12.0 MAPS

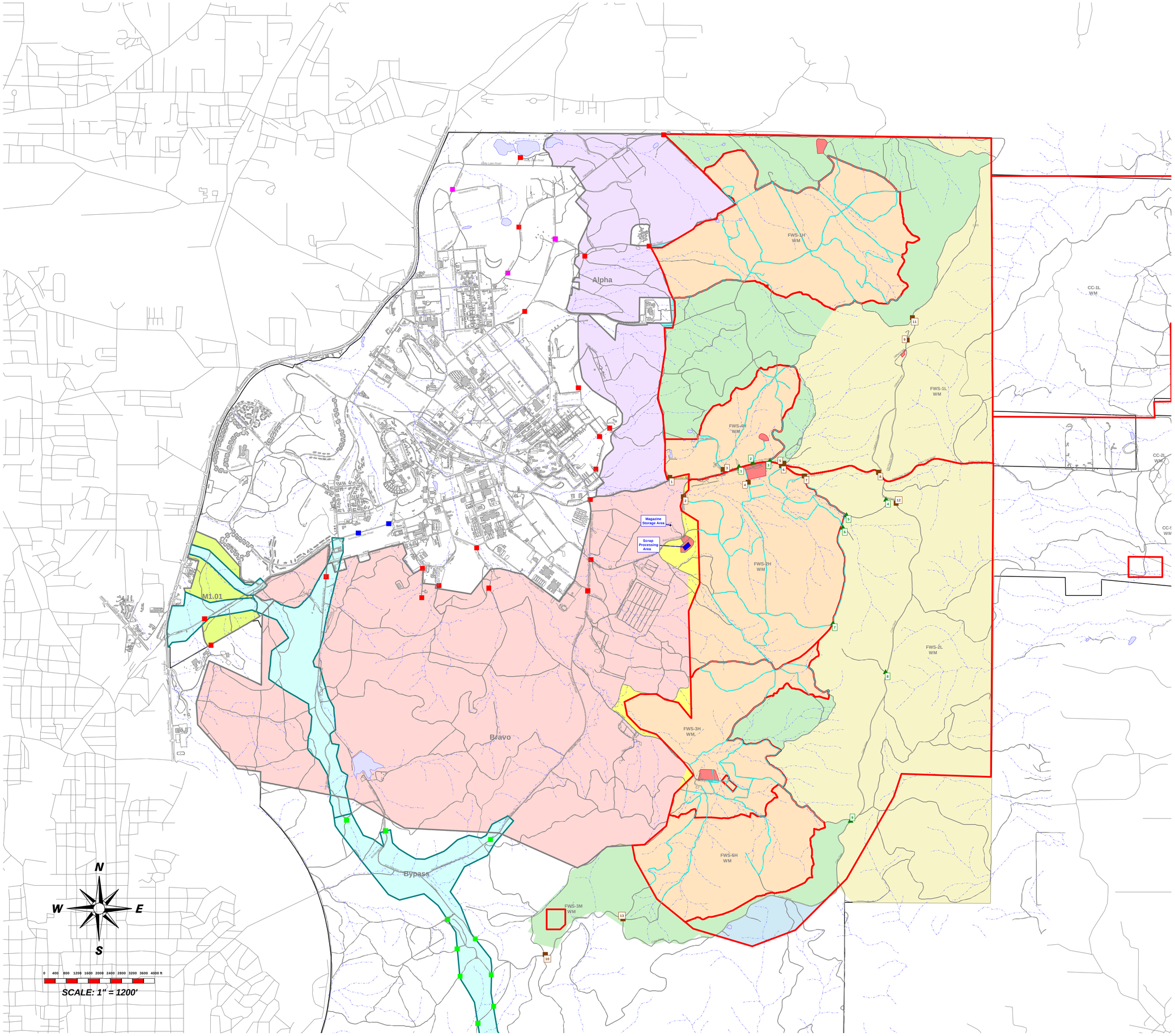
12.1 Figure 12-1 shows the location of the site within FMC.

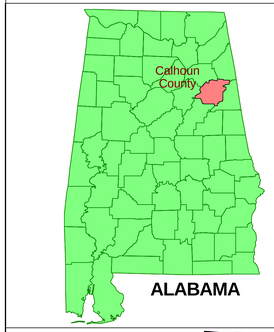
12.2 Figure 12-2 shows the roads, firebreaks, and high use areas within the clearance area.

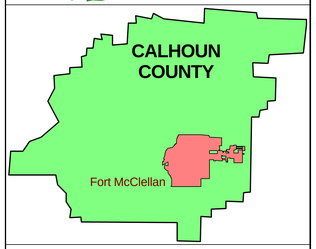
12.3 Figure 12-3 shows the Q-D Arc for each area.

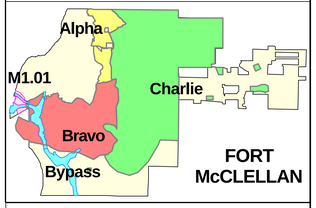
THIS PAGE INTENTIONALLY LEFT BLANK.

FOSTER WHEELER ENVIRONMENTAL CORPORATION









Legend

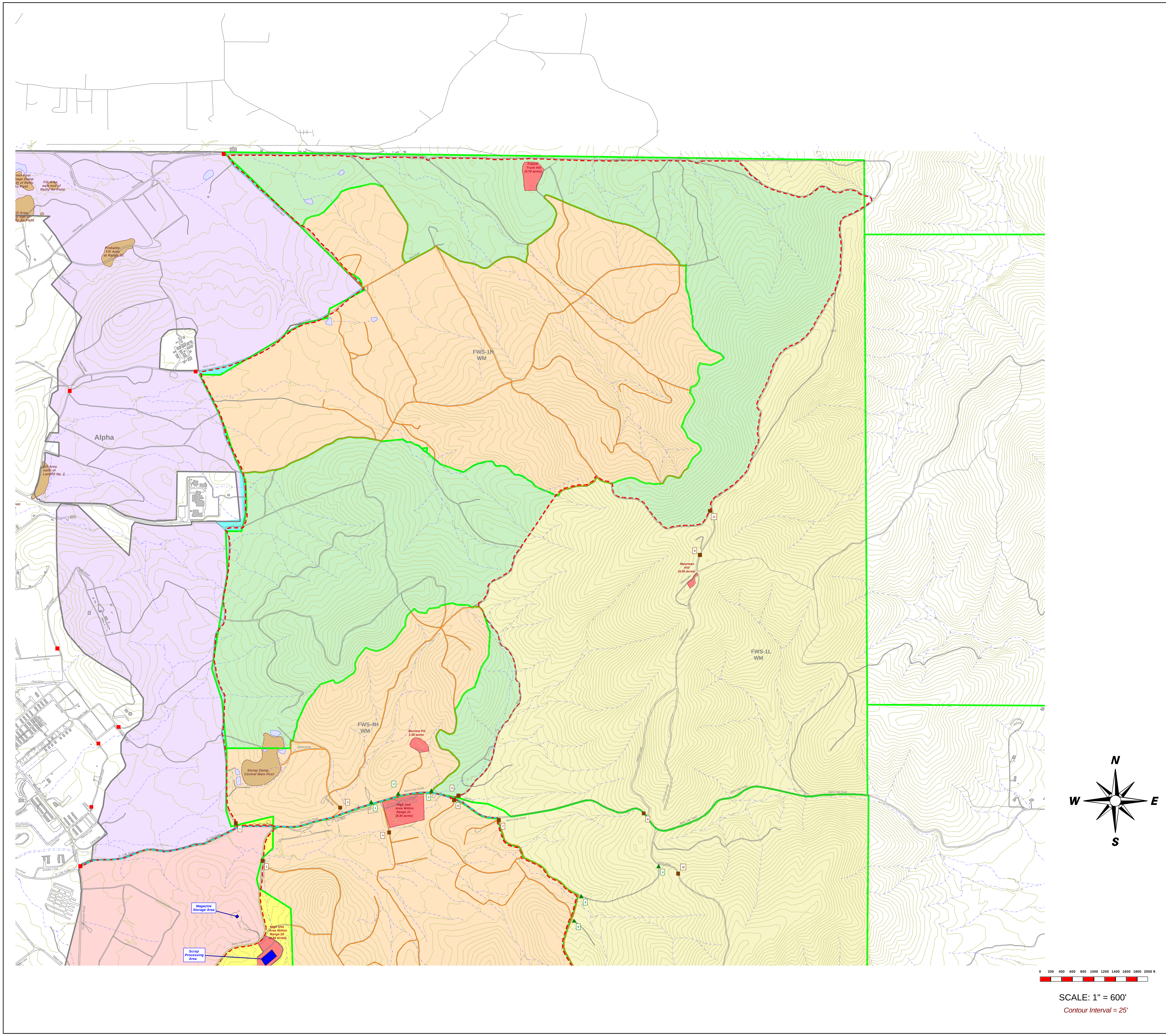
- ALDOT Gates
- JPA Gates
- Task Force UXO Gates
- FWENC Gates
- USFWS Gates (Gate Number =)
- USFWS Barriers (Barrier Number =)
- USFWS Firebreak Roads
- Magazine Storage and Scrap Processing Areas
- Areas Investigated as Part of the Bravo EE/CA (Transferred to USFWS)
- Areas Investigated as Part of the Alpha EE/CA (Transferred to USFWS)
- USFWS: 'High Use' Areas
- USFWS: Recommended for Removal Action
- USFWS: 'No Further Action' Areas
- USFWS: 'No Further Action' Areas Encompassed Within the Signage
- Charlie Sectors: 'No Further Action' AND Outside USFWS Areas
- Charlie Sectors Boundaries
- Bypass ROW Area
- Alpha Study Area
- Bravo Study Area
- M1.01 Study Area
- Fort Mcclellan Boundary
- Buildings
- Roads
- Streams
- Lakes/Ponds

