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February 21, 2008

Ms. Brandi Little
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, AL 36110-2059

Mr. Tom Lederle
Director Base Realignment and Closure
3A Bernard Road (Bldg. 105A)
Fort Monroe, VA 23651-1048

Subject: Cleanup Agreement No. A14 210 020 562
Transmittal of Final Engineering Evaluation and Cost Analysis (EE/CA) Action
Memorandum Bravo Munitions Response Site MRS-3, McClellan, Anniston, Alabama

Dear Ms. Little and Mr. Lederle:

This letter is sent to forward copies of the Final Engineering Evaluation and Cost Analysis (EE/CA) Action Memorandum Bravo Munitions Response Site-3, McClellan, Anniston, Alabama on behalf of the Anniston Calhoun County Fort McClellan Development Joint Powers Authority. Our response to the Army and ADEM comments on the Draft Final version is attached. Please contact me at 404.414.7054 if you have any questions on this submittal.

Sincerely,

MATRIX ENVIRONMENTAL SERVICES, LLC.

Richard L. Satkin, P.G.
Senior Project Manager

c: Miki Schneider – JPA
Scott Bolton – Army TF
Jim Pastorick – UXOPro
Steve Young – MES

ADEM Comments

COMMENT 1. Section 5.0: For Table 1, Alternative 3 – Construction Support, please specify that the construction support will be provided in accordance with U.S. Army Corps of Engineers guidance document EP 75-1-2, Munitions and Explosives of Concern (MEC) Support During Hazardous, Toxic, and Radioactive Waste (HTRW) and Construction Activities (August 1, 2004). Also in this table, please modify Alternative 6 – Clearance to Depth to read Clearance to Maximum Depth of Detection as this is more descriptive of the remedy to be implemented.

RESPONSE 1. The table has been revised.

COMMENT 2. Section 9.0: Although the area slated to be developed will be cleared to the maximum depth of detection, it is not possible to ensure the detection and removal of all munitions and explosives of concern (MEC). During construction activities any MEC remaining would present a hazard. Therefore, construction support, in accordance with EP 75-1-2, should also be selected for this portion of MRS-3. Please address.

RESPONSE 2. Residual risk in areas that are cleared to the maximum depth of detection will be managed through the inclusion of a deed notice in the property transfer documents. The deed notice will inform future property owners of the historical military use, provide notification procedures in the event a MEC item is discovered, and include a reference to online educational resources that can be used to educate future workers and inhabitants of the potential risks of unexploded ordnance and how to respond in the event a suspect munitions is encountered.

Army Comments

COMMENT 1. Page 1, Lines 6-7: Change “Draft” to “Draft Final”; “December 2004” to “July 2006”; and “Tetra Tech, FW Inc.” to “Tetra Tech EC, Inc.”.

Rationale: The latest edition of the Bravo Area EE/CA (Draft Final) should be used as the basis for the recommended response action.

RESPONSE 1. Non-concur. The July 2006 document was not recognized or reviewed by ADEM or JPA. Furthermore, negotiations between the Army and JPA for the Bravo early transfer were based on the December 2004 document.

COMMENT 2. Page 1, Line 30: Verify the number of munitions response areas.

Rationale: The sentence on this line states there are three munitions response areas at McClellan and references Figure 1, however five areas are shown on Figure 1.

RESPONSE 2. There are three munitions response areas. The legend in Figure 1 has been revised.

COMMENT 3. Page 2, Line 29: Change “Tank Site B” to “Tank Site A”.

Rationale: The Rucker Avenue Water Tank Site is Tank Site A.

RESPONSE 3. The text has been revised.

COMMENT 4. Page 3, Lines 4-5: Change the reference from the Draft Bravo Area EE/CA, December 2004 to the Draft Final Bravo Area EE/CA, July 2006.

Rationale: The latest edition of the Bravo Area EE/CA (Draft Final) should be used as the basis for the recommended response action.

RESPONSE 4. Non-concur. See response to comment 1.

