside MRA.			
Grid Number(s):				
Work can proceed in pools/ponds?: N/A		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Restrictions:	<p><u>Note:</u> CTS could occur in portions of the Seaside MRA, therefore travel shall be restricted to the approved haul route (located along the east and south boundary of the MRA) when outside of the work area. The 2 km CTS habitat buffer only extends into parcel E24. The 1 km CTS habitat buffer extends into the southern end of Seaside MRA. (Figure 1)</p>			

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IMPACT MITIGATION CHECKLIST No. 2, Rev. 01

Confidential Business Information

Seaside MRA RQA Level 2 Baseline DGM Survey

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

6. VEGETATION REMOVAL		
<input type="checkbox"/> None	Location(s):	
<input checked="" type="checkbox"/> Manual Removal	Location(s):	Manual vegetation removal is allowed in all work areas.
Restrictions:		
<input checked="" type="checkbox"/> Mechanical Removal	Location(s):	Mechanical vegetation removal is allowed in all work areas.
Restrictions:	Mechanical vegetation removal is allowed in all work areas. Work activities shall be conducted in such a manner as to avoid and minimize impacts to Federal ESA-listed and non-Federal ESA-listed HMP species and their habitats to the extent feasible while conducting RQA activities.	

7. EROSION CONCERNS/SITE RESTORATION:

Best Management Practices shall be installed to minimize erosion/runoff for the RQA Level 2 and 3 areas. These practices may include controls such as water bars, silt fences, and hay wattles. All areas shall be monitored for erosion and sediment control.

8. SITE ACCESS: Access to the site may be obtained primarily via Eucalyptus Road.

9. ADDITIONAL SITE CONCERNS:

The Level 2 Baseline DGM Survey and Level 3 Soil Scrape and Post Scrape DGM survey activities are within a proposed residential parcel with no restrictions under the HMP; and as such, natural resources are considered lost. Although there are no restrictions on vegetation removal for the Seaside MRA RQA areas overall impacts to the site will be minimized to the extent possible. Small pockets of habitat may be preserved in and around development (see section 4 of HMP).

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IMPACT MITIGATION CHECKLIST No. 2, Rev. 01