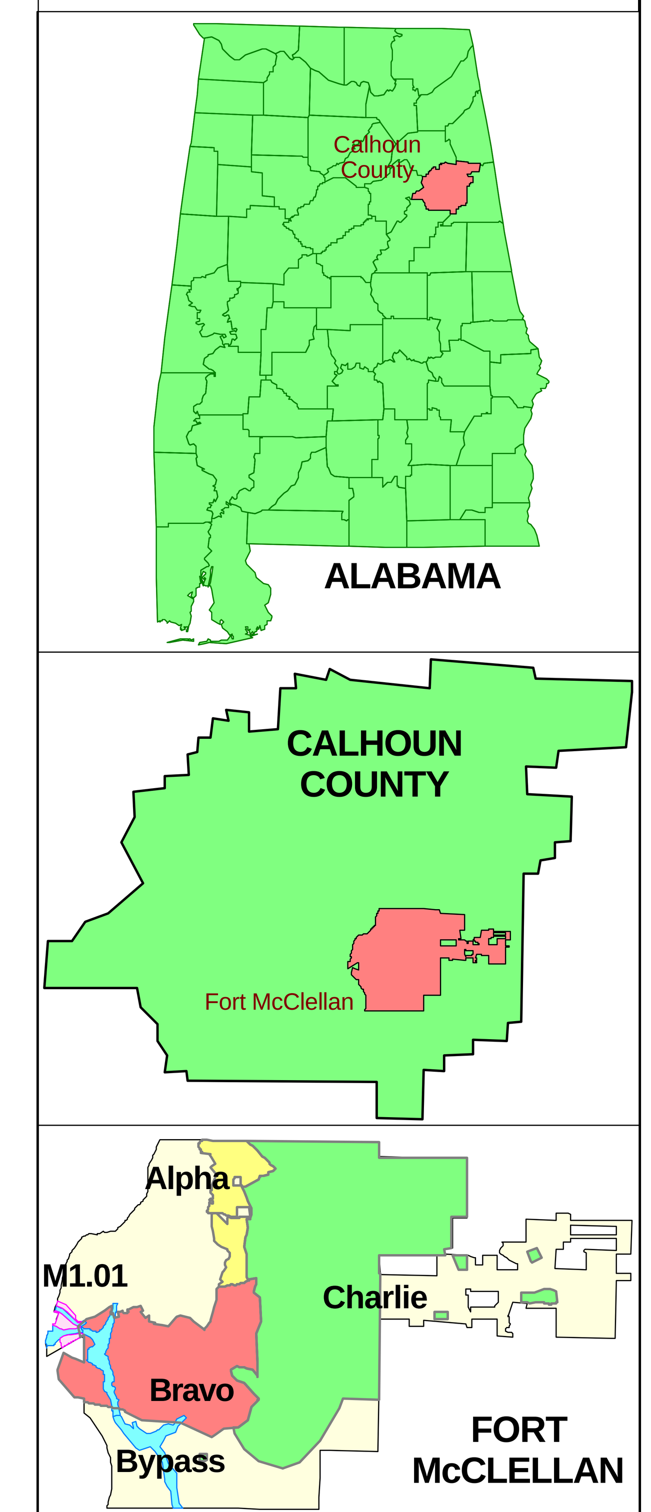
Figure 12-1

FWS Area Removal Overview

Fort McClellan,
Calhoun County,
Alabama
June 2003

FOSTER WHEELER ENVIRONMENTAL CORPORATION





Legend

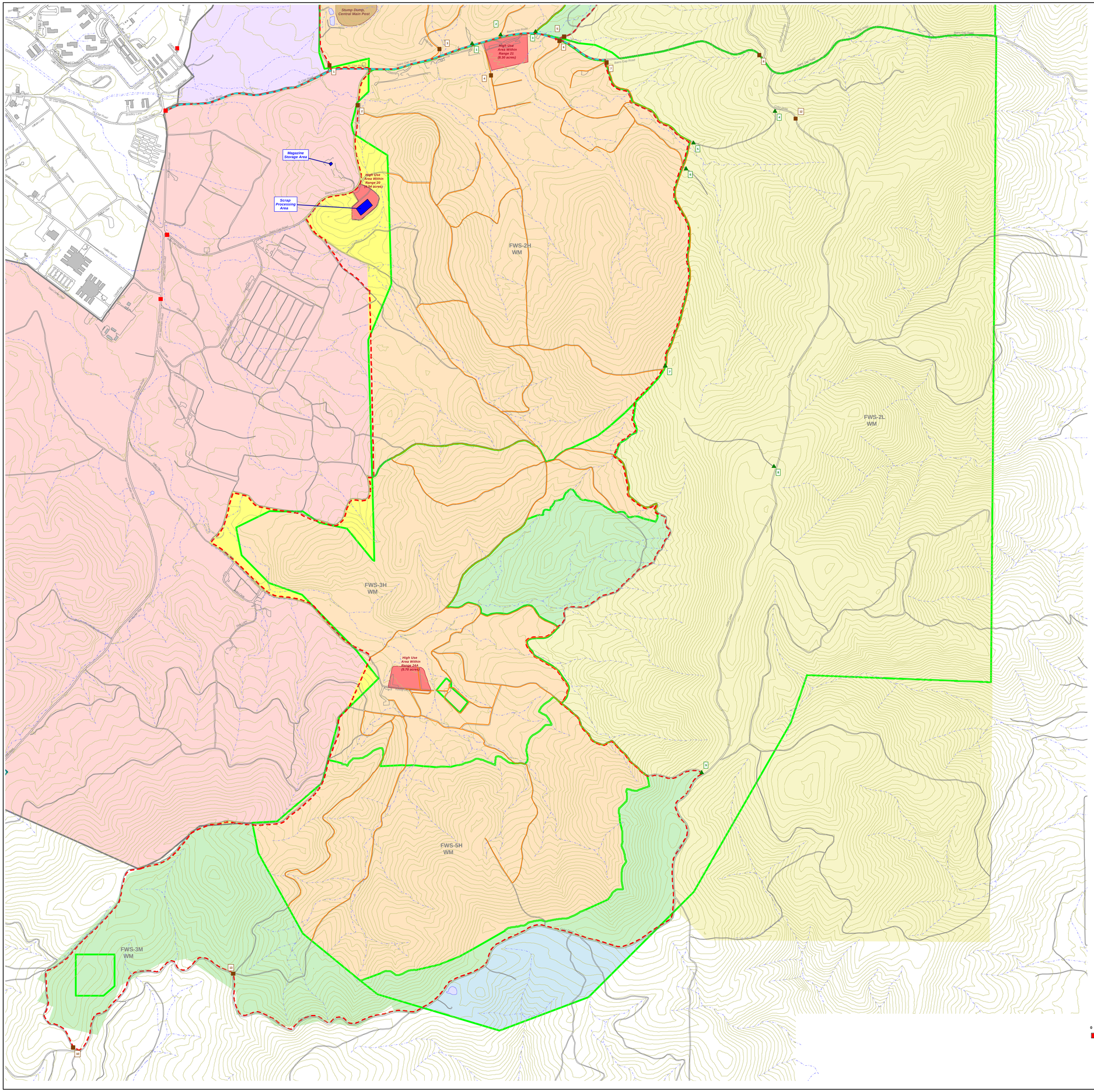
- ALDOT Gates
- JPA Gates
- Task Force UXO Gates
- FWENC Gates
- USFWS Gates (Gate Number =)
- USFWS Barriers (Barrier Number =)
- USFWS Firebreak Roads
- USFWS Signs: Both Sides of Road
- USFWS Signs: One Side of Road
- Magazine Storage and Scrap Processing Areas
- Inhabited Areas Within an EZ
- Areas Investigated as Part of the Bravo EE/CA (Transferred to USFWS)
- Areas Investigated as Part of the Alpha EE/CA (Transferred to USFWS)
- USFWS: 'High Use' Areas
- USFWS: Recommended for Removal Action
- USFWS: 'No Further Action' Areas
- USFWS: 'No Further Action' Areas Encompassed Within the Signage
- Charlie Sectors: 'No Further Action' AND Outside USFWS Areas
- Charlie Sectors Boundaries
- Bypass ROW Area
- Alpha Study Area
- Bravo Study Area
- M1.01 Study Area
- Fort Mcclellan Boundary
- Buildings
- Roads
- Streams
- Lakes/Ponds
- 25' Contours