COMMENT 5. Figure 1: Change Figure 1 to show the M2 Parcel as a separate area.

Rationale: The M2 Parcel is shown as part of the Eastern Bypass on the figure but it is not part of the bypass.

RESPONSE 5. The figure has been revised.

**Final
Engineering Evaluation and Cost Analysis (EE/CA)
Action Memorandum
Bravo Munitions Response Site 3 (MRS-3)
McClellan
Anniston, Alabama**

Prepared for:

**Anniston Calhoun County Fort McClellan Development Joint Powers Authority,
McClellan, Anniston, Alabama**



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February 2008

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FOREWORD

This Action Memorandum document presents the selected munitions and explosives of concern (MEC) response actions for former Fort McClellan located in Calhoun County, Alabama. The Anniston – Calhoun County Fort McClellan Development Joint Powers Authority (JPA) is the lead agency and has developed this Action Memorandum in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act as amended; and is consistent with the National Contingency Plan. The selection of MEC response actions is based on the information contained in the administrative record for this site. This document has been approved by the undersigned.



Dan Cleckler, Executive Director
Anniston – Calhoun County Fort McClellan Development
Joint Powers Authority

1.0 INTRODUCTION

The purpose of this Action Memorandum is to document the Anniston – Calhoun County Fort McClellan Development Joint Powers Authority’s (JPA) decision regarding the selected risk – reduction alternatives to address munitions and explosives of concern (MEC) in the Bravo Munitions Response Area (MRA) at McClellan, Alabama. The response action described in this Action Memorandum is based on the Draft Engineering Evaluation/Cost Analysis Bravo Area of the Redevelopment Area Fort McClellan, Alabama (Tetra Tech, FW Inc., December 2004) (Army EE/CA). As the primary decision document, the Action Memorandum becomes a critical component of the Administrative Record, required by Section 113(k) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

McClellan, formerly known as Fort McClellan, is an 18,929-acre site located in Calhoun County, Alabama and was used by the Department of the Army for ordnance and chemical weapons training and other military exercises. In September 1999, McClellan was closed under Base Realignment and Closure (BRAC) as recommended by the 1995 Defense Base Closure and Realignment Commission in conformance with Public Law 101-510 as amended, the Defense Base Closure and Realignment Act.

Under CERCLA Section 9620(h)(3)(C), Federal property may be transferred prior to the completion of all remedial action necessary to protect human health and the environment. Acting in accordance with this early transfer authority, portions of McClellan were transferred in September 2003 to the local reuse authority (JPA), which assumed responsibility for certain environmental and munitions response activities. The Environmental Services Cooperative Agreement (ESCA) No. DASW01-03-2-0001 between the Department of the Army (Army) and JPA, and Cleanup Agreement No. AL4 210 020 562 between JPA and Alabama Department of Environmental Management (ADEM) memorializes the early transfer agreements and responsibility for environmental cleanups. These documents require that the JPA conduct munitions response actions in select areas of McClellan (i.e., Alpha MRA and Bravo MRA) in accordance with a Department of Defense Explosive Safety Board (DDESB) – approved Explosive Safety Submission (ESS). The JPA subsequently must obtain approval from ADEM that the required munitions response actions are complete.

There are three munitions response areas at McClellan (Figure 1). The MRAs have been grouped for geographical, explosive hazards and future reuse purposes into the Alpha, Bravo, and Charlie MRAs. The Bob Stump National Defense Authorization Act for Fiscal Year 2003 authorized the transfer of 7,759 acres from the Army to the Department of Interior to establish the Mountain Longleaf National Wildlife Refuge in the Charlie MRA. On October 23, 2003, the JPA transferred an additional 1,257 acres to the Department of Interior to increase the refuge acreage to 9,016 acres. The Army has retained responsibility for the munitions response actions required in the Charlie MRA.

The Alpha MRA was transferred by the Army to the JPA in September 2003 with the responsibility for completing any required munitions response actions. A Final Action

Memorandum addressing munitions response in portions of the Alpha MRA has been previously submitted to ADEM and the Army.

