

FINAL

**Munitions and Explosives of Concern
Five-Year Review Report**

**Fort McClellan
Anniston, Alabama**

**Prepared by
U.S. Army Engineering and Support Center,
Huntsville**



**Date
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TABLE OF CONTENTS

Section	Page
ACRONYMS	iii
EXECUTIVE SUMMARY	v
1.0 INTRODUCTION	1
2.0 SITE DESCRIPTION AND CHRONOLOGY	2
2.1 Site Physical Characteristics	2
2.1.1 Meteorological data	2
2.1.2 Geology and Soil	2
2.1.3 Hydrogeology	3
2.2 Chronology of Site History	3
2.3 Previous Investigations	4
2.4 Response Actions	6
2.4.1 Eastern Bypass OES1 and OES2	6
2.4.2 M2 Parcel	10
2.4.3 M1.01 Parcel and M3 Miscellaneous Property	11
2.4.4 Y Area	14
2.4.5 Water Tank Construction Sites A, B, and C	16
2.4.6 Dog Kennel Area	17
2.4.7 FWS Land Transfer Area Roads, Firebreaks and High Use Areas at Range 20, Range 21, and Range 24	19
2.4.8 Bains Gap Road	21
2.5 Current Property Owners and Land Usage	23
2.6 Highlights of Community Participation	25
3.0 FIVE-YEAR REVIEW PROCESS	27
3.1 Administrative Components	27
3.2 Community Notification and Involvement	27
3.2.1 Community Notification	27
3.2.2 Interview and Community Involvement	27
3.2.3. Regulator and Stakeholder Concerns	27
3.3 Site Visit	29
4.0 FINAL SITE ANALYSIS	30
4.1 Eastern Bypass OES1 and OES2	30
4.2 M2 Parcel	30
4.3 M 1.01 Parcel and M3 Miscellaneous Property	31
4.4 Y Area	31
4.5 Water Tank Construction Sites A, B, and C	31

4.6	Dog Kennel Area	31
4.7	FWS Land Transfer Area Roads, Firebreaks and High Use Areas at Range 20, Range 21, and Range 24	32
4.8	Bains Gap Road	32
5.0	CONCLUSIONS AND RECOMMENDATIONS	33
5.1	Conclusions	33
5.2	Recommendations	33
6.0	REFERENCES	34

TABLES

Table 2-1	Munitions Response Action	23
Table 2-2	Current Land Owner	24

FIGURES

Figure 2-1	Eastern Bypass Location Map	7
Figure 2-2	M2 Parcel Location Map	10
Figure 2-3	M1.01 and M3 Location Map	12
Figure 2-4	Y Area Location Map	15
Figure 2-5	Water Tank Location Map	17
Figure 2-6	Dog Kennel Location Map	18
Figure 2-7	FWS Land Transfer Location Map	20
Figure 2-8	Bains Gap Road Location Map	22
Figure 3-1	Public Meeting Press Release	28

APPENDIX

Figure 1	Ordnance Clearance Areas
Figure 2	EE/CA Locations
Figure 3	Eastern Bypass OES1 and OES2
Figure 4	M2 Parcel
Figure 5	M1.01 Parcel and M3 Miscellaneous Property
Figure 6	Y Area
Figure 7	Water Tank Sites
Figure 8	Dog Kennel Area
Figure 9	FWS Land Transfer Area; Roads, Firebreaks, and High Use Areas at Range 20, Range 21, and Range 24
Figure 10	Bains Gap Road

ACRONYMS

ADEM	Alabama Department of Environmental Management
ALDOT	Alabama Department of Transportation
ASR	Archives Search Report
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DDESB	Department of Defense Explosives Safety Board
DOI	Department of Interior
EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
ECOP	Environmental Condition of Property
EODT	EOD Technology Inc.
EP	Engineering Pamphlet
EPA	Environmental Protection Agency
EPIC	Environmental Photographic Interpretation Center
ESCA	Environmental Services Cooperative Agreement
ESD	Explanation of Significant Differences
ESE	Environmental Science and Engineering, Inc.
ESS	Explosives Safety Submission
FOSET	Finding of Suitability for Early Transfer
FOST	Finding of Suitability to Transfer
FWEC	Foster Wheeler Environmental Corporation
FWS	U.S. Fish and Wildlife Service
HE	high explosives
LRA	Local Reuse Authority
LUCIP	Land Use Controls Implementation Plan
LUCs	Land Use Controls
MEC	Munitions and Explosives of Concern
mm	millimeter
MPM	Most Probable Munition
MSD	Minimum Separation Distance
NFA	No Further Action
OE	Ordnance and Explosives
OES	Ordnance and Explosives Site
ORNL	Oak Ridge National Laboratories
PDT	Project Delivery Team
RAB	Restoration Advisory Board
TF	U.S. Army Transition Force
TRADOC	U.S. Army Training and Doctrine Command
TTECI	Tetra Tech EC, Inc.
TTFWI	Tetra Tech FW, Inc.
USACE	U.S. Army Corps of Engineers
USAESCH	U. S Army Engineering and Support Center, Huntsville

USATCES
UXO
WP

U.S. Army Technical Center for Explosives Safety
Unexploded Ordnance
White Phosphorus

Executive Summary

The United States Army Engineering and Support Center, Huntsville (USAESCH) has conducted a five-year review for multiple Munitions and Explosives of Concern (MEC) response actions that were completed at Fort McClellan, Alabama. Fort McClellan is a former Army installation located near Anniston, Alabama that was closed in 1999.

The purpose of a five-year review for a MEC response action is to determine whether the response action at a site continues to minimize explosives safety risks and continues to be protective of human health, safety, and environment. Five-year reviews satisfy the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) five-year review requirement. All sites where a MEC response action is implemented require five-year reviews.

The MEC response action sites addressed within this five-year review are: Eastern Bypass Ordnance and Explosives Sites (OES) 1 and OES2; M2 Parcel; M1.01 Parcel and M3 Miscellaneous Property; Y Area; Water Tank Construction Sites A, B, and C; Dog Kennel Area; FWS Land Transfer Area Roads, Firebreaks, and High Use Areas at Range 20, Range 21, and Range 24; and Bains Gap Road. A response action has been completed at each of these sites and a five-year review is required.

Members of the review team inspected each of the response action sites. Most areas were covered by foot, however; a small portion was covered by driving. Each site was visually inspected for erosion, evidence of MEC, and changes in land use. A Lowes home improvement store was built on a portion of the M1.01 Parcel. A publishing facility for The Anniston Star was built on the M2 Parcel. Improvements were made to Bains Gap Road, and Summerall Road was rerouted through the Eastern Bypass OES1. No other areas with differing site conditions or uses were observed.

A public meeting announcement was published in The Anniston Star on November 28, 2006, and on December 3, 2006. The public meeting was held at the Anniston Meeting Center on December 6, 2006. Community members were given the opportunity to ask questions and discuss the findings of the review during the meeting. The five-year review team concluded that the response actions continue to minimize explosives safety risks and continue to be protective of human health, safety, and environment. No evidence of MEC due to erosion, new construction, recreational or other activities, storm damage or changes in land use was identified.

1.0 Introduction

The USAESCH conducted a five-year review for multiple MEC response actions that were completed at Fort McClellan, Alabama. Fort McClellan is a former Army installation that comprised approximately 18,929 acres of land adjacent to the city of Anniston, in Calhoun County, Alabama.

The purpose of a five-year review for a MEC response action is to determine whether the response action at a site continues to minimize explosives safety risks and continues to be protective of human health, safety, and environment. The methods, findings, and conclusions of the review are documented in this report. The review of each of the completed response actions has been conducted following guidance provided in Engineering Pamphlet (EP) 75-1-4, Recurring Reviews on Ordnance and Explosives (OE) Response Actions.

Members of the Project Delivery Team (PDT) that conducted the site visit and review, including their titles and contact information, are as follows:

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This five-year review was conducted from October 1 through December 7, 2006 and is the first for the site. The locations of the specific response action sites are described in Section 2.4 and illustrated in the Appendix. The following response action sites are the subject of this review.

- Eastern Bypass OES1 and OES2
- M2 Parcel
- M1.01 Parcel and M3 Miscellaneous Property
- Y Area
- Water Tank Construction Sites A, B, and C
- Dog Kennel Area
- FWS Land Transfer Area Roads Firebreaks and High Use Areas at Range 20, Range 21, and Range 24
- Bains Gap Road

Areas on Fort McClellan that did not have a completed response action in the fall of 2006 are not addressed in this report.

2.0 Site Description and Chronology

2.1 Site Physical Characteristics

2.1.1 Meteorological Data

Fort McClellan is situated in a temperate, humid climate. Summers are hot and long, and winters are usually short and mild to moderately cold. The climate is influenced by the frontal systems moving from northwest to southeast, and temperatures change rapidly from warm to cool due to the inflow of northern air. The average annual temperature is 63 degrees Fahrenheit (°F). Summer temperatures usually reach 90 °F or higher about 70 days per year, but temperatures above 100 °F are rare. Freezing temperatures are common but are usually of short duration. The first frost may arrive by late October. At Anniston, the average date of the first 32 °F temperature is November 6, and the last is March 30. This provides a growing season of 221 days. Snowfall averages 0.5 to 1 inch. On rare occasions, several inches of snow accumulate from a single storm.

The average annual rainfall is approximately 53 inches and is well distributed throughout the year. The more intense rains usually occur during the warmer months, and some flooding occurs nearly every year. Drought conditions are rare. Approximately 80 percent of the flood-producing storms are of the frontal type and occur in the winter and spring, lasting from 2 to 4 days each. Summer storms are usually thunderstorms with intense precipitation over small areas, and these sometimes result in serious local floods. Occasionally, several wet years or dry years occur in series. Annual rainfall records indicate no characteristic order or pattern.

Winds in the Fort McClellan area are seldom strong and frequently blow down the valley from the northeast. However, there is no truly persistent wind direction. Normally, only light breezes or calm prevail, except during passages of cyclonic disturbances, when destructive local wind storms develop, some into tornadoes, with winds of 100 miles per hour or more.

2.1.2 Geology and Soil

Fort McClellan is situated near the southern terminus of the Appalachian Mountain chain. All but the eastern most portion of the Main Post lies within the Valley and Ridge Province of the Appalachian Highlands. The portion of Fort McClellan east of Choccolocco Creek lies within the Piedmont Province. The age of the consolidated sedimentary and metamorphic rocks ranges from Precambrian to Pennsylvanian. On a large scale, most of the rocks have been intensely folded into an aggregate of the northeast-southwest trending anticlines and synclines with associated thrust faults. The shallow geology in the area is characterized by colluvial deposits. The presence of metamorphic rocks, as well as iron-bearing cements within the sedimentary rocks, increases the potential for minerals such as magnetite and other associated magnetic minerals.

2.1.3 Hydrogeology

Aquifers in the area are developed in residual soil derived from the weathering of bedrock, within fractured bedrock, along fault lines and within karstic units. Groundwater flow is generally toward major surface water features. However, because of differential weathering, variable fracturing within a karst environment and the potential for conduit flow, topography as an indicator of groundwater flow direction must be used with caution. Groundwater intersecting the ground surface has resulted in numerous springs, which are important sources of discharge and water supply in the area. Precipitation is the primary source of recharge to groundwater in Calhoun County. Thrust fault-zones form conduits for groundwater movement. Points of discharge are springs, effluent streams and lakes. Shallow groundwater occurs on bedrock units of the Weisner Formation, part of the Chilhowee Group and locally in Ordovician carbonates. Bedrock permeability may be locally enhanced by fracture zones associated with thrust faults and by solution of limestone. Surface water movement into sinkholes provides another source of groundwater recharge and locally has facilitated the formation of caves.

2.2 Chronology of Site History

Fort McClellan occupies 18,929 acres adjacent to the city of Anniston, Calhoun County, Alabama. To the west of the Fort are the areas known as Weaver and Blue Mountain, to the north is the City of Jacksonville. The Talladega National Forest is located east of the Fort.

During the Spanish American War (1898-1899), the Fourth Alabama Artillery used the Choccolocco Mountains as a background for firing shells. There is the possibility that units stationed at Camp Shipp in the Blue Mountain area also used the area for artillery training.

In 1912 the War Department brought 20,000 National Guardsmen of the Department of the Southeast to the area for maneuvers. During the next four years, 1912-1916, high official and Army Officers from Washington were sent to Anniston to study the possibilities of the location as a camp site.

Starting in 1912 and ending in 1916, artillery units of the Alabama, Georgia and Louisiana National Guard conducted annual training, using the hills as backdrops.

On December 6, 1915, by Executive Order No. 2281, President Woodrow Wilson ordered that 1,160 acres of land be reserved for Military purposes. This land was designated the Anniston Field Artillery Range.

In early 1917, upon the advice of the War Department, the Federal Government decided to purchase the area as an artillery range. Congress appropriated a total of \$247,400 to purchase 18,952 acres. The actual land purchased was 17,837.18 acres. This brought the Camp up to 18,997.18 acres.

On July 18, 1917, the War Department named Camp McClellan as one of sixteen cantonment camps for the training of National Guard divisions and assigned the 29th Infantry Division to the Camp.

In 1929, Camp McClellan was made a permanent Army post and was re-designated on July 1, 1929 as Fort McClellan.

In 1941, Fort McClellan leased an area of 4,160 acres, known as the Choccolocco corridor. This area abuts the main post on the eastern edge and provided a corridor to the national forest during World War II.

On June 30, 1947, Fort McClellan was placed on a custodial basis, with only a few persons assigned to maintain the buildings and grounds.

On January 4, 1951, it was announced that the Army had decided to reactivate Fort McClellan on an unlimited basis for operation of the Chemical Corps School and as a replacement center for the Chemical Corps.

In 1995 Fort McClellan was recommended for closure under the Base Realignment and Closure (BRAC) Act and the installation closed in September 1999.

2.3 Previous Investigations

The Environmental Protection Agency's (EPA) Environmental Photographic Interpretation Center (EPIC) provided an analysis of historical aerial photography, using photography from 1940 to 1982, to help determine the history and locations of potential environmental issues at Fort McClellan (EPA, 1990). Ranges, cleared areas, ground scars and trenches represent some of the findings of the analysis.

An Environmental Baseline Survey (EBS) conducted by Environmental Science and Engineering, Inc. (ESE) provides a summary of known MEC sites at Fort McClellan, and was useful in confirming and/or supplementing the information contained in the Archives Search Report (ASR) (ESE, 1998).

In 1998, Oak Ridge National Laboratories (ORNL) conducted a historical aerial photography investigation of the Fort McClellan East Bypass Study Area (ORNL, 1998). The study included an analysis of photographs from 1937 to 1994. Photographic anomalies were classified as unidentified objects, unidentified structures, ammunition ranges, a trap and skeet range, training areas, bivouac sites, areas of trails and clearings, a trail with no outlet, areas cleared of scrub and ground cover, and a road in a cleared area.

The ASR was prepared by the U.S. Army Corps of Engineers, St. Louis District in 1997, and was revised in 2000 and 2001 with additional information (U.S. Army Corps of Engineers (USAEC), St. Louis District, 2001). The ASR describes known historical MEC-related activities at Fort McClellan. The document includes maps with the

locations of known range safety fans, as well as ordnance firing points, types of ordnance reportedly used at the various ranges, and dates of operation of ranges, firing fans, and training areas.