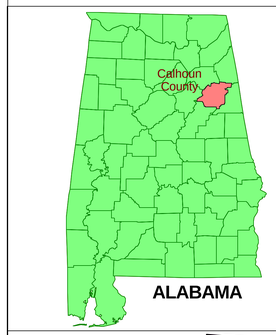
Figure 12-2

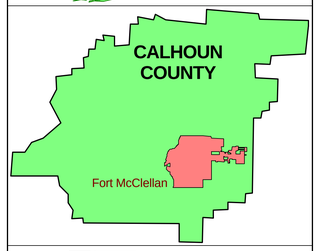
FWS Area Removal North

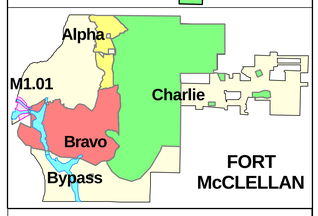
Fort McClellan,
Calhoun County,
Alabama
June 2003

FOSTER WHEELER ENVIRONMENTAL CORPORATION









Legend

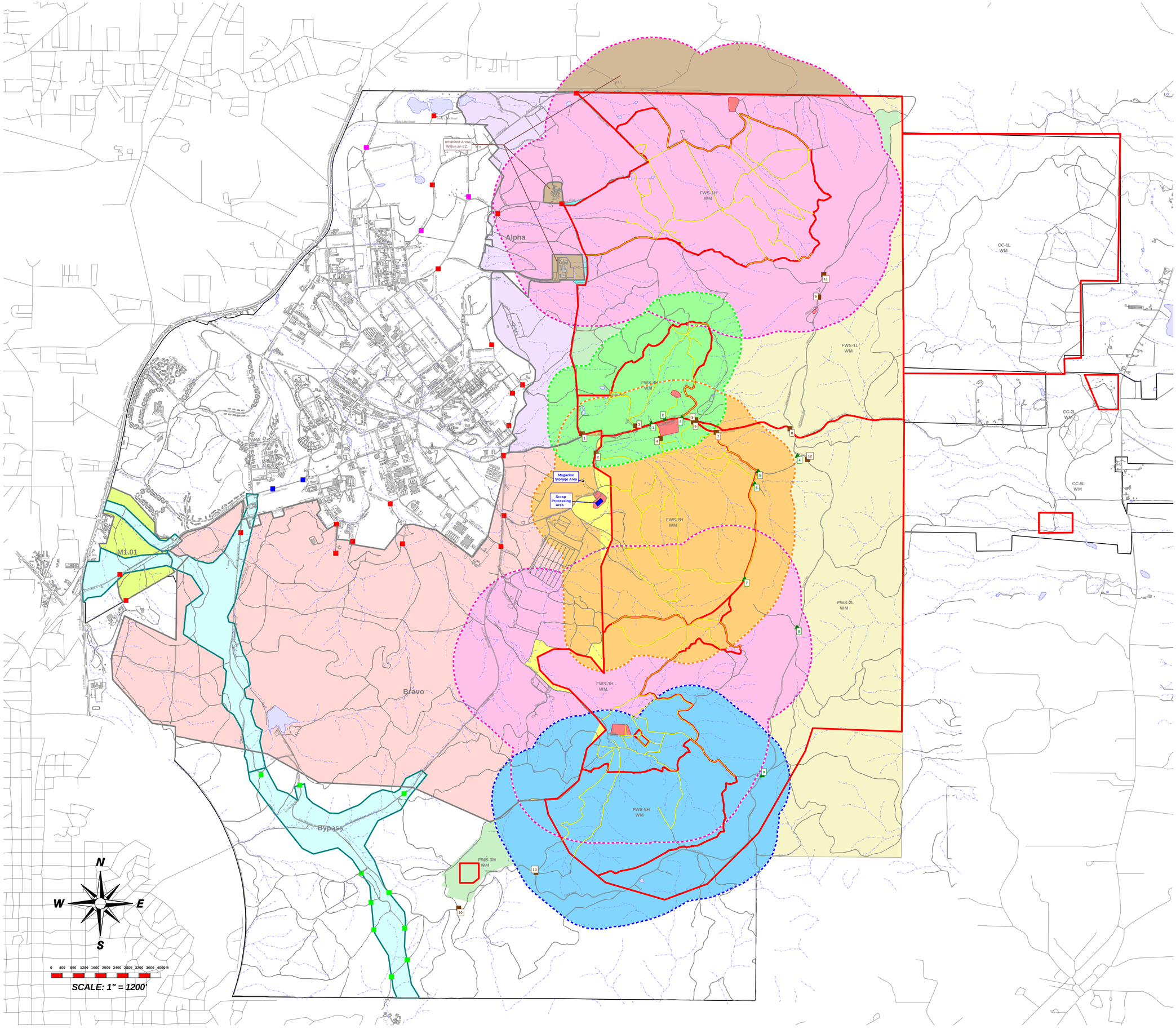
- ALDOT Gates
- JPA Gates
- Task Force UXO Gates
- FWENC Gates
- USFWS Gates (Gate Number = #)
- USFWS Barriers (Barrier Number = #)
- USFWS Firebreak Roads
- USFWS Signs: Both Sides of Road
- USFWS Signs: One Side of Road
- Magazine Storage and Scrap Processing Areas
- Inhabited Areas Within an EZ
- Areas Investigated as Part of the Bravo EE/CA (Transferred to USFWS)
- Areas Investigated as Part of the Alpha EE/CA (Transferred to USFWS)
- USFWS: 'High Use' Areas
- USFWS: Recommended for Removal Action
- USFWS: 'No Further Action' Areas
- USFWS: 'No Further Action' Areas Encompassed Within the Signage
- Charlie Sectors: 'No Further Action' AND Outside USFWS Areas
- Charlie Sectors Boundaries
- Bypass ROW Area
- Alpha Study Area
- Bravo Study Area
- M1.01 Study Area
- Fort Mcclellan Boundary
- Buildings
- Roads
- Streams
- Lakes/Ponds
- 25' Contours

