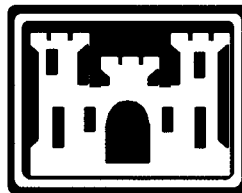


**FINAL REPORT**  
**Time Critical OE Removal Action**

**At**  
**The Blalock and Riley Properties**  
**Former Camp Butner**  
**Butner North Carolina**

**DACA87-00-D-0036**  
**Task Order: 0026**  
**Project No. I04NC000902**



**Prepared For**  
**U.S. Army Engineering and Support Center, Huntsville**  
**And**  
**US Army Corps of Engineers, Wilmington District**

**Prepared by:**  
**USA Environmental, Inc.**  
**5802 Benjamin Center Drive, Suite 101**  
**Tampa, FL 33634**

**June 18, 2004**

The views, opinions, and/or findings contained in the report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

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# ***USA Environmental, Inc.***

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February 18, 2005

USA-CE-OERS-1068

US Army Engineering and Support Center, Huntsville  
ATTN: CEHNC-CT-E (Ms. Lydia Tadesse)  
4820 University Square  
Huntsville, AL 35816-1822

RE: Contract Number DACA87-00-D-0036, Task Order 0026, Time Critical OE Removal Action at the Blalock and Riley Properties, Former Camp Butner, Butner, North Carolina

Dear Ms. Tadesse;

In accordance with the Task Order 0026 Scope of Work and Contract Requirements, USA Environmental, Inc. is submitting the Final Report. No comments were received on the draft report.

Distribution and number of copies are in accordance with the Scope of Work.

USA Environmental, Inc. is pleased that the US Army Engineering and Support Center, Huntsville selected us to perform this work and we look forward to working with USAESCH on future projects.

Sincerely,



George R. Spencer  
Operations Manager

Copies/Distribution:

- 2 CD-ROM - Commander, U.S. Army Engineering and Support Center, Huntsville, ATTN: (Steuart, OE-DC), 4820 University Square, Huntsville, AL 35816-1822
- 2 CD-ROM - Commander, U.S. Army Corps of Engineers Wilmington District, ATTN: Mr. John Baden, 69 Darlington Ave, Wilmington, NC 28403
- 1 Copy - Commander, U.S. Army Corps of Engineers, South Atlantic, ATTN: Ms. Sharon Taylor (CESAD-PM-H), 77 Forsyth Street, Atlanta, GA 30336-6801
- 1 Copy - Headquarters, U.S. Army Corps of Engineers, ATTN: Mr. Dale Moeller (CEMP-RF), 441 G Street N.W., Washington, DC 20314-1000
- 1 Copy - Commander, U.S. Army 18<sup>th</sup> Explosive Ordnance Disposal Company, Building 0-9040, McRidge Rd., Fort Bragg, NC 28307-5000

**Final Report**

**Time Critical OE Removal Action**

At

**The Blalock and Riley Properties  
Former Camp Butner, Butner, NC  
DACA87-00-D-0036  
Task Order: 0026  
Project No: I04NC000902**

Prepared For

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

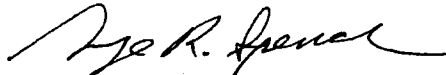
And

**US Army Corps of Engineers Wilmington District**

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Approved By



**John Q. Adams  
Vice President**

**June 18, 2004**

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**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION**  
**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

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- Appendix C:** Site Photographs
- Appendix D:** Maps and Drawings
- Appendix E:** Quality Control/Quality Assurance Documentation
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- Appendix G:** Documentation

