

Response to Comments
Revised DRAFT Land Use Control Implementation Plan for Former 81MM Mortar Range
Environmental Remediation Services at Four Sites, Fort McClellan, Anniston, Alabama

Comment #	Reviewer	Page	Paragraph/ Section	Comment	Response
1.	ADEM	NA	General	The Department's February 14, 2018 letter regarding the <i>Final Remedial Action Report (RACR) for the Former 81- Millimeter Mortar Range</i> states that the Army was currently in the process of revising a LUCIP containing a Notice of Environmental Use Restriction (NEUR), which would be provided for ADEM review. However, it should be noted that a NEUR was not included in the October 18, 2018 Revised Draft LUCIP. Therefore, the Department cannot concur on the Revised Draft LUCIP until a NEUR is included with the document for ADEM review. Please address in the revised report.	The Army and ADEM agreed in the December 2000 Land Use Control Assurance Plan that LUCs will be necessary. However, recordation of the LUCs is pending a template with language that is mutually acceptable to the parties involved. At this time, the DOD template and the AL UECA differ significantly in that the State creates an enforceable property right interest. The instrument the Army will record will only be a pure notice.
2.	ADEM	NA	6.0	This section states that Land Use Controls (LUCs) shall remain in effect until changes in applicable Federal and State risk-based cleanup standards indicate that site contaminants no longer pose an unacceptable risk or until a reduction in site contaminant concentrations to below Federal and State residential risk-based cleanup standards occurs. However, the LUCs should remain in place until a request to remove or reduce the LUCs has been approved by the Department. Please revise the plan as necessary to incorporate this information.	Information in Section 6.0 was updated to reflect the information requested.
3.	ADEM	NA	5.0	Please revise this section to clarify how the Army intends to implement the monitoring, maintenance, and enforcement of the LUCs. Please see the Department's Comment 1.	The Army will not monitor, maintain, or enforce the LUCs on the property. As stated in the LUCIP, the landowner (in this case, USFWS) is responsible for those actions. The USFWS will report LUC violations to the Army and ADEM. Information in Section 5.0 was updated to reflect this. In addition, the third sentence of Section 5.0 "The USFWS and the Army will meet to discuss and enter agreement, per the Letter of Transfer/Memorandum of Agreement between the agencies, regarding the enforcement of the LUCs and the division of LUC responsibilities" was deleted, as the LUCIP is said agreement.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Mountain Longleaf NWR

407 Bains Gap Road
Anniston, Alabama 36201

09/03/2019

Dear Owen Nuttall,

The United States Fish and Wildlife Service, Mountain Longleaf National Wildlife Refuge (NWR) concurs with the Land Use Control Implementation Plans (LUCIPs) for the three designated lead remediation areas, 81mm Mortar Range, Bains Gap Road Ranges and T24A. The restriction of no residential building on the sites outlined within the LUCIPs provides no restrictions with the Refuge's current capabilities and management plans to allow the public to enjoy normal outdoor recreational activities throughout these areas of Mountain Longleaf NWR.

Thank you

Richard P. Ingram
Project Leader
Wheeler NWR Complex
256-353-7243 ext 23

Signature: Richard P. Ingram



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON DC 20310-2400

April 9, 2019

Base Realignment and Closure Division

Mrs. Brandi Little
Alabama Department of Environmental Management (ADEM)
Engineering Services Section
Governmental Hazardous Waste, Land Division
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059

Dear Mrs. Little:

Please find the attached *Final Land Use Control Implementation Plan, Former 81mm Mortar Range, Fort McClellan, Anniston, Alabama*, April 2019, and responses to your comments dated December 4, 2018 on the draft document for your review.

Copies of this correspondence were provided to Mrs. Melissa Shirley, U.S. Army Corps of Engineers, Mobile District, and Mr. Keith Westlake, U.S. Fish and Wildlife Service.

If you have questions regarding this submittal or require additional information, please contact me at 404-469-3399 or by email at owen.m.nuttall.civ@mail.mil.

Sincerely,

Owen Nuttall
Site Manager

Attachment



Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ■ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ■ FAX (334) 271-7950

May 21, 2019

Mr. Owen Nuttall
Site Manager
US Army Transition
681 Castle Avenue
Anniston, Alabama 36205

RE: ADEM Review and Comment: *Final Land Use Control Implementation Plan for Former 81MM Mortar Range*; dated April 9, 2019
Fort McClellan, Calhoun County, Alabama
Facility I.D. No. AL5 000 053 611

Dear Mr. Nuttall:

The Alabama Department of Environmental Management (ADEM or the Department) has completed its review of the Army's *Final Land Use Control Implementation Plan (LUCIP) for Former 81MM Mortar Range*, received April 12, 2019. Based upon this review, the Department has determined that the aforementioned report is incomplete and additional information and/or data will be required.

Comments regarding the *Final Land Use Control Implementation Plan (LUCIP) for Former 81MM Mortar Range* are provided in the attached document. Responses addressing all comments should be submitted within forty-five (45) days of receipt of this letter. Responses may be submitted in the form of a revised document or appropriate revised pages, tables, and figures to be inserted in the original submission. If the Army chooses to submit revised pages, please date or code each page and figure. For example, **15(r-6/15/19)** would be page 15 revised June 15, 2019.

To facilitate the Department's review, please return a copy of the Department's comments with annotations in the left or right margin, which identify the LUCIP's revised pages, figures, tables, etc. where the Army's response to each comment item is recorded. In addition, please provide a redline strikeout version of the revised document. Within the transmittal letter of the revised plan, there should be a statement certifying that all changes to the revised plan are shown in the redline strikeout version.



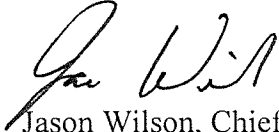
Mr. Owen Nuttall

May 21, 2019

Page 2 of 3

If you have any questions or concerns regarding this matter, please contact Mr. William Overstreet at 334-270-5646 or via email at william.overstreet@adem.alabama.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Wilson".