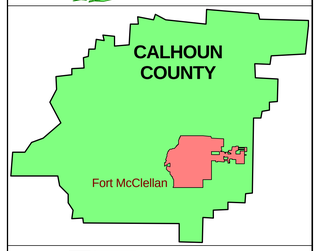
Figure 12-3

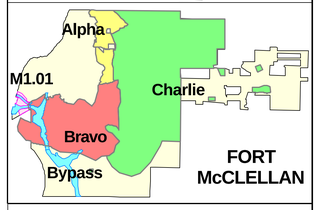
FWS Area Removal South

Fort McClellan,
Calhoun County,
Alabama
June 2003

FOSTER WHEELER ENVIRONMENTAL CORPORATION







Legend

- ALDOT Gates
- JPA Gates
- Task Force UXO Gates
- FWENC Gates
- USFWS Gates (Gate Number = #)
- USFWS Barriers (Barrier Number = #)
- USFWS Firebreak Roads
- Inhabited Areas Within an EZ
- Magazine Storage and Scrap Processing Areas
- Areas Investigated as Part of the Bravo EE/CA (Transferred to USFWS)
- Areas Investigated as Part of the Alpha EE/CA (Transferred to USFWS)
- USFWS: 'High Use' Areas
- USFWS: Recommended for Removal Action
- USFWS: 'No Further Action' Areas
- USFWS: 'No Further Action' Areas Encompassed Within the Signage
- Charlie Sectors: 'No Further Action' AND Outside USFWS Areas
- Charlie Sectors Boundaries
- Bypass ROW Area
- Alpha Study Area
- Bravo Study Area
- M1.01 Study Area
- Fort Mcclellan Boundary
- Buildings
- Roads
- Streams
- Lakes/Ponds

Legend: QD Arcs

MPM/MFD for Charlie Removal Areas

- 60mm HE M49 = 1080 feet
- 81mm HE M43 = 1395 feet
- 105mm HE M1 = 1939 feet
- 155mm HE M107 = 2577 feet

Figure 12-4

FWS Area QD Arc Overview

Fort McClellan, Calhoun County, Alabama
June 2003

APPENDIX A

STATEMENT OF WORK

THIS PAGE INTENTIONALLY LEFT BLANK.

STATEMENT OF WORK
GENERAL SITE SUPPORT AND UNEXPLODED ORDNANCE CLEARANCE FOR THE CHOCOCOLOCCO AREA U.S. FISH & WILDLIFE LAND TRANSFER FORT MCCLELLAN, ALABAMA

~~28 February 2003~~ ~~5 March 2003~~18 Aug 2003

1.0 OBJECTIVE.

This is a performance-based task order. The objective of this task order is to provide general site support and a Clearance To Depth UXO/OE removal action in specified portions of the lands proposed for transfer to the U.S. Fish & Wildlife Service in the Choccolocco Area. These actions are being performed prior to finalizing the Charlie (Choccolocco) Area Engineering Evaluation & Cost Analysis (EE/CA) and the follow-on Action Memorandum (AM). **The work shall be accomplished in separate phases and by options to the Task Order: a) general site support tasks shall be completed in Phase I and, b), Phase II (Option 1) all intrusive UXO/OE tasks shall be completed after receipt of an approved conventional Explosive Safety Submission (ESS).**

2.0 BACKGROUND AND GENERAL STATEMENT OF REQUIRED WORK.

The work required under this Statement of Work (SOW) falls under the Defense Environmental Restoration Program, Department of The Army, Base Realignment And Closure Office (DA BRACO). Ordnance and Explosives (OE) exists on property currently owned or leased by the Department of Army.

The Contractor shall provide general site support for the procurement and installation of gates, berms, barriers, and signage along specified roads and trails in the lands designated within the Choccolocco Area for transfer to the U.S. Fish & Wildlife Service (FWS). Conducting the general support fieldwork will require application of anomaly avoidance procedures and techniques.

The Contractor shall perform an unexploded ordnance clearance of approximately 125 acres within specified Choccolocco Area sectors along roads, trails, firebreaks, and FWS designated high use (development) areas. Additional acreage may be required and will require a modification to this SOW, if such added work is necessary. The removal shall be Clearance To Depth for the approximate 125 acres. The removal work shall be performed in accordance with the provisions of this Statement of Work, the Fort McClellan Site-Wide OE Work Plan, and the proposed and approved site-specific OE Removal Work Plan and ESS developed for this SOW.

2.1. Regulatory Guidance. Explosive ordnance (OE) is a safety hazard and may constitute an imminent and substantial endangerment to the local populace and site personnel. The work shall be performed in a manner consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 104, and the NCP. All activities involving work in areas potentially containing unexploded hazards shall be conducted in full compliance with CEHNC, USACE, DA and DoD requirements regarding personnel, equipment, and procedures. Federal regulations under 29 CFR 1910.120 shall apply to all actions taken at this site.

2.2. Recovered Chemical Warfare Materiel (RCWM) and HTRW at OE Response Sites. During OE response, the Contractor may encounter HTRW material or non-stockpile Chemical Warfare Materiel (CWM). In such situations, the following procedures shall apply.

2.2.1. Hazardous Toxic or Radiological Waste (HTRW), unexploded ordnance constituents, or CWM may be in munitions, containers, landfills, Open Burning/Open Detonation (OB/OD) areas, ground spills, surface water or groundwater. If suspected HTRW of unknown origin and nature is encountered, the Contractor shall immediately withdraw from the work area and notify the U. S. Army Engineering and Support Center, Huntsville (USAESCH) OE Design Center. The Contractor shall take necessary actions to protect the safety of his/her workforce, the public, and the environment.

2.2.2. During conventional OE field operations, if the Contractor identifies or suspects CWM, the Contractor shall immediately withdraw upwind from the work area and notify the appropriate personnel as identified in the Standing Operating Procedure for Notification of Incidents and Accidents at Fort McClellan, dated 7 May 2001. The Contractor shall secure the area and provide two personnel located upwind of the suspect CWM to secure the site until relieved by the Technical Escort Unit (TEU) or Explosive Ordnance Disposal (EOD) personnel.

2.3. Site Description. 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 Forest is to the east of the post.

2.3.1. The designated areas under this Task Order are shown on the accompanying map. The locations of gates, barriers, and signs and the locations for Clearance To Depth along the roads/trails/firebreaks are shown on the "FWS Safety & Access" map. The area for UXO clearance consists of approximately 125 acres along designated roads, trails, firebreaks, and high use areas. This acreage is "inclusive" of the roadbed for all unpaved roads and trails, etc.
UXO investigation and removal will not be conducted beneath paved roadways but will be required between the unpaved shoulder and the adjoining wood line along Bains Gap Road.

2.4. Site History. Fort McClellan has been used for artillery training of troops and the National Guard as early as 1912 to 1941. In 1941, McClellan became site of the Chemical Corps Training Command.

In 1962, the U.S. Army Combat Developments Command Chemical Biological-Radiological Agency moved to Fort McClellan. In 1973, the Chemical Corps School along with the U.S. Army Combat Developments Command Chemical Biological-Radiological Agency closed. In 1979, the U.S. Army Chemical Corps School was re-established, along with a training Brigade for Basic Training.

2.4.1. The areas covered by this Task Order were used in field training activities, maneuver training, and were also connected with several historical firing ranges (artillery, mortars, rifle grenade, smoke grenades, flares, etc.).

2.5. Current Site Use. The Choccolocco Area is completely wooded and is currently managed for wildlife resources. All lands are within the boundary of Fort McClellan. The future use for the site is designated for a USFWS National Wildlife Refuge.

2.6. Previous OE Clearances or Characterization. No removal actions have been completed at the designated sectors of this site. Limited sampling activities were conducted for the Charlie (Choccolocco) Area EE/CA associated with these sectors.

2.7. Potential Ordnance. Tables 3-6, 3-7, 3-8, 3-9, and 3-10, from the Internal Draft Charlie Area EE/CA, describe UXO/OE items that have been encountered in the vicinity of this site.

2.8. Definitions. (See Section C of basic contract)

3.0 DESCRIPTION OF SERVICES. This is a firm fixed price task order, except for Task 15 under Option 1, which is time & materials in support of the Government's Quality Assurance inspections.