ACRONYMS AND ABBREVIATIONS

AEDA	Ammunition, Explosives, and Dangerous Articles
ANSI	American National Standards Institute
APC	Armor-Piercing, Capped
AR	Army Regulation
ARARs	Applicable, Relevant, Appropriate, Requirements
ASR	Archives Search Report
BATF	Bureau of Alcohol, Tobacco, and Firearms
Cal	Caliber
CEGS	Corps of Engineers Guide Specifications
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
COE	Corps of Engineers
CWM	Chemical Warfare Material
DERP	Defense Environmental Restoration Program
DID	Data Item Description
DOD	Department of Defense
DOT	Department of Transportation
DQO	Data Quality Objective
DRMO	Defense Reutilization and Marketing Office
EM	Engineer Manual
EPA	Environmental Protection Agency
ER	Engineer Regulation
ES	Emergency Standard
ESS	Explosive Safety Submission
EOD	Explosive Ordnance Disposal
°F	Degrees Fahrenheit
FUDS	Formerly Used Defense Sites
GFE	Government Furnished Equipment
GIS	Geographical Information System
GP	General Purpose
GPS	Global Positional System
GQA	Government Quality Assurance
HE	High Explosive
HEAT	High Explosive Antitank
HSP	Health and Safety Program
HTRW	Hazardous, Toxic, and Radioactive Waste
HTW	Hazardous and Toxic Waste
HW	Hazardous Waste
Lb.	Pound
IAW	In accordance with
ID	Identification
IME	Institute of Makers of Explosives
In. (")	inch
mm	millimeter
Mph	miles per hour
MFR	Memorandum of Record
MPM	Most Probable Munition
MSD	Minimum Separation Distance
MSDS	Material Safety Data Sheets
N/A	Not Applicable
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Protection Act

NIOSH	National Institute for Occupational Safety and Health
NPL	National Priority List
NTP	Notice to Proceed
OE	Ordnance and Explosives
OERIA	Ordnance and Explosive Risk Impact Assessment
ORS	Ordnance Related Scrap
OSHA	Occupational Safety and Health Administration
OSIC	On-Scene-Incident-Commander
PAO	Public Affairs Office
PAM	Pamphlet
PEL	Permissible Exposure Limits
PEP	Property Equipment Plan
PC	Personal computer
PM	Project Manager
POC	Point of Contact
PPE	Personal Protective Equipment
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RA	Removal Action
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SOW	Statement Of Work/Scope of Work
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
SSR	Site Specific Report
SUXOS	Senior UXO Supervisor
SW	Surface Water
TCRA	Time Critical Removal Action
TEC	Topographical Engineer Center
TNT	2,4,6-trinitrotoluene
TO	Task Order
TP	Target Practice
TP-T	Target Practice with Tracer
TSDF	Treatment, Storage, or Disposal Facility
USA	USA Environmental, Inc.
USACE	U.S. Army Corps of Engineers
USA	USA Environmental, Inc.
USAESCH	U.S. Army Engineering and Support Center, Huntsville
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
USGS	United States Geological Survey
UXO	Unexploded Ordnance
UXOSO	UXO Safety Officer
UXOQCS	UXO Quality Control Specialist
WDCMP	Work, Data, and Cost Management Plan
WP	Work Plan
WP	White Phosphorus

## CHAPTER 1: INTRODUCTION

### 1.0 INTRODUCTION

This section outlines the project regulatory authority and work performed by USA Environmental, Inc. (USA) for the U.S. Army Engineering and Support Center, Huntsville (USAESCH) and describes the Time Critical Removal Action (TCRA) at former Camp Butner, Butner, North Carolina. All activities involving work in areas potentially containing unexploded ordnance (UXO) hazards were conducted in full compliance with the US Army Corps of Engineers (USACE), Department of the Army (DA), and Department of Defense (DOD) requirements regarding personnel, equipment, and procedures. All site operations were in accordance with the USAESCH Scope of Work (SOW) provided in Appendix A (dated 5 March 2004). All site operations were performed consistent with Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan (NCP) (Sections 300.120(d) and 300.400(e)(1)).

### 1.1 BACKGROUND

The former Camp Butner, consisting of 40,384.39 acres, is located in Butner, North Carolina 15 miles northeast of Durham and adjacent to Stem, North Carolina. The Camp encompasses portions of Person, Durham, and Granville Counties. The Lakeview Subdivision, one area of concern for this TCRA, is located to the immediate east of the southeastern corner of the North Carolina National Guard (NCNG) property between Roberts Chapel Road and East Range Road. The two specific sites of concern are:

The Riley Property, part of Lake View Subdivision, a community within the boundaries of the former Camp Butner. A TCRA was done in 2003 on 26 acres of the subdivision and on part of the Riley property. The other part of the Riley property was inadvertently skipped in the original TCRA. No UXO has been found on the Riley property to date.