Confidential Business Information

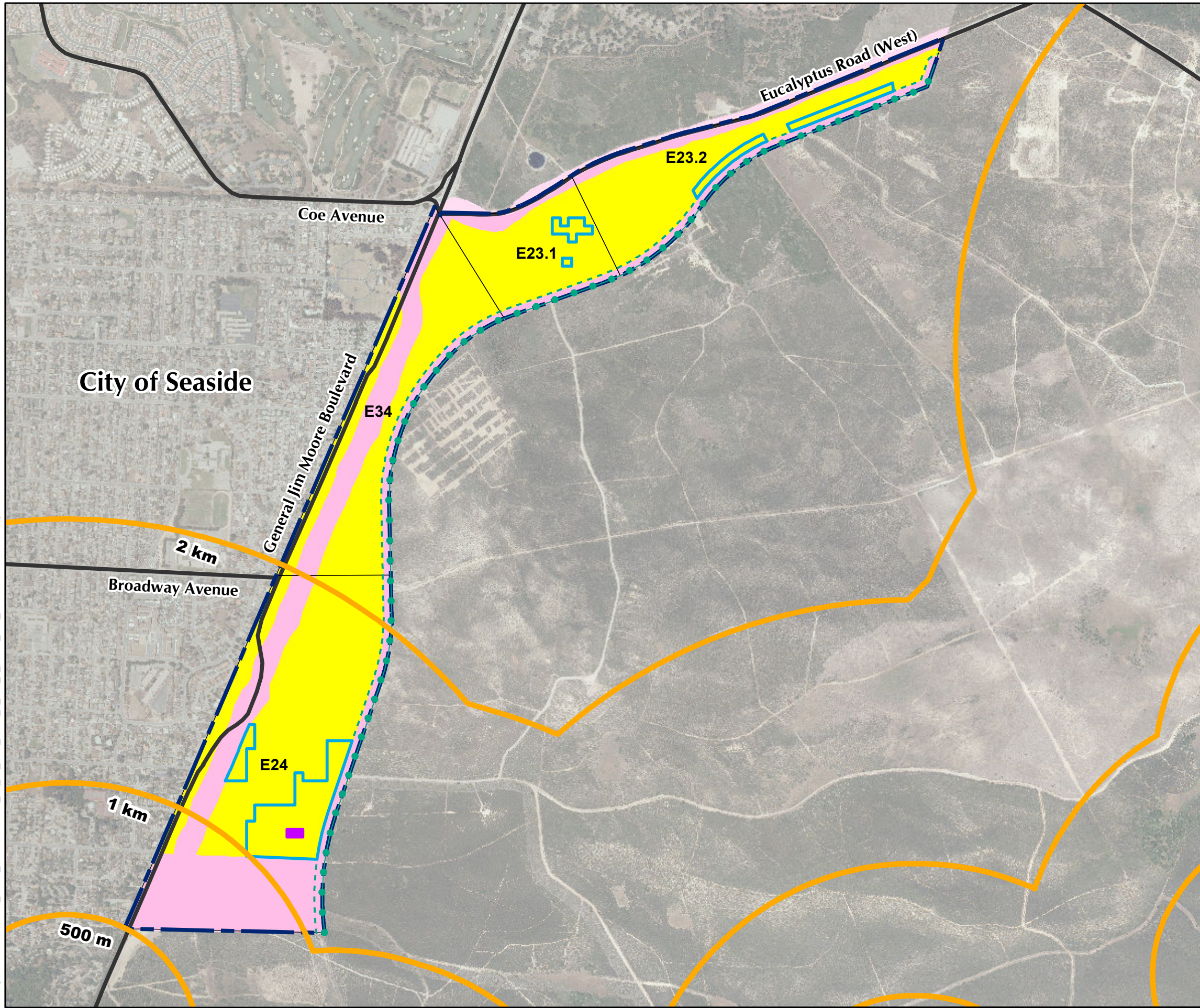
Seaside MRA RQA Level 2 Baseline DGM Survey

Seaside MRA RQA Level 3 Soil Scrape and Post Scrape DGM Survey

Attachments:

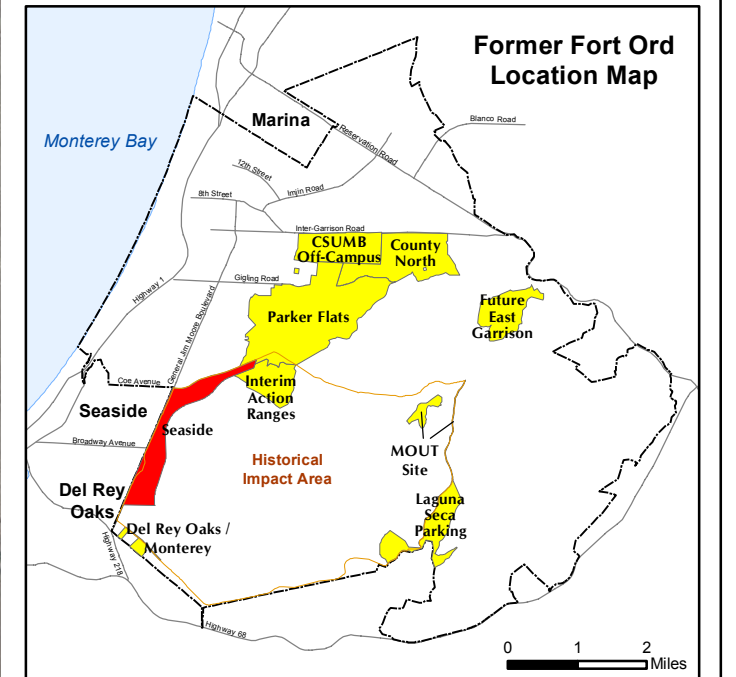
Figure 1. Seaside MRA RQA Level 2 and Level 3 Areas and CTS Buffer; Natural Resource Impact Mitigation Checklist