A Reconnaissance Findings, Conceptual Plan, and Proposed Scope of Work were prepared in August 2000 following the site reconnaissance phase of the Engineering Evaluation and Cost Analysis (EE/CA) process at Fort McClellan (FWEC, 2000b). The report includes a tabular summary of historical ordnance use at the various ranges, a description of the site reconnaissance activities performed in the field, a summary of the ordnance related and non-ordnance related findings, and a map showing proposed OE characterization sectors to be used in the EE/CA sampling.

For the purpose of MEC assessment, Fort McClellan was divided into the following six areas: Eastern Bypass, M2 Parcel, M1.01 Parcel and M3 Miscellaneous Property, Alpha Area, Bravo Area, and Charlie Area. An EE/CA was prepared for each site. A summary of each EE/CA Area is provided below.

In April 2000, Zapata Engineering completed the EE/CA for the Eastern Bypass right-of-way (Zapata Engineering, 2000). The Eastern Bypass EE/CA Area consists of approximately 621 acres. The Eastern Bypass begins on the western boundary of Fort McClellan in the vicinity of Summerall Gate then heads due east approximately one mile and turns due south for 3.5 miles to the southern boundary of Fort McClellan. Response action sites OES1 and OES2 are located within the Eastern Bypass EE/CA Area.

In June 2000, USAESCH completed an EE/CA for the M2 Parcel (USAESCH, 2000a). The M2 EE/CA Area is approximately 20.3 acres located 400 feet south-southeast of the Summerall Gate Road, east of Highway 21 and adjacent to the western Main Post boundary. The entire M2 Parcel is a response action site.

An EE/CA for the M1.01 Parcel was completed in December 2001 (FWEC, 2001b). The EE/CA for the M1.01 reuse parcel included a small portion of the M3 reuse parcel. This area is located on the western boundary of Fort McClellan in the vicinity of Summerall Gate Road. The area consists of 97 acres and is divided into three segments. The entire M1.01 Parcel and M3 Miscellaneous Property is a response action site.

The EE/CA for the Alpha Area was completed in September 2003 (FWEC, 2003c). The Alpha EE/CA Area comprises approximately 930 acres of land located in the north central portion of Fort McClellan between the cantonment area on the west and the Charlie Area on the east. All of the acreage in the Alpha Area transferred to the local reuse authority (LRP) under CERCLA Early Transfer Authority in 2003. Additional characterization in the form of a supplemental EE/CA was performed by the LRA for finalization of response actions and cleanup of the property in accordance with an Environmental Services Cooperative Agreement (ESCA) between the Army and the LRA. The Alabama Department of Environmental Management (ADEM) concurred with the Action Memorandum in a letter dated October 4, 2005. No response action sites in this five-year review are located within the Alpha Area.

In July 2006, a Draft Final EE/CA was developed for the Bravo Area (TTECI, 2006c). The Bravo EE/CA Area lies south of the cantonment area, roughly between the west property line and the south end of the Charlie Area. The Eastern Bypass Area bisects the Bravo Area into a large eastern and smaller western area. The Bravo Area covers about 3,325 acres. The Y Area, Water Tank Construction Sites A, B, and C, and the Dog Kennel Area response action sites are located within the Bravo Area. All of the acreage in the Bravo Area, except the Water Tank Construction Sites and approximately 7.27 acres designated as the Iron Mountain Road Addition located adjacent to the Eastern Bypass, transferred to the LRA under CERCLA Early Transfer Authority in 2003. The Draft Final EE/CA was provided to the LRA for finalization of response actions and cleanup of the property in accordance with the ESCA.

A Draft Final EE/CA for the Charlie Area was prepared in December 2004 (TTFWI, 2004b). The Charlie EE/CA Area comprises approximately 8,630 acres located in the eastern portion of the Main Post and includes portions of the Choccolocco Mountains and the Choccolocco Corridor to the east of the mountains. The Choccolocco Corridor portion of the Charlie Area is owned by the State of Alabama. The Army transferred the Army owned property to the U.S. Fish and Wildlife Service (FWS) in June 2003 for management as a National Wildlife Refuge. The Army remains responsible for characterization and remediation of the property through a memorandum of agreement with the Department of the Interior (DOI). Supplemental sampling to complete the EE/CA is currently underway. The Bains Gap Road, and the FWS Land Transfer Area Roads, Firebreaks, and High Use Areas at Range 20, Range 21, and Range 24 response action sites are located within the Charlie Area.

2.4 Response Actions

The following paragraphs summarize the investigations, decision documents, explosives safety submissions (ESS), response actions, and property transfer actions that have been implemented for each response action site.

2.4.1 Eastern Bypass OES1 and OES2

The Eastern Bypass sites designated as OES1 and OES2 (Figure 2-1) have a combined area of approximately 355 acres. OES1 is located in the northwestern portion of the Eastern Bypass right-of-way north and south of Summerall Gate Road and comprises 89 acres. OES2 is located in the north and central portion of the Eastern Bypass right-of-way and comprises 266 acres.

Both sites were investigated as part of the EE/CA for the Eastern Bypass. OES1 was a suspected non-impact field training area. Munitions debris (MD) items discovered during the EE/CA in OES1 included 60mm practice mortars, 2.36-inch practice rockets, expended smoke grenades, an M20 practice mine with an expended M604 training fuse, and an M1 practice activator. Small arms ammunition was also discovered within OES1. All items recovered from OES1 were found within 12 inches of the ground surface.

OES2 was a known impact area containing significant quantities of MEC. Historical records indicated that OES2 was used as a 60mm mortar range, 2.36-inch rocket launcher range, and a tank range.

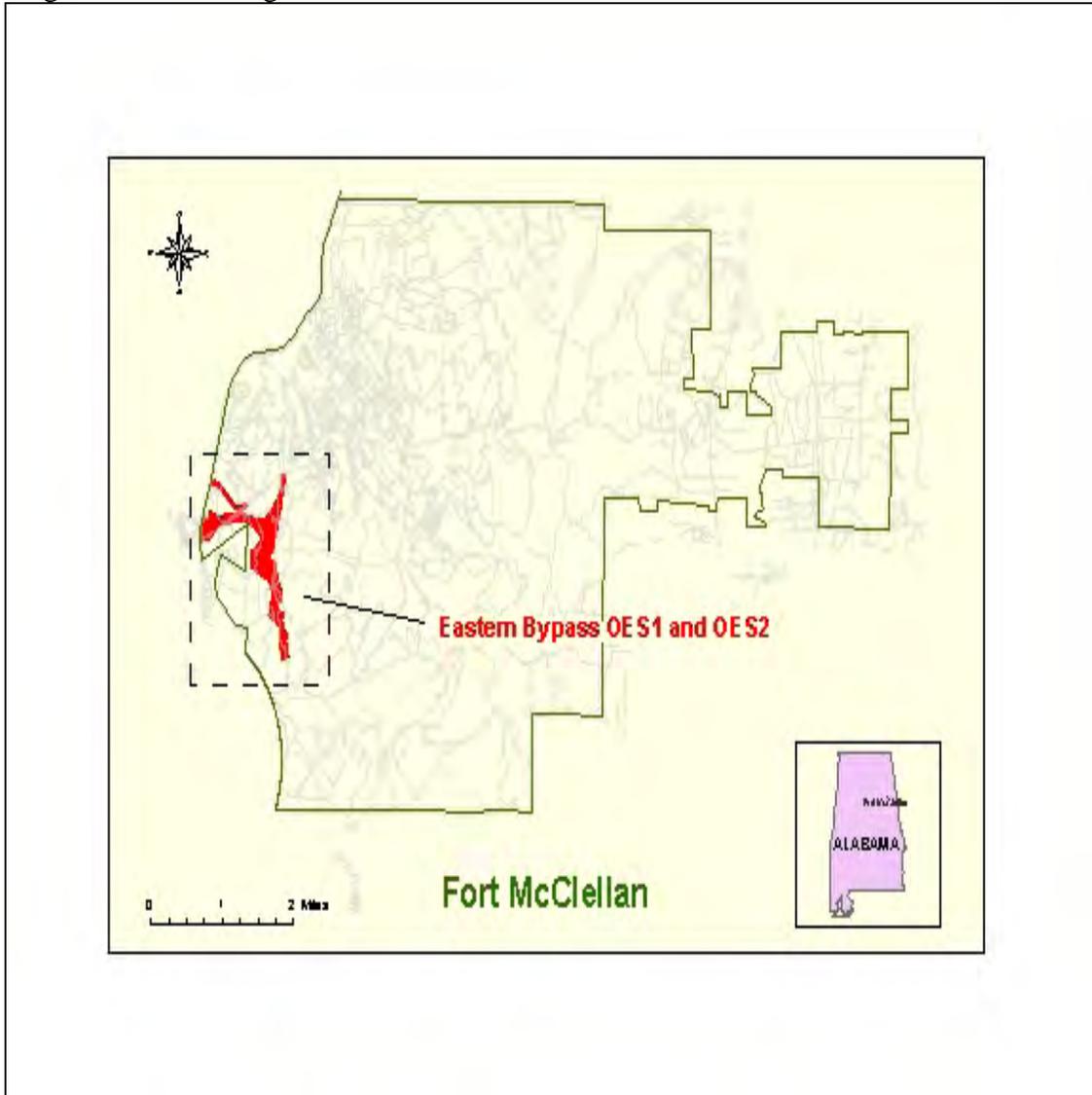


Figure 2-1: Eastern Bypass Location Map

A clearance to one-foot depth was performed over the entire OES1 and the majority of OES2 from October 1999 to March 2001 (EODT, 2001). This action was undertaken prior to completion of the EE/CA to support timber harvesting and pre-design activities necessary for the Alabama Department of Transportation (ALDOT) to begin design of the bypass. In OES1 and OES2, a total of 1,046 MEC (UXO) and 38,700 MD items were recovered. OES1 did not have any UXO items and MD recovered was training and practice items including smoke and practice hand grenades, slap flares, training and practice mortars (60mm and 81mm), expended rifle grenades, one practice anti-vehicle mine, 2.36 inch practice rockets and two expended 37mm APT rounds. MEC found in OES2 included 3 inch stokes mortars, 2.36 inch rockets, 60mm mortars, flares, hand

grenades, rifle grenades, smoke grenades, practice mines, 37mm projectiles, 81mm projectiles, and 105mm projectiles.

The Army prepared an Action Memorandum for the Eastern Bypass EE/CA area in August 2001 (U.S. Army, 2001). Based on the type and nature of MEC items found during the clearance to one-foot depth, and on data gathered during the removal action on the adjacent M2 Parcel, it was concluded that the specific types of MD found in OES1 would be located within 12 inches of ground surface. Therefore, with the clearance to one-foot depth having already been performed, no further action (NFA) was the selected risk reduction alternative for OES1. Institutional controls including construction worker education and posting of signs, clearance for intended land use, and construction support were the selected alternatives for OES2. The Action Memorandum also required a deed notice for OES1 and OES2 to provide information on notification requirements in case a MEC item is found.

The ESS (FWECI, 2001a) was prepared in October 2001, and approved by the Department of Defense Explosives Safety Board (DDESB) in November 2001 (DDESB, 2001). The Most Probable Munition (MPM) for OES2 was the 37mm HE MK II projectile, and a Minimum Separation Distance (MSD) of 1,181 feet was applied. Amendment 1 to the ESS (FWEC, 2002b) allowed the use of mechanical equipment for removal, sifting and shredding operations at locations within OES2 that had high density MEC and MD (DDESB, 2002c).

In April 2002, the Action Memorandum was modified with an Explanation of Significant Differences (ESD) (TRADOC, 2002b) to include an additional 40 acres adjacent to OES2 in the clearance to depth for OES2. A correction to the ESS adding the 40 acres to OES2 was transmitted to DDESB on July 8, 2002 (Department of the Army, Huntsville Center, Corps of Engineers, 2002a).

The munitions response for removal of MEC to depth of detection in OES2, with the exception of 48 grids that contained large amounts of construction debris, was conducted from April 2001 to April 2003 (FWEC, 2006). During this response, 668 MEC items and 4,601 MD items were recovered. MEC included 2.36 inch rockets, 37mm projectiles, 40mm grenades, 60mm mortars, 81mm mortars, hand grenades, and rifle grenades. This response included the mechanical removal which recovered 486 MEC items and 19,000 pounds of MD.

Amendment 4 to the ESS (U.S. Army Defense Ammunition Center, 2004), approved by DDESB on October 1, 2004 (DDESB, 2004b), explained why a MEC removal action, as required in the original ESS, was not performed on certain locations within OES2 where construction debris had been buried. Amendment 4 stated that as ALDOT removed construction debris during highway construction, the Army would provide construction support and conduct a removal to depth beneath the debris.

Amendment 5 to the ESS (Department of the Army, Huntsville Center, Corps of Engineers, 2005a) approved by DDESB April 14, 2005 (DDESB, 2005a), revised the

locations in the construction debris area at which construction support and removal to depth would occur: (a) grids that will have four feet or less of fill deposited above the existing construction debris, (b) locations where removal is necessary for the placement of drainage structures and c) a ten foot buffer around the areas included in (a) and (b). Amendment 5 also required that property transfer documents show areas where construction debris was not removed. For these areas, the Army will provide future construction support and removal to depth, as appropriate.

From June to August 2005, the Army performed a removal to depth of detection on the construction debris area that would not receive at least 4 feet of fill deposited above the existing construction debris during bypass construction (TTECI, 2006a). In this action no MEC was discovered and nine MD items were recovered. MEC removal was not conducted in 30 grids known as the construction debris grids where construction debris was not removed.

In October 2007, the Action Memorandum was modified with another ESD (USACE, 2007). Because a clearance to depth of detection had been performed on all of OES2, with the exception of the 30 construction debris grids which will have a minimum of four feet of fill deposited on them, the requirement for posting warning signs along the boundary of OES2 was withdrawn. The withdrawal of the requirement to post warning signs is documented in Amendment 8 to the ESS (Department of the Army, Huntsville Center, Corps of Engineers, 2007b) and was approved by DDESB on November 16, 2007 (DDESB, 2007).

Approximately 64.94 acres of OES1 transferred to ALDOT in Quitclaim Deed No. 2 on January 14, 2004. The environmental condition of the property is documented in a Finding of Suitability to Transfer (FOST) (U.S. Army, 2003b). The Statement of Clearance for OES1 (Department of the Army, Huntsville Center, Corps of Engineers, 2002b) included as Attachment 2 of the FOST, requires that residual risk be managed through a deed notice.

The remaining portion of OES1 and all of OES2 are pending transfer to ALDOT. The environmental condition of the property is documented in a FOST (U.S. Army, 2008). The Statement of Clearance for OES1 and the Statement of Clearance for OES2 (Department of the Army, Huntsville Center, Corps of Engineers, 2002b) are included as Enclosure 7 of the FOST. Requirements described in the Statement of Clearance for OES2 are as follows: construction support will be provided in the 30 grids identified as construction debris areas, ordnance familiarization training and notification procedure for all construction workers, and management of residual risk through land use controls and a deed notice. A Land Use Control Implementation Plan (LUCIP) for OES2 was included as Enclosure 13 of the FOST. In addition to the requirements of the Statement of Clearance for OES2, the LUCIP also requires that ALDOT maintain training records.