The Blalock property is several miles away from the subdivision. The Blalock property is in the target area of heavy artillery, up to 155mm artillery. It is very close to what was called the Mock German Village Target. The Blalock's property consists of 10 acres, of which approximately 7.5 acres is wooded with the remaining being their home, garage, and yard. The property owners purchased a metal detector and found a live 155mm White Phosphorus projectile in their yard adjacent to a garage in September 2002, which was subsequently disposed of by EOD from Fort Bragg, NC. At the time of the find, both Wilmington District and Huntsville Center were notified. The Blalock's then found a 105 HE round on one of their walking trails several months later.

The action for this expanded TCRA was selected targets at the Riley property and targets on approximately 2.5 acres of property surrounding the Blalock residence. The property was geophysically mapped and analyzed (see Appendix A SOW).

### 1.2 AUTHORITY

USA was tasked under Contract Number DACA87-00-D-0036, Task Order 0026 to perform a TCRA. OE is a safety hazard and may constitute an eminent and substantial threat to the local populace and site personnel. USA performed the work associated with this TCRA in a manner consistent with USACE, DA, and DOD requirements. USA performed this TCRA in accordance with all applicable laws and regulations 29 CFR 1910.120 applied to all actions taken at this site. The effort required under this SOW falls under the NCP, Section 300.



### **1.3 TECHNICAL SCOPE OF WORK**

The type of work executed under this TCRA was an OE Removal action to depth of Government marked anomalies. Specific types of work executed under this WP include:

- Investigating potential UXO/OE anomaly targets using “Mag and Dig” search procedures. Anomaly targets were investigated outward to a 1.5 foot radius from the center pin flag placed by the Government;
- Investigation, identification and removal of subsurface anomalies to depth;
- Documentation of anomaly source;
- Disposal of UXO, OE and OE related scrap.

The following were tasks required by the SOW.

- Task 4: Removal Action Work Plan (WP);
- Task 10: Intrusive Investigations;
- Task 11: Removal Report;
- Task 12: Project Management

#### **1.3.1 TASK 4: REMOVAL ACTION WORK PLAN**

USA submitted a Draft Work Plan April 30, 2004 to the USAESCH. USA received comments and submitted the Final Work Plan May 7, 2004. USA received WP approval and notice to proceed (NTP) May 11, 2004.

#### **1.3.2 TASK 10: INTRUSIVE INVESTIGATIONS**

USA mobilized the Senior UXO Supervisor (SUXOS) and the UXO Quality Control Specialist (UXOQCS) to Camp Butner on May 17, 2004. The additional UXO personnel including the UXO Safety Officer (UXOSO), 2 UXO Technicians III and 2 UXO Technicians II mobilized on May 18, 2004. Intrusive investigations began on May 19 at the Riley property and completed on May 21 at the Blalock property. No OE was encountered.

##### **1.3.2.1 Quality Control and Quality Assurance**

USA performed Quality Control (QC) inspections throughout the TCRA operations. These inspections consisted of daily inspections of operational activities and formal inspections of completed work. Daily inspections included checks of maintenance and calibration procedures, and compliance with the WP. Following completion of the anomaly investigations, the UXO Quality Control Specialist (UXOQCS) performed a QC inspection of the excavations. Upon completion of the QC inspections the USACE Safety Specialist performed Quality Assurance (QA) inspections. All Areas and grids investigated passed QA inspection (see Appendix E) by the Government.

##### **1.3.2.2 Final Disposition of AEDA/Range Residue**

USA inspected, certified, packaged, and shipped OE-related scrap (ORS) for final disposal (see Appendix G).

#### **1.3.3 TASK 11: REMOVAL REPORT**

This Final Report is prepared in accordance with the specifications outlined in paragraph 5.0 of the SOW

and Data Item Description (DID) OE-030.01.

**1.3.4 TASK 12: PROJECT MANAGEMENT**

Upon contract award USA assigned a Project Manager (PM) to manage the project, maintain project control and meet reporting requirements. This individual performed these functions from USA's Corporate Headquarters, located in Tampa, FL. Throughout the project the PM provided coordination with the Government and local Butner, NC agencies, assigned resources, and managed all task activities to ensure a safe and efficient completion of the project.