The Bravo MRA was transferred to the JPA in September 2003. In September 2005, the transfer of responsibility for munitions response actions for select munitions response sites (MRSs) in Bravo was also transferred to the JPA via an amendment to the ESCA. Those munitions response sites include the Industrial Access Road and its right-of-way, 38 acres in Planning Area 4 (Range 18), and Bains Gap Road. In August 2006, the transfer of responsibility for munitions response actions for MRS-1 located in Bravo was also transferred to the JPA via an amendment to the ESCA. In September 2007, the transfer of responsibility for the remainder of the Bravo MRSs, including MRS-3 the subject of this Action Memorandum, was transferred to the JPA via a new ESCA.

2.0 BACKGROUND

McClellan has documented its use as a military training area since 1912, when the Alabama National Guard used it for artillery training. However, the Choccolocco Mountains may have been used for artillery training as early as 1898 by the units stationed at Camp Shipp in the Blue Mountain Area during the Spanish American War. The 29th Infantry Division used areas of McClellan for training before being ordered to France during World War I. In 1917, Congress authorized the establishment of Camp McClellan. In 1929, the camp was officially designated as Fort McClellan. Before World War II, the 27th Infantry Division assembled at McClellan for training. During the war, many other units used the site for various training purposes. McClellan was put into inactive status in June 1947 following World War II, and was reactivated in January 1950. The site was used for National Guard training and was selected as the site for the Army's Chemical Corps School. McClellan was closed in September 1999.

Munitions Response Site-3 (MRS-3) is 399 acres in size and includes a 1395 foot right-of-way east and west of the planned Eastern Bypass. MRS-3 includes portions of the Army EE/CA sectors M3-1H Mixed Use Area-D, M3-2H Mortar Area-PR, M3-2H Mortar Area-D, M3-1L Rocket Area-D, M3-1L 37mm Projectile Area-D, M3-3H Rocket/Hand Grenade Area-D, and all of M3-1H Rocket Area -PR and M3-1H Grenade Area-PR. All of the Rucker Avenue Water Tank Site A is located within MRS-3; a clearance to depth was completed by the Army at this site. During the Army's Bravo EE/CA, 19 UXO were recovered in M3-1H Mixed Use Area-D, nine UXO were recovered in M3-2H Mortar Area-PR, 27 UXO were recovered in M3-2H Mortar Area-D, 28 UXO were recovered in M3-1L Rocket Area-D, five UXO were recovered in M3-1L 37mm Projectile Area-D, 20 UXO were recovered in M3-3H Rocket/Hand Grenade Area-D, 11 UXO were recovered in M3-1H Grenade Area-PR and no UXO were recovered in M3-1H Rocket Area-PR. UXO were recovered on the surface to a maximum depth of 13 inches. UXO items ranged in size from a 37mm HE Projectile to a 3.5inch Rocket.

3.0 STATEMENT OF BASIS AND PURPOSE

Prospective beneficial uses of the Bravo MRA have been identified and prioritized for reuse under the BRAC process. The purpose of this Action Memorandum is to present the selected

munitions response action for a site prioritized for early redevelopment within the Bravo MRA. Specifically, this Action Memorandum addresses munitions response actions for MRS-3 with confirmed MEC contamination.

Based on the results of the Army draft Bravo EE/CA Report (Tetra Tech, FW Inc., December 2004), which included a qualitative baseline risk evaluation and comparative analysis of potential munitions response actions, the most appropriate alternative was selected. Potential land uses in the Bravo MRA that were considered in the Army EE/CA included development, mixed business use, cultural, retail, active recreation, and passive recreation. Recommendations in this Action Memorandum take into account the JPA's current land use redevelopment plan, the degree of public usage and the types of items found during the site characterization.

The JPA currently plans to develop portions of MRS-3 and leave the remainder undeveloped as McClellan Park System. For those areas that will be actively developed a Clearance to Maximum Depth of Detection is selected as the recommended munitions response. For those areas that will remain as McClellan Park System the recommended munitions response action is a Clearance to 1 Foot. A deed restriction will also be placed that requires the use of UXO construction support/anomaly avoidance for any future excavations in the area designated McClellan Park System. These recommended munitions response actions take into account the degree of public usage and types and depth of MEC items previously found in the area.

