TETRA TECH EC, INC.

9 April 2007
FWHN-FTMC-07-001

Ms. Wanda Hampton
Contracting Officer
US Army Engineering and Support Center, Huntsville
P.O. Box 1600
Huntsville, AL 35807

Subject: Letter Report TO20 Phase 1, Fort McClellan, Alabama, Contract DACA87-99-D-0010, Task Order 0020.

Dear Ms. Hampton:

The TO20 Phase 1 Letter Report for Fort McClellan, Alabama of the subject contract is submitted.

Please feel free to contact me at (256) 430-3701 or (770) 331-4195 with any questions. I can also be reached by e-mail at Art.Holcomb@tteci.com.

Sincerely,

Arthur B. Holcomb, P.E.
Vice President

Enclosures, as stated

CF: Mr. Roland Belew, US Army Engineering & Support Center, Huntsville
Ms. Lisa Holstein, US Army Garrison, Ft. McClellan, AL

TETRA TECH EC, INC.

Distribution

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CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Arthur B. Holcomb P.E.
Vice President

SITE LOCATION

Fort McClellan is located northeast of the City of Anniston, Calhoun County, Alabama. To the west are the areas known as Weaver and Blue Mountain. To the North is the City of Jacksonville. The Talladega National Forest is to the east of the post. Figure 4-5 shows the location of the Charlie Area and additionally shows where the no public access boundary was marked with signs, to include where gates and barricades were installed.

OBJECTIVE

The objective of this action was to install UXO warning signs, gates, and barriers. These were to act as land use controls to warn the public of possible UXO contamination and to prevent unauthorized entry via existing roadways. The project was broken down into two tasks; Task 1 was the installation of gates, barriers, berms, and fencing. Task 2 was the installation of warning signs around the boundary.

DISCUSSION

In early 2003 Tetra Tech EC received an RFP for the installation of the signs, gates and barriers. The contract was awarded and a work plan was prepared and submitted. On April 8, 2003 a Notice to Proceed with the work was given. The installation of the signs, barriers, and gates was completed in July, 2003.

In accordance with Task 1 and the approved work plan, the gates and barriers were installed. The location of the gates and barriers can be seen on Figure 4-5. The approved work plan is included as Attachment 1.

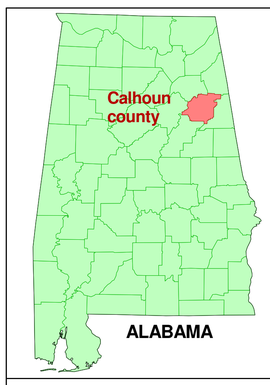
In accordance with Task 2 and the approved work plan, the warning signs were placed around the no public access area of the Mountain Longleaf National Wildlife Refuge within line of sight of the previous sign, with no distance greater than 200 feet. This means that in the open areas signs were placed no greater than 200 feet apart, but if conditions were such that 200 feet could not be gained while still being within sight of the previous sign, then the distance was shortened to ensure line of sight between signs. At the request of the U.S. Fish and Wildlife Service a second sign was attached to every other sign location. This sign was put below the UXO warning signs, on the same pole, to let the public know that the area beyond was closed by order of the U.S. Fish and Wildlife Service. The boundary area that was signed can be viewed on Figure 4-5.

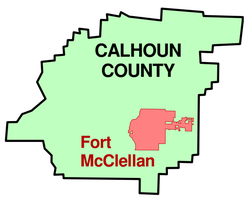
CONCLUSIONS

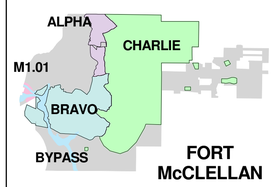
In accordance with the approved work plan, all required signs, gates, and barriers were installed. Figure 4-5 shows the boundary which was signed and the location of all gates and barriers which were installed. There were no safety incidents and the job was completed on schedule.