## CHAPTER 2: DISCUSSION

### 2.0 DISCUSSION

This section describes the procedures used to execute the work associated with Contract Number DACA87-00-D-0036, Task Order 0026. USA performed operations at the former Camp Butner project site in a systematic manner using proven operating techniques and methods. Operations were performed in three distinct phases: Phase 1-Mobilization, Phase 2-Operations, and Phase 3-Demobilization. This chapter describes the activities USA performed during each phase and the methodology used to accomplish these activities.

USA performed operational activities at the former Camp Butner under the supervision and direction of qualified UXO personnel. Non-essential personnel were prohibited from performing operations unless they were accompanied and supervised by a UXO Technician. Throughout operations, USA strictly adhered to the following general practices.

- Operations were conducted only during daylight hours;
- All personnel attended a daily general safety briefing and tailgate safety briefing prior to beginning work on site;
- Visitors received a safety briefing prior to entering the operating areas and were escorted at all times by the SUXOS, UXOSO, or UXOQCS.

### 2.1 PHASE 1, MOBILIZATION

USA mobilized the SUXOS and UXOQCS to the former Camp Butner on May 17, 2004 to begin local coordination and site setup. The remaining USA personnel mobilized on May 18, 2004.

#### 2.1.1 PROJECT EQUIPMENT

During mobilization, USA received, inventoried and inspected equipment dedicated to site operations. USA purchased and/or leased equipment including vehicles and other expendable supplies.

#### 2.1.2 PROJECT OFFICE

Due to the short duration of site operations USA did not establish a project field office.

#### 2.1.3 LOCAL COORDINATION

Prior to USA mobilization to the site the U.S. Army Corps of Engineers, Wilmington District (SAW) notified the affected residents for evacuations on the Riley and Blalock properties (see Appendix G) for planned operations. On site USA again coordinated with the homeowners the day before each day's operations at the sites. USA also coordinated, prior to mobilization, with the Butner Public Safety Office for local law enforcement support during evacuations and excavations.

On May 18, 2004 USA's SUXOS and UXOQCS coordinated with the on-site Field Team Leader and the site OE Safety Specialist from the U.S. Army Engineering and Support Center, Huntsville (USAESCH) to assess the site; and Butner, NC Public Safety Officer, Captain A. Rhew to discuss the Butner Public Safety Division's involvement with road closures and residential evacuations during intrusive investigation operations at the Riley and Blalock properties. The UXOQCS also met with and/or contacted the homeowners in the Lakeview subdivision and Blalock plat whose properties were located within the exclusion zone of the investigation area at the two properties to explain to them the operations that USA

would be conducting at the Riley and Blalock properties and to request that they would evacuate their homes during these operations.

#### 2.1.4 SITE-SPECIFIC TRAINING

USA performed site-specific training for all personnel assigned to this project. The purpose of this training was to ensure that all personnel fully understood the procedures and methods to perform operations at the former Camp Butner, their individual duties and responsibilities, and any and all safety and environmental practices/procedures associated with operations. USA provided the following training:

- Prior to deployment, the SUXOS received operational briefings on his duties and responsibilities, and reviewed the work and safety plans;
- At the site prior to the start of operations, USA teams received most probable munition (MPM) and other ordnance recognition and UXO safety precautions. This training was performed by the SUXOS and UXOSO;
- All personnel received training on the individual equipment they operated while on-site;
- Prior to mobilization, all USA UXO personnel received HAZWOPER 40 hours (or eight hour refresher) training as required.

All UXO personnel on site completed a pre-placement or annual physical examination. The examination complies with the requirements of 29 CFR 1910.120 and all personnel were certified as fit to work by an Occupational Physician certified in Occupational Medicine by the American Board of Preventive Medicine, or who by necessary training and experience is board eligible. All USA personnel on-site were in the USA medical surveillance program.

## 2.2 PHASE 2: REMOVAL ACTION

Prior to mobilization USA coordinated with the Butner Public Safety Office to arrange hiring of two police officers for roadblocks during all excavations. In addition USA coordinated with the local motel for rooms available for any local homeowners who required temporary lodging during evacuations. During the three-day's of evacuations three rooms were used by homeowners at the motel.