PHASE I GENERAL SUPPORT TASKS:

3.1. (TASK 1) GATES, BARRIERS, BERMS, FENCING, etc. The Contractor shall consult with the Ft. McClellan Transition Force to determine an acceptable design for each size of required gate, barrier, bollard, fencing, and/or berms to be installed at the sites designated on the accompanying map. The Ft. McClellan acceptable design shall be incorporated into the Contractor's proposal prior to submitting the proposal.
The Contractor will procure "spares" of signs, bollards, fencing, and gates at a 10% overage to specified needs. Excess items and spares will be delivered to the Fort McClellan Transition Force for storage, upon completion of the installation activities.

All gate, barrier, bollard, berms etc. installation activities will be conducted using the UXO/OE anomaly avoidance procedures specified in the Fort McClellan Installation-Wide Work Plan. An Annex to the Charlie Area EE/CA Site Safety and

Health Plan (SSHP) shall be provided for the Government's review and acceptance, in order to specify the safety procedures to be used during the gate/barrier/fence/sign installation work. The Annex shall include an Activity Hazard Analysis for all new work tasks associated with Tasks 1 and 2 of this SOW.

In general, gates should be constructed of heavy steel pipe and designed to swing from a single pivot point located at the side of a road/trail/firebreak, etc. Double-swing gates may be acceptable for longer gates. The locking mechanism should be protected and inaccessible to removal by bolt cutter, cutting torches, etc. The gates shall prevent access by trucks, cars, and off-road all terrain vehicle (ATV). Gateposts shall be placed to a minimum of 4.5 feet below ground surface with the hole bell-shaped at the bottom. All gate posts shall be concreted in place and the interior of the posts filled with concrete. All gates and gateposts shall be primed with a standard metal primer and finished with a suitable, exterior metal finishing paint in "Safety Yellow" color. Reflective safety strips (red and silver) shall be affixed to both sides of the gate on a maximum 36-inch spacing. A standard, single keyed lock, as provided by Ft. McClellan, shall be installed for all gates. Keys shall be returned to the Fort McClellan upon completion of installation of each gate. The estimated number of gates and required lengths is as follows: 12-foot, 8 each; 20-foot, 3 each.

All barriers shall be considered to be semi-permanent installations. The Contractor shall install barriers that consist of steel bollards installed at a spacing to prevent access by ATVs, cars, and trucks. Bollards shall be installed a minimum of 4.5 below ground surface and concreted in place, similar to that for gate posts above. Bollards will extend 4.5 feet above ground. Painting and reflective safety strips shall be as for the gates listed above. The minimum number of bollards required is expected to be approximately 75.

The Contractor shall provide a minimum of 150-feet of fencing to extend beyond gates and barriers at locations where barriers and gates can be bypassed by ATVs, etc. The fencing shall be 3-strand barbed wire, military standard temporary fence. Posts shall be steel. Reflective safety strips shall be provided on both sides of the posts and attached every 15 feet along the top strand of the barbwire.

3.2. (TASK 2) Installation of Boundary Signs Between Public Access and UXO/OE Areas. The Contractor shall procure and install a "danger" type sign around specified parts of the boundary of the Choccolocco Area lands proposed for future transfer to the FWS. Locations of the boundary areas requiring the signs are shown on the "FWS Safety & Access" map. The specific design of the sign (exterior dimensions, color, specific wording, letter height, and pictographs) shall be coordinated with the Ft. McClellan Transition Force prior to submitting the proposal. The accepted design shall be provided with the proposal.

All signs installation activities will be conducted using the UXO/OE anomaly avoidance procedures specified in the Fort McClellan Installation-Wide Work Plan.

Signs shall be constructed of metal. Signs shall be posted at distances such that each sign can be seen from the next nearest sign location and not to exceed a 200-foot spacing. Signs shall be posted on both sides of Bains Gap Road as shown on the map. All other boundary area signs shall be posted on the west side of the trail, road, or

firebreak along which the boundary runs. See the map for the location of the boundary line. The contractor shall provide and use painted steel posts for installation of all signs. Steel posts shall be equal to or similar to posts used for typical signage installation for roads, streets, etc. such that the signage can be bolted to the post. An estimated minimum of 1000 signs and posts will be required. The Contractor shall procure at an overage of 10% for future replacement needs. Any excess signs and posts not used during the initial installation work shall be delivered to the Fort McClellan Transition Force for storage.

PHASE II TASKS:

OPTION 1:

General Information.

Option 1 consists of performing a Clearance To Depth over approximately 125 acres along roads, trails, firebreaks and in future FWS designated high use areas. See the "FWS Safety and Access" map for locations. See Tasks 3 through 15 for details of the work.

All trails, roads, and firebreaks within the "blue" colored sectors are to be Cleared To Depth. On those roads, trails, or firebreaks which serve as a boundary to another colored sector, clearance will be conducted in the travel way and only on the side adjoining the "blue" sectors. The other side of these particular boundary roads, etc. lies within a zone that does not require an OE removal action. Specific tasks are provided below.

Clearance along roads, trails, and firebreaks will **generally** consist of clearing an approximate 30-foot wide zone, 15-feet either side of the centerline of the traveled way. The 30-foot wide zone is an estimated width. Where site conditions (slopes, rock outcrops, etc.) restrict one side of the roads/trails/firebreaks, the contractor shall clear a reasonable width only on the accessible side. Reasonable means a clearance width that will allow firebreak plowing or maintenance of the "road" for water diversion, etc. a sufficient distance away from the traveled way for safe operations. This SOW shall be interpreted to allow such flexibility by the contractor in making site-specific decisions along all clearance zones to accommodate shifting the 30-foot clearance zone as necessary to meet site needs.

Clearance along paved or improved roads, such as Bains Gap Road, will **generally** consist of an approximate 40-foot wide zone, 20 feet either side of the centerline. Clearance will not be accomplished beneath the pavement sections of such improved roads but only beyond the pavement edges.

Along Bains Gap Road, UXO/OE clearance shall ensure sufficient width to allow for fire lines to be plowed between the paved roadway and the adjoining wood line where such space is available for fire plow access. This may require going beyond the general 20-foot from centerline standard. A limited amount of acreage for this purpose is included within the approximate 125 acres specified for Clearance To Depth.

Brush clearing will be required outside the traveled way to the extent necessary to reach the 15-foot boundary along each side of the each road, trail, or firebreak. The Contractor shall consider all available combinations of geophysical and precision location systems and suitability of application under the site-specific terrain conditions when developing their proposal for the geophysical mapping required for this optional work.

UXO Operations - UXO personnel conducting identified OE/UXO field operations shall comply with the personnel work standards in DID OE-025.01 and IAW any approved Fort McClellan variances/amendments to the basic contract with respect to UXO work hours. Forty-eight hours of rest must separate each 40-hour UXO field operation workweek.

3.3. TASK 3) – GEOPHYSICAL PROVE-OUT. The Contractor shall perform a Geophysical Prove-Out (GPO) in accordance with DID OE-005-05A.01. The Contractor shall submit a GPO Letter Report and shall include the letter report as an appendix to the Geophysical Investigation Plan and the Removal Report. The Government will also require 3 additional copies of the GPO Letter Report for submittal to the Alabama Dept. of Environmental Management.

3.4. (TASK 4) PREPARE EXPLOSIVE SAFETY SUBMISSION (ESS) AND SITE-SPECIFIC OE REMOVAL WORK PLAN. The Contractor shall prepare and submit, for Contracting Officer Approval, a Site-Specific OE Removal Work Plan (WP) describing how the required removal work on the roads, trails, firebreaks, and high use areas will be accomplished. The WP shall be in accordance with the Basic Contract, this Statement of Work (SOW), and the Fort McClellan Site Wide OE Work Plan. DID OE-005-01.01 shall be the general guide for providing the details of the WP. The WP shall contain a Site-Specific Safety and Health Plan covering all tasks for the OE Removal under this Option to this SOW. **Any and all changes to the approved work plan (methods, procedures, practices, etc.) will be provided to the Contracting Officer as dated, slip pages for inclusion in the Work Plan within 10 days of the approved change(s).**

The Contractor shall provide a conventional Explosive Safety Submission (ESS) in accordance with DID 060.01 for review and approval by the Department of Defense Explosive Safety Board (DDESB).