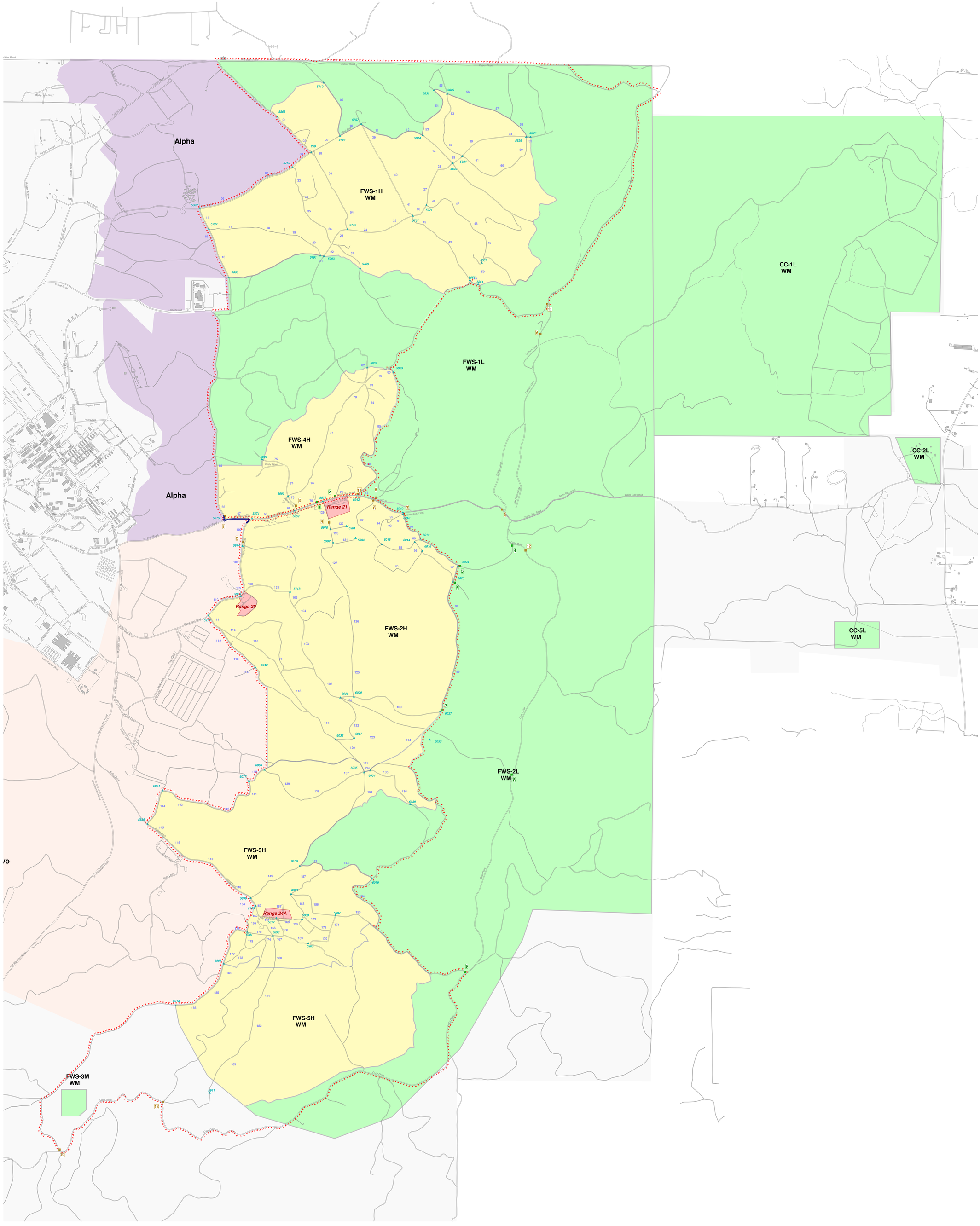
CC: Roland Belew
Suzanne Murdock
Lisa Holstein
Karen Pinson

Figures









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W E

S

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000
Feet

SCALE: 1" = 1000'

TETRA TECH EC, INC.

Legend

- 888 Firebreak/Road Segments
- 9999 Survey Control Points & Labels
- 99 USFWS Gate Labels
- 88 USFWS Barrier Labels
- USFWS Barriers
- USFWS Gates
- Signs Designating No Public Access Boundary
- Roads
- High Use Areas
- Proposed No Further Action Areas within the Charlie Study Area
- Proposed Clearance Areas within the Charlie Study Area
- Alpha Study Area
- Bravo Study Area
- Fort McClellan
- Road Area Cleared to Depth (except paved areas)
- Buildings

Figure 4-5

FWS LAND TRANSFER AREA

CONTROLS

**Fort McClellan,
Calhoun county,
Alabama
January 2007**

Letter Report
Attachment 1
Site Specific Work Plan
for General Site in the FWS Portion
of the Charlie Area

SITE SPECIFIC WORK PLAN
FOR GENERAL SITE SUPPORT IN
THE FWS PORTION OF THE CHARLIE AREA

1.0 PURPOSE

1.1 The purpose of this Site Specific Work Plan is to provide the standard procedures and safety and health requirements applicable to conducting UXO Avoidance for the installation of signs, gates, barriers and fencing in the FWS portion of the Charlie Area. The work area is suspected to contain UXO.