Jason Wilson, Chief

Governmental Hazardous Waste Branch
Land Division

JJW/ATM/WGO/tlp

Attachment

cc: Ms. Melissa Shirley/USACE, Mobile District
Ms. Leigh Lattimore/EPA Region 4
Mrs. Ashley Mastin/ADEM
Ms. Lisa Holstein/Army
Mrs. Brandi Little/ADEM

ATTACHMENT
ADEM Review Comments
Final Land Use Implementation Plan for Former 81MM Mortar Range
Dated April 9, 2019
Fort McClellan, Alabama

General Comment: In the Department's February 14, 2018 letter regarding the *Final Remedial Action Report (RACR) for the Former 81- Millimeter Mortar Range*, the Army was currently in the process of revising a LUCIP containing a Notice of Environmental Use Restriction (NEUR), which would be provided for ADEM review. However, a NEUR has not been submitted to the Department for review. If a site or property is undergoing a response action that does not return the property to unrestricted use, an environmental covenant is required in accordance with ADEM Admin. Code r. 335-5. ADEM Admin. Code r. 335-5-1-.02 states, "In lieu of an environmental covenant, a Notice of Environmental Use Restriction for properties or sites owned by the federal government shall be submitted to ADEM for approval that gives notice of the current and future use of the federal property." Until a NEUR is submitted, the Department cannot provide concurrence with either the RACR or the LUCIP.

FINAL

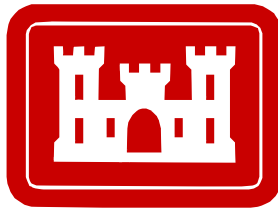
LAND USE CONTROL IMPLEMENTATION PLAN

FOR

FORMER 81MM MORTAR RANGE

FORT MCCLELLAN, ANNISTON, ALABAMA

Prepared for:



U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
Mobile, Alabama 36602

Contract No. W912DY-10-D-0023
Task Order No: CK01

Prepared by:

HydroGeoLogic, Inc.
85 NE Loop 410, Suite 605
San Antonio, Texas 78216

April 2019

**Land Use Control Implementation Plan
Former 81mm Mortar Range**

**Fort McClellan
Calhoun County, Alabama**

Prepared for:

**U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
Mobile, Alabama 36602**

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April 2019

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List of Acronyms

ADEM	Alabama Department of Environmental Management
Army	U.S. Department of the Army
CERCLA	Comprehensive, Environmental Response, Compensation, and Liability Act
COC	chemicals of concern
EBS	Environmental Baseline Study
EPA	U.S. Environmental Protection Agency
FFS	focus feasibility study
FTMC	Fort McClellan
HGL	HydroGeoLogic, Inc.
LUC	land use control
LUCAP	land use control assurance plan
LUCIP	land use control implementation plan
MDA	McClellan Development Authority
mg/kg	milligram(s) per kilogram
USFWS	U.S. Fish and Wildlife Service
RI	remedial investigation
ROD	Record of Decision
Shaw	Shaw Environmental, Inc.
SI	site investigation
XRF	X-ray fluorescence

1.0 Introduction

The Army completed an environmental response action at the former Fort McClellan under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA 42 U.S.C. 9601 et. seq.). Land Use Controls (LUC) were a component of the selected remedy. This Land Use Control Implementation Plan (LUCIP) applies to the former 81mm Mortar Range, which is located on U.S. Fish and Wildlife Service (USFWS) property at the former Fort McClellan in Calhoun County, Alabama. The Department of the Army (Army) transferred the property to the USFWS in 2003 and the site is now part of the *Mountain Longleaf National Wildlife Refuge* (hereafter referred to as the Refuge). This LUCIP complies with requirements set forth in the Land Use Control Assurance Plan (LUCAP) (Army, 2000) signed by the Army, the U.S. Environmental Protection Agency (EPA), the Alabama Department of Environmental Management (ADEM), and the Calhoun County McClellan Development Authority (MDA), successor to the Anniston-Calhoun County Fort McClellan Development Joint Powers Authority.

A Record of Decision (ROD) for the former 81mm Mortar Range was finalized in October 2013 (Shaw Environmental, Inc. [Shaw], 2013). The final ROD was signed by the Army on February 6, 2014. The ROD summarizes the results of a site investigation (SI), remedial investigation (RI), focused feasibility study (FFS), proposed plan and the Selected Remedy to address remediation of soil containing chemicals of concern (COC), primarily lead, at concentrations exceeding cleanup goals established for the former 81mm Mortar Range. The ROD addressed the major components of the Selected Remedy [Alternative 3b from the FFS (Shaw, 2012)] which include the following:

- **Excavation of Soil.** The Selected Remedy involves the excavation of soil from areas at the range where the concentrations of lead and the other COCs (antimony and copper) exceed the cleanup levels selected for protection of industrial/recreational site users and ecological receptors.
- **On-Site stabilization.** The excavated soils will be treated onsite using a reagent-based stabilization technology, referred to as stabilization.
- **Off-site disposal.** The treated soil material would be considered a nonhazardous special waste rather than a hazardous waste for disposal purposes. Therefore, the stabilized material would be disposed of off-site as nonhazardous special waste at a permitted Subtitle D disposal facility.
- **Land use controls.** Because the Selected Remedy will not achieve cleanup to a concentration that would allow unrestricted reuse, LUCs that prohibit residential use would be required for portions of the site where lead concentrations remain in soil above the residential cleanup level of 400 milligrams per kilogram (mg/kg).

1 No remedy selection was determined to be warranted for any other media (i.e., groundwater,
2 surface water, sediment) at the former 81mm Mortar Range. The Selected Remedy was
3 implemented in 2016 as detailed in Section 2.1 below.
4

5 The cleanup was based on protection of ecological receptors and industrial/recreational site
6 users, consistent with the current and expected future land use of the property. Because the soil
7 removal action did not achieve cleanup to unrestricted (residential) use standards, the final ROD
8 specified that the Army would implement LUCs to prohibit unrestricted use of the site and
9 conduct five-year reviews to ensure that the remedy is protective of human health and the
10 environment. This document specifies the LUC objectives; describes the actual LUCs; provides
11 the LUC monitoring, maintenance, and enforcement requirements; and identifies the conditions
12 under which the LUCs may be reduced or removed at the former 81mm Mortar Range.