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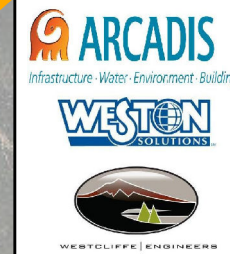
Legend

-  Area to Proceed to Level 3 Soil Scrape and Post-Scrape DGM Survey (0.5 Acres)
-  Level 2 Baseline DGM Survey Areas (30.8 Acres)
-  California Tiger Salamander (CTS) Buffer
-  USACE Parcel
-  100 Foot Buffer from Borderland Interface
-  Borderland Interface
-  Residential Development Area
-  Non-Residential Development Area
-  Seaside MRA Boundary
-  Major Road



State Plane California IV, NAD 1983 (U.S. Survey Foot)

0 1,250 2,500 Feet



Seaside MRA
RQA Level 2 and 3 Areas
and CTS Buffer
Natural Resource Impact
Mitigation Checklist
 FORA ESCA RP
 Monterey County, California

DRAFT Figure 1



**QUALIFIED BIOLOGIST NRIM CHECKLIST
FIELD INSPECTION REPORT – FORA/ESCA**

Munitions Response Area Seaside Date March 19, 2013 Page 1 of 4

Site Visited in MRA Residential Quality Assurance (RQA) Level 3

Other Documentation (i.e., maps, photos, etc.): Photos: 2013 0319 SEA RQA L3, map: 2013 0319 DYM

Qualified Biologist(s) Danielle Muir and Cynthia Fenter Escort/Other Mark Majors, Weston Solutions

Weather/Site Conditions overcast ~65°F

Tasks to be Completed Inspect RQA Level 3 work area where Weston Solutions crew is removing the top ~8 inches of soil.

Other Work Being Conducted Onsite Weston Solutions crew removing soil.

Work-Force Onsite (Company Name) Weston Solutions.

CHECKLIST

1) General Impact Minimization Measures	a. Ingress/Egress procedures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
	b. Soil disturbance minimized to work areas only, per supervisor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
	c. Vehicles staying on existing roads to extent possible	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
	d. Erosion absent from Borderland Interface areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
2) Habitat Checklist	a. Compliance w/ any add'l measures req'd?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Work conducted during daylight hours. Travel restricted to approved roads.</u> Followed up with:

QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST – (CONTINUED)

Munitions Response Area Seaside Date March 19, 2013 Page 2 of 4

3) CTS Related Impact Minimization Measures	a. 2-km buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The entire RQA level 3 work area is within the 2km buffer. The crew was given the CTS refresher training Oct. 2012 Followed up with:
	b. 1-km buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The RQA level 3 work area is outside the 1km buffer. Followed up with:
3) CTS Related Impact Minimization Measures (cont'd)	c. 500 meter buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The RQA level 3 work area is outside the 500m buffer. Followed up with:
	d. Excavation silt fences ok	<input type="checkbox"/> Yes <input type="checkbox"/> No NA excavations are less than 12 inches and are sloped so that CTS would not become trapped. Followed up with:

TIME
ACTIVITIES
0715

D. Muir and C. Feater arrived in Seaside MRA where the RQA level 3 soil excavation work is being conducted by Weston Solutions. The Weston Solutions crew is on site. The equipment on site to conduct the work includes a tracked excavator, a front end loader, and a backhoe. Soil is being excavated down approximately 8 inches and then placed on the existing dirt road, known as the blue line road. The RQA level 3 work area was surveyed on March 4, 2013, prior to work commencing. The area was observed to be previously disturbed and containing mostly weedy species. Species included ice plant, *Heterotheca grandiflora* and *Acmispon glaber*.

QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST - (CONTINUED)

Munitions Response Area Seaside Date March 19, 2013 Page 3 of 4

TIME

ACTIVITIES

A small section of the work area to the
was was composed of less disturbed Maritime
Chaparral and included: *A. paniculata*, *Salvia*
mellifera, *Baccharis pilularis*, *E. ericoides*
A. tomentosa and *Acmispon glaber*.

The excavated work area was approximately
8 inches in depth and sloped so that
OTS could not become trapped.

0800

D. Muir and C. Fenter departed the
work area.



QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST – (CONTINUED)

Munitions Response Area Seaside

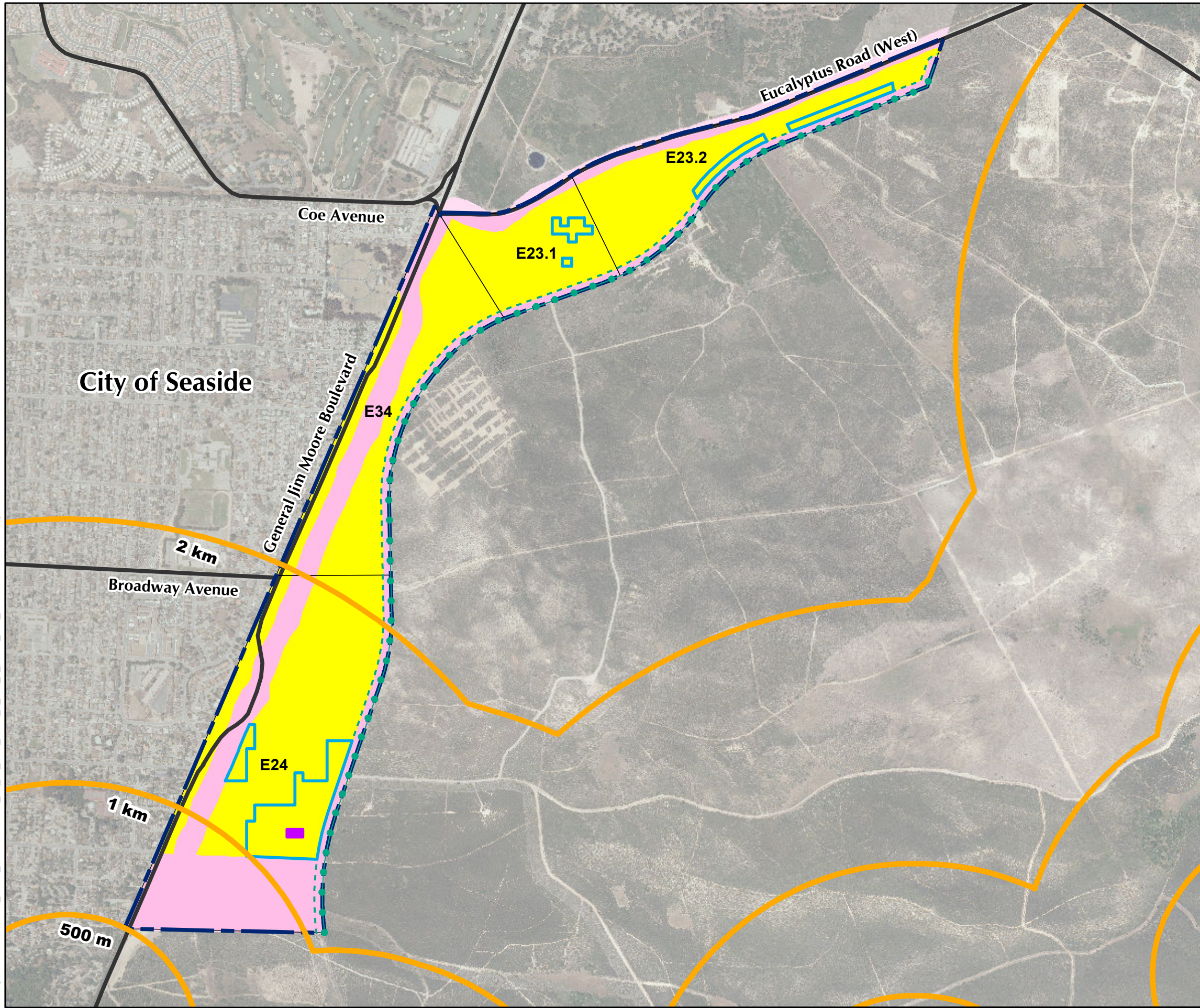
Date March 19, 2013 Page 4 of 4

Route Copies To: _____

SIGNED Danielle M. i.