2.0 SCOPE

2.1 FWENC will self perform the installation of approximately: 1000 UXO warning signs, 10 gates, and 12 barriers. Each gate/barrier will also require 3 strand barb wire fencing to prevent drive around from occurring. In order to safely install the steel post and bollards, UXO Avoidance techniques will be used. A team of qualified UXO Technicians will ensure the area selected for gate or barrier installation is free of UXO. Signs will be installed by a team of laborers, one of which will be a qualified UXO Technician. Prior to any sign post being driven into the ground the qualified UXO Technician will ensure the location does not contain UXO.

3.0 APPLICABILITY

3.1 This Plan applies to all site personnel, including contractor and subcontractor personnel, involved in the conduct of UXO Avoidance or general work in this area. This Plan is not intended to contain all of the requirements needed to ensure complete compliance, and should be used in conjunction with the General Site Wide Work Plan.

4.0 PERSONNEL REQUIREMENTS

4.1 The following FWENC personnel will be involved in the work performed under this work plan:

a. **Senior UXO Supervisor (SUXOS).** The SUXOS will be responsible for oversight of all UXO Avoidance activities and gate, sign and barrier installations;

b. **UXO Safety Officer (UXOSO).** The UXOSO will provide limited supervision to ensure that all work is performed in accordance with the approved Site Wide Health and Safety Plan; and

c. **UXO Quality Control (UXOQC).** The UXOQC will perform Quality Control (QC) procedures in accordance with the *Site Wide Work Plan.*

d. **UXO Technician.** Will provide the actual UXO Avoidance activity in the field.

e. **FWENC/Sub-Contractor Laborer.** Will provide the needed labor to install all required gates, barriers, and signs.

5.0 OPERATING PROCEDURES

5.1 UXO avoidance operations will be carried out using qualified UXO Technicians. They will ensure the locations of all signs, gates, barriers and fencing is clear prior to them being installed. The avoidance will be carried out using an approved hand held magnetometer. The locations will be marked using flags, stakes and paint as appropriate.

5.2 The signs will be placed around the perimeter of the FWS portion of the Charlie Area at intervals of the line of site, not to exceed 200 feet. The signs will be 2 color UXO warning signs, mounted on galvanized steel, U channel traffic sign post. The post will be driven into the ground using a hydraulic post driver. The signs will be mounted using standard nut and bolt hardware.

5.3 Gates will be installed in 10 locations as described in the scope of work. Eight (8) of these gates will consist of a single gate 12 feet wide. Two (2) gates will be 20 feet wide, consisting of two (2) 10 foot gates combined. All gates will be mounted to 4 inch steel post and installed in a manner approved by the Ft. McClellan Transition Force. All gates will be painted safety yellow and will have reflective striping. The attached figure shows the approximate location of all gates. Gates number 2 and 8 will be the 20 foot gates with the remainder being 12 foot.

5.4 This task will require two types of barriers: Steel bollard type and Concrete block type. The steel bollard type barriers consist of a line of steel bollards (4 inch OD pipe) filled with, and set in, concrete at 30 inch spacing. The bollards will be set 36 inches deep and will stand 48 inches above grade. The concrete block type consist of 2’ x 2’ x 4’ concrete blocks, which weigh approximately 2000 pounds, placed in a line. These barriers are to prevent vehicle traffic from passing. Both types of barriers will be will be painted safety yellow and have reflective striping. The attached figure has the approximate location of each barrier marked and numbered. Barrier numbers 5 through 10 will be of the concrete block type, with the remainder being bollard type.

5.5 Three strand barbed wire fencing will be installed at gate and barrier crossings, as needed, to prevent vehicles from driving around. The fencing will stretch from the ends of the gates/barriers into the natural surroundings (trees) to cause a man made barrier preventing easy drive around.

6.0 SAFETY PROCEDURES

6.1 All personnel, including contractor and subcontractor personnel, involved in operations on UXO/OE contaminated sites shall be familiar with the potential safety and health hazards associated with the conduct of operations, and with the work practices and control techniques used to reduce or eliminate these hazards. All safety procedures will be carried out in accordance with Chapter Six of the Site Wide Workplan with the following exceptions, which are specific to this Task Order. The Activity Hazard Analysis (AHA) sheet is provided for the tasks listed below.

6.1.1 Welding. Welding will be used for completion of the locking mechanism on the gates and to secure the mounting hardware to prevent its removal. Please see the attached AHA for specific safety procedures for welding.

6.1.2 Farm Tractor. The farm tractor will be used as the base for the auger and pole driver. Please see the attached AHA for specific safety procedures when dealing with this piece of equipment.