The process for munitions response action selection is documented in the Administrative Record for the site. The project Administrative Record, which includes the Archives Search Report and other pertinent project documents, is maintained at two locations. The records are available for public access at:

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

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

4.0 PROJECT JUSTIFICATION

A variety of material potentially presenting an explosive hazard (MPPEH) was recovered during the Army's EE/CA field investigations conducted at McClellan. Portions of McClellan are now

being released to the public and private sectors for reuse. This, combined with the presence of MEC items, is justification for a removal action at this site.

The data collected during the Army EE/CA field investigation was used to perform a qualitative risk evaluation for assessing the MEC risk to public safety and the environment. The qualitative risk analysis was completed based on the U.S. Army Corps of Engineers, Engineering and Support Center Huntsville (USAESCH) Ordnance and Explosives Risk Impact Assessment (OERIA) evaluation tool. This tool qualitatively evaluates three primary risk factors: 1) presence of OE, 2) site characteristics, and 3) human factors. A detailed discussion of the OERIA is presented in the Army EE/CA (Tetra Tech FW, Inc., December 2004).

5.0 ALTERNATIVES CONSIDERED

Six non-time critical MEC response action alternatives were developed and evaluated in the Bravo MRA where a public safety risk associated with MEC was identified. The response action alternatives are described in Table 1.

Table 1 – Munitions Response Action Alternatives

Alternative	Description
Alternative 1 – No Further Action	The No Further Action alternative involves no additional action at the site. This alternative does not impose any land use controls (i.e., as described below for Alternative 2). An Explosives Safety Submission would be submitted to DDESB for approval.
Alternative 2 – Land Use Controls	No clearance action will be conducted. Site-specific land use controls may consist of one or more institutional or engineering controls tailored to an area. Institutional controls considered included: a community education program; a deed notice filed with the property transfer documents that informs future owners of the military history of the site and provides notification procedures in the event a MEC item is discovered, and a deed restriction that prohibits digging in the area without construction support by UXO-qualified personnel. Engineering controls considered included: fences, gates, signage, and security patrols. An Explosives Safety Submission would be submitted to DDESB for approval. Recurring reviews would be conducted on 5 year intervals for a period of 20 years to ensure the selected response alternative remains appropriate.
Alternative 3 – Construction Support	Construction support will be provided in accordance with U.S. Army Corps of Engineers guidance document EP 75-1-2, Munitions and Explosives of Concern (MEC) Support During Hazardous, Toxic, and Radioactive Waste (HTRW) and Construction Activities (August 1, 2004). This alternative may include on-call construction support, on-site construction support or footprint clearance in designated areas where intrusive building activities are planned. An Explosives Safety Submission would be submitted to DDESB for approval. Recurring reviews would be conducted on 5 year intervals for a period of 20 years to ensure the selected response alternative remains appropriate.

Table 1 – Munitions Response Action Alternatives (Cont'd)

Alternative 4 – Surface Clearance	This alternative involves removal of surface MEC items from the site. This alternative includes a deed restriction that prohibits digging in the area without construction support by UXO-qualified personnel. An Explosives Safety Submission would be submitted to DDESB for approval. Recurring reviews would be conducted on 5 year intervals for a period of 20 years to ensure the selected response alternative remains appropriate.
Alternative 5 – Clearance to 1 Foot	This alternative involves removal of MEC items on the surface to a depth of 1 foot. This alternative includes a deed restriction that prohibits digging in the area without construction support by UXO-qualified personnel. An Explosives Safety Submission would be submitted to DDESB for approval. Recurring reviews would be conducted on 5 year intervals for a period of 20 years to ensure the selected response alternative remains appropriate.
Alternative 6 – Clearance to Maximum Depth of Detection	This alternative involves continued investigation (i.e., excavation) of a suspect anomaly until the source of the anomaly is found and removed. The clearance depth is not limited. An Explosives Safety Submission would be submitted to DDESB for approval.