The Work Plan and the ESS shall be submitted to the Contracting Officer in Draft, Draft-Final, and Final formats. The draft submittal shall be provided on compact disc media (CD). All other submittals shall be in printed hard copy format, accompanied by an equal number on CD media. All comments received on each submittal will be addressed by the Contractor for the Draft and Draft-Final versions. Corrections and changes will be incorporated into each successive version.

The Contractor may not begin physically working on the OE Removal portions of the site work until: a) Option 1 is awarded, and b) the site-specific WP and the ESS have been approved.

3.5 (TASK 5) – Geographic Information System (GIS) Application.

The Contractor shall collect and input all survey, geophysical, spatial, and OE descriptive data into a GIS, which matches the Fort McClellan GIS (Arc View). Further guidance on the use and application of a GIS can be found in DID OE-005-14.01. Use of the GIS shall provide a permanent record of all collected data and the logical and clear presentation of such data and records of the OE removal activities for this site for inclusion in the Final Removal Report. **The Contractor shall submit a CD with all validated site GIS data and updates on a monthly basis. There may be months where new data is not available for updates to the GIS.**

3.6. (TASK 6) PERFORM OE SURFACE CLEARANCE, BRUSH CLEARING, & VEGETATION REMOVAL.

The Contractor shall provide the necessary personnel and equipment to remove all surface OE, OE scrap and other metallic scrap where these items would interfere with the brush clearing/vegetation removal, surveying, and/or the geophysical mapping or impede the progress, effectiveness, or safety of the survey and/or geophysical investigation team, or affect the data quality. The Contractor shall plan on a minimum of 50 acres of brush clearing at a low to moderate density of brush and small trees (< 4-inch diameter).

3.7. (TASK 7) PERFORM LOCATION SURVEYS.

The Contractor shall perform location surveys as described in the approved Work Plan and in general accordance with guidance contained in DID OE-005-07.01, Location Survey and Mapping Plan. The coordinate system used for this task order shall be the Alabama State Plane coordinate system. A licensed Professional Land Surveyor in the State where the work is being performed shall certify all surveying products to include all control points, grid corners and boundaries as required by the project. All survey data shall be included in the Site Specific Removal Report and entered in the GIS database.

Boundary surveys are not required along roads, trails, and firebreaks. A centerline stationing and offset control system is acceptable, however, any centerline stationing or other survey control system must be tied to the Alabama State Plane coordinate system.

3.8 (TASK 8) - GEOPHYSICAL INVESTIGATION AND EVALUATION. The Contractor shall implement geophysical investigations as described in the approved Work Plan and DID OE-005-05.01.

3.8.1. Geophysical Mapping. The Contractor shall plan on mapping approximately 122 acres. The smallest targeted UXO/OE items for geophysical detection are as listed below:

Sector FWS-1H-PR	37mm projectile, HE
Sector FWS-2H-PR	60mm mortar, HE
Sector FWS-3H-PR	37mm projectile, HE
Sector FWS-4H-PR	37mm projectile, HE
Sector FWS-5H-PR	75mm projectile, HE

3.8.2. Evaluation. The Contractor shall utilize a qualified geophysicist to analyze and evaluate the geophysical data collected. The geophysicist shall make a professional determination regarding the identification of all target anomalies at the site. Based on this determination, the Contractor shall provide to the Government and the OE Contractor, dig-sheets showing predicted location and characteristics of all target anomalies (See 3.8.3 below for target anomaly definition).

The dig sheets shall include tables as well as graphical representations. In addition, a project geophysicist shall continually compare predicted results with actual results so that the Contractor's geophysical evaluation methodology is constantly refined over the life of the project.

3.8.3. Anomaly Selection. Anomalies that meet the established target anomaly selection criteria for OE in each sector will be identified for excavation and clearing the site of UXO/OE, practice ordnance items, cultural scrap larger than the specified items, etc. Geophysically identified underground utilities on, or immediately adjoining the site boundaries, will not be excavated. The Contractor's senior geophysicists will evaluate each such buried utility geophysical map to ensure no potential OE target items are distinguishable in or adjacent to the backfill of such utilities. If the Contractor identifies a potential OE target in such an area of a buried utility, the Government shall be informed and a joint decision made for investigation/removal of the potential item.

Target anomalies shall also be identified and selected for excavation to satisfy QC requirements for the geophysical data analysis. The particular QC approach for this project shall be as described in the approved existing Site Specific Work Plan and/or the amendment to the Work Plan. The Government may also identify and select target anomalies for excavation to satisfy QA requirements. Government selected QA target anomalies will be investigated as part of the Government's QA program after each grid or group of grids has been submitted for QA review.

3.9. (TASK 9) ANOMALY REACQUISITION AND MARKING. For the sectors where digital geophysical mapping is used under this removal action, the Contractor shall reacquire all selected geophysical target anomalies identified on the dig sheets utilizing precision surveying methods, or other approved methods, to reacquire each target location. Dig sheets shall be provided to the Contracting Officer's QA representative and the OE Contractor on the day of the UXO/OE removal action for each sector and/or gird. The dig sheet shall include the location of the anomalies according to the survey standard established. The Contractor shall flag the actual field location of each identified anomaly shown on the dig sheet and mark the location with a non-metallic pin flag or by some other method approved by the Contracting Officer.

The Contractor shall ensure that the reacquired location and the geophysical data location for each anomaly are within the range of accuracy given in DID OE-005-05.01. The Contractor shall record and report on all discrepancies between original mapped locations (way-pointing) of anomalies as shown on the dig-sheet, and actual locations of the reacquired anomaly excavated. All such reporting shall include distance and orientation from grid north. The Contractor shall also report any anomalies that could not be reacquired.

3.10. (TASK 10) PERFORM UXO/OE CLEARANCE –REMOVAL ACTION.

3.10.1. Perform UXO Clearance. The Contractor shall perform a Clearance-To-Depth. The Contractor shall provide the necessary personnel and equipment to locate, gain access, identify, recover, and destroy all UXO/OE and shall temporarily store all OE Scrap recovered from this site.

3.10.2. The procedures used under this task shall comply with those contained in Basic Safety Concepts and Considerations for Ordnance and Explosives Operations and the approved WP. If demolition operations cannot be safely conducted on-site, the Contractor shall submit a disposal feasibility letter for Contracting Officer approval, in accordance with DID OE-040.01. All transportation and demolition of UXO shall be in accordance with all applicable Federal, State, and local laws and regulations, including the disposal alternative approved by the Contracting Officer. The Contractor shall use engineering controls for intrusively investigating anomalies in areas where inadequate safety distance is available for the designated exclusion zone(s).

3.10.3. Intrusive Anomaly Investigation and Removal. The Contractor shall excavate and remove all target anomalies identified and re-acquired during the geophysical investigation and as directed by the Contracting Officer.

3.10.4. OE Destruction. The Contractor shall be responsible for destroying all live or potentially live OE encountered during the site removal action. The Contractor shall use the method of destruction in the approved project Site-Specific Work Plan. If UXO is encountered that cannot be moved due to its condition and the location prevents disposal in place, then the on-site USACE OE Safety Specialist or the Transition Force shall be notified

3.10.5. Backfilling Excavations. All access/excavation/detonation holes shall be backfilled by the Contractor.

3.10.6. OE Accountability. The Contractor shall maintain a detailed accounting of all OE items encountered and enter such data into the GIS database. This accounting shall include the standard official nomenclature, condition of the item, depth located, orientation of item, location coordinates, and disposition of each item. A digital photograph of each UXO/OE item shall also be taken and entered into the GIS database.

3.10.7. Disposition of OE and OE Scrap. The Contractor shall furnish all necessary personnel and equipment to collect and remove all recovered OE/OE Scrap to the Fort McClellan scrap storage area. All scrap will be handled in accordance with 3.10.9.