2.4.2 M2 Parcel

The M2 Parcel (Figure 2-2) consists of approximately 22 acres and is located 400 feet south-southeast of the Summerall Gate Road, east of the Anniston-Jacksonville highway and adjacent to the western Main Post boundary of Fort McClellan. The M2 Parcel had been identified as part of a much larger undocumented training area. The period and duration of training that was conducted in the M2 Parcel is unknown. However, the items that have been identified in the vicinity are representative of troop training using practice items.

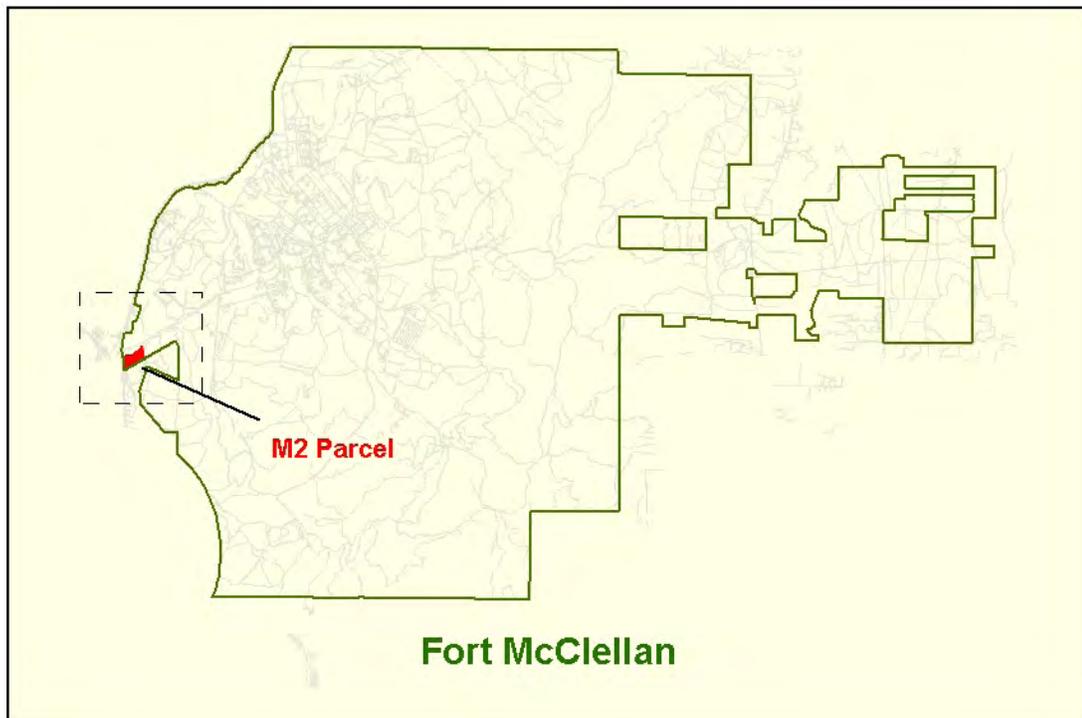


Figure 2-2: M2 Parcel Location Map

An EE/CA for the M2 Parcel was completed in June 2000. The nature and extent of the presence of MEC at the site was estimated using existing site-specific field data that was collected during the Eastern Bypass EE/CA, a visual ground reconnaissance, and the Eastern Bypass construction support clearance to one-foot depth. In May 1999, during the EE/CA for the Eastern Bypass, Zapata Engineering conducted intrusive sampling in the vicinity of the M2 Parcel and discovered MD items used for training. MD items found included; 60-mm practice mortars, expended smoke rifle grenades, expended rocket propelled ground signals (slap flares), expended practice anti-personnel mines (M8), expended ground trip flares (M48), and unexpended M1 mine activator. In February 2000, during a visual ground reconnaissance, the remains of a white phosphorus grenade were identified on the ground surface adjacent to the M2 Parcel. During the one-foot clearance of MEC over the Eastern Bypass to support pre-construction activities, expended rifle smoke grenades were found in grids adjoining the M2 Parcel on the

northern boundary. These previous investigations conducted in and around the M2 Parcel indicated that the area was used primarily as a training area.

The Action Memorandum recommended a clearance to depth of detection, a deed notice, and education of construction workers in the hazards associated with MEC and the proper action to be taken if any suspect item is identified (USAESCH, 2000b).

The ESS for a clearance to depth of detection was prepared in July 2000 (FWEC, 2000a) and approved by DDESB (DDESB, 2000).

A clearance to depth of detection was performed between May 22, 2000 and September 18, 2000 (FWEC, 2000c). Intrusive investigation of anomalies resulted in the excavation of one UXO item (white phosphorous hand grenade); two practice items (practice land mine and practice hand grenade); approximately twelve pounds of munitions debris primarily consisting of expended portions of rifle grenades, slap and rifle flares, and parts of hand grenades; expended and unexpended small arms (mostly .30 caliber); and 1,465 pounds of cultural debris. Consistent with the type of training exercises thought to have occurred at the site, greater than 99-percent of the items recovered were within 18 inches of the ground surface and more than 95-percent were at a depth less than six inches.

An addendum to the Action Memorandum eliminated the requirement for education of the construction worker because the area was cleared to depth of detection (USAESCH, 2000c).

The M2 Parcel was renamed E2 Parcel during the development of the FOST (U.S. Army, 2000). Included in Attachment 2 of the FOST is the Statement of Clearance (Department of the Army, Huntsville Center, Corps of Engineers, 2000). The Statement of Clearance recommended unrestricted use of the property and a deed notice. The parcel transferred to the LRA in Quitclaim Deed 3 on February 14, 2001.

This property is currently owned by the Consolidated Publishing Company, The LRA conveyed 22.48 acres to Consolidated Publishing Company on April 9, 2001. Subsequently, Consolidated Publishing constructed a building on the parcel for publication of The Anniston Star. On April 19, 2002 Consolidated Publishing Company conveyed 0.94 acres, adjoining Alabama Highway 21 (McClellan Blvd.), to Alabama Department of Transportation.

2.4.3 M1.01 Parcel and M3 Miscellaneous Property

The M1.01 Parcel and M3 Miscellaneous Property (Figure 2-3) is on the western boundary of Fort McClellan in the vicinity of Summerall Gate Road. The area consists of approximately 97 acres and is divided into three segments: 1) property north of the Summerall Gate Road Extension (22 acres); 2) property south of Summerall Gate Road Extension (42 acres) and; 3) property south of the Eastern Bypass right-of-way (33 acres).

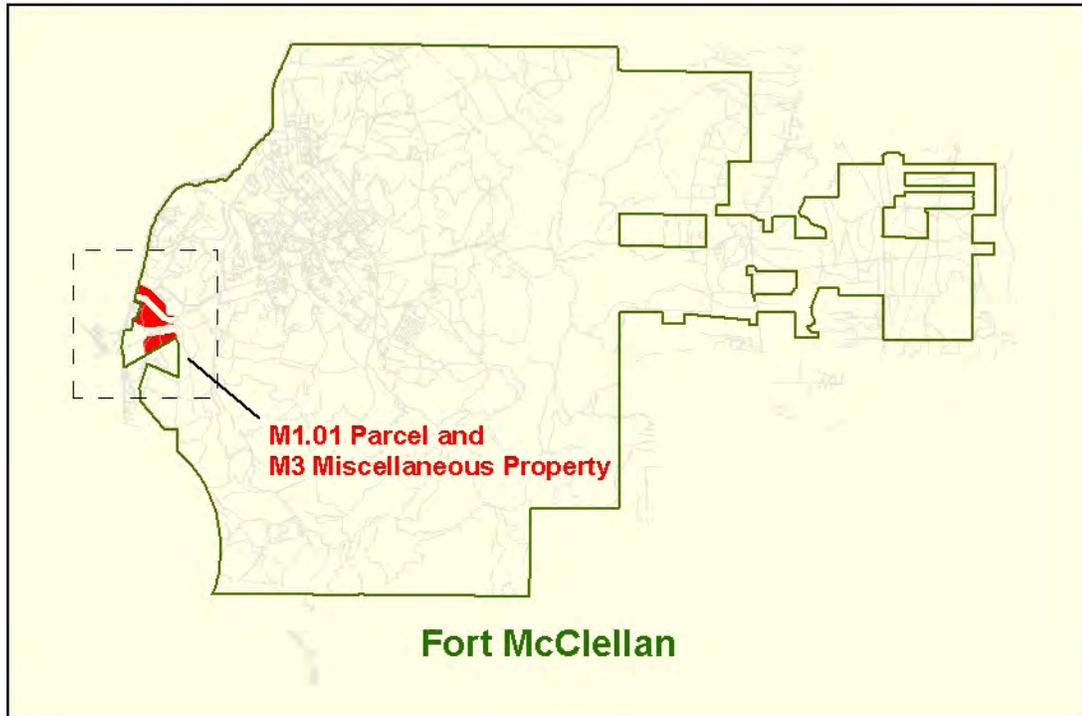


Figure 2-3: M1.01 and M3 Location Map

An EE/CA for this area was completed in December 2001. Because all MEC was expected to be found within one foot of the ground surface, a clearance to one-foot depth was recommended. The nature and extent of the presence of MEC at the site was estimated using existing site-specific field data that was collected during three previous response actions that took place in 1999-2001 in areas inclusive and adjacent to the M1.01 Parcel as follows: Eastern Bypass EE/CA, Eastern Bypass construction support clearance to one-foot, and M2 Parcel clearance to depth of detection. Based on archival records and results of these previous actions, the evidence indicated that the area was primarily used for training activities. But for one exception, the remains of a white phosphorus (WP) grenade, there was no evidence that high explosives (HE) were ever used in the area. Small quantities of HE were used in M-15 WP smoke hand grenades to break open the case for the purpose of exposing/releasing the WP. Items found in the previous response actions were training items at depths of several inches to one foot or less and include such items as 2.36-inch practice rockets, practice hand grenades, practice mortars (60 and 81 mm), expended rifle grenades, flares, and practice land mines. During the Eastern Bypass EE/CA, all ordnance related items found were at depths of 12 or less inches. The only items found below 12 inches were non-OE scrap (cultural metallic debris). At the M2 Parcel, except for one, all ordnance items were found at depths of six inches or less. One item was recorded as found at a depth of 30 inches, however, the item (an expended rifle grenade) actually was found on the surface at the bottom of a 30-inch deep, 3-foot diameter open hole. The only items found below 12 inches were cultural debris. Although depth data was not recorded for the ordnance related items found during the Eastern Bypass one-foot clearance, the types of items

recovered were consistent with findings in the other two areas. Because the items were similar, it was reasonably assumed that the depths were similar as well.

The Action Memorandum recommended clearance to 1-foot depth and a deed notice (TRADOC, 2002a).

The ESS for clearance to 1-foot depth was prepared in February 2002 (FWEC, 2002a) and approved by DDESB (DDESB, 2002a). The DDESB approval letter also required construction support for future development activities in the area. A clearance to one-foot depth was performed from February 2002 through July 2002 (FWEC, 2003a). During this response action 455 MEC and MD items were recovered. The findings include the following: a) 8 UXO items were discovered; b) a high number of inert, practice rounds (60mm and 81mm mortar, 2.36-inch rocket) were discovered in a relatively defined area indicating the presence of a target area for training activities; and c) fragments from high explosive rounds (mortars and possibly some rocket fragments) indicate a limited number of live rounds were fired into the practice site. The most significant discovery was a single 60mm HE Mortar. The single 60mm HE mortar was discovered at the extreme northern edge of the impact area (Grid D-20), 1-inch below ground surface, lying horizontally, facing east, and pointing into the base of a tree. The field data indicates that the round had been fuzed and fired. This location and position indicate a significantly high probability that the round was placed in this location and not fired into this point. This MEC item was classified as “unique and anomalous” with respect to being fired into the site.

The discovery of the 60mm mortar round triggered the need for Amendment 1 to the ESS (U.S. Army Garrison, 2002a), which was approved by DDESB in August 2002 (DDESB, 2002b). Amendment 1 changed the MPM from an M15 WP Hand Grenade to an M49, 60mm Mortar Projectile. The MSD for unintentional detonations increased from 60 feet to 70 feet. The exclusion zone for intentional detonation increased from 517 feet to 1,080 feet.

Amendment 2 to the ESS (Department of the Army, Huntsville Center, Corps of Engineers, not dated), approved by DDESB in April 2003 (DDESB, 2003b), allowed for withdrawal of the requirement for construction support. The DDESB approval also required that the provisions of the action memorandum, deed notice and recurring reviews, be accomplished.

This site transferred to the LRA under early transfer authority in Quitclaim Deed No.13 on September 26, 2003. The environmental condition of the property is documented in a Finding of Suitability for Early Transfer (FOSET) (U.S. Army, 2003c). Included as Attachment 8 to the FOSET is a Statement of Clearance recommending unrestricted use of the property and requiring that any residual risk remaining be managed through a deed notice.

In response to meetings and discussions among the Army, ADEM, and LRA, the Army conducted a clearance to depth of detection of six grids from December 2004 through January 2005 to demonstrate that the one-foot clearance was an appropriate remedy (TTECI, 2006e). No MEC items were found. MD items were found in five of the six grids, and all munitions debris found was consistent with the type of items found during the EE/CA and one-foot clearance. No further clearance was recommended; however, the Army is providing construction support as required by ADEM for any construction activities on the property. Construction support is performed by the LRA as provided for in the ESCA between the Army and the LRA.

January 29, 2007, the LRA conveyed 16.63 acres (of which 10.50 acres lies within the M1.01 Parcel boundary) of the site to McWhorter Properties – Anniston, LLC which developed the property for a Lowes home improvement store. Construction support was provided by LRA. The 16.63 acres are located in the western segment of the M1.01 Parcel, however 6.13 acres lies to the north of and outside of the M1.01 Parcel boundary. On March 6, 2008 McWhorter Properties conveyed the 16.63 acres to Lowe’s Home Centers, Inc.

2.4.4 Y Area

The Y Area (Figure 2-4) is approximately 60 acres and located within the Y-Junction of the Eastern Bypass in the Bravo Area, east of State Highway 21 and south of Summerall Gate Road on the western side of Fort McClellan. The Y Area was investigated during the Bravo Area EE/CA (TTECI, 2006c) and includes the following risk assessment sectors: M3-1H Grenade Area-D, a portion of M3-1H Grenade Area-PR, and M3-1H Rocket Area-D. The M3-1H Grenade Area-D sector consists of 31 acres. One UXO item was found at a depth of 12 inches and fourteen OE scrap items were found on the surface and up to a depth of 8 inches. The Eastern Bypass divides the M3-1H Grenade Area-PR risk sector. The portion of the risk sector located in the Y Area is approximately 16 acres. Five OE scrap items were found at shallow depths. The M3-1H Rocket Area-D consists of approximately 13 acres. Ten UXO items were found on the surface and at depths up to 18 inches, and one hundred and two OE scrap items were found on the surface, at shallow depths, and a few items at depths up to 18 inches. Most of the field work for the Bravo EE/CA was performed between April 2001 and August 2002. Supplemental sampling was performed in July 2004.