6.0 HIGHLIGHTS OF COMMUNITY PARTICIPATION

The JPA conducts open monthly meetings to discuss issues pertinent to the redevelopment of McClellan. The JPA also conducts an annual open meeting to present the results of activities conducted during the past year and educate the public on the potential hazards of MEC. The JPA also participates at each quarterly Restoration Advisory Board meeting.

7.0 COORDINATION SUMMARY

Project activities for the Bravo EE/CA were coordinated with USAESCH, ADEM, and JPA through the BRAC Cleanup Team (BCT). The work plan and draft Army EE/CA Report were reviewed by USAESCH and ADEM and made available to project stakeholders, including the JPA.

8.0 SELECTION CRITERIA

The selection criteria used to evaluate the six response action alternatives consist of effectiveness in reducing the public safety risks, the implementability of the alternative, and the cost of implementing the alternative.

9.0 DESCRIPTION OF SELECTED REMEDIES

The recommended response action for MRS-3 where the area is slated for development is Alternative 6 – Clearance to Maximum Depth of Detection and Alternative 2 – Land Use Controls. Residual risk that may remain following the Clearance to Maximum Depth of Detection will be managed through the inclusion of a deed notice in the property transfer documents that informs future property owners of the historical military use, provides notification procedures in the event a MEC item is discovered and includes a reference to online

educational resources that can be used to educate future workers and inhabitants of the potential risks of unexploded ordnance and how to respond in the event a suspect munitions is encountered.

The recommended response action for MRS-3 where the land use is McClellan Park System is Alternative 5 – Clearance to 1 Foot and Alternative 2 – Land Use Controls. The majority of the area designated as McClellan Park System is very steep. The steep slopes serve to limit the penetration depth of ordnance. The steep slopes also make digital geophysical mapping of these areas problematic and as such analog methods of metal detection will be employed rather than digital geophysical mapping in the McClellan Park System. The objective of the site-specific Land Use Controls is to minimize the potential for exposure to MEC. This will be achieved by education and a deed restriction that prohibits digging in this area without construction support provided by UXO-qualified personnel. The JPA conducts annual education UXO briefings to the public. These briefings describe the explosive hazards associated with munitions that may be present and the actions people should take (Recognize, Retreat, Report) should they encounter MEC or a suspected MEC item.

