4300 B Street, Suite 600
Anchorage, AK 99503-5922 USA
907.563-3322 Fax 9.907.563-3320

Work Plan Addendum

Date	8 August 2011
To	Bob Brock (USACE)
CC	Joe Malen (DPW)
From	Terry Heikkila, PE, PMP
Subject	**Draft Former Communication Site Environmental Response Work Plan Addendum**

This Work Plan Addendum describes environmental support activities that may be conducted at the Former Communication Site (FCS) in Fort Wainwright, Alaska (Figure 1). The activities described in this Work Plan Addendum will be conducted in accordance with all plans and procedures outlined in the *Fort Wainwright Post Wide Work Plan* (U.S. Army Corps of Engineers [USACE], Alaska District [2011]). Appendices to the Work Plan include the Site Safety and Health Plan, Field Sampling Plan, Quality Assurance Project Plan, Environmental Protection Plan, Storm Water Pollution Prevention Plan, Stockpile Construction Plan, and Waste Management Plan.

Project Description

Construction planned for the FCS during 2011 includes installation of new and replacement utilities, roadways, driveways, and drainage ditches for completion of the Army Family Housing Replacement project. These activities may include excavation up to 6 feet below ground surface. Although it is not expected, soil with suspected contamination could be identified during these activities.

Objectives of environmental support activities may include the delineation, investigation, excavation, and proper disposal of contaminated material identified during construction activities. A combination of field screening, excavation, and sampling activities may be used to meet objectives at the site. Data quality objectives have been established for field activities to ensure that work procedures and data collected during the project are of sufficient quality and quantity to meet the overall project objectives (see Table 1).

Field Activities

In the event that suspected contamination is identified by the onsite contractor, American Mechanical Inc, Jacobs Engineering Group Inc. (Jacobs) will mobilize to the site and conduct an investigation that may include the following activities:

- Physical investigation of anomalies and metal debris if encountered
- Identification of the contaminant of concern
- Field screening utilizing a photoionization detector (PID)
- Excavation activities
- Media sampling
- Stockpiling or Super Sack® containerization of contaminated materials

A certified unexploded ordnance (UXO) technician will be present at all excavations to visually survey the excavations and surrounding work area to ensure that no UXO, discarded military munitions (DMM), or munitions debris (MD) exist and pose a threat to the safety of any human or environmental receptors.

After field activities are completed, confirmation samples may be collected to determine the boundaries of excavation, presence/absence of contamination, and the continued direction of excavation if necessary. Soil confirmation samples may be analyzed for gasoline-range organics (GRO), diesel-range organics (DRO), residual-range organics (RRO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), herbicides, pesticides, and Resource Conservation and Recovery Act (RCRA) metals; however, the analyte list may be revised based on field observations and potential sources. Field screening and confirmation samples will be collected in accordance with the Field Sampling Plan, Appendix B to the Work Plan (USACE 2011), and the data quality objectives (Table 1).

Waste Management

The UXO team will inspect all metals items. The items will be segregated according to their hazard classification. All items classified as MD will be inspected to verify that the item does not contain explosive residues.

Any metals not classified as UXO, DMM, or MD will be taken to a local recycler for disposal.

Contaminated soil will be stockpiled or placed into Super Sacks® for short-term storage at a location to be determined by U.S. Army. Waste will be sampled for analytes of concern based on field observations and waste disposal requirements prior to transportation to an approved disposal and treatment facility. If encountered, hazardous waste will be disposed of in accordance with the Field Sampling Plan, Appendix B to the Work Plan (USACE 2011). All personal protective equipment and spent sampling material will be containerized in an overpack for disposal at a location to be determined by U.S. Army.

Site Restoration

The site will be restored as appropriate and based on direction by U.S. Army.

Reporting

Field logbooks will be used to record fieldwork activities and field screening results, and to log soil quantities. A summary of activities, field screening results and analytical soil results will be presented in an After-Action Report.

Safety

All activities will be conducted in accordance with the Site Safety and Health Plan, Appendix A to the Work Plan (USACE 2011).

References

ADEC (Alaska Department of Environmental Conservation. ADEC. 2008 (October). Oil and Other Hazardous Pollution Control Regulations—Discharge Reporting, Cleanup, and Disposal of Oil and Other Hazardous Substances. 18 AAC 75.

USACE (U.S. Army Corps of Engineers). 2011 (March). *Fort Wainwright Post Wide Work Plan*. Fort Wainwright, Alaska. Prepared by Jacobs Engineering Group Inc.

USACE. 2008. *Safety and Health Manual*. EM 385-1-1.