13 ***2.0 Site Description and History***

14 The former Fort McClellan (FTMC) is located in the foothills of the Appalachian Mountains of
15 northeastern Alabama near the cities of Anniston and Weaver in Calhoun County (Figure 1).
16 FTMC consisted of three main areas: Main Post, Pelham Range, and Choccolocco Corridor, a
17 4,488-acre tract of land that was leased from the State of Alabama until May 1998. The Main
18 Post, which occupied 18,929 acres, is bounded on the east by the Choccolocco Corridor, which
19 previously connected the Main Post with the Talladega National Forest. Pelham Range, which
20 occupies 22,245 acres, is located approximately 5 miles due west of the former Main Post and
21 adjoins the Anniston Army Depot to the south. The Refuge is located in the eastern portion of the
22 former Fort McClellan's Main Post. The property encompasses approximately 9,000 acres and
23 contains large stands of mountain longleaf pine. The military used this area in various types of
24 training from 1912 (and possibly as early as 1898) to 1999.
25

26 The former 81mm Mortar Range, Parcel 137Q-X, is located in the northeastern corner of the
27 former FTMC Main Post (Figure 1). The 81mm Mortar Range first appeared on a 1958 range
28 map but by 1967 the range had been abandoned. The history of ordnance used at the range is
29 unknown; however, an expended 81mm high explosive mortar round was found on the range
30 during a site walk (USACE, 2001). The location of the expended mortar round was not
31 documented. Site reconnaissance was conducted on several occasions during the SI and RI but
32 found no evidence to indicate that the area was ever used as a mortar range (Shaw, 2008).

The area investigated during the SI and RI was approximately 41 acres and included the firing line and target areas. The former range inclusive of the safety fan encompasses approximately 1,140 acres (approximately 960 acres on the former FTMC Main Post and approximately 180 acres that extend into the Choccolocco Corridor) (Figure 2). Features identified during site reconnaissance conducted in January 2002, included an approximately 600-foot-long trench (observed between the two dirt roads that bound the eastern and western sides of the area of investigation). Within the trench were several 1- to 5-gallon pails, metal debris, and circular pits. Rusty drums, showerheads, possible gasoline cans, and rusty truck beds were also observed near the trench. A rusty truck that had been used for small-arms target practice was observed in the southwestern portion of the site.

Today, the site is located within the *Mountain Longleaf Pine National Wildlife Refuge*, which is managed by the USFWS.

2.1 Previous Investigations and Response Actions

- **Environmental Baseline Survey (EBS).** An EBS prepared by Environmental Science and Engineering, Inc. in 1998 classified the Former 81mm Mortar Range as a Category 1 Qualified parcel. Category 1 parcels were defined as those areas where no release or disposal of hazardous substances or petroleum products occurred (including no migration of these substances from adjacent areas). However, the parcel was qualified because chemicals of potential concern and/or munitions and explosives of concern may be present as a result of historical range activities.
- **Site Investigation.** Shaw conducted an SI at the Former 81mm Mortar Range in 2002. The SI consisted of the collection of 21 surface and depositional soil samples, 15 subsurface soil samples, and three groundwater samples (Shaw, 2008).
- **Remedial Investigation.** Shaw conducted an RI at the Range in 2003-2004. The RI consisted of the collection of 34 surface and depositional soil samples, 25 subsurface soil samples, four surface water and sediment samples, and four groundwater samples. In addition, the RI field activities included X-ray fluorescence (XRF) soil screening (Shaw, 2008).
- **Remedial Action at Selected Sites within the Charlie Area at Fort McClellan.** Tetra Tech performed munitions response activities at 5.7 acres at the Range in 2009 as part of a larger effort across the Fort McClellan ranges. The area was geophysically mapped and cleared of munitions potentially presenting an explosive hazard to the depth of detection (TetraTech, 2011).
- **Soil Remedial Action.** In 2016, HydroGeoLogic, Inc. (HGL) implemented the Selected Remedy at the former 81mm Mortar Range to remove contaminated soil with

concentrations of lead and the other COCs (antimony and copper) above the cleanup levels presented in the Final ROD. The cleanup levels for the soil COCs were as follows:

- Antimony – 18 mg/kg
- Copper – 334 mg/kg
- Lead – 500 mg/kg (surface soil); 800 mg/kg (subsurface soil).

The remedial action successfully removed the COCs to concentrations below the cleanup levels as documented in the Remedial Action Completion Report (HGL, 2018). A total of approximately 9,688 tons of contaminated soil were excavated, treated onsite using a reagent-based stabilization process as necessary, and transported and disposed as nonhazardous special waste at an offsite permitted Subtitle D disposal facility. Because the remedial action did not achieve cleanup to a concentration that would allow for unrestricted future site use, LUCs will be required for the site.

The LUCs for the former 81mm Mortar Range are briefly discussed in the following sections.

3.0 Land Use Control Objectives

Because the Selected Remedy (Alternative 3b, excavation of soil, LUCs, on-site stabilization, and off-site disposal) did not achieve cleanup to a concentration that would allow unrestricted reuse, LUCs as described in Section 4.0 will be required for portions of the site where lead remains in soil above the residential cleanup level of 400 mg/kg. The LUC area was determined based on surface lead concentrations above 400 mg/kg, including results from the removal action and previous studies that used XRF surveys. All subsurface results at the site were below 800 mg/kg and do not impact the LUC area. . To the extent practicable the area was selected to maximize land use but be as contiguous as possible to minimize inspection burden in the future.