10.0 TRADE-OFF ANALYSIS

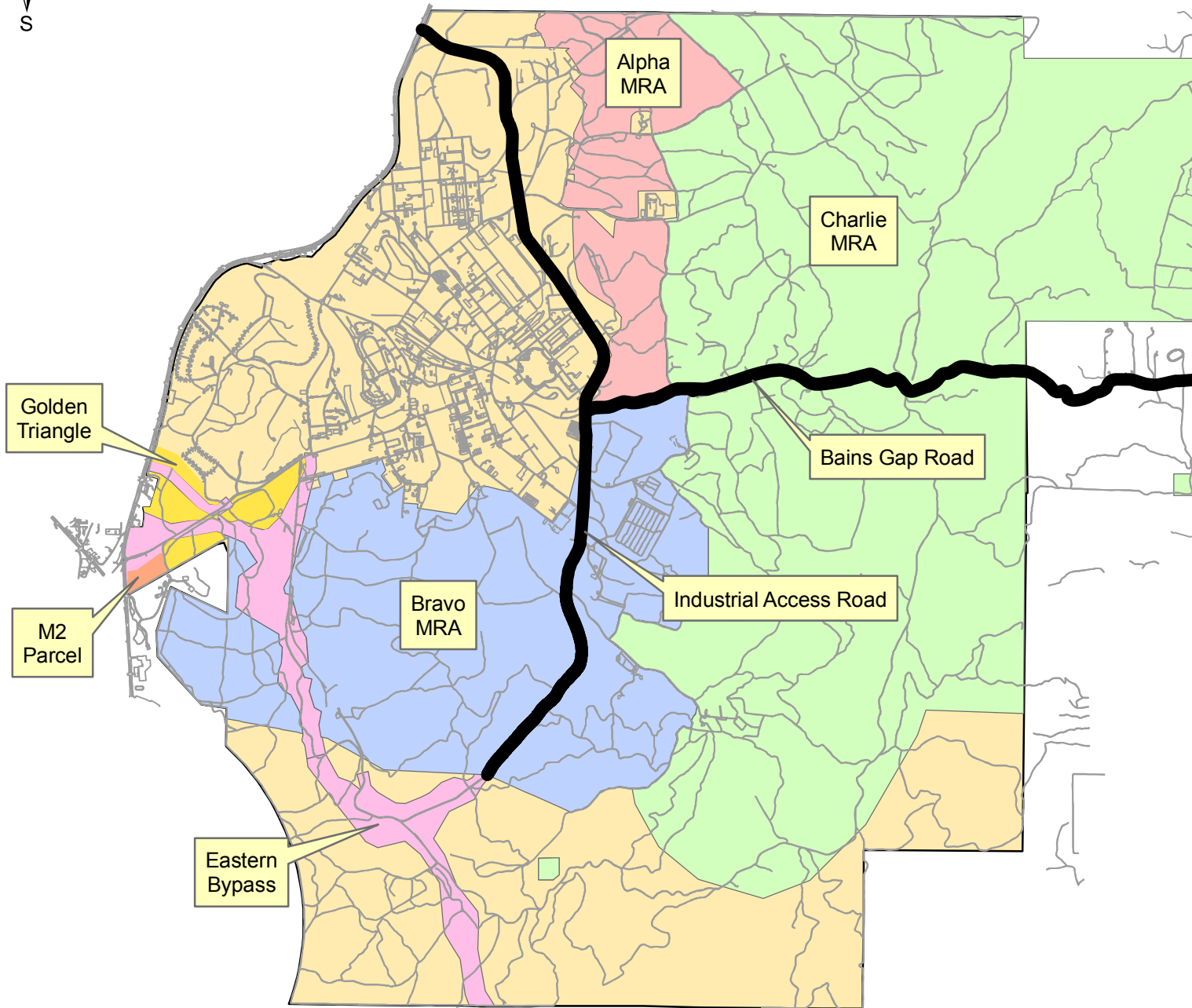
These response actions are the best response actions as determined from the available historical records, data gathered in support of the Army EE/CA investigations, and are compatible with the proposed land use. Mitigative measures will be implemented during the clearance actions to ensure that there is a minimal impact to any human, ecological or cultural resources.

11.0 DOCUMENTATION OF SIGNIFICANT CHANGES

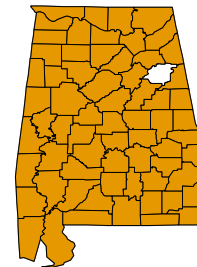
If the actions outlined in this Action Memorandum are delayed or not taken, it could affect the redevelopment of the property, delay road work and impact critical infrastructure upgrades. Response actions presented in this Action Memorandum are required to reduce/manage the risk to the future public users.

12.0 RESPONSIVENESS SUMMARY

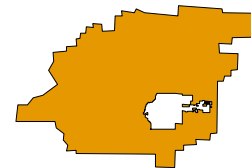
A responsiveness summary has not been compiled because there has not been a public meeting on the Army EE/CA.



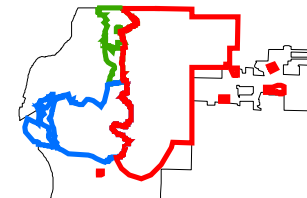
Alabama



Calhoun County



McClellan



Legend


-  Alpha Munitions Response Area
-  Bravo Munitions Response Area
-  Charlie Munitions Response Area
-  Golden Triangle
-  Eastern Bypass
-  M2 Parcel

FIGURE 1
Munitions Response Areas

McClellan
Munitions Response Site
Anniston, Alabama