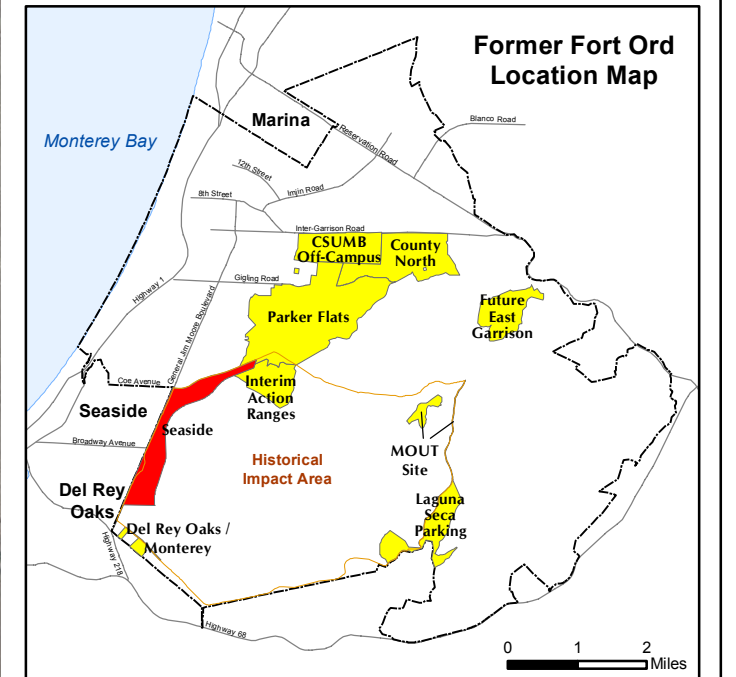
Reviewed _____
(Senior QB)

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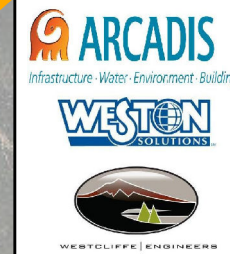
Legend

-  Area to Proceed to Level 3 Soil Scrape and Post-Scrape DGM Survey (0.5 Acres)
-  Level 2 Baseline DGM Survey Areas (30.8 Acres)
-  California Tiger Salamander (CTS) Buffer
-  USACE Parcel
-  100 Foot Buffer from Borderland Interface
-  Borderland Interface
-  Residential Development Area
-  Non-Residential Development Area
-  Seaside MRA Boundary
-  Major Road



State Plane California IV, NAD 1983 (U.S. Survey Foot)

0 1,250 2,500 Feet



Seaside MRA
RQA Level 2 and 3 Areas
and CTS Buffer
Natural Resource Impact
Mitigation Checklist
 FORA ESCA RP
 Monterey County, California

DRAFT Figure 1



**QUALIFIED BIOLOGIST NRIM CHECKLIST
FIELD INSPECTION REPORT – FORA/ESCA**

Munitions Response Area Future East Garrison Date July 11, 2013 Page 1 of 4

Site Visited in MRA Brush cut area - grid cells: C4E5I0, C4E6J1, C4E6J2, C4F6A1

Other Documentation (i.e., maps, photos, etc.): Photos 1-4, Map 2013 04 11 Map A

Qualified Biologist(s) Danielle Muir, Mitch Siemens Escort/Other N/A

Weather/Site Conditions over cast, ~70°F

Tasks to be Completed Inspection of brush cutting completed on June 30, 2013

Other Work Being Conducted Onsite N/A (Brush cutting completed on June 30, 2013)