3.10.8. Inspection and Disposition of AEDA/Range Residue. The Contractor shall furnish all necessary personnel and equipment to inspect and temporarily store all recovered OE scrap and Ammunition, Explosives, and Dangerous Articles (AEDA) and Range Residue. The methodology to accomplish this task shall be in accordance with the existing Site-Specific Work Plan and/or any addition as proposed in the Amendment to the Site-Specific WP. A series of representative digital photographs shall be taken of OE scrap/range residue across the entire site and will be entered into the site-specific removal report. All scrap will be secured to ensure positive control of the material. Final disposition will be handled under a separate task order.

3.11. (Task 11) QUALITY CONTROL PLAN. The Contractor shall furnish the necessary personnel and equipment to administer a Quality Control (QC) Program to manage, control, and document Contractor and subcontractor activities to ensure compliance with contract requirements. The Contractor shall develop and provide a Quality Control Plan in accordance with DID OE-005-11.01. The QC activities shall be documented and included in the Site-Specific Final OE Removal Report.

3.11.1. The criterion for accepting grids that have completed surface and subsurface clearance is:

a) No ferrous objects with a "width" (diameter) between a 37 mm projectile and a 155 mm projectile at a depth of less than 11 diameters of the object.

3.12. (Task 12) ENVIRONMENTAL SAMPLING AND CHEMICAL ANALYSIS. Not Used.

3.13. (TASK 13) PREPARE SITE-SPECIFIC REMOVAL REPORT.

3.13.1. The Contractor shall prepare a Site-Specific Removal Report that fully documents all activities performed under this Contract. The Contractor shall use DID OE-030.01 as guidance in formatting the report, except for the appendices. The Contractor shall modify the report format to add, modify, or delete sections to the report, which may be required to completely and clearly present the removal information. The textural portion of the report shall be fully supported by accompanying maps, charts, and data tables as necessary. Separate maps shall be furnished in the report showing the locations of specific items in each category/grouping/type of items located and removed from the site, to include: UXO, OE, OE scrap, and Non-OE Scrap.

The Contractor should anticipate providing a preliminary Army only "draft", Draft, Draft-Final, and Final versions of the report. The Army only "draft" removal report text shall be issued on CD-ROM only, with all data appendices, maps, etc furnished in hard copy.

Appendices will be issued in hard copy only once to each addressee upon their designated initial mailing. Subsequent changes to any appendix will be made by slip-pages and re-issue of title pages/cover pages. The Final removal report shall be issued in hard copy and CD-ROM. The Final document will be issued upon resolution of all comments and acceptance of the document by the appropriate agencies.

3.13.2. OE Removal Data. The contractor shall assemble all the detailed project information and data for inclusion into the Site-Specific Removal Report as an appendix/appendices. Separate volumes for the appendices are acceptable. This data shall include all detailed sampling data, surveying data, mapping data, OE data, and any other supporting removal/clearance data. The data shall fully detail the OE removal action that was performed at the site. All data will be cross-referenced in the GIS. This data shall provide the detailed support documentation for the Site-Specific Removal Report.

3.14. (TASK 14) MEETINGS. The Contractor shall, as directed by the Contracting Officer, participate in two (2) on-site, on-board technical review meetings. Appropriate Contractor personnel shall be available to support these meetings.

3.15. (TASK 15 - **Time & Materials**). PROVIDE SUPPORT FOR GOVERNMENT QUALITY ASSURANCE EFFORT. The Contractor shall provide personnel and equipment as necessary to support the Government QA effort. The Contractor should anticipate that the field QA review of Contractor submitted grids will begin after approximately 10% of the total number of girds have been submitted and will continue for up to 1 week after the Contractor has completed QC of all grids. The Contractor support will include UXO technician assistance to conduct intrusive investigation of anomalies identified during the QA process and demolition of any UXO items discovered as a result of the QA operations.

4.0 SUBMITTALS AND CORRESPONDENCE

4.1. Format and Content of Reports. The Contractor shall prepare Site-Specific OE Removal Work Plan, a Site-Specific Explosive Safety Submission (Conventional) and a separate Site-Specific Removal Report for this site. The Contractor's OE Task Order Manager and the Project Manager/Engineer shall each sign all submittals (draft, draft-final, and final) indicating that all appropriate contractor technical reviews have been conducted. The Final version of each document shall be signed and sealed by a registered engineer in the State of Alabama.

4.2. Computer Files. All text files generated by the Contractor under this contract shall be furnished to the Contracting Officer in Word 6.0/95 or higher software, IBM PC compatible format. This format shall facilitate the development of hypertext markup language (HTML) or PDF deliverables required in the following paragraph.

All final CADD/GIS data, design drawings and survey data generated by the Contractor under this delivery order shall be submitted in the proper format and media that will permit their loading, storage, and use without modification or additional software on the Huntsville Center and or the Fort McClellan GIS. CADD files will be in Micro Station version "J" or "8". The GIS will be in ArcView®.

4.3. HTML or PDF Deliverables. All submittals identified in this SOW including the final version of the removal report shall be submitted, uncompressed, on individual CD ROM in HTML or PDF along with a linked table of contents, linked tables, linked photographs, linked graphs and linked figures included and suitable for viewing on the Internet.

4.4. Review Comments. Various reviewers will have the opportunity to review submittals made by the Contractor under this contract. The Contractor shall review all comments received from the Contracting Officer and evaluate their appropriateness based upon their merit and the requirements of the SOW.
The Contractor shall issue to the Contracting Officer a formal, annotated response to each comment in accordance with the schedule in paragraph 4.14.

4.5. Draft Reports. Each page of draft reports shall be stamped "DRAFT", except for the appendices, which shall have no header/footer information shown. All submittals after the "Draft" version shall include incorporation and notation of all previous review comments accepted by the Contractor. **Draft-Final submittals shall only show the "Draft-Final" status on the cover and title sheet of the submittal.** This process should allow for most corrections between the Draft-Final and the Final document to be made by page inserts/replacements.

4.6. Identification of Responsible Personnel. Each report shall identify the specific members and title of the Contractor 's staff and subcontractors that had significant, specific input into the reports' preparation and review.

4.7. Minutes of Meetings. The Contractor shall prepare and submit minutes of all meetings attended to the Contracting Officer within 10 calendar days.

4.8. Correspondence. The Contractor shall keep a record of each phone conversation and written correspondence affecting decisions relating to the performance of this Task Order. A summary of the phone conversations, e-mails, and written correspondence shall be submitted with the Monthly Progress Report to the Contracting Officer.

4.9. Project Control and Reporting. The Contractor shall prepare and submit a Work, Data, and Cost Management Plan IAW DID OE-005-08.01. **The plan shall only include the proposed Work Schedule for this project.**

4.10. Weekly Progress/Project Status Reports. A weekly progress report shall be submitted in accordance with DID OE-085.01 to the Contracting Officer. Failure to report issues to the Government in a timely manner that impact the project will result in corrective action from the Contracting Officer.

4.11. Monthly Progress Report and Data Submittals. The Contractor shall prepare and submit a Monthly Progress Report IAW DID OE-080.01 to the Contracting Officer describing the work performed since the previous report, work currently underway and work anticipated and any issues that will impact the project. Any weekly reports provided shall be incorporated into the Monthly Progress Reports. The report shall state whether current work is on schedule and within budget. If the work is not on schedule or within budget, the Contractor shall state what corrective actions are being taken in order to get back on-schedule and within budget. The report shall be submitted not later than the 10th day of the following month. Data submittals shall include the monthly GIS database update, which shall be submitted on a CD.

4.12. Public Affairs. The Contractor shall not make available or publicly disclose any project data or reports generated or reviewed under this contract or any subcontract unless specifically authorized by the Contracting Officer, the Public Affairs Office (PAO) of the U. S. Army Engineer District, and/or the OE Design Center PAO. When approached by any person or entity requesting information about the subject of this contract, the Contractor shall defer to the PAO for response. Reports and data generated under this contract shall become the property of the Government and distribution to any other source by the Contractor is prohibited unless authorized by the Contracting Officer.

4.13. On-Site Coordination. The Contractor shall keep the Contracting Officer's on-site representative informed of day-to-day field activities occurring on site. Where Contractor activities are likely to require coordination with various other activities at the site, the Contractor shall notify the POC identified by the Contracting Officer sufficiently ahead of time to allow for coordination activities to take place.