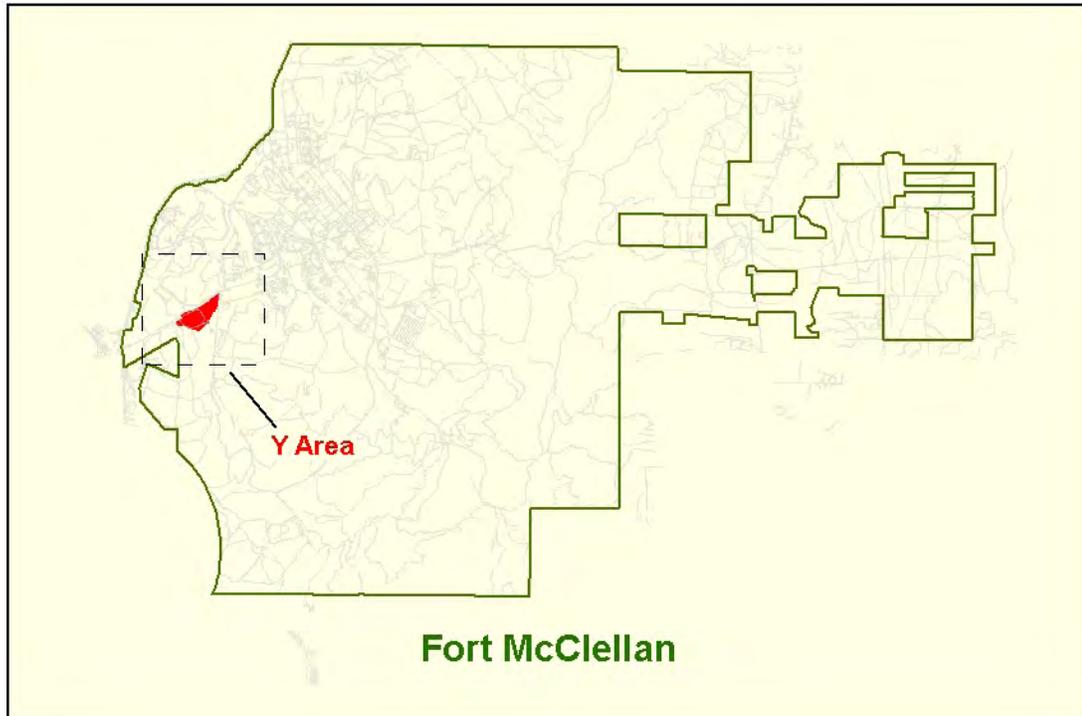


Figure 2-4: Y Area Location Map

To minimize interference with development of nearby residential property and construction of the Eastern Bypass, the Army performed a clearance to depth on the Y Area prior to completion of the EE/CA and Action Memorandum. This response action was addressed by including the 60 acre site in the Eastern Bypass ESS with Amendment 2 (U.S. Army Garrison, 2002b) which was approved by DDESB in a letter dated February 13, 2003 (DDESB, 2003a). The MPM for the Y Area continued to be the 37mm MK II HE Projectile, with an exclusion zone of 1,181 feet; Land Use Controls (LUCs) applicable to the Eastern Bypass OES2 (construction worker education, posting of signs, and construction support) were required; and procedures discussed in Amendment 1 (use of mechanical equipment) were required should high concentrations of metallic debris be encountered. The clearance to depth was performed between April 2003 and November 2003 (FWEC, 2007). Sixty UXO items including 2.36 inch rockets, rifle grenades, 3 inch stokes mortars, hand grenades, and flares were recovered. In addition, 2,460 pounds of munitions debris from 2.36 inch rockets, rifle grenades, 60mm mortars, hand grenades, flares and 3 inch stokes mortars and 8,430 pounds of cultural debris were excavated. Three grids located in the Y Area were cleared during the mechanical removal action performed as part of the EBP Removal Action (Foster Wheeler Environmental Corporation, 2006).

Amendment 6 to the Eastern Bypass ESS (Department of the Army, Huntsville Center, Corps of Engineers, 2005b), approved by DDESB in a letter dated June 6, 2005 (DDESB, 2005b), removed the requirements to provide construction support and to post warning signs within the Y area; however, the Army is providing construction support as required

by ADEM for any construction activities on the property. Construction support is performed by the LRA as provided for in the ESCA between the Army and the LRA.

Amendment 7 to the Eastern Bypass ESS (Department of the Army, Huntsville Center, Corps of Engineers, 2006a), approved by DDESB in a letter dated October 27, 2006 (DDESB, 2006), removed the requirement to educate construction workers on the hazards of MEC because past removal activities had proven the detection depth for subsurface anomalies exceeded the actual recovery depth of the MEC. The depths of detection were more than 2.5 times the recovery depths and the maximum calculated penetration depths.

The site transferred to the LRA under early transfer authority in Quitclaim Deed 13 on September 26, 2003. The environmental condition of the property is documented in the FOSET. A Statement of Clearance was provided to ADEM and the LRA in a letter dated October 5, 2007 (Department of the Army, Huntsville Center, Corps of Engineers, 2007a). The Statement of Clearance requires construction support as required for a low risk of encountering UXO and that any residual risk remaining be managed through a deed notice.

2.4.5 Water Tank Construction Sites A, B, and C

The Water Tank Construction Sites (Figure 2-5) are three separate areas designated as Sites A, B and C and have a combined area of approximately 19.08 acres. The Water Tank Construction Sites are located in the Bravo Area of Fort McClellan. Site A is located on Rucker Avenue and comprises 7.15 acres. Site B is located on Snap Lane and comprises 5.82 acres. Site C is a 6.11 acre site located on Bains Gap Road.

All three sites were investigated as part of the Bravo Area EE/CA. Site A is located mainly within risk assessment sector M3-1H Mixed Use Area-D and partially within M3-1H Grenade Area-PR. Sites B and C are located within risk assessment sector M4-1H Mixed Use Area-PR. The types of MEC located in areas adjacent to the Water Tank Construction Sites during the EE/CA included: 2.36 inch rockets, 37mm projectiles, rifle grenades, hand grenades, 3 inch stokes mortars, 81mm mortars and flares.

Because the sites were identified by the Anniston Water Works and Sewer Board as locations for future construction of water tanks to store potable water for the potable water distribution system, the Army performed a clearance to depth of detection prior to completion of the EE/CA and Action Memorandum. The ESS (FWEC, 2003d) for the Water Tank Construction Sites was approved by DDESB in a letter dated December 24, 2003 (DDESB, 2003d). The MPM was the 81mm HE, M43 mortar and a MSD of 1,395 feet was applied.

A clearance to depth was performed between January 2004 and May 2004 (TTECI, May 2006b). The following items were found during the response action. Site A: one MEC item (a rifle grenade) was recovered and destroyed. Site B: nine UXO items (one smoke grenade, one 3" Stokes mortar, three trip flares, one 2.36" M6 rocket, one slap flare, one

practice grenade, and one projectile fuze) and five MEC items (one 3" Stokes mortar and four 75mm shrapnel projectiles) were recovered and destroyed. Site C: two UXO items (one one-pounder projectile and one projectile fuze) and two MEC items (one smoke grenade and one slap flare in the original shipping container) were recovered and destroyed.

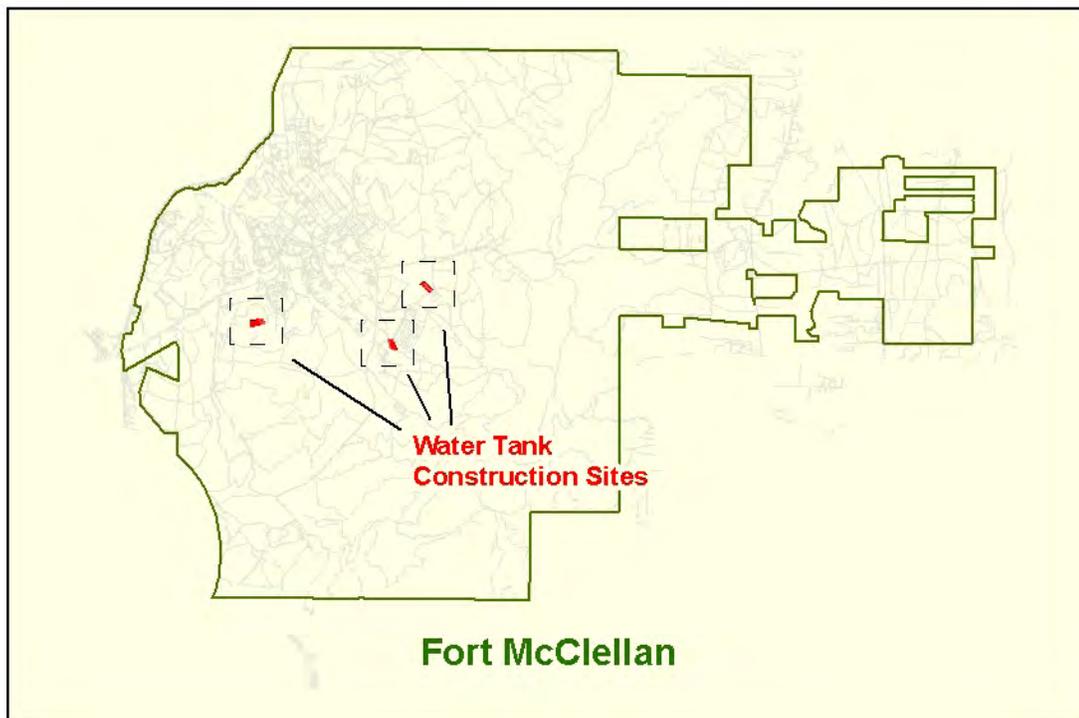


Figure 2-5: Water Tank Location Map

The Water Tank Construction Sites are pending transfer to the local reuse authority. The environmental condition of the property is documented in a FOST (U.S. Army, 2007). A Statement of Clearance was included in the FOST as Enclosure 7 and requires that any residual risk remaining be managed through a deed notice.

2.4.6 Dog Kennel Area

The Dog Kennel Area (Figure 2-6) is located at the southern side of the cantonment area and comprises 2 acres within the Bravo Area. The Dog Kennel Area was investigated as part of the Bravo Area EE/CA (TTECI, 2006c) and is located mainly within risk assessment sector M3-1H Grenade Area-PR; however, small portions of the kennel area are in the M3-1L 37mm Projectile Area-D and M3-1H Mixed Use Area-D risk assessment sectors.

A surface clearance was performed on the property prior to completion of the EE/CA and Action Memorandum to allow the area to be used by Homeland Security to house dogs used in the canine training program. The ESS for the surface clearance was submitted to the U.S. Army Technical Center for Explosives Safety (USATCES) May 5, 2004

(Department of the Army, Huntsville Center, Corps of Engineers, 2004). Because the level of clearance was not in agreement with the recommendation of the draft EE/CA, USATCES did not forward it on to DDESB for approval. The MPM was the 2.36 inch Rocket and a MSD of 809 feet was applied.

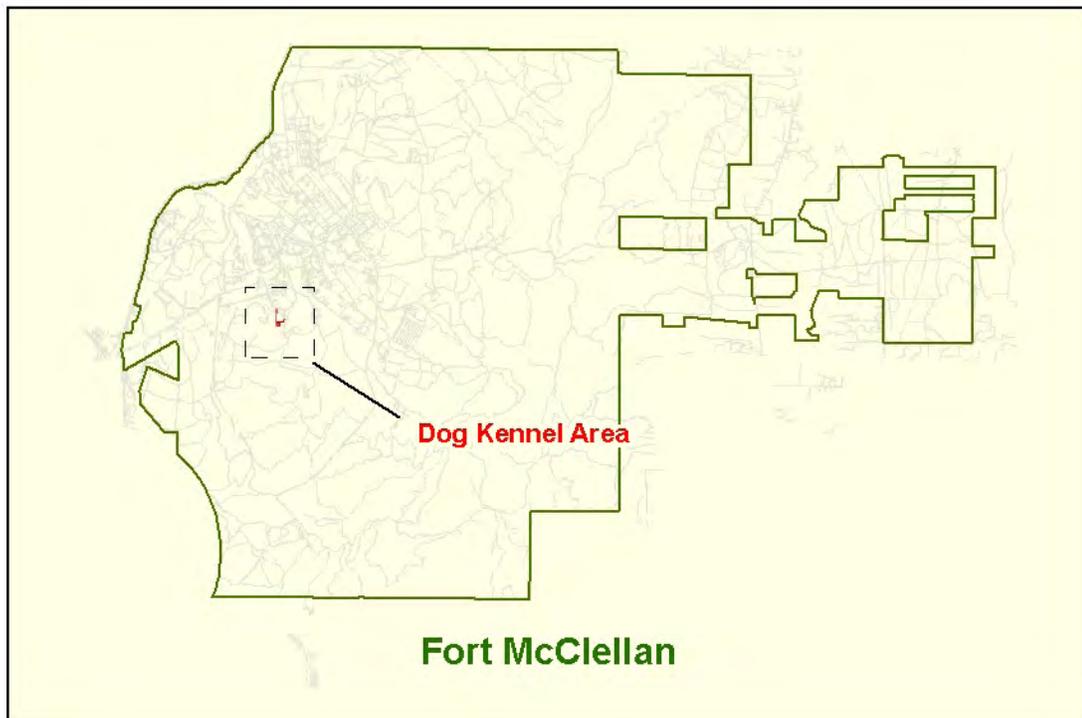


Figure 2-6: Dog Kennel Location Map

The surface clearance was performed on May 26, 2004 (TTFWI, June 2004a). One piece of munitions debris and 100 pounds of non-munitions related scrap was removed from the area.

The site transferred to the LRA under early transfer authority in Quitclaim Deed 13 on September 26, 2003. The environmental condition of the property is documented in the FOSET. An interim LUCIP addressing the entire Bravo Area was included as Attachment 3 of the FOSET. Enclosure 11 of the interim LUCIP addressed the entire Bravo Area of which the Dog Kennel Area is a part. Following the surface clearance, the interim LUCIP was revised in October 2004 with Enclosure 11-1 to specifically address the Dog Kennel Area. The LUCIP prohibits intrusive activity and requires ordnance familiarization training for workers and visitors. DDESB concurred with the interim LUCIP in a letter dated September 2, 2004. The interim LUCIP was intended to expire upon termination of the lease on July 1, 2005; however, the lease was renewed and the LUCIP was revised in March 2006 with a termination date of August 30, 2007. Monitoring of the LUCs is performed by the LRA as provided for in the ESCA between the Army and the LRA.

2.4.7 FWS Land Transfer Area Roads, Firebreaks and High Use Areas at Range 20, Range 21, and Range 24

The U.S. Army, as directed by Congress in the Bob Stump National Defense Authorization Act of 2003, transferred approximately 7,759 acres of former Fort McClellan to the U.S. Department of Interior (DOI) Fish and Wildlife Service (FWS) in a Letter of Transfer on May 29, 2003, for the creation of a Mountain Longleaf National Wildlife Refuge. Environmental documentation for the transfer is contained in the Environmental Condition of Property (ECOP) (U.S. Army, 2003a).

The FWS Land Transfer Area Roads, Firebreaks, and High Use Areas (Figure 2-7) are located within the Charlie Area. The roads and firebreaks were identified by the DOI as being high priorities for a response action, as they would be used for fire suppression and management of the area, while the high use areas were selected as locations for possible construction of DOI required facilities. The roads, firebreaks and high use areas have a combined area of approximately 128.9 acres. The roads and firebreaks totaled 114.4 acres, High Use Area at Range 20 totaled 4 acres, High Use Area at Range 21 totaled 6.5 acres, and High Use Area at Range 24 totaled 4 acres.