Work-Force Onsite (Company Name) N/A

CHECKLIST

1) General Impact Minimization Measures	a. Ingress/Egress procedures	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Minimal disturbance - one path in and out of the work area.</u> Followed up with: <u>N/A</u>
	b. Soil disturbance minimized to work areas only, per supervisor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
	c. Vehicles staying on existing roads to extent possible	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Followed up with:
	d. Erosion absent from Borderland Interface areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>No erosion issues observed</u> Followed up with:
2) Habitat Checklist	a. Compliance w/ any add'l measures req'd?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Oak trees >6" DBH retained during brush cutting. Approximately 10 Toro manzanitas retained during brush removal.</u> Followed up with: <u>N/A</u>

QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST – (CONTINUED)

Munitions Response Area Future East Garrison (FEG) Date July 11, 2013 Page 2 of 4

3) CTS Related Impact Minimization Measures	a. 2-km buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Entire area within 2km buffer.
		Followed up with:	
3) CTS Related Impact Minimization Measures (cont'd)	b. 1-km buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Entire area within 1km buffer.
		Followed up with:	
3) CTS Related Impact Minimization Measures (cont'd)	c. 500 meter buffer staked	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Entire area within 500m buffer
		Followed up with:	
	d. Excavation silt fences ok	<input type="checkbox"/> Yes <input type="checkbox"/> No	N/A - No Excavation
		Followed up with:	

TIME

ACTIVITIES

10:05 D. Muir and Mitch Siemens arrive in FEG at the location where brush cutting has occurred. The crew used an excavator with a grinding attachment on the arm to conduct the brush cutting. The tracks left from the excavator were observed to be minimal disturbance for ingress and egress with one path in and out of the site.

10:15 all oak trees with a diameter at breast height (DBH) of six inches or greater were left uncut and/or lower branches were trimmed up to prevent hazards. Several torro manzanitas (*Arctostaphylos montereyensis*) were left uncut. Approximately ten torro manzanitas were observed to be left



QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST – (CONTINUED)

Munitions Response Area Future East Garrison Date July 11, 2013 Page 3 of 4

TIME

ACTIVITIES

uncut within the four grid cells: C4F6A1, C4E5J0, C4E6J1, C4E6J2. See photos 1-3. All brush that was ground up with the attachment on the excavator was left in place and would server as a mulch to help prevent exrosion of the area.

1115

D. Muir and M. Siemens departed the site.



QUALIFIED BIOLOGIST IMPACT MITIGATION FIELD CHECKLIST – (CONTINUED)

Munitions Response Area Future East Garrison

Date July 11, 2013

Page 4 of 4

Route Copies To: _____

SIGNED Danielle Mui

Reviewed _____

(Senior QB)