The overall objective for the LUCs described in this LUCIP is to prevent unacceptable risk to human health and the environment and to promote human safety by minimizing the potential for exposure to any substances that may present an unacceptable risk. The purpose of the LUCs is to prohibit residential use of the former 81mm Mortar Range where soil lead concentrations exceed the residential use level of 400 mg/kg. The soil excavation boundaries are shown on Figure 3. The area where the soil LUCs will be implemented encompasses approximately 8.67 acres (estimated area where soil lead concentrations will remain above 400 mg/kg) at the former 81mm Mortar Range as shown in Figure 4.

4.0 Description of Land Use Controls

The following LUCs have been implemented to meet the objectives in Section 3.0.

4.1 Land Use Restrictions

Residential use is prohibited. Under EPA guidance and the Alabama Risk-Based Corrective Action Guidance, “unrestricted use” refers to “residential use” and includes, but is not limited to, schools, dwellings, homes, hospitals, child-care centers, nursing homes, playgrounds, recreation centers, and any other areas/structures with sensitive human activity (ADEM, 2017).

4.2 Land Use Control Mechanisms

- The USFWS or its successor will conduct annual inspections and reviews of these LUCs to verify that the LUCs have not been violated in accordance with the LUCAP requirements (Army, 2000).

4.3 Legal Description of Land Use Control Boundary

A parcel of land (8.67 acres, more or less) situated in portions of Sections 6 and 7, lying in Township 15 South, Range 9 East, Huntsville Meridian, Calhoun County, Alabama, and being more particularly described as follows:

POINT OF BEGINNING being an unmarked point (Point 1 on Figure 4) having Alabama State Plane, East Zone Coordinates of North 1180750.9992 and East 685156.5306, runs thence as follows:

South 88 degrees 46 minutes 12 seconds East, 310 feet;
South 24 degrees 22 minutes 12 seconds East, 114 feet;
North 88 degrees 12 minutes 0 seconds East, 368 feet;
South 8 degrees 19 minutes 12 seconds West, 330 feet;
North 81 degrees 4 minutes 12 seconds West, 234 feet;
South 28 degree 57 minutes 36 seconds West, 136 feet;
South 54 degrees 43 minutes 48 seconds West, 292 feet;
North 61 degrees 27 minutes 36 seconds West, 276 feet;
North 25 degrees 14 minutes 24 seconds West, 106 feet;
North 14 degrees 36 minutes 0 seconds East, 284 feet;
North 23 degrees 9 minutes 0 seconds East, 189.4 feet to the point of beginning.

5.0 Monitoring, Maintaining, and Enforcing Land Use Controls

The USFWS is responsible for monitoring, maintaining, and enforcing the LUCs specified in Section 4.0. The USFWS shall report any observed LUC violations to the Army and ADEM and take other appropriate preventive action if danger to human health and the environment is indicated.

Should a third party violate the terms and intent of these LUCs, the USFWS will attempt to resolve the violation with the offender and, if not corrected within 30 days, USFWS will consider use of all options (e.g., civil action, criminal prosecution) available to correct the violation.

6.0 Reducing or Removing Land Use Controls

The LUCs are required because the lead concentrations are above those allowed for residential use and shall remain in effect until:

- a. Changes in applicable Federal and State risk-based cleanup standards indicate that site contaminants no longer pose an unacceptable risk; or
 - b. There is a reduction in site contaminant concentrations to below Federal and State residential risk-based cleanup standards.
- and
- c. Until a request to remove or reduce the LUCs has been approved by ADEM.

7.0 Points of Contact

Fort McClellan Site Manager
U.S. Army Transition Force
681 Castle Avenue
Anniston, Alabama 36205

Refuge Manager
Mountain Longleaf National Wildlife Refuge
407 Baby Bains Gap Road
Anniston, Alabama 36205

Chief, Land Division
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110-2059

8.0 Administrative Record

Pertinent LUC records and other documents in the Administrative Record for the former 81mm Mortar Range can be found at the information repository maintained at the following location:

McClellan Center Library
100A Gamecock Drive (Room 1153)
Anniston, Alabama 36205
Telephone: (256) 238-9352

9.0 References

ADEM, 2017, *Alabama Risk-Based Corrective Action Guidance Manual*, Alabama Department of Environmental Management, Revision 3.0, February.

Army, 2000, *Memorandum of Agreement Among U.S. Environmental Protection Agency, Alabama Department of Environmental Management, U.S. Department of the Army Fort McClellan, and Anniston-Calhoun County Fort McClellan Development Joint Powers Authority*, 12 December 2000.

Environmental Science and Engineering, Inc., 1998, *Final Environmental Baseline Survey (EBS)*, Fort McClellan, Alabama, prepared for the U.S. Army Environmental Center, Aberdeen Proving Grounds, Maryland, January.

HydroGeoLogic, Inc. 2018, *Remedial Action Completion Report, Former 81mm Mortar Range, Environmental Remediation Services at Four Sites, Fort McClellan, Anniston, Alabama*, Final, January.

Shaw Environmental, Inc. (Shaw), 2008, *Remedial Investigation Report, Former 81mm Mortar Range, Parcel 137Q-X, Fort McClellan, Calhoun County, Alabama*, Final Revision 1, April.

Shaw, 2012. *Final Focused Feasibility Study, Former 81mm Mortar Range, Parcel 137Q-X, Fort McClellan, Calhoun County, Alabama*, Final, January.

Shaw Environmental, Inc. (Shaw), 2013, *Record of Decision, Former 81mm Mortar Range, Parcel 137Q-X, Fort McClellan, Calhoun County, Alabama*, Final, October.

TetraTech, 2011, *Site Specific Final Report, Remedial Action at Selected Sites within the Charlie Area at Fort McClellan, Alabama*, Final, March.

U.S. Army Corps of Engineers, St. Louis District, 2001, *Archives Search Report, Fort McClellan, Anniston, Alabama*, Revision 1, September.