### 2.2.1 RILEY PROPERTY INVESTIGATIONS

All USA UXO personnel received a project site-specific overview and operational brief from the SUXOS, a site specific Health and Safety brief from the UXOSO and reviewed the project work plan. The UXOQCS verified that the homes located within exclusion zone (EZ) of the Riley property investigation area were evacuated and the police roadblocks were in place prior to starting intrusive operations.

USA completed the intrusive investigation of the 23 Government-marked anomaly targets on the Riley property, investigating each anomaly to depth at the pin flag location and an area up to 1.5-feet in radius around each marked target. There was no OE or ORS located during the intrusive investigation on the Riley property. USA recorded data and digital pictures (see Appendices B & C) for each of the anomalies investigated on the Riley property. USA's UXOQCS performed an inspection of the work while it was in progress and an inspection of all 23-anomaly target locations upon completion.

Due to the results/findings of the intrusive investigation of the anomaly targets on the Riley property, the USAESCH Site OE Safety Specialist made the decision to check each of the 23 anomaly target locations again with the EM-61. The results revealed no other metallic contacts. All the areas of investigation/excavation at the Riley property were restored to their prior condition and operations were completed and secured at the Riley property.

The same day USA'S UXOQCS met with and/or contacted the homeowners whose properties were located within the EZ of the investigation area at the Blalock property to notify them that USA would be conducting investigations at the Blalock property the following day and to request that they evacuate their homes during these operations.

### 2.2.2 BLALOCK PROPERTY

The morning of May 20, 2004 the UXOQCS verified that the homes that were located within EZ of the Blalock property investigation area were evacuated and police roadblocks in place prior to intrusive operations. One home, barely within the EZ, was occupied and the resident declined to evacuate. After coordination with the USAESCH (see Appendix G) the EZ was reduced to 2,100 feet and UXO Technicians began the intrusive investigation of the 84 Government-marked targets on the Blalock property. USA investigated each anomaly to depth at the pin flag location and searched an area up to 1.5-feet in radius around each marked target. A total of 73 selected anomaly targets were investigated on May 20 and the rest completed the next day. USA's UXOQCS performed an inspection of the work while it was in progress and an inspection of the 73 anomaly targets upon completion.

The morning of May 21, 2004 the UXOQCS again verified that the homes located within EZ of the Blalock property investigation area were evacuated and police roadblocks in place prior to intrusive operations. UXO Technicians continued and completed the intrusive investigation of the remaining 11 Government-marked targets on the Blalock property, investigating each anomaly to depth at the pin flag location and an area up to 1.5-feet in radius around each marked target. USA's UXOQCS performed an inspection of the work while it was in progress and an inspection of the 11 anomaly targets upon completion. USA recorded data and digital pictures for each of the anomalies investigated on the Blalock property (see Appendices B & C). All the areas of investigation/excavation at the Blalock property were restored to their prior condition.

USA's SUXOS and the CEHNC on site OE Safety Specialist certified and verified that all of the recovered ordnance related scrap (ORS) and range residue (RR) to ensure that it was free of explosive materials. The scrap was then shipped off site to Timberline Environmental Services for final disposal. A DOD Form 1348-1A was completed documenting the turn-in/disposal of the ORS and range residue (RR) (see Appendix G). Operations were completed and secured at the Blalock property.

#### 2.2.2.1 Records

The UXO Team Leader prepared and maintained a detailed accounting of activities performed at each property. The Daily Operations Record included information pertaining to the following.

- The date and time operations began;
- The date and time operations completed;
- The location, number, type, and description of UXO and OE items encountered;
- The location and number of subsurface anomalies investigated;
- An estimated weight, in pounds, of the ORS and other RR removed from the sites.

#### 2.2.3 PERSONNEL

Investigation teams consisted of a UXO Technician III and a UXO Technicians II.

#### 2.2.4 EQUIPMENT

The equipment requirements for this activity included:

- Schonstedt GA-52CX;
- Miscellaneous common hand tools (i.e. shovels, trowels, etc.);
- Forms and logbooks to record activities and contamination levels.