6.1.3 Hydraulic Pole Driver. The hydraulic pole driver is attached to a farm tractor and is used to set the sign post in place. Please see the attached AHA for specific safety procedures when dealing with this piece of equipment.

6.1.4 Hydraulic Auger. The auger will be used to create holes into which the steel post and bollards will be inserted and concrete pored. Please see the attached AHA for specific safety procedures when dealing with this piece of equipment.

Site Specific Work Plan
for General Site in the FWS Portion
of the Charlie Area
Attachment 1
Activity Hazard Analysis
Installation of Gates, Fencing and Signs

ACTIVITY HAZARD ANALYSIS		
Project: Ordnance and Explosive Response **Location: Ft McClellan, Anniston, AL** **Contract: DACA87-99-D-0010** **Activity: Installation of Gates, Fencing and Signs** **Approved by: Mark Fletcher, PESM**		
MAJOR STEPS	**POTENTIAL HAZARDS**	**PROTECTIVE MEASURES/CONTROLS**
2. Installation of gates and fences. *Potential Hazards # 1-14 apply*	1. Back Injuries	1. Site personnel will be instructed on proper lifting techniques; mechanical devices should be used to reduce manual handling of materials; team lifting should be utilized if mechanical devices are not available; instruct personnel on proper lifting techniques.
	2. Temperature Extremes	2. Site personnel will be trained about signs and symptoms of heat stress; FWENC Program EHS 4-6 (Annex 6-10) and USACE EM 385-1-1 Section 6.J, Inclement weather and Environmental Hazards will be followed.
	3. Slips/Trips/Falls	3. Maintain work areas safe and orderly; unloading areas should be on even terrain; watch for uneven terrain, stumps, vegetation in walk areas; mark tripping hazards and repair if possible.
	4. Vehicular Traffic	4. Spotters will be used when backing up trucks and heavy equipment; trucks and heavy equipment will be equipped with back up alarms; traffic cones/vests will be used when working in public traffic areas.
	5. Overhead Hazards	5. Personnel will be required to wear hard hats that meet ANSI Standard Z89.1. All ground personnel will stay clear of suspended loads and equipment swing areas. All equipment will be provided with guards, canopies or grills to protect the operator from falling or flying objects. All overhead hazards will be identified prior to commencing work operations.
	6. Dropped Objects	6. Composite or steel toe boots will be worn.
	7. Noise	7. Hearing protection with a noise reduction rating capable of maintaining personal exposure below 85 dBA (ear muffs or plugs) will be worn as needed during heavy equipment operations; all equipment will be equipped with manufacturer's required mufflers. The applicable paragraphs of USACE EM 385-1-1 Section 5.C, Hearing Protection and Noise Control will be followed
	8. Eye Injuries	8. Safety glasses will be worn. A portable eye wash station will be located adjacent to work activities. The applicable paragraphs of USACE EM 385-1-1 Section 5.B, Eye and Face Protection will be followed.
	9. Sharp Objects	9. Cut resistant work gloves will be worn; All hand and power tools will be maintained in safe condition; first aid kits will be available by work area.
	10. Fire	10. 10 lb. ABC type fire extinguisher will be located adjacent to work area; all gasoline-powered equipment will be grounded. The applicable paragraphs of USACE EM 385-1-1 Section 9, Fire Protection will be followed.
	11. Spills	11. Spill and absorbent materials will be readily available. All waste materials generated will be contained in 55-gallon drums.
	12. Biological Hazards	12. Follow procedures outlined in Section 6.4.3 and USACE EM 385-1-1 Section 6.D, Harmful Plants, Animals and Insects will be followed.