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FIGURES

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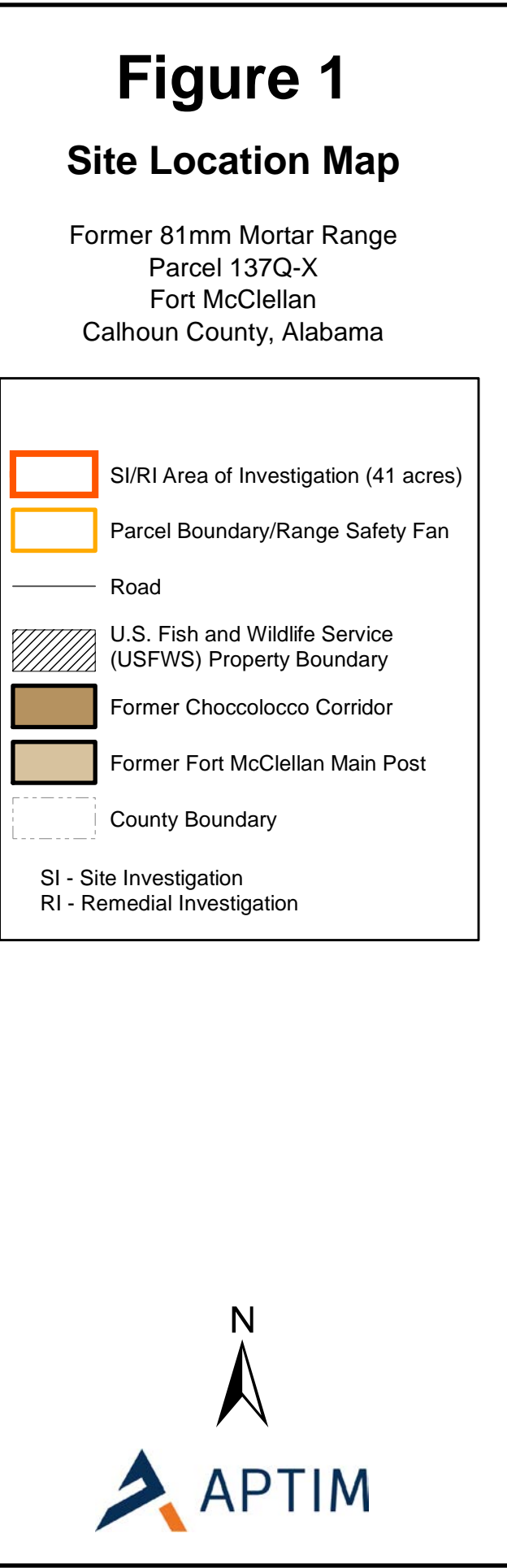
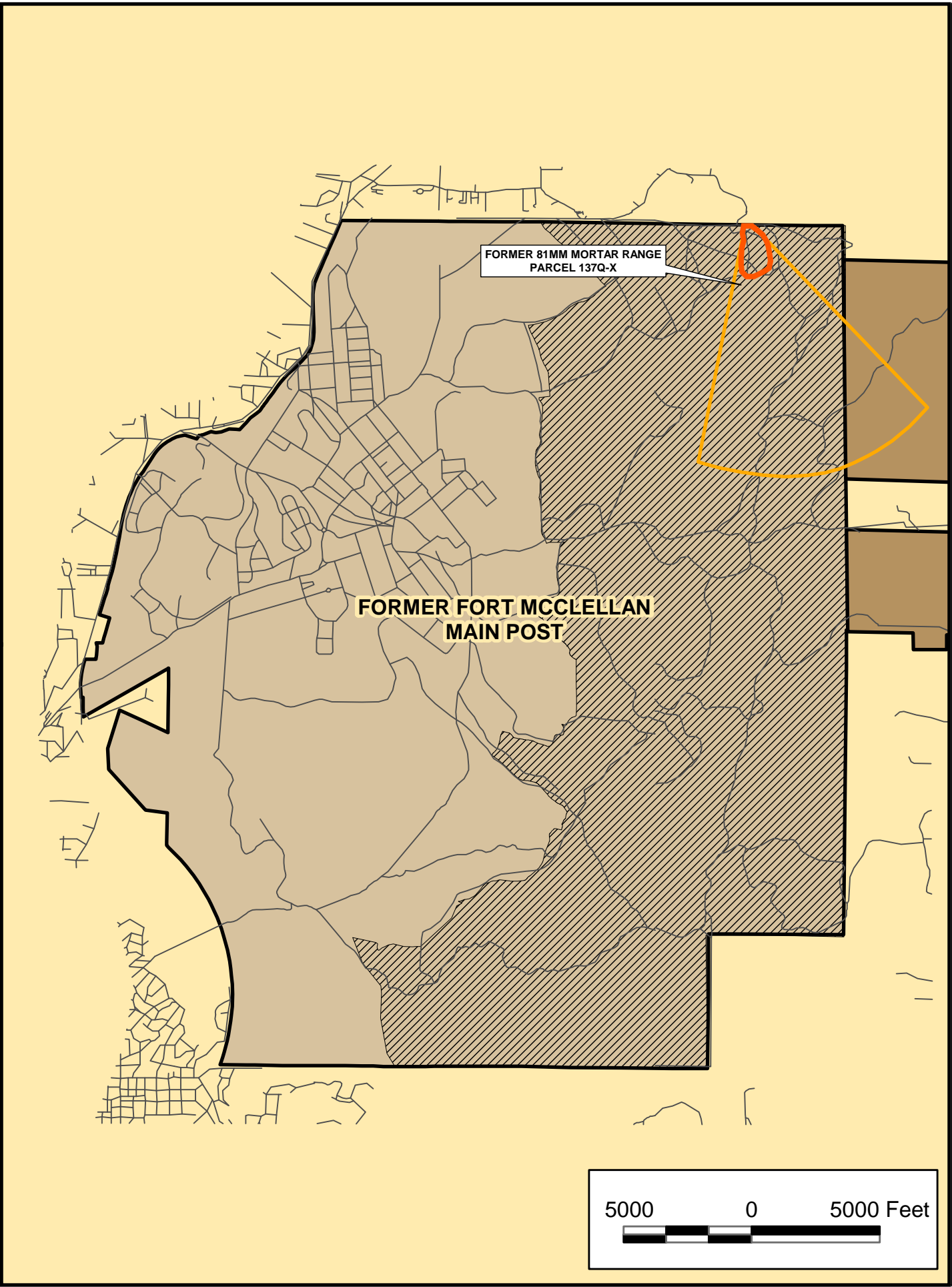
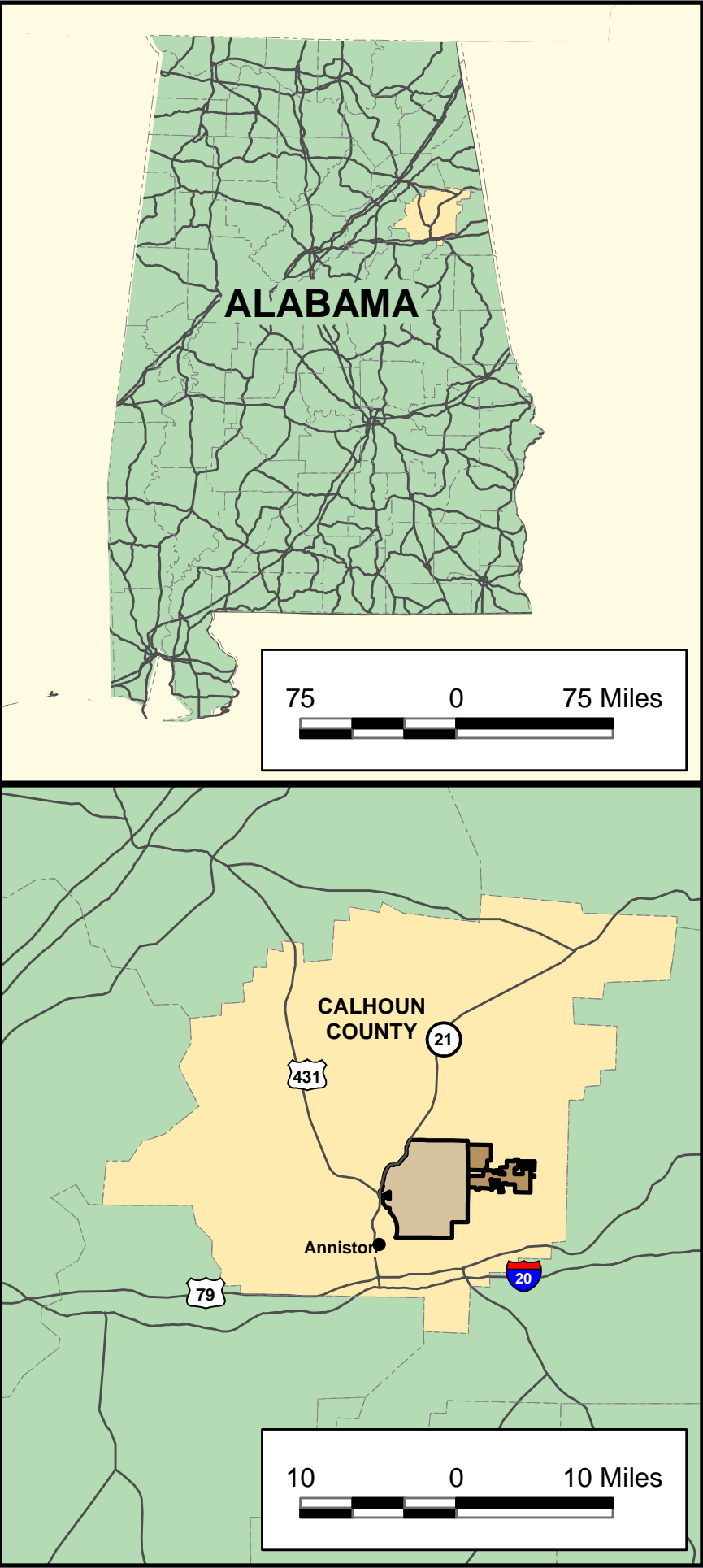