### 2.2.5 QUALITY CONTROL AND QUALITY ASSURANCE

Throughout operations USA performed QC inspections. These inspections consisted of daily inspections of operational activities and formal inspections of completed work. Daily inspections included checks of maintenance and calibration procedures, and compliance with the WP (see Chapter 4, Tests). Following completion of investigations, the UXOQCS performed a formal inspection. Upon passing the QC inspection the USACE Safety Specialist inspected the excavations for QA. All target locations cleared and intrusively investigated passed QA inspection (see Appendix E) by the Government.

### 2.2.6 OE/UXO DISPOSAL

No OE or UXO was encountered during investigations at the Riley and Blalock properties.

### 2.2.7 REMOVAL AND DISPOSAL OF SCRAP METAL

Within or adjacent to each operating area, the UXO Teams established temporary scrap collection points. During operations, scrap items that were free of explosives were placed into these collection points. The UXO Technician III team leader and a UXO Technician II inspected scrap loaded for disposal from the collection points prior to transfer to scrap containers. As the material was loaded, the SUXOS and UXOQCS performed a second inspection of the material to ensure it was free of explosives and other hazardous materials.

The SUXOS prepared and signed (see Appendix G) as certifier a DD Form 1348-1A and the USACE OE Safety Specialist signed as verifier with the following statement:

*"This certifies that the AEDA residue, Range Residue, and/or Explosive Contaminated Property listed has been 100 percent properly inspected and to the best of our knowledge and belief are inert and/or free of explosives or related material."*

USA shipped the scrap to Timberline Environmental Services (Timberline) for demilitarization and disposal of the ORS. Timberline provided USA with certification that the material would be shredded, smelted or crushed prior to release for sale.

## 2.3 PHASE 3: DEMOBILIZATION

During this phase, USA removed its operational capability from the area and reallocated its personnel and equipment to other projects. Following the completion of operations, all leased/rented equipment was returned to vendors and USA property returned to USA-Tampa.

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## CHAPTER 3

### 3.0 DOCUMENTATION

This section discusses the documentation generated during the former Camp Butner Project, operating procedures/issues, and lessons learned during conduct of operations at the project site. All significant correspondence such as approvals and pertinent correspondence are in Appendix G.

#### 3.1.1 EVACUATIONS

Prior to site operations the Wilmington District notified affected residents at the Riley and Blalock properties. USA again notified each of the residents the day prior to investigations (see Appendix G). The process went smoothly except for one resident in the Blalock EZ who worked nights and slept days. As the affected property was at the extreme limits of the 2,577 foot 155mm EZ, calculations by the USAESCH Structural Branch (Appendix G) reduced the EZ based on the terrain and heavy forests to 2,100 feet. In this case the issue had minimal impact on the overall operation and USA was able to complete all investigations in a timely manner.

##### 3.1.1.1 Lessons Learned

Evacuation coordination should entail face-to-face notification to ensure that affected residents receive the information and determine if and when there could be a conflict.

#### 3.1.2 TARGET MARKING & INVESTIGATIONS

The Government marked targets for investigation during USA's mobilization Phase. The targets were marked with green pin flags with each have a unique identifying number (see Appendix B). During investigations some of the marked locations were difficult to locate in heavy vegetation due to the green flags.

##### 3.1.2.1 Lessons Learned

In vegetated areas marking colors other than green should be used.

#### 3.1.3 SCRAP TURN-IN

ORS turn-in and disposal documentation is contained in Appendix G.

#### 3.1.4 QA/QC DOCUMENTATION

The UXOQCS performed inspections and or audits at random (see Appendix E), with unscheduled checks of the site to ensure personnel accomplished all work as specified in the Work Plan. The UXOQCS checked 107 target locations and all were checked and accepted by the Government QA.

#### 3.1.5 DAILY LOGS

The SUXOS maintained a Daily Operations Summary of all site operations at the former Camp Butner sites; copies are included in Appendix F.

## CHAPTER 4

### 4.0 TESTS

This Chapter details the procedures and methods that USA used at the former Camp Butner project site and addresses equipment testing and calibration, QC inspections and audits, and reporting procedures. Throughout site operations the UXOQCS performed QC checks of equipment, procedures and performance.

