

FIELD WORK VARIANCE

Project Name/Number Fort Ord / 846075 CTO/WAD CTO 16 / WAD 06

Applicable Document: Final Work Plan, MRS-16 Date: 03/06/08

Munitions and Explosives of Concern Removal, Former Fort Ord, California, August 2006, Revision 1

Problem Description:

MRS-16 MEC Removal work was not completed due to insufficient funding prior to completion of all work. Additional funding has been secured to complete work.

Recommended solution:

Intent of work is to remove fencing from the site. This work does not include the saturated area in the western portion of the site. Complete work inside and at fenceline as detailed below:

- 1) Complete reacquisition and excavation of anomalies resulting from Digital Geophysical Mapping (DGM) performed previously.
- 2) Investigate latrine and trash pit delineated during previous work at the site.
- 3) Conduct EM61 real time work in areas where DGM is not feasible to include areas with significant tree cover and site fenceline once fence is removed.
- 4) Conduct "mag and dig" operations using Schonstedt GA52-C/x magnetometers in areas where EM61 real time work is not feasible due to terrain conditions and proximity to obstructions (tree trunks, stones, mounds, etc.).
- 5) Remove fence around the site at an appropriate time. Current intent is to leave fencing in place until removal of fencing is required to complete work at the site.

Some areas at the site have significant populations of Sand Gilia and Monterey Spineflower which preclude work at this time. These areas are currently being delineated and will be addressed in June 2008 when impact to these populations is reduced.

Impact on present and completed work:

Will allow completion of MEC Removal work inside and along MRS-16 fenceline.

Requested by: Kevin Siemann

Recommended revisions to the plan:

A total of 1445 DGM anomalies will be reacquired and subsequently excavated if reacquisition is successful. Two reacquisition teams consisting of one local field laborer and one geophysicist each will reacquire the anomalies. Production goals for reacquisition are 100 reacquired anomalies per day per team. Subsequent to the reacquisition phase of the project, two excavation/EM61 real time teams will excavate anomalies and perform EM61 real time operations. Production goals for excavation are 75 excavated anomalies per day per team. This goal is based on the assumption that the majority of reacquired anomalies will require only one dig. Excavation/EM61 real time teams will consist of the following personnel on each team: one geophysicist, one UXO Tech III, and one UXO Tech I or II. Production goals for EM61 real time is completion of one grid (area) per day per team.

Data collection for DGM anomaly excavation and EM61 real time work will be different as defined below.

For DGM targets that are reacquired and dug, all standard data fields will be collected for every dig. This will include item length, diameter, metal type (ferrous vs. non-ferrous) as well as estimated thickness from each dig (measurements are visual estimates). For the previous DGM grids, dimensions and weight were collected only for suspected MEC. This change was requested by the USACE geophysicist, as discussed in a team conference call 2/14/08.

For Real Time EM61 grids/areas, a record will be entered into PDAs that will record the following items by grid:

Grid
Team

Number of Digs
Total lbs of Munitions Debris
Total lbs of Other Debris
Grid Op Complete (Y/N)
Date

Additionally, for EM61 real time grids/areas, an "item" record will be created *only* for MEC or QA Seed items that are found. This will include all of the standard data fields, including coordinates (or offsets), length, diameter and weight.

Every excavation, either resulting from DGM or EM61 real time work, will be QC'd following excavation using the EM61. If QC check results in an EM61 reading below 14 mV, excavation will be considered complete. If QC check results in an EM61 reading at or above 14 mV, subsequent excavation will occur. This process will continue until QC check of excavation results in an EM61 reading below 14 mV.

Subsequent to completion of subsurface work at the site, a final QC visual inspection of the site will be performed prior to demobilization.

Specific individual grids and actions required are included on the attached spreadsheet.

Clarification Minor Change Major Change
Affects Budget Yes X No
Affects Schedule Yes X No

Signature [Signature] Date 3/6/08
Technical Reviewer

Shaw Approvals:

Signature [Signature] Date 3/6/08
Signature _____ Date _____
UXOQCS

Digitally signed by Peter Kelsall
DN: CN = Peter Kelsall, C = US, O = Shaw E&I
Date: 2008.03.06 13:20:32 -0700
Project Manager
Peter Kelsall

USACE Approval: If Major Change:

Signature [Signature] Date 3/6/08 Signature [Signature] Date 3/6/08
OE Safety Specialist USACE COR or TM