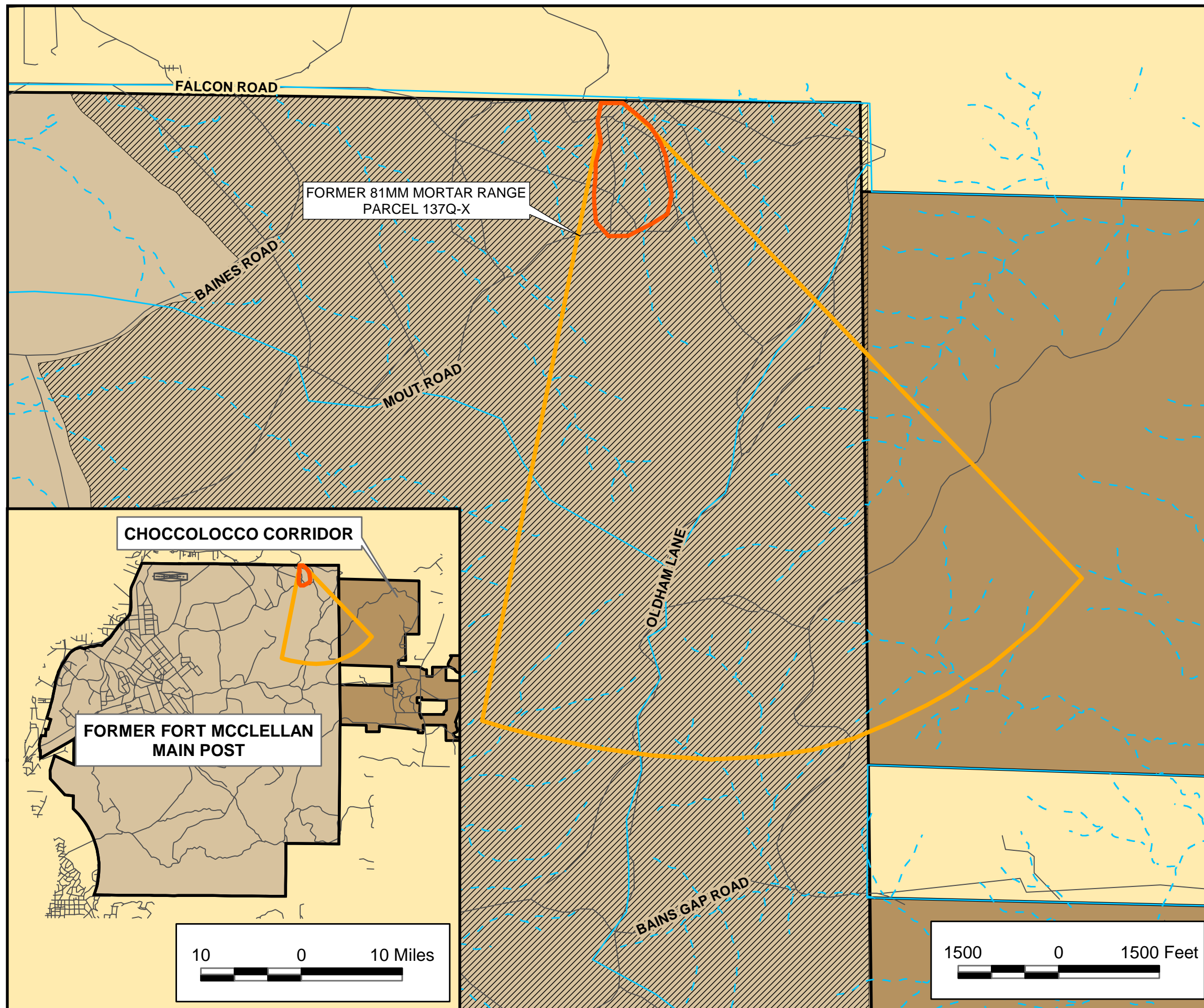


Figure 2

Site Map

Former 81mm Mortar Range
Parcel 137Q-X
Fort McClellan
Calhoun County, Alabama

-  SI/RI Area of Investigation (41 acres)
-  Parcel Boundary/Range Safety Fan
-  Surface Drainage Feature (dashed where intermittent)
-  Road
-  U.S. Fish and Wildlife Service (USFWS) Property Boundary
-  Former Choccolocco Corridor
-  Former Fort McClellan Main Post
- SI - Site Investigation
- RI - Remedial Investigation



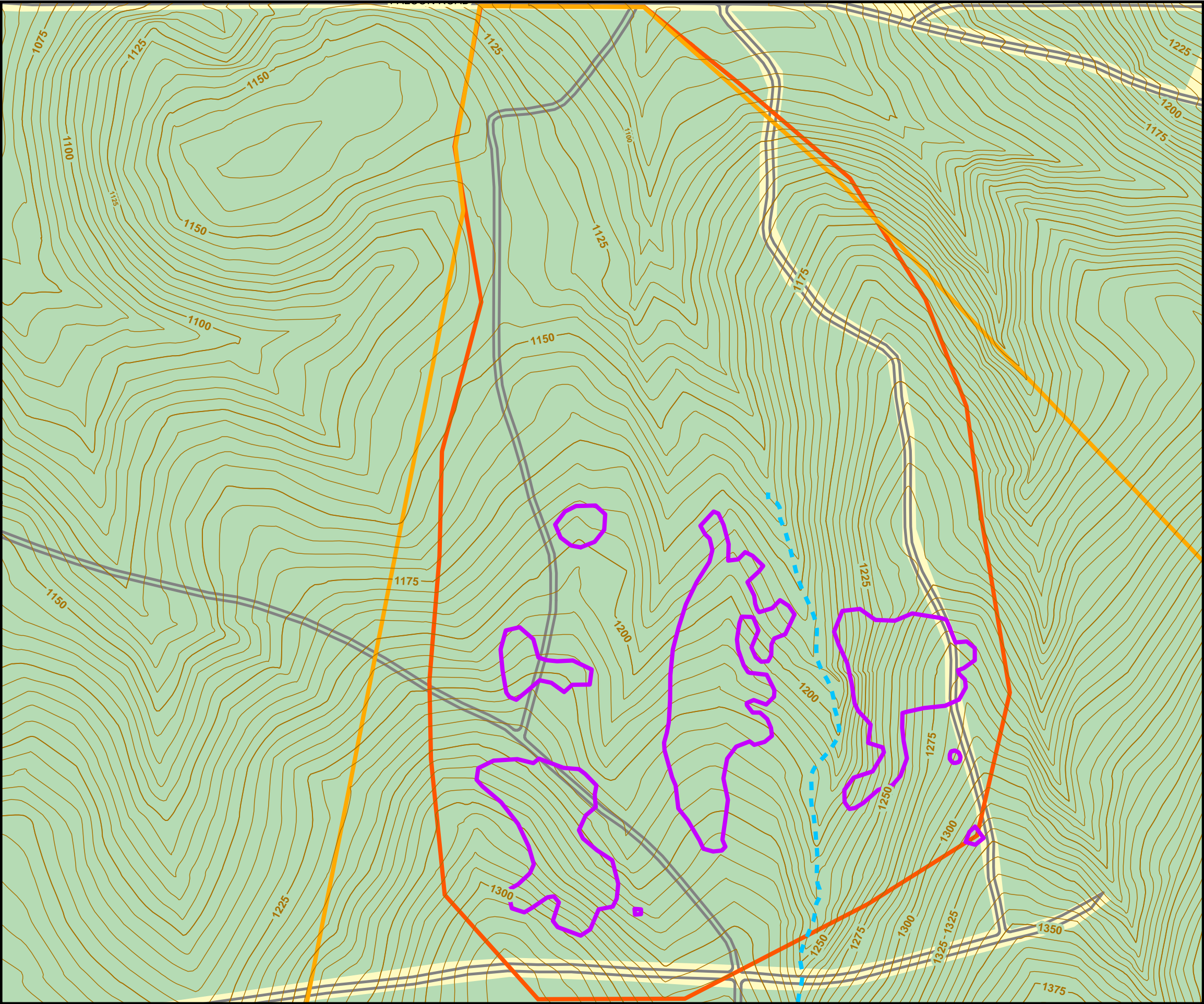
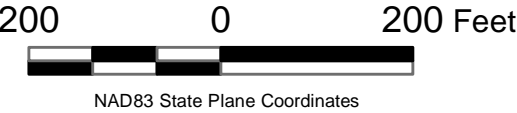