This response action was accomplished in advance of the final Charlie Area EE/CA and action memorandum in order to support the congressionally mandated early transfer of the property. The Draft Final EE/CA for the Charlie Area identifies five risk sectors recommended for clearance: FWS-1H-FM, FWS-2H-FM, FWS-3H-FM, FWS-4H-FM, and FWS-5H-FM.

The ESS for the FWS Land Transfer Area Roads, Firebreaks and High Use Areas (FWEC, 2003b) was approved by the DDESB in a letter dated August 28, 2003 (DDESB, 2003c). The MPMs and MSDs established for the five risk sectors are shown below.

<u>Risk Sector</u>	<u>MPM</u>	<u>MSD</u>
FWS-1H	155mm HE M107	2577 ft
FWS-2H	81mm HE M43	1395 ft
FWS-3H	155mm HE M107	2577 ft
FWS-4H	60mm HE M49	1080 ft
FWS-5H	105mm HE M1	1939 ft

Amendment 1 to the ESS was prepared based on a reexamination of the Charlie Area EE/CA data that allowed risk sector FWS-1H to be subdivided into 3 separate sectors in order to minimize the impact of exclusion zones to off post inhabited areas (FWEC, 2004). The MPMs and MSDs are as follows:

<u>Risk Sector</u>	<u>MPM</u>	<u>MSD</u>
FWS-1Ha	81mm HE M43	1395 ft
FWS-1Hb	155mm HE M107	2577 ft
FWS-1Hc	2.36" Rocket, HEAT (case only)	809 ft

Amendment 1 was approved by DDESB in a letter dated February 3, 2004 (DDESB, 2004a).

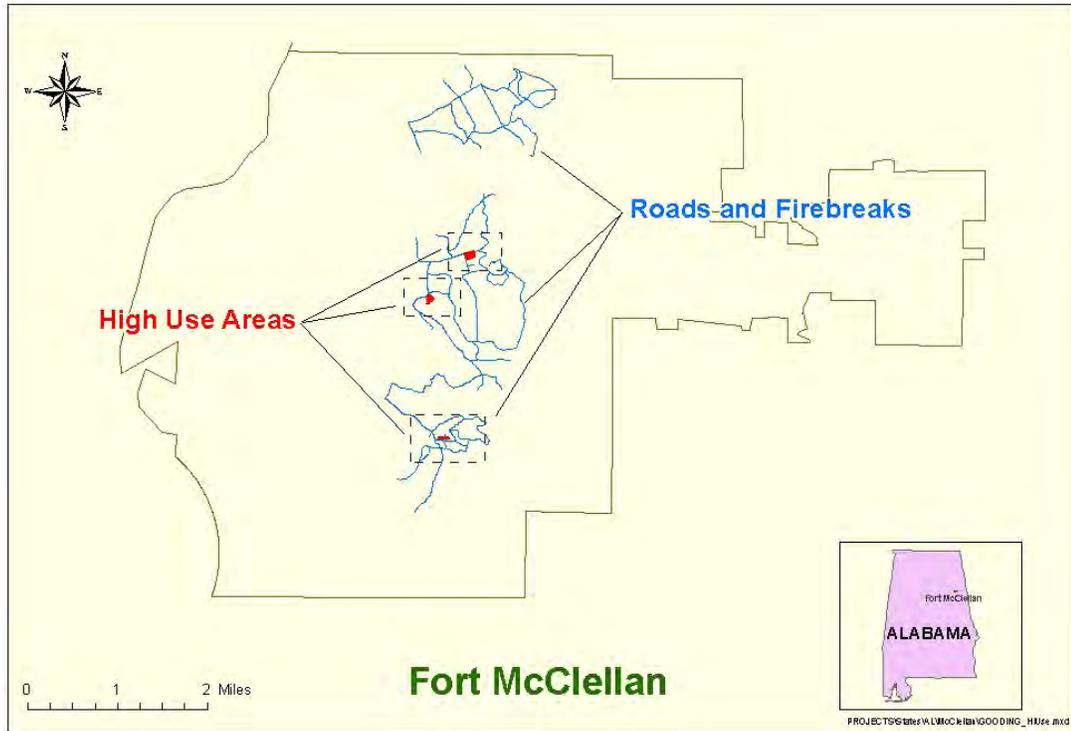


Figure 2-7: FWS Land Transfer Location Map

A clearance to depth was performed on the roads, firebreaks, and high use areas between November 2003 and December 2004 (TTFWI, 2007). During the response action in these areas 83 UXO items were recovered. UXO items included 60mm mortars, 81mm mortars, 75mm projectiles, 155mm projectiles and one pound projectiles. Unpaved roads were cleared 15' on either side of the road except where the road bounded an area recommended for no further action. In instances where the road bounded an NFA area the road was cleared to the NFA area. Road segments 11, 12, 32, 53, 54, 55, 56, 57, and 58 were cleared to 15' on either side even though the northern side of the road was a NFA area. Paved roads were cleared to 20' on either side of the road, however, no anomalies under the pavement were investigated.

Land use controls were implemented in accordance with the Land Use Control Assurance Plan (LUCAP) and an Interim Land Use Control Implementation Plan (LUCIP). The LUCAP and LUCIP are included in the ECOP as Attachments 3 and 4 respectively. Interim LUCs implemented in the Charlie Area include access controls consisting of gates, barricades, and signs posted at 200 foot intervals around the entire boundary of

suspected MEC areas, daily inspections, and a UXO safety education program (TTECI, 2007). Final LUCs will be documented in an Action Memorandum once the Charlie Area EE/CA is finalized.

In August 2008, the Fort McClellan Transition Force discovered that anomalies around the culverts in the FWS Land Transfer Area Roads, Firebreaks and High Use Areas were not investigated during the clearance and that the Army had verbally agreed to provide FWS with construction support when a culvert was identified for replacement. Removal of all culverts in Charlie areas identified for MEC clearance except for the culverts under Bains Gap Road, Kellog Road and the berm between Ranges 21 and 22 is being added to a MEC remedial action for four lead removal sites.

2.4.8 Bains Gap Road

Bains Gap Road is located within the boundaries of the Charlie Area EE/CA risk sectors FWS-4H and FWS-2H, and runs primarily east and west. A previous response action was performed in this area during the clearance on the FWS Land Transfer Area Roads, Firebreaks and High Use Areas. Road segments marked during the previous response action for the Bains Gap Road include segments 67A, 67, 68, 69, 70, 71, 72, and 72A.

The previous clearance extended 20 feet on either side of the centerline of the road. Anomalies that were detected underneath the pavement had been left in place. In order to open the road for public use the road required work to add guard rails, improve drainage, and widen and repave the road. The previous clearance was determined to be insufficient to allow for improvements to be made to the road.

In order to facilitate road improvements, the clearance to depth of detection along road segments 67A, 67, 68, 69, 70, 71, 72, and 72A was expanded. Table 2-1 lists the expanded munitions response for each of these road segments.

Amendment 2 to the ESS for the FWS Land Transfer Area Roads, Firebreaks and High Use Areas was revised to reflect the expansion (USACE, Engineering and Support Center, Huntsville, 2005). DDESB approved Amendment 2 in a letter dated October 26, 2005 (DDESB, 2005c). Correction 1 to Amendment 2 added .14 acre (road segment 67A and an addition to road segment 67) to the approved response in and around the Bains Gap Road (Department of the Army, Huntsville Center, Corps of Engineers, 2005c). Correction 1 was submitted to DDESB on November 29, 2005.

A clearance to depth of detection was performed on Bains Gap Road from January 2006 – April 2006 (TTECI, 2006d). During this response action only one MEC item was recovered. The MEC item was a 75mm projectile. In addition, 4,665 pounds of munitions debris (37mm projectiles, 75mm shrapnel projectiles, fuzes and 2.36 inch rockets) and 4,375 pounds of Non-MD were excavated.

A Statement of Clearance was provided to FWS in September 2006 (Department of the Army, Huntsville Center, Corps of Engineers, 2006b). The Statement of Clearance

required that residual risk be managed in accordance with the deed notice provided in the Letter of Transfer. A letter dated January 17, 2007 revised the Interim LUCIP in the ECOP to allow public access to Bains Gap Road.

In August 2008, the Fort McClellan Transition Force discovered that anomalies around the culverts in the Bains Gap Road clearance areas were not investigated during the Bains Gap Road clearance, and that the Army had verbally agreed to provide FWS with construction support when a culvert was identified for replacement. Removal of all culverts in Charlie areas identified for MEC clearance except for the culverts under Bains Gap Road, Kellog Road and the berm between Ranges 21 and 22 is being added to a MEC remedial action for four lead removal sites.

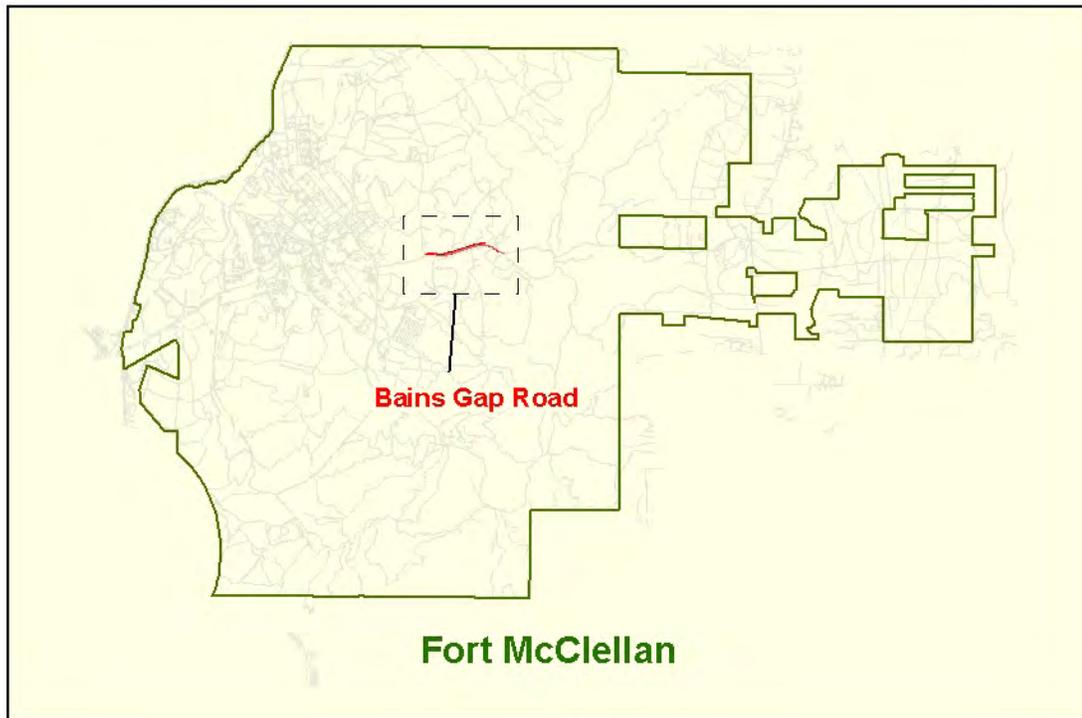


Figure 2-8: Bains Gap Road Location Map

**Table 2-1
Munitions Response Action**

Road Segment	Munitions Response Action
67A	Clearance to depth of detection under pavement (St. Clair Road) and south of the road to the FWS refuge boundary. The area to 100 feet north of the pavement centerline from the west edge of the firebreak north of St. Clair Road to the FWS refuge boundary.
67	Clearance to depth of detection under pavement and 100 ft north of the centerline of St. Clair Road. The area south of the road was cleared to the FWS refuge boundary.
68	Clearance to depth of detection under pavement and 100 ft north and south of the centerline of Bains Gap Road.
69	Clearance to depth of detection under pavement and 100 ft north and south of the centerline of Bains Gap Road.
70	Clearance to depth of detection under pavement and 100 ft north and south of the centerline of Bains Gap Road.
71	Clearance to depth of detection under pavement and 100 ft north and south of the centerline of Bains Gap Road except the segment in the Range 21 high use area which was cleared to depth of detection during the response action for the FWS Land Transfer Area (Roads, Firebreaks and High Use Areas).
72	Clearance to depth of detection under pavement and 100 ft south of the centerline of Bains Gap Road. The area north of the road is within an area recommended for NFA.
72A	Clearance to depth of detection under pavement and 100 ft south of the centerline of Bains Gap Road. The area north of the road is within an area recommended for NFA.

2.5 Current Property Owners and Land Usage

Following is a list of present property owners of the transferred parcels along with past, present, and future usage.

**Table 2-2
Current Land Owner**

Area	Former Usage	Present Owner	Present Usage	Future Usage	Size (Acres)
Eastern Bypass OES1	Training Area	Army	Public Highway	Public Highway	24
Eastern Bypass OES1	Training Area	ALDOT	Public Highway	Public Highway	65
Eastern Bypass OES2	Training Area	Army	Public Highway	Public Highway	266
M2 Parcel	Training Area	Consolidated Publishing Company	Commercial	Commercial	21.54
M2 Parcel	Training Area	ALDOT	Public Highway	Public Highway	0.94
M1.01 Parcel	Training Area	Lowes	Commercial	Commercial	10.50*
M1.01 Parcel	Training Area	LRA	Forest	Commercial/Residential	49.64
M1.01 Parcel	Training Area	Army	Forest	Public Highway	3.17
M3 Miscellaneous Property	Training Area	LRA Army	Forest	Commercial Public Highway	32.5 0.5
Y area	Training Area	LRA	Forest	Wildlife Management Area/Residential	60
Water Tank Construction Site A	Underground Water Tank	Army	Underground Water Tank/Forest	Water Tank Site	7.15
Water Tank Construction Site B	Training Area	Army	Forest	Water Tank Site	5.82
Water Tank Construction Site C	Training Area	Army	Explosives Storage Magazine/Forest	Water Tank Site	6.11
Dog Kennel Area	Dog Kennels	LRA (leased to Auburn Univ.)	Dog Kennels	Dog Kennels	2
FWS Land Transfer Area Roads &	Training Area	FWS	Wildlife Management Area	Wildlife Management Area	114.4

Area	Former Usage	Present Owner	Present Usage	Future Usage	Size (Acres)
Firebreaks					
Range 20 High Use Area	Training Area	FWS	Wildlife Management Area	Wildlife Management Area	4
Range 21 High Use Area	Training Area	FWS	Wildlife Management Area	Wildlife Management Area	6.5
Range 24 High Use Area	Training Area	FWS	Wildlife Management Area	Wildlife Management Area	4
Bains Gap Road	Training Area	FWS	Public Road/Wildlife Management Area	Public Road/Wildlife Management Area	19
			Total		703.23

*Lowe's Home Center, Inc. actually owns 16.63 acres however only 10.50 acres lies within the boundary of the M1.01 Parcel boundary.

2.6 Highlights of Community Participation

A Restoration Advisory Board (RAB) was established for Fort McClellan to advise the BRAC Cleanup Team in restoration efforts. The charter meeting was held May 9, 1996. Currently the RAB meets quarterly. The RAB is Co-Chaired by Mr. Scott Bolton, Site Manager for the U.S. Army Transition Force. The Community Co-Chair is Mr. John Spain.

Two public information repositories were established to provide the public an opportunity to review documentation concerning the project. These repositories were established at the Anniston Calhoun County Public Library and Houston Cole Library. The addresses for these locations are shown below.