Table

Table 1 Data Quality Objectives

Figure

Figure 1 Location and Vicinity Maps

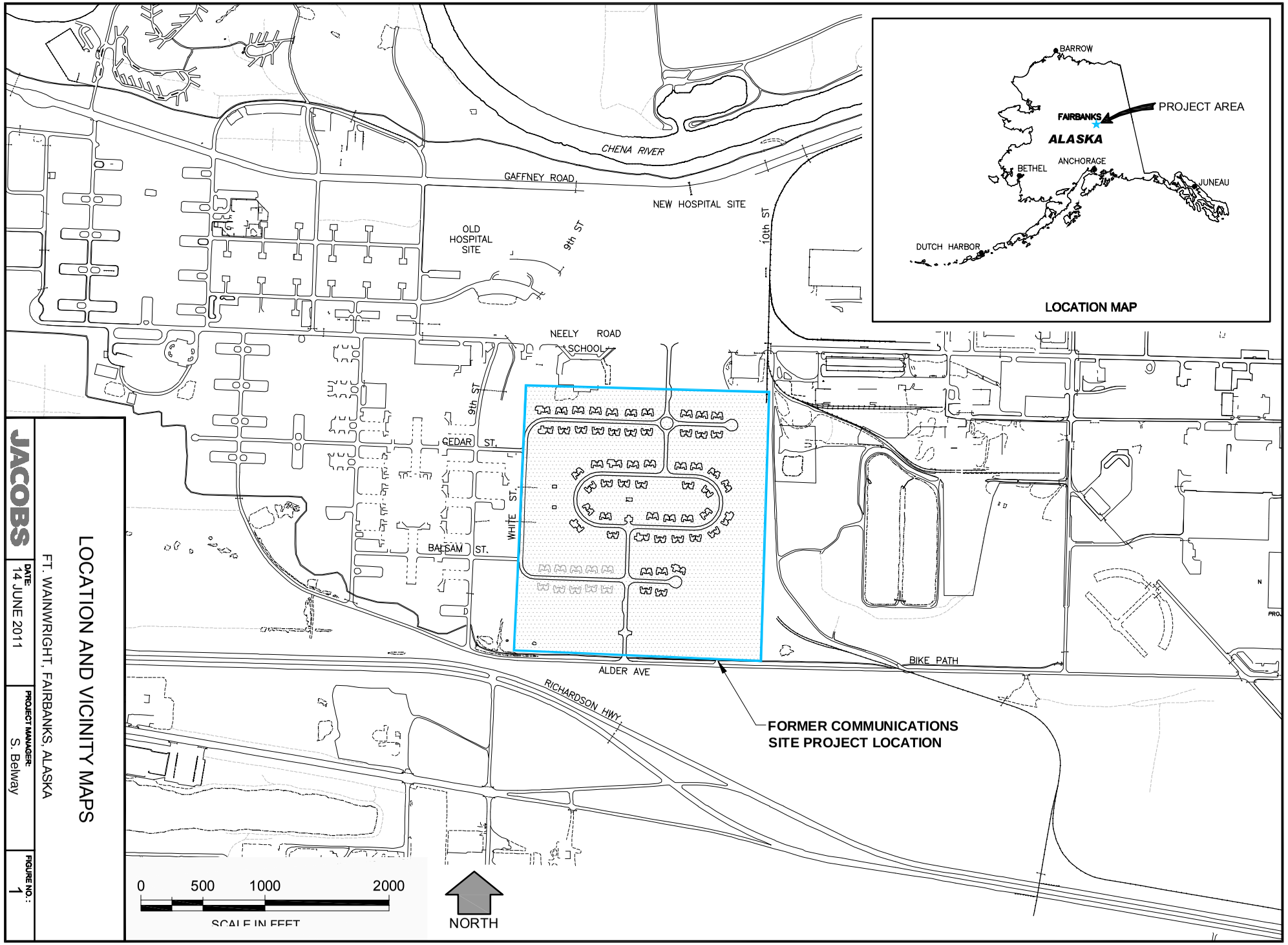
TABLE

Table 1
Data Quality Objectives

Objective	Data to Be Collected	Analytes of Potential Concern	Data Use	Concentration Level of Concern	Comments
Characterize and classify metal debris	Observations recorded in logbooks and photographs	NA	Determine potential explosive hazard and ensure that no debris poses a threat to safety of the workers or any human or environmental receptors.	NA	A certified UXO technician will be present at all excavations to visually survey the excavations to ensure no UXO, DMM, or MD exist and pose a threat to the safety of the workers or any human or environmental receptors.
Excavation field screening	Soil field screening samples from the excavation	Volatile constituents	Guide the excavation to clean boundaries using a PID	Action limit to be determine at each location	Soil with field screening results greater than the action limit will be stockpiled onsite for removal. Soil with field screening results less than the action limit will be left in place and analytical confirmation samples will be collected.
Excavation confirmation sampling	Soil samples from the clean boundaries of the excavation	GRO DRO RRO SVOCs VOCs RCRA Metals Pesticides Herbicides Polychlorinated biphenyls (PCBs) Explosives Analyte list will be revised based on field observations	Confirm the excavation has reached clean boundaries and can be backfilled	ADEC 18 AAC 75, Method Two cleanup criteria (Tables B1 and B2) for the under 40-inch zone	Field screening samples will be collected at a frequency determined appropriate by the onsite technical lead. Analytical soil samples will be collected at the frequency described below: <u>For Surface/Floor</u>: 0 to 50 square feet = One sample 51 to 250 square feet = Two samples > 250 square feet = Two samples plus one per additional 250 square feet <u>For sidewalls</u>: One sample per 20 linear feet, or portion thereof at the highest field screening reading.
Characterize stockpile/containerize into Super Sacks®	Soil samples from stockpiles		Characterize stockpiles for appropriate waste disposal	RCRA Waste Characterization 40 CFR 261.24 (Table 1)	Field screening samples will be collected at a frequency determined appropriate by the onsite technical lead. Analytical soil samples will be collected at a frequency of one per 10 cubic yard of stockpiled soil.

FIGURE

G:\Autocad\ERS-UR\05F50701\2009 RI Rpt\Fig 1-1 Location & Vicinity Maps.dwg Sep 30,2010 -tiedemam



JACOBS

LOCATION AND VICINITY MAPS

FT. WAINWRIGHT, FAIRBANKS, ALASKA

DATE: 14 JUNE 2011

PROJECT MANAGER: S. Belway

FIGURE NO.: 1