Figure 3

Areal Extent of Soil Excavation

Former 81mm Mortar Range
Parcel 137Q-X
Fort McClellan
Calhoun County, Alabama

- Surveyed Excavation Boundary
- SI/RI Area of Investigation (41 acres)
- Parcel Boundary/Range Safety Fan
- Road
- Surface Drainage Feature
(dashed where intermittent)
- Topographic Contour
(25-foot interval)
- Topographic Contour
(5-foot interval)
- Vegetated Area
- Clear Area



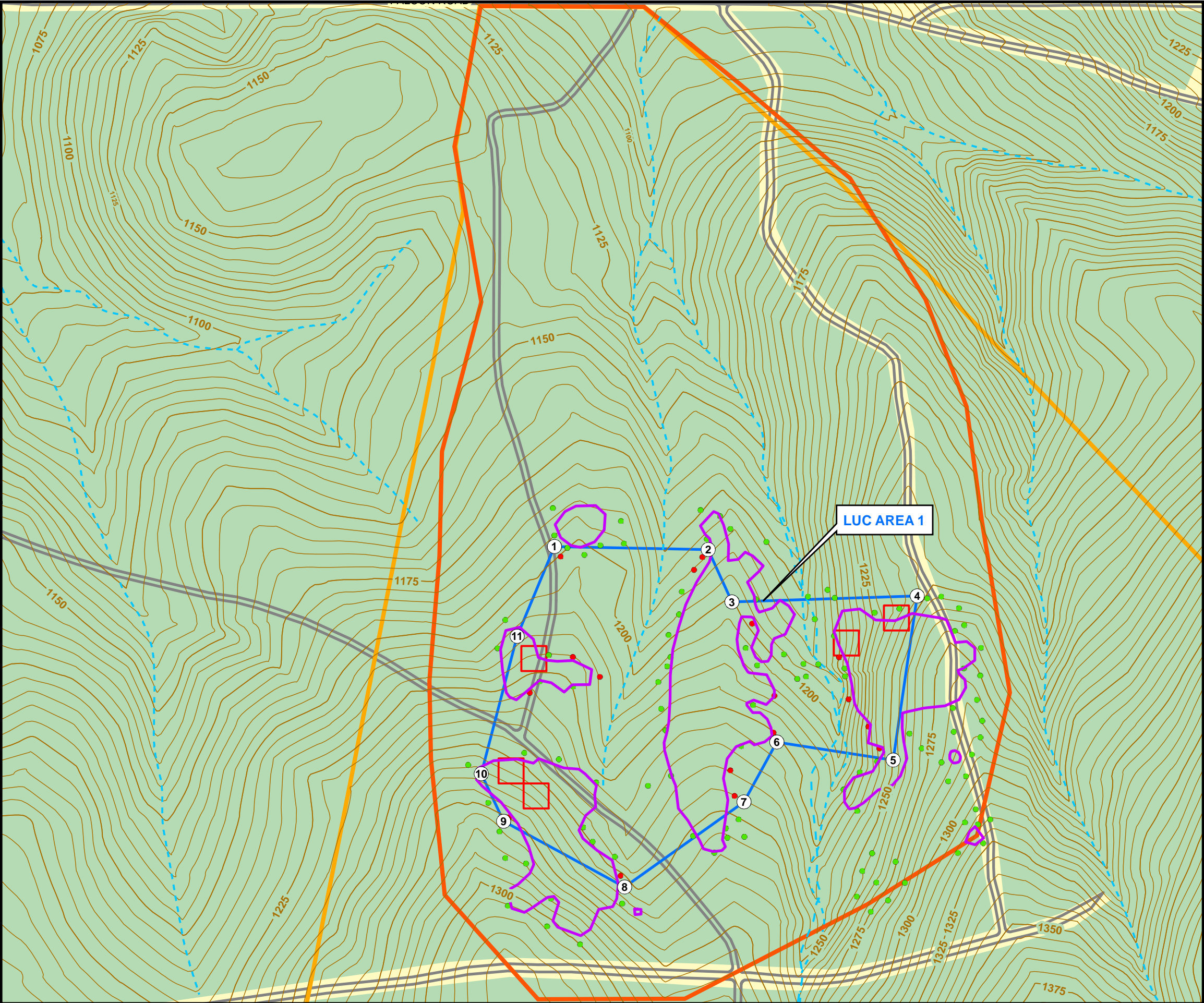


Figure 4

Land Use Control Boundary

Former 81mm Mortar Range
Parcel 137Q-X
Fort McClellan
Calhoun County, Alabama

2015 XRF Location with Lead Results (for Areas Outside the Excavation Boundary)

- ≤ 400 mg/kg
- > 400 mg/kg but < 500 m/kg
- ① Land Use Control Boundary Corner Point
- Land Use Control Boundary (8.67 acres)
- Sampling Grid with Final Lead Results (subsurface) above 400 mg/kg
- Surveyed Excavation Boundary
- SI/RI Area of Investigation (41 acres)
- Parcel Boundary/Range Safety Fan
- Road
- Surface Drainage Feature (dashed where intermittent)
- Topographic Contour (25-foot interval)
- Topographic Contour (5-foot interval)
- Vegetated Area
- Clear Area