### 4.1 INSTRUMENT AND EQUIPMENT TESTING, CALIBRATION AND MAINTENANCE

#### 4.1.1 TESTING PROCEDURES AND FREQUENCY

Instruments and equipment, such as navigational, data analysis and transfer systems, used to gather and generate site data were tested with sufficient frequency and in such a manner as to ensure that accuracy and reproducibility of results are consistent with the manufacture's specifications.

The method performed for measuring the instrument response was conducted at the start of each workday, over a test area, and comparing that response and position to a known response and position recorded prior to the instruments initial placement into service. Instruments or equipment failing to meet the standard were repaired, recalibrated, or replaced. Replaced instruments or equipment met the same specifications for accuracy and precision as the item removed from service. Items such as cellular telephones and radios were tested for serviceability at the start of each workday.

#### 4.1.2 ROUTINE EQUIPMENT CHECKS

Each Schonstedt GA-52CX was tested each workday prior to being placed into service. This test included a functions check (described below), 360-degree spin check (described below), and the locating of selected anomalies within the test plot. Selected anomalies were seed items that met the size and depth requirements necessary to determine the serviceability of the instrument. Instruments failing this test were repaired or replaced as directed by the SUXOS or UXOQCS.

Moving the on/off/volume/range selector switches through their various positions and determining their serviceability/functionality accomplished a functions check. A 360 degree spin check was accomplished by placing the instrument on the most sensitive setting, vertical, with the sensor (probe) down on an anomaly free area and slowly rotate the instrument 360 degrees while listening for a change in tone that would be equivalent to an known anomaly detection (e.g. selected seed item). If no equivalent tone occurs the instrument was considered serviceable used for detection operations, if an equivalent tone is heard the instrument was considered non-serviceable and repaired or replaced.

#### 4.1.3 CALIBRATION

Instruments and equipment requiring calibration or recalibration was accomplished in accordance with the manufacture's recommendation or owner's manual.

#### 4.1.4 MAINTENANCE

Scheduled maintenance was performed in accordance with the manufactures/owners recommendation or owner's manual for equipment requiring regular upkeep. This equipment included:

- Vehicles;



- Personal Protective Equipment (PPE);
- Communications Equipment;
- Handheld Magnetometers;
- Emergency Equipment.

#### 4.2 QUALITY CONTROL

##### 4.2.1 HANDHELD MAGNETIC LOCATOR (SCHONSTEDT GA-52CX)

A QC survey was performed using a handheld locator at each target location investigated.

##### 4.2.2 FAILURE CRITERIA

The failure criterion was any metallic item remaining within a 1.5-foot radius of Government-marked target locations.

##### 4.2.3 AMMUNITION, EXPLOSIVES, AND DANGEROUS ARTICLES AND RANGE RESIDUE

AEDA and range residue was inspected prior to release for disposal. This property was 100% properly inspected in accordance with the approved WP. Dual signatures for certifying and verifying the property were required on the DD Form 1348-1a. The UXOQCS ensured that procedures were followed which preclude any explosive or energetic material from being released to the public and required documentation is maintained on file for inspection purposes.

#### 4.3 QUALITY CONTROL INSPECTIONS, AUDITS AND REPORTS

The UXOQCS was responsible for the accomplishment of operational checks of instruments and equipment by site personnel and the appropriate log entries made. The UXOQCS performed inspections and or audits at random (see Appendix E), with unscheduled checks of the site to ensure personnel accomplished all work as specified in the Work Plan. The UXOQCS checked 107 target locations and all were checked and accepted by the Government QA.

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CHAPTER 5

5.0 FINANCIAL BREAKDOWN

USA completed the project under a Firm Fixed Price (FFP) task order. The following tables are a recapitulation of the bid and Government accepted costs per task.