Anniston Calhoun County Public Library
Reference Section
108th East 10th Street
Anniston, Alabama 36201
Point of Contact: Ms. Sunny Addison
Telephone: (256) 237-8501
Fax: (256) 238-0474

Houston Cole Library
9th Floor

Jacksonville State University
700 Pelham Road, North
Jacksonville, Alabama 36265
Point of Contact: Ms. Paula Ellis-Barnett
Telephone: (256) 782-5249

In addition to the information repositories, Fort McClellan maintains an Administrative Record at the following location:

US Army Transition Force
291 Jimmy Parks Boulevard
Anniston, Alabama 36205
Point of contact: Ms. Brenda Cunningham
Telephone: (256) 848-3539

In addition to the above locations, the administrative record related to the response actions at Fort McClellan is available on-line to the public for review at www.mcclellan.army.mil.

3.0 Five-Year Review Process

3.1 Administrative Components

A public opportunity session was held on the evening of December 5, 2006 to provide the public a chance to discuss the project and receive feedback on whether response actions established in the past continue to minimize explosives safety risk and to protect human health, safety, and the environment. Representatives from the U.S. Army Transition Force and USAESCH were present for the public opportunity session. Corps employees and Transition Force personnel included:

Mr. Scott Bolton	Site Manager	TF	256-848-3847
Ms. Karen Pinson	BRAC Program Planner	TF	256-848-6831
Ms. Lisa Holstein	BRAC Program Planner	TF	256-848-7455
Mr. Dan Copeland	Project Manager	USAESCH	256-895-1567
Mr. Michael Gooding	Project Engineer	USAESCH	256-895-1635
Mr. Michael Smith	OE Safety Specialist	USAESCH	256-509-8708

3.2 Community Notification and Involvement

3.2.1 Community Notification

The U.S. Army Corps of Engineers, Huntsville Engineering and Support Center Public Affairs Office provided information for a press release. U.S. Army Transition Force personnel placed the notice in the local paper. A copy of the Public Meeting Press Release is shown in Figure 3.1.

3.2.2 Interviews / Community Involvement

Col. Orval Matteson (Retired) was the only private citizen that attended the public opportunity session. Col Matteson voiced several concerns over the reuse of Fort McClellan however none of his concerns related to the response actions that have been performed.

Mr. Chip Howell, Mayor of Anniston attended the meeting. He did not provide any comments.

Mr. Chip Howell
Mayor - City of Anniston
256-231-7691
chowell@ci.anniston.al.us

3.2.3 Regulator and Stakeholder Concerns

Mr. Shannon Jones from ALDOT was present at the public opportunity session. Mr. Jones asked questions concerning the OES1 and OES2 sites as these sites are slated to be

transferred to ALDOT for construction of the Eastern Bypass. His questions were answered and Mr. Jones did not voice any concerns.

Mr. Shannon T. Jones
Alabama Department of Transportation
Office: 256-820-3131
E-mail: joness@dot.al.state.us

Figure 3-1 Public Meeting Press Release



**US Army Corps
of Engineers** ®
Huntsville, US Army Engineering
and Support Center

NOTICE OF PUBLIC MEETING

The U.S. Army Corps of Engineers is sponsoring a public meeting to discuss the recurring review at Fort McClellan, a Base Realignment and Closure site. The Corps performed a removal action of military munitions at nine different parcels on Fort McClellan from 1999 to 2006. The purpose of the recurring review is to determine if the response actions performed by the Corps continue to minimize explosives safety risks and continue to be protective of human health, safety and the environment. Representatives from the U.S. Army Corps of Engineers will be at the public meeting to discuss the recurring review and answer your questions.

An administrative record related to the removal actions at Fort McClellan is available to the public for review at www.mcclellan.army.mil, Anniston Calhoun County Public Library, and Houston Cole Library at Jacksonville State University.

The public meeting is scheduled for Tuesday, December 5, 2006 from 5 to 7 p.m., at the Anniston City Meeting Center, Room B, 1615 Noble Street, Anniston, Ala.

Once the recurring review is completed, a recurring review report will be prepared and made available to the public for review and comment.

For more information, please call Dan Copeland at 256-895-1567.

3.3 Site Visit

The PDT visited the site from Monday, December 4 through Wednesday, December 6, 2006 and evaluated areas based on the following criteria:

- Quantities and types of ordnance discovered during previously conducted response actions;
- Location of areas with respect to accessibility and public use; and
- Potential for public exposure to ordnance hazards

A driving tour of the FWS roads and firebreaks was performed which included periodic stops for walking and visual evaluation. A driving tour was also performed on the Eastern Bypass and included periodic stops for walking and visual recon. All other areas covered in this five-year review were traversed by walking. Approximately 10 percent of the project areas were visually inspected.

Interviews were conducted with various participants regarding changes in land use, incidence of MEC discovery, and any concerns related to the previous actions. The interviewees included the Transition Force, LRA, FWS and ALDOT. No issues were stated regarding the safety and effectiveness of the response actions.

4.0 Final Site Analysis

The PDT reviewed the status of the response actions to determine if they are still in effect and continue to be protective of the public.

4.1 Eastern Bypass OES1 and OES2

OES-1: The response action, NFA and inclusion of a MEC notice in property transfer documents, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use and the deed was inspected for a MEC notice. The locations traversed for this area are shown in Figure 3 of the Appendix. 64.94 acres of OES1 transferred to ALDOT in Quitclaim Deed No. 2 in January 2004 and a MEC notice was included in the deed. The Summerall Road reroute has been constructed on a portion of this site. There were no reports of any MEC found during construction. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

OES-2: The response action, clearance to depth of detection, construction support for 30 grids in the construction debris area, construction worker education, and inclusion of a MEC notice and location of the construction debris area in property transfer documents, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 3 of the Appendix. Property transfer to ALDOT is pending, no construction activities have occurred, and there have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.2 M2 Parcel

The response action, clearance to depth of detection and a deed notice, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 4 of the Appendix. The M2 Parcel transferred to the LRA in Quitclaim Deed No. 3 on February 14, 2001 and a MEC notice was included in the deed. The LRA transferred the M2 Parcel (22.48 acres) to Consolidated Publishing Company on April 9, 2001. Subsequently Consolidated Publishing constructed a building on the parcel for publication of The Anniston Star. Regrading of most of the property was performed as part of the construction. On April 19, 2002 Consolidated Publishing Company conveyed 0.94 acres, adjoining Alabama Highway 21 (McClellan Blvd.), to Alabama Department of Transportation. There were no reports of MEC found during construction. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.3 M1.01 Parcel and M3 Miscellaneous Property

The response action, clearance to one-foot depth, and construction support, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 5 of the Appendix. The site transferred to the LRA under early transfer authority in Quitclaim Deed No. 13 on September 26, 2003. A deed notice, providing notification requirements in the event a MEC item is discovered on the property after transfer, was included in the deed as was required by the action memorandum. A Lowe's store has been constructed on the northern portion of the M1.01 Parcel and is open to the public. Construction support was provided by the LRA during construction activities in accordance with the ESCA. There were no reports of MEC found during construction. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.4 Y Area

The response action, clearance to depth of detection and construction support, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 6 of the Appendix. The Y Area transferred to the LRA under early transfer authority in Quitclaim Deed No. 13 on September 26, 2003. Construction support is provided by the LRA in accordance with the ESCA. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.5 Water Tank Construction Sites A, B, and C

The response action, clearance to depth of detection and a deed notice, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 7 of the Appendix. The Water Tank Construction Sites are pending transfer to the local reuse authority. The FOST contains a deed notice for inclusion in the deed. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.6 Dog Kennel Area

The response action, surface clearance and interim LUCs prohibiting intrusive activity and requiring ordnance familiarization training for workers and visitors, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 8 of the Appendix. The Dog Kennel Area transferred to the LRA under early transfer authority in Quitclaim Deed No. 13 on September 26, 2003. The LRA is currently leasing the area to

Auburn University for their canine training program. The LRA incorporated provisions in the lease prohibiting intrusive activity on the property. Monthly inspections are performed by the LRA to ensure that the restrictions have not been violated. The inspections are recorded on an inspection form that is dated and signed by the LRA security officer. The form is then filed in a notebook at the LRA offices. A training video explaining the dangers of MEC is mandatory for persons who enter and/or use the Dog Kennel Area. Documentation of training is maintained in a notebook at the LRA offices. Additionally, "No Trespassing" signs are posted. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.7 FWS Land Transfer Area Roads, Firebreaks, and High Use Areas at Range 20, Range 21, and Range 24

The response action, clearance to depth of detection, and interim LUCs consisting of access controls, inspections, and safety program continue to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 9 of the Appendix. The FWS Land Transfer Area Roads, Firebreaks, and High Use Areas at Range 20, Range 21, and Range 24 transferred to the FWS in a Letter of Transfer on May 29, 2003 and an interim LUCIP describing the interim LUCs was included with the transfer documentation. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

4.8 Bains Gap Road

The response action, clearance to depth of detection and a deed notice, continues to be effective. The area was visually inspected for erosion, evidence of ordnance, and changes in land use. The locations traversed for this area are shown in Figure 10 of the Appendix. Bains Gap Road transferred to the FWS in a letter of transfer on May 29, 2003. Some construction has been performed in the area and the road is open to the public. There were no reports of any MEC found during construction. There have not been any reported incidents of MEC encountered. Therefore, the response action continues to minimize explosives safety risks and be protective of human health, safety, and the environment.

5.0 Conclusions and Recommendations

5.1 Conclusions

The primary objective of the five-year review was to determine whether site conditions have changed since the response actions have been implemented at the various sites, and whether these changes impact public safety. The project areas were visually inspected for erosion, evidence of ordnance, and changes in land use. Except for the Summerall Road reroute in the Eastern Bypass OES1, the construction on the M1.01 and the M2 Parcels, and road improvements on the Bains Gap Road, there were no areas where differing site conditions or uses were observed.

No evidence of MEC issues or concerns due to erosion, new construction, recreational or other activities, storm damage or changes in land use were identified. The PDT concluded that the response actions continue to minimize explosives safety risks and continue to be protective of human health, safety, and environment.

5.2 Recommendations

Removal of all culverts in Charlie areas identified for MEC clearance except for the culverts under Bains Gap Road, Kellog Road and the berm between Ranges 21 and 22 is recommended and is being added to a MEC remedial action for four lead removal sites. The PDT does not have any recommended actions to enhance the current controls. The next five-year review should occur in 2011.

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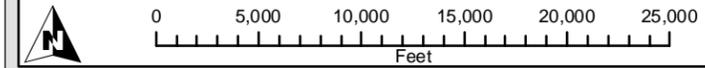
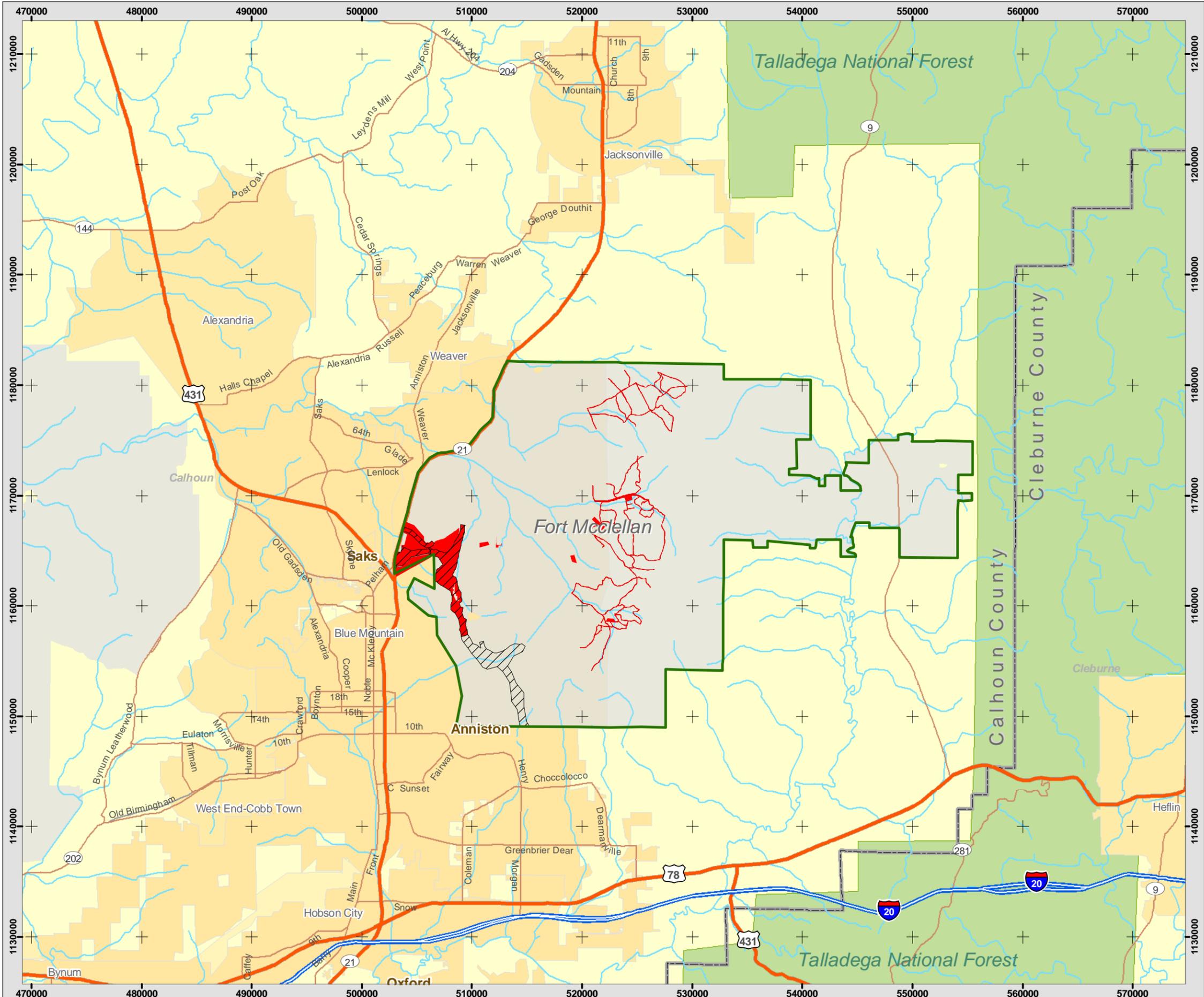
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APPENDIX
FIGURES