4.14. Schedule and Submittals. The Contractor shall submit all deliverable data to the Contracting Officer and other reviewers shown in Section 4.14.1 IAW the following schedule. All submittals shall be delivered to all addressees no later than the close of business (COB) on the day indicated in Section 4.14.2. In addition, submittals to regulatory reviewers shall be shipped by registered mail or other method where a signed receipt is obtained indicating the date received and the individual accepting the submittal.

4.14.1. The Contractor shall furnish copies of the plans and reports as indicated to each addressee listed and in the quantities indicated.

ADDRESSEES For Reports/Work Plan	Draft	Draft-Final	Final
Commander US Army Engineering and Support Center, Huntsville ATTN: CEHNC-OE-DC (Mr. Dan Copeland) 4820 University Square Huntsville, Alabama 35816-1822	6	6	6
Commander US Army Engineering and Support Center, Huntsville ATTN: CEHNC CT-E (Ms. Evelyn Kelley) 4820 University Square Huntsville, Alabama 35816-1822	1	1	1
Commander US Army Engineer District, Mobile ATTN: CESAM (Mr. Ellis Pope) P.O. Box 2288 Mobile, AL 36628-0001	0	0	0
Commander US Army Engineer Division, South Atlantic ATTN: CESAD-PM-H (Ms. S. Ernst) 77 Forsyth St., SW Atlanta, GA 30335-6801	0	0	0
ATTN: Mr. Doyle Brittain U.S. Environmental Protection Agency 61 Forsyth St, SW Atlanta, GA 30303-3104	0	0	0
Hugh Vick 171 North Broad St. Winder, GA 30680	0	0	0
Alabama Department of Environmental Management Government Facilities Section, Haz Waste Branch, Land Division ATTN: Mr. Phillip Stroud P.O. Box 301463 Montgomery, AL 36130-1463	3	3	3

U.S. Army Garrison ATTN: ATZN-ENV, Lisa Holstein 291 Jimmy Parks Blvd. Fort McClellan, AL 36205-5000	6	6	9
Shaw Group	0	0	1

4.14.2. Contract Deliverables.

Deliverables	**Date**
Army "draft" SS WP and ESS	21 days after award
Draft Site-Specific Work Plan & ESS	10 days after receipt of comm'ts
Draft-Final Specific Work Plan & ESS	10 workdays after receipt of com'ts
Final Site-specific Work Plan & ESS	10workdays after receipt of com'ts
Army "draft" Site-Specific Removal Report to CEHNC	45 days after completion of fieldwork
Draft Site-Specific Removal Report	20 days after receipt of com'ts
Draft-Final Site-Specific Removal Report	10 days after receipt of com'ts
Final Site-Specific Removal Report	1 week after receipt of final com'ts
Report/Minutes, Record of Meeting IAW DID OE-045 to CO	5 days after event
Monthly GIS Update IAW Section 3.5 of this SOW To CO	Monthly
Monthly Status Report IAW DID OE-080.01 To CO	Monthly
Weekly Status Report IAW DID OE-085.01	Weekly
Cost/Schedule Status Report IAW DID OE-085.01 to Contracting Officer (CO)	Monthly
Telephone Conversation/Correspondence Report IAW DID OE-055.01 to CO	Monthly

Accident/Incident Report IAW the DID OE-015.01 to CO	Written report within 24 hours after incident occurrence

In addition to the hard copies required above, the final WP and the final Report shall be forwarded on a CD-ROM in Microsoft Word format to CEHNC-OE-DC only.

OVERALL COMPLETION DATE - TBD

4.15. Contract DIDs. The DIDs listed below at Section 7.0, References, and on the following web site have submission requirements that may be applicable to this SOW. The DIDs are available on the USAESCH Web Page at http://www.hnd.usace.army.mil/oew/policy/dids/didindx.

4.16. Quality Assurance. In addition to the QC process by the Contractor, the Government shall perform Quality Assurance (QA) on all phases and types of work done on the project to ensure safety, quality workmanship, proper procedures, and quality products~~. Any work or process that fails the Government QA process shall be re-done by the Contractor and full documentation given to correct the problem.~~

In order to evaluate the effectiveness of the geophysical investigation and evaluation methods utilized by the Contractor, the Contracting Officer may direct an independent contractor provided by the Government or may provide Government personnel to independently map, evaluate, locate and access some detected subsurface anomalies as deemed necessary or mag and flag portions of the contractor work areas that are intrusively investigated under this Task Order. All grids that fail the grid QA criteria will be evaluated and addressed IAW the Contracting Officer's determination. All QA failures will be documented with the corrective action taken reported in the Site-Specific Removal Report.

6.0 SPECIAL INSTRUCTIONS.

6.1. During field activities on ordnance projects, hardhats need not be worn unless a head injury threat is present.

6.2. Contractor UXO/OE sweep personnel shall have no metal parts in or on their footwear or wear large metal belt buckles while performing geophysical mapping or removal operations.

7.0 REFERENCES.

7.1. Engineering Evaluation/Cost Analysis, Bravo Area of the Redevelopment Area, Fort McClellan, Alabama, (Nov 2002 Draft)

7.2. National Contingency Plan, 40 CFR 300.

7.3 Federal Acquisition Regulation, F.A.R. Clause 52.236-13: Accident Prevention.

7.4. EM 385-1-1, *U.S. Army Corps of Engineers Safety and Health Requirements Manual*, 3 September 1996.

7.5. EM 1110-1-4009, *Ordnance and Explosives,* 23 Jun 2000.

7.6. ER 385-1-92, U.S. Army Corps of Engineers, Safety and Occupational Health Document Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) Activities, 01 Sep 2000.

7.7. Occupational Safety and Health Administration (OSHA) General Industry Standards, 29 CFR 1910 and Construction Industry Standards, 29 CFR 1926; especially 1910.120/29CFR1926.65-Hazardous Waste Site Operations and Emergency Response.

7.8. NIOSH/OSHA/USCG/EPA, Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, October 1985. (DHHS (NIOSH) Publication No. 85-115).

7.9. OE DIDS

- DID OE-005-05.01 Geophysical Investigation Plan
- DID OE-005-06.01 Site Safety and Health Plan
- DID OE-005-07.01 Location Surveys and Mapping Plan
- DID OE-005-08.01 Work, Data, and Cost Management Plan
- DID OE-005-09.01 Property Management Plan (Not normally required for EECA)
- DID OE-005-11.01 Quality Control Plan
- DID OE-005-14.01 Geographic Information System
- DID OE-015.01 Accident reports
- DID OE-025.01 Personnel and Work Standards
- DID OE-030.01 Site Specific Final Report
- DID OE-040.01 Disposal Feasibility Letter Report
- DID OE-045.01 Report /Minutes, Record of Meetings
- DID OE-055.01 Telephone Conversations/Correspondence Records
- DID OE-080.01 Monthly Status Report
- DID OE-085.01 Weekly Status Report
- DID OE-100.01 Analysis of Institutional Controls

7.10. Archive Search Report

7.11. EM 200-1-2, *Technical Project Planning (TPP) Process*, 31 Aug 1998

7.12. EPA 540-R-92-021, *Guidance for Performing Site Inspections Under CERCLA*, September 1992

7.13. Code of Federal Regulations. [n.d.] *Hazardous Waste Operations and Emergency Response*. 29 CFR 1910.120, Final Rule.

7.14. *CERCLA Compliance With Other Laws Manual*. Parts I (August 1988) and II (August 1989) Parts I and II.

7.15. ER 1110-1-8153, *Ordnance and Explosives Response*, 14 May 1999.

7.16. EP 1110-1-24, *Establishing and Maintaining Institutional Controls for Ordnance and Explosives (OE) Projects*, 15 December 2000.

7.17. EP 385-1-95a, *Basic Safety Concepts and Considerations for Ordnance and Explosives Operations*, 29 June 2001.

7.18. EP 1110-1-18, *Ordnance and Explosives Response*, 24 April 2000.

7.19. ERDC TR-01-13, *Distribution and Fate of Energetics on DOD Test and Training Ranges: Report 1*, September