ACTIVITY HAZARD ANALYSIS

Project: Ordnance and Explosive Response **Location: Ft McClellan, Anniston, AL** **Contract: DACA87-99-D-0010**
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MAJOR STEPS	POTENTIAL HAZARDS	PROTECTIVE MEASURES/CONTROLS
	13. General Requirements for Motor Vehicles	13. Follow procedures in Section 6.15.2 and the applicable paragraphs of USACE EM 385-1-1 Section 18 (A, B and C), Motor Vehicles. Initial and Daily Pre-use Safety Inspection will be conducted.
	14. Tractor Operations	14. Follow procedures in Section 6.15.2; equipment will have rollover protective structures and seat belts; operators shall wear seat belts when operating equipment; do not operate equipment on grades which exceed manufacturer's recommendations; equipment will have guards, canopies or grills to protect from flying objects; ground personnel will stay clear of all suspended loads; spills and absorbent materials will be readily available; drip pans, polyethylene sheeting or other means will be used for secondary containment; eye contact with operators will be made before approaching equipment; equipment will not be approached on blind sides; avoid equipment swing areas; know hand signals.
2. Installation of gates and fences. *Potential Hazards # 1-15 apply*	15. Hydraulic Post Driver Operations.	15. The use of this machine is subject to certain hazards, which cannot be protected against by mechanical means or production design. Only properly trained personnel, who have read and understands the operator's manual and have been instructed in the safe and proper use, will operate this equipment. Keep all non-essential personnel 25 feet behind the operating driver. Long hair, loose fitting clothing or jewelry should not be around moving parts. All safety shields and guards must be in place prior to operating the equipment. Before operating the equipment, check all pins, bolts and connections to be sure they are securely in place. Replace any damaged or worn parts immediately. Never position the post by hand. Always use the Post Holder Tool. Be sure the post is "square cut" on top. Angle cuts post can "Kick Out" of driver an injury the operator. Do not walk or work under a raised driver ram unless it is securely blocked. Never leave post driver ram in the raised position. Always lower the ram to the ground or to the transport position and install the transport lock pin before transporting or storing. Remove hydraulic pressure prior to doing any maintenance. If injured by escaping hydraulic fluid, see a doctor at once. Gangrene or death can result if not treated.
Potential Hazards # 1-14 and 16 apply	16. Post Hole Digger Operations.	16. The use of this machine is subject to certain hazards, which cannot be protected against by mechanical means or production design. Only properly trained personnel, who have read and understands the operator's manual and have been instructed in the safe and proper use, will operate this equipment. Do not operate the digger with another person near, or in contact with any part of the digger. The post hole digger is designed for a one-man operation; keep all personnel 25 feet from the digger when it is started. All safety shields and guards must be in place prior to operating the equipment. Before operating the equipment, check all pins, bolts and connections to be sure they are securely in place. Replace any damaged or worn parts immediately. Do not walk or work under a raised digger or attachment unless it is securely blocked. Keep hands, feet, hair, jewelry, and clothing, away from all moving and/or rotating parts. When leaving equipment unattended: Disengage PTO, set parking brake, stop engine and remove key from ignition. Park in level area.

ACTIVITY HAZARD ANALYSIS

Project: Ordnance and Explosive Response **Location: Ft McClellan, Anniston, AL** **Contract: DACA87-99-D-0010**
Activity: Installation of Gates, Fencing and Signs **Approved by: Mark Fletcher, PESM**

MAJOR STEPS	POTENTIAL HAZARDS	PROTECTIVE MEASURES/CONTROLS
Potential Hazards # 1-10, 12, and 18 apply	17. Welding/Cutting Operations	17. Follow the procedures of USACE EM 385-1-1 Section 10. Welders, cutters, and their supervisors shall be trained in the safe operation of their equipment, safe welding/cutting practices, and proper respiratory and fire protection. All welding/cutting equipment shall be inspected daily and defective equipment shall be repaired or replaced prior to use. Compatible fire extinguishing equipment shall be provided in the immediate vicinity of welding/cutting operations. A fire watch will be present during welding/cutting operations and will remain at the site for at least 30 minutes after welding/cutting has been completed. Follow the guidelines for personnel protective and safety equipment as outlined in USACE EM 385-1-1 Section 5. Approved protective clothing and equipment must be worn during all welding/cutting operations.
3. Installation of Signs. *Potential Hazards # 1, 2, 3, 6, 8, 9, 12, and 17 apply*	18. Hand and Power Tools.	18. Follow the procedures of USACE EM 385-1-1 Section 13 will be followed. The proper tools will be used for each task, all tools will be inspected before each use, damaged tools will be removed from service, and tools will be used in accordance with manufacturer's instructions.
EQUIPMENT USED	**INSPECTION REQUIREMENTS**	**TRAINING REQUIREMENTS**
1. Level D PPE 2. First Aid Kits 3. Portable Eyewash 4. Fire Extinguishers 5. John Deere 5310 Tractor 6. Hydraulic Post Driver 7. Post Hole Digger 8. Hand and Power Tools	1. Pre-use inspection. 2. Monthly inspections will be performed on first aid kits. 3. Portable eyewash will be inspected monthly. 4. Monthly inspections will be performed on fire extinguishers. 5. Conduct pre-use inspections.	1. Personnel have read and comply with SSHP 2. Site specific training 3. At least 2 individuals on-site will have current CPR and First Aid training 4. Instruct personnel on proper use of fire extinguishers 5. Competent operators will be used 6. Instruct personnel on proper use of hand and power tools