10	C4F5H1	C4F5H2	C4F5H3	C4F5H4	C4F5H5	C4F5H6	C4F5H7	C4F5H8	C4F5H9	C4F5H0	C4F6H1	C4F6H2	C4F6H3	C4F6H4	C4F6H5	C4F6H6	C4F6H7	C4F6H8	C4F6H9
20	C4F5G1	C4F5G2	C4F5G3	C4F5G4	C4F5G5	C4F5G6	C4F5G7	C4F5G8	C4F5G9	C4F5G0	C4F6G1	C4F6G2	C4F6G3	C4F6G4	C4F6G5	C4F6G6	C4F6G7	C4F6G8	C4F6G9
30	C4F5F1	C4F5F2	C4F5F3	C4F5F4	C4F5F5	C4F5F6	C4F5F7	C4F5F8	C4F5F9	C4F5F0	C4F6F1	C4F6F2	C4F6F3	C4F6F4	C4F6F5	C4F6F6	C4F6F7	C4F6F8	C4F6F9
40	C4F5E1	C4F5E2	C4F5E3	C4F5E4	C4F5E5	C4F5E6	C4F5E7	C4F5E8	C4F5E9	C4F5E0	C4F6E1	C4F6E2	C4F6E3	C4F6E4	C4F6E5	C4F6E6	C4F6E7	C4F6E8	C4F6E9
50	C4F5D1	C4F5D2	C4F5D3	C4F5D4	C4F5D5	C4F5D6	C4F5D7	C4F5D8	C4F5D9	C4F5D0	C4F6D1	C4F6D2	C4F6D3	C4F6D4	C4F6D5	C4F6D6	C4F6D7	C4F6D8	C4F6D9
60	C4F5C1	C4F5C2	C4F5C3	C4F5C4	C4F5C5	C4F5C6	C4F5C7	C4F5C8	C4F5C9	C4F5C0	C4F6C1	C4F6C2	C4F6C3	C4F6C4	C4F6C5	C4F6C6	C4F6C7	C4F6C8	C4F6C9
70	C4F5B1	C4F5B2	C4F5B3	C4F5B4	C4F5B5	C4F5B6	C4F5B7	C4F5B8	C4F5B9	C4F5B0	C4F6B1	C4F6B2	C4F6B3	C4F6B4	C4F6B5	C4F6B6	C4F6B7	C4F6B8	C4F6B9
80	C4F5A1	C4F5A2	C4F5A3	C4F5A4	C4F5A5	C4F5A6	C4F5A7	C4F5A8	C4F5A9	C4F5A0	C4F6A1	C4F6A2	C4F6A3	C4F6A4	C4F6A5	C4F6A6	C4F6A7	C4F6A8	C4F6A9
90	C4E5J1	C4E5J2	C4E5J3	C4E5J4	C4E5J5	C4E5J6	C4E5J7	C4E5J8	C4E5J9	C4E5J0	C4E6J1	C4E6J2	C4E6J3	C4E6J4	C4E6J5	C4E6J6	C4E6J7	C4E6J8	C4E6J9
00	C4E5I1	C4E5I2	C4E5I3	C4E5I4	C4E5I5	C4E5I6	C4E5I7	C4E5I8	C4E5I9	C4E5I0	C4E6I1	C4E6I2	C4E6I3	C4E6I4	C4E6I5	C4E6I6	C4E6I7	C4E6I8	C4E6I9
10	C4E5H1	C4E5H2	C4E5H3	C4E5H4	C4E5H5	C4E5H6	C4E5H7	C4E5H8	C4E5H9	C4E5H0	C4E6H1	C4E6H2	C4E6H3	C4E6H4	C4E6H5	C4E6H6	C4E6H7	C4E6H8	C4E6H9
20	C4E5G1	C4E5G2	C4E5G3	C4E5G4	C4E5G5	C4E5G6	C4E5G7	C4E5G8	C4E5G9	C4E5G0	C4E6G1	C4E6G2	C4E6G3	C4E6G4	C4E6G5	C4E6G6	C4E6G7	C4E6G8	C4E6G9
30	C4E5F1	C4E5F2	C4E5F3	C4E5F4	C4E5F5	C4E5F6	C4E5F7	C4E5F8	C4E5F9	C4E5F0	C4E6F1	C4E6F2	C4E6F3	C4E6F4	C4E6F5	C4E6F6	C4E6F7	C4E6F8	C4E6F9
40	C4E5E1	C4E5E2	C4E5E3	C4E5E4	C4E5E5	C4E5E6	C4E5E7	C4E5E8	C4E5E9	C4E5E0	C4E6E1	C4E6E2	C4E6E3	C4E6E4	C4E6E5	C4E6E6	C4E6E7	C4E6E8	C4E6E9

MRS-42

MRS-42 EXP

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G15



1. FEG pre-brush cut June 27, 2013



2. FEG pre-brush cut June 27, 2013



3. FEG pre-brush cut June 27, 2013



4. FEG post brush cutting July 11, 2013



5. FEG post brush cutting July 11, 2013