Figure 1

Ordnance Clearance Areas Fort McClellan, Alabama

-  Fort McClellan Boundary
-  Eastern Bypass Boundary
-  Cleared Areas



Drawn By: **GDW** Date Drawn: **JAN 2010** Project No.:
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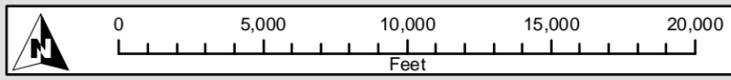
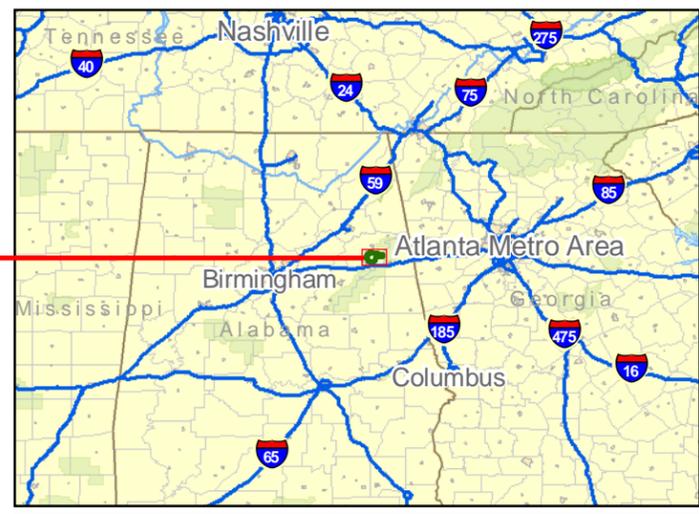
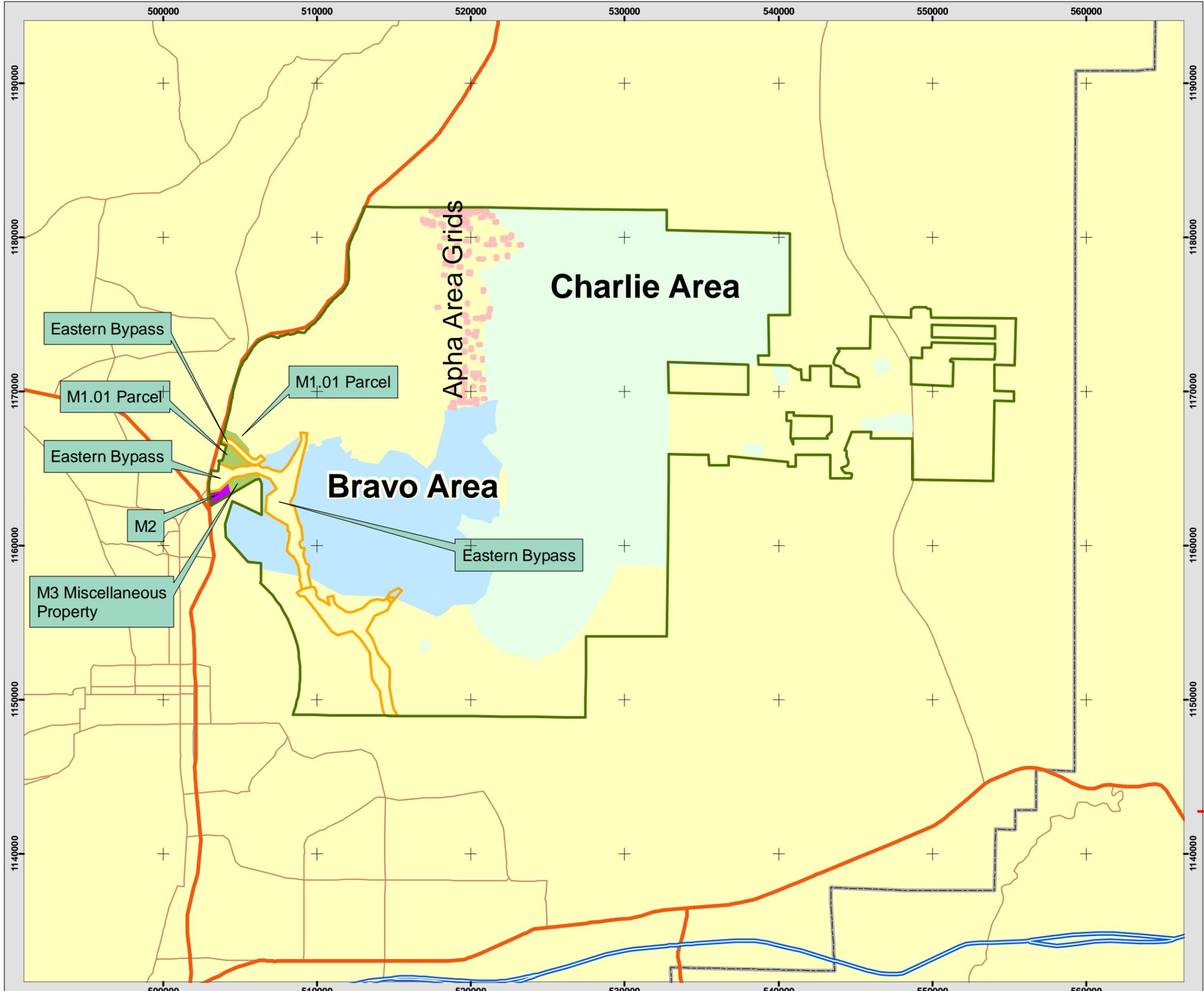
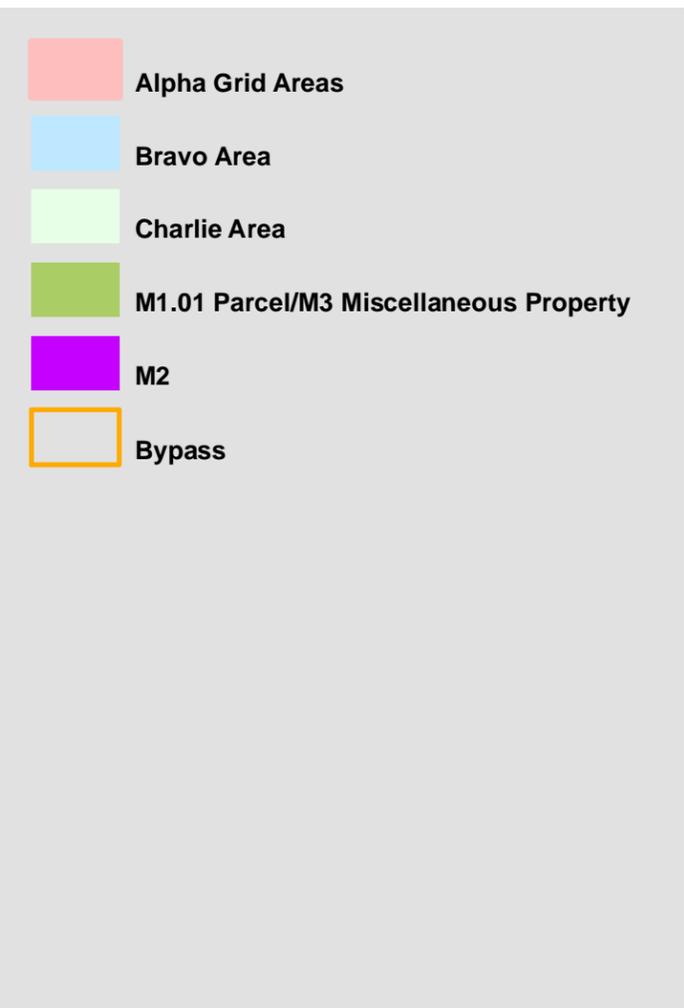


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Figure 2

EE/CA Locations Fort McClellan, Alabama



Drawn By: GDW Date Drawn: JAN 2010 Project No.:
Coordinate System: NAD_1927_StatePlane_Alabama_East, feet

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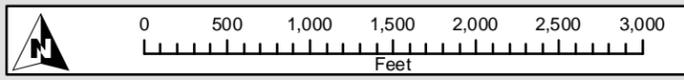
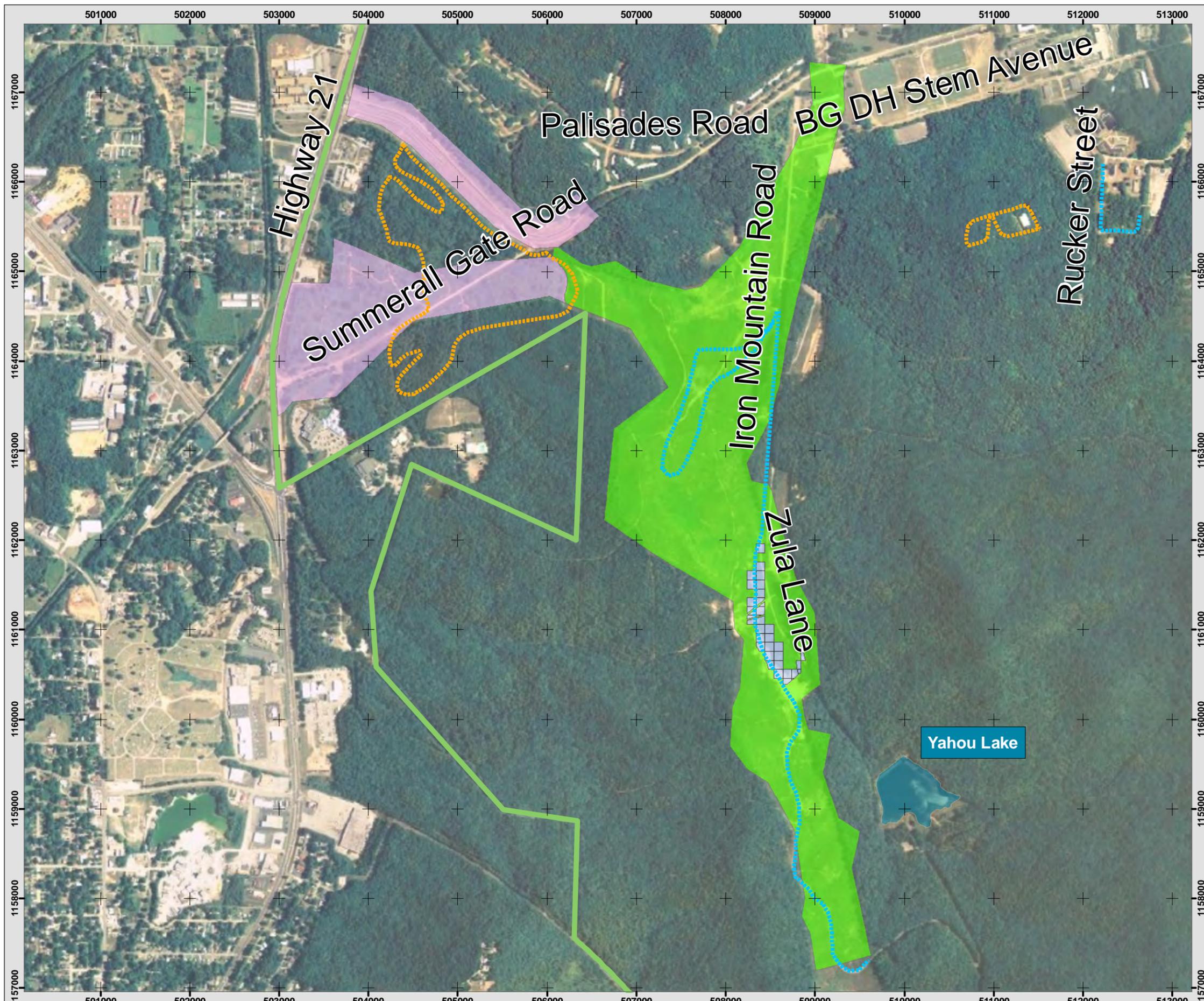
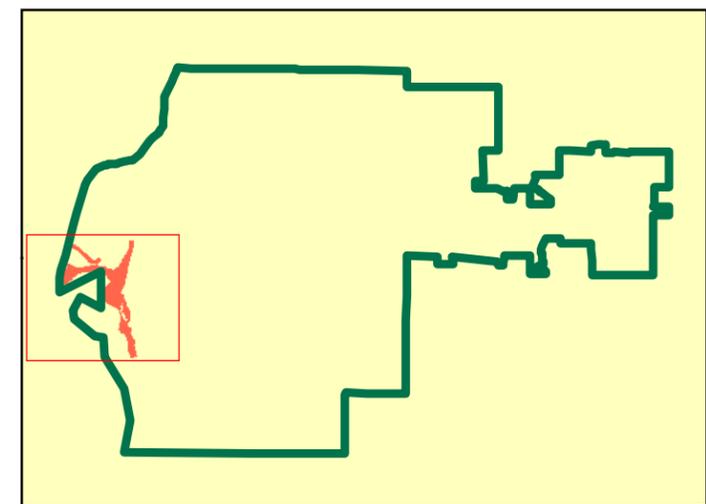
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Figure 3

**Ordnance Clearance
Eastern Bypass
(OES 1, OES 2)
Fort McClellan, Alabama**

-  Fort McClellan Boundary
-  Walking Track
-  Driving Track
-  OES 1
-  OES 2
-  Construction Debris Grids



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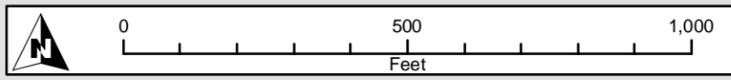
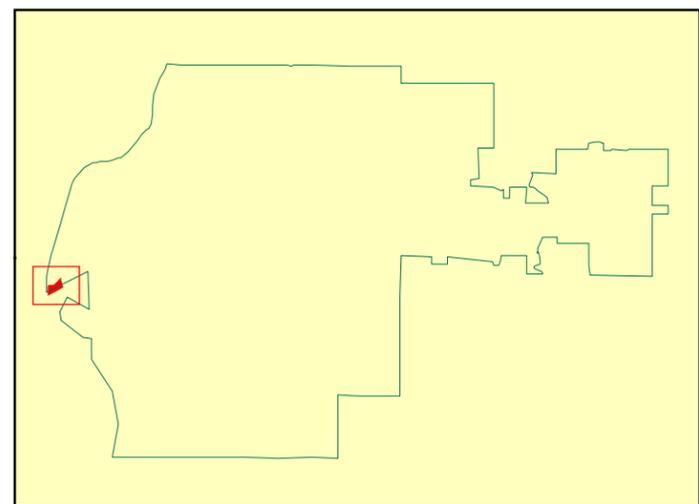
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Figure 4

Ordnance Clearance M2 Parcel Fort McClellan, Alabama

-  Fort McClellan Boundary
-  Walking Track
-  M2 Parcel



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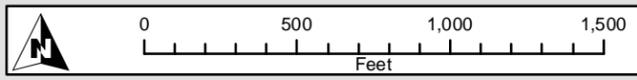
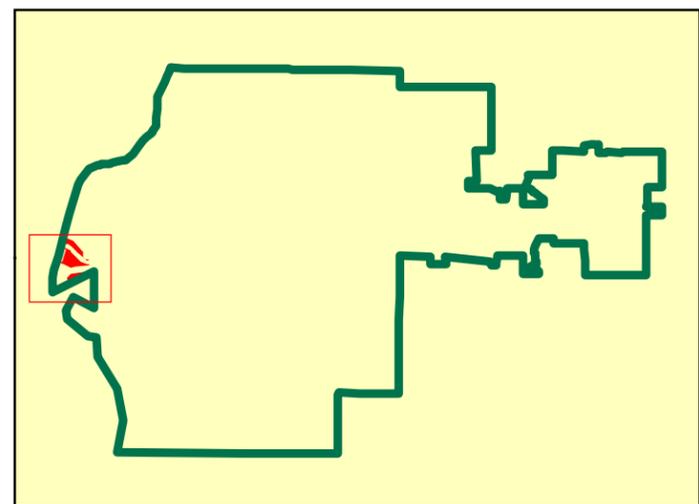
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Figure 5

**Ordnance Clearance
M1.01 Parcel &
M3 Miscellaneous Property
Fort McClellan, Alabama**

-  Fort McClellan Boundary
-  Walking Track
-  Driving Track
-  M1.01 Parcel
-  M3 Miscellaneous Property



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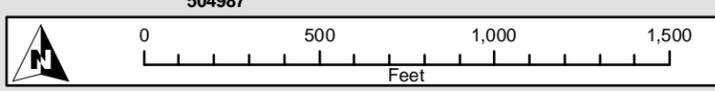
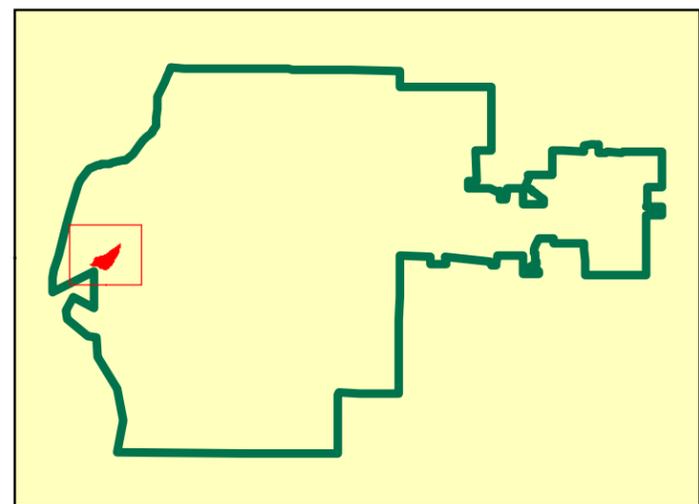
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Figure 6

Ordnance Clearance Y Area Fort McClellan, Alabama

-  Fort McClellan Boundary
-  Walking Track
-  Driving Track
-  Y Area



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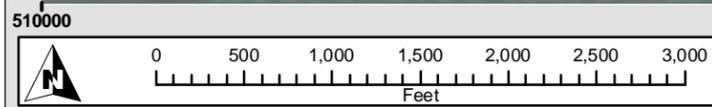
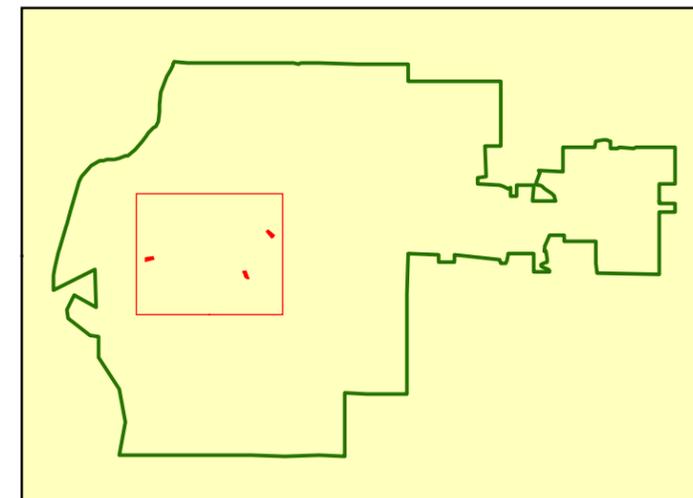
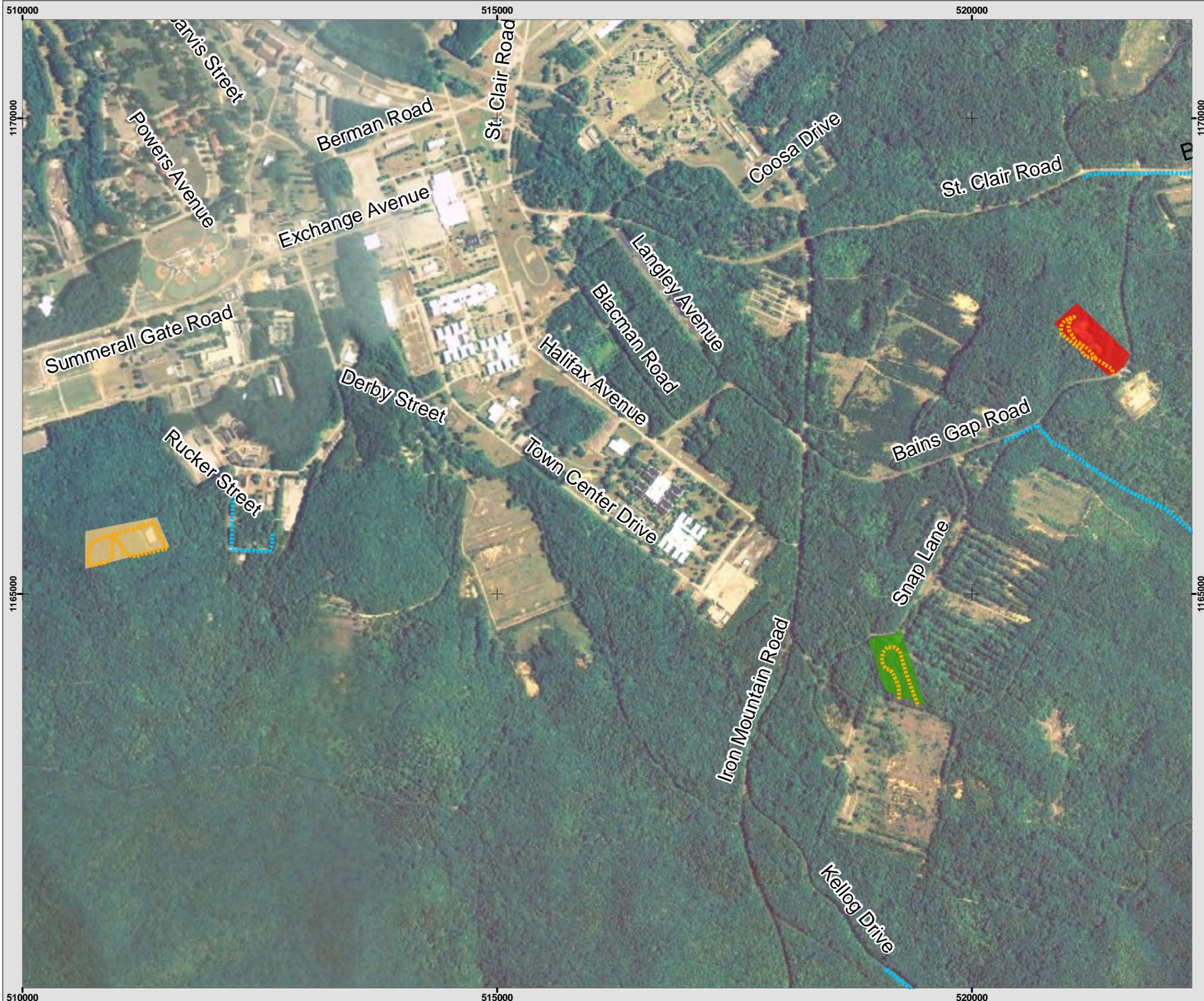
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Figure 7

**Ordnance Clearance
Water Tank Sites
Fort McClellan, Alabama**

-  Walking Track
-  Driving Track
-  Rucker Avenue Water Tank Site
-  Snap Lane Water Tank Site
-  Bains Gap Water Tank Tank Site



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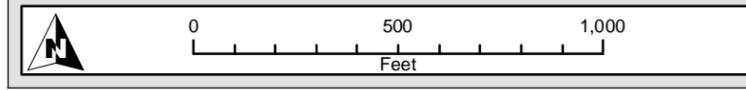
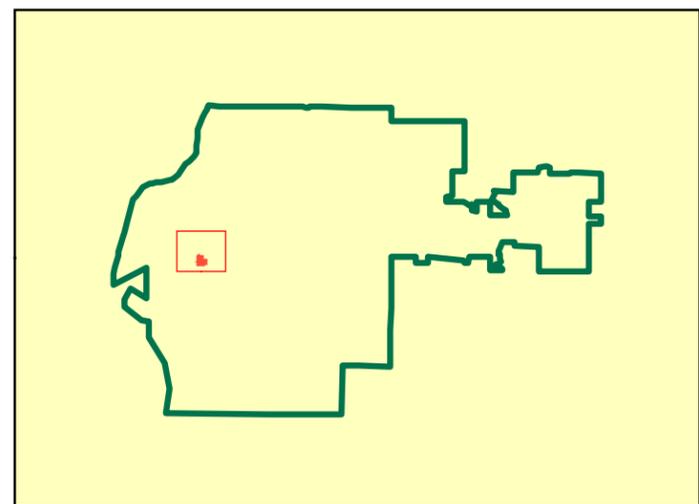


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Figure 8

**Ordnance Clearance
Dog Kennel Area
Fort McClellan, Alabama**

- Walking Track
- Driving Track
- Dog Kennel Area



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Coordinate System: NAD 1927 State Plane Alabama East, feet

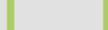
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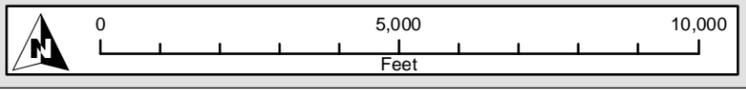
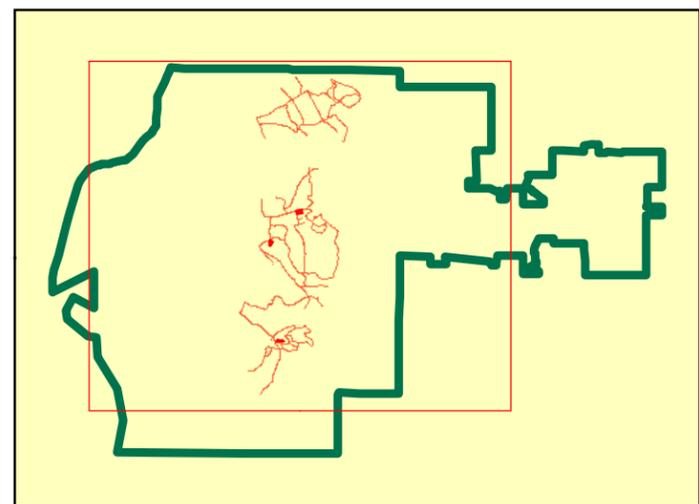
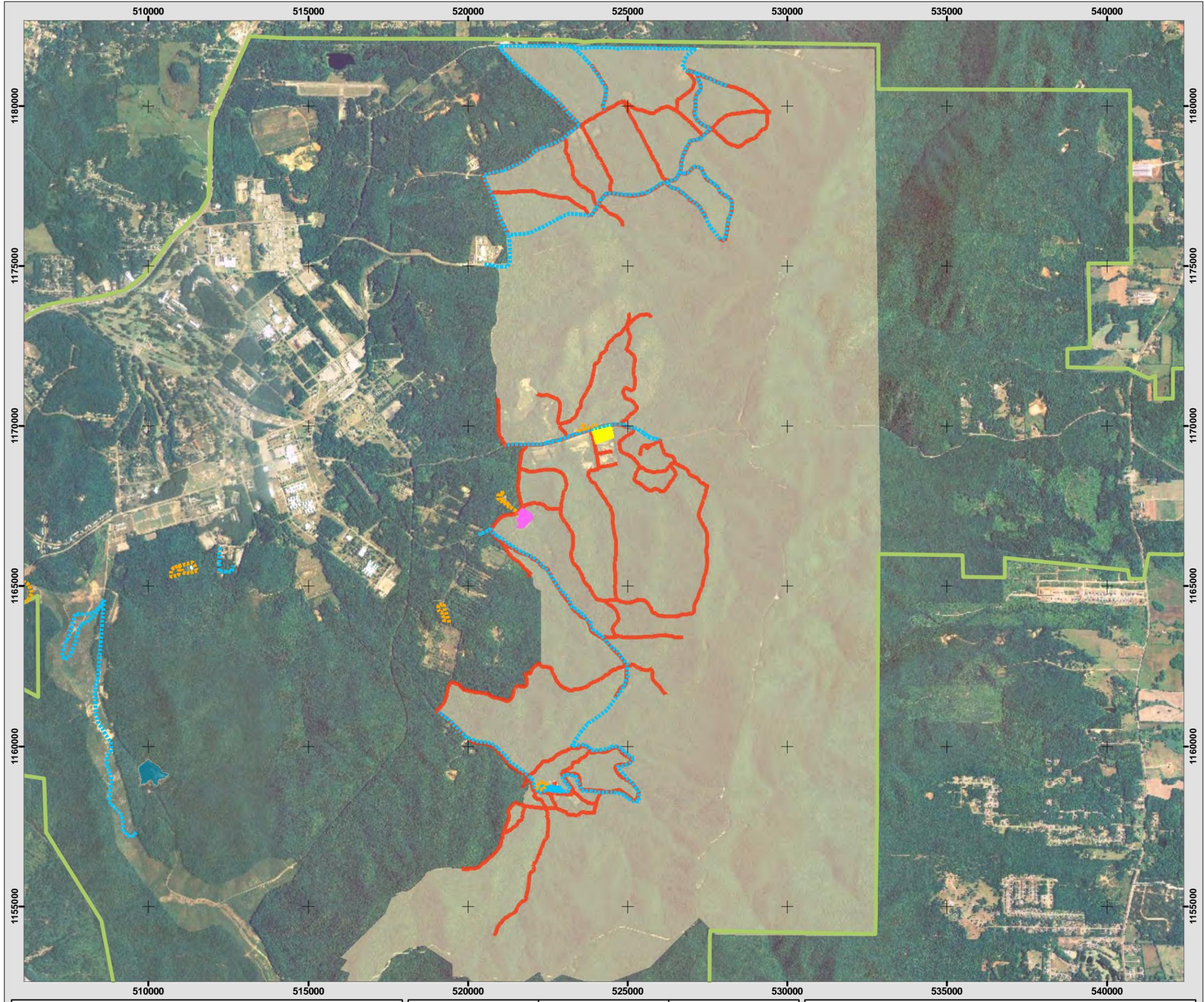
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Figure 9

**Ordnance Clearance
Roads, Firebreaks,
High Use Areas
Fort McClellan, Alabama**

-  Walking Track
-  Driving Track
-  Fort McClellan Boundary
-  Wildlife Refuge
-  Cleared Roads & Firebreaks
-  Range 20 High Use Area
-  Range 21 High Use Area
-  Range 24 High Use Area



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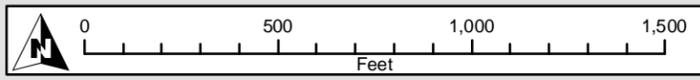
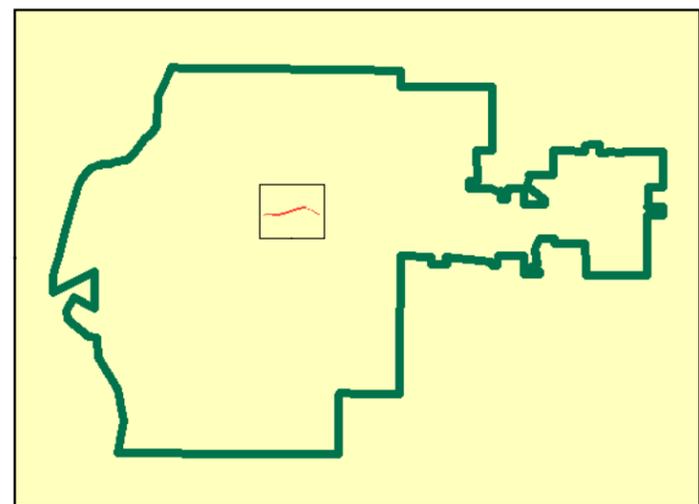
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Figure 10

Ordnance Clearance Bains Gap Road Clearance Area Fort McClellan, Alabama

- Walking Track
- Driving Track
- 200' Bains Gap Road Buffer



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