5.1 PRICING SUMMARY

Task/Activity	Basis	Cost	Fee	Price
Task 4 -Removal Action Work Plan	FFP	\$ 5,191.84	\$ 415.35	\$ 5,607.19
Task 10 - Mobilization/Demobilization	FFP	\$10,138.12	\$ 811.05	\$10,949.17
Task 10 - Intrusive Investigations	FFP	\$37,467.84	\$2,997.44	\$40,465.28
Task 11 - Removal Report	FFP	\$ 3,553.24	\$ 284.26	\$ 3,837.50
Task 12 - Project Management	FFP	\$ 1,237.12	\$ 98.97	\$ 1,336.09
<b>Totals</b>		<b>\$57,588.16</b>	<b>\$4,607.07</b>	<b>\$62,195.23</b>

5.1.1 TASK 4 -REMOVAL ACTION WORK PLAN

Labor

Position	# Pers	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Certified Industrial Hygienist	1	8	8	\$ 94.17	\$ 753.36
Project Manager	1	16	16	\$ 77.32	\$1,237.12
Senior UXO Supervisor (0% HPD)	1	16	16	\$ 59.35	\$ 949.60
UXO QC Specialist (0% HPD)	1	8	8	\$ 57.36	\$ 458.88
UXO Safety Officer (0% HPD)	1	8	8	\$ 57.36	\$ 458.88
Subtotal					\$3,857.84

Equipment, Supplies and Subcontracts

Item	Basis	# of Units	\$ Per Unit	Subtotal
Reproduction and Binding (Draft)	Copy	12	\$ 50.00	\$ 600.00
Distribution (Draft Report)	Copy	10	\$ 4.00	\$ 40.00
Reproduction (Changes to Draft)	Copy	13	\$ 50.00	\$ 650.00
Distribution (Changes to Draft)	Copy	11	\$ 4.00	\$ 44.00
Total				\$1,334.00

Summary

Item	Subtotal
Labor	\$ 3,857.84
Equipment and Supplies	\$ 1,334.00
<b>Subtotal</b>	<b>\$ 5,191.84</b>
Proposed Fee @ 8.00%	\$ 415.35
<b>Total</b>	<b>\$ 5,607.19</b>

**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
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**5.1.2 TASK 10 - MOBILIZATION/DEMobilIZATION**

**Labor**

Position	# Pers	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Senior UXO Supervisor (0% HPD)	1	16	16	\$ 59.35	\$ 949.60
UXO Technician III (0% HPD)	2	16	32	\$ 48.75	\$1,560.00
UXO Technician II (0% HPD)	2	16	32	\$ 40.68	\$1,301.76
UXO QC Specialist (0% HPD)	0.5	16	8	\$ 57.36	\$ 458.88
UXO Safety Officer (0% HPD)	0.5	16	8	\$ 57.36	\$ 458.88
<b>Subtotal</b>	<b>6</b>		<b>96</b>		<b>\$4,729.12</b>

**Per Diem and Travel**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Lodging	Day	6	\$ 55.00	\$ 330.00
Meals	Day	12	\$ 23.25	\$ 279.00
Airfare	Round trip	6	\$ 700.00	\$4,200.00
<b>Subtotal</b>				<b>\$4,809.00</b>

**Equipment and Supplies**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Equipment Shipping and Handling	Lump Sum	1	\$ 600.00	\$ 600.00
<b>Total</b>				<b>\$ 600.00</b>

**Summary**

Item	Subtotal
Labor	\$ 4,729.12
Per Diem and Travel	\$ 4,809.00
Equipment and Supplies	\$ 600.00
<b>Subtotal</b>	<b>\$ 10,138.12</b>
Proposed Fee @ 8.00%	\$ 811.05
<b>Total</b>	<b>\$ 10,949.17</b>

**5.1.2.1 Task 10 - Intrusive Investigation (Riley Property)**

**Labor**

Position	# Pers	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Senior UXO Supervisor (8% HPD)	1	20	20	\$ 64.09	\$1,281.80
UXO Technician III (8% HPD)	2	20	40	\$ 52.65	\$2,106.00
UXO Technician II (8% HPD)	2	20	40	\$ 43.94	\$1,757.60
UXO QC Specialist (8% HPD)	0.5	20	10	\$ 61.96	\$ 619.60
UXO Safety Officer (8% HPD)	0.5	20	10	\$ 61.96	\$ 619.60
Local-Hire Security (Police)	2	20	40	\$ 20.00	\$ 800.00
<b>Subtotal</b>			<b>160</b>		<b>\$7,184.60</b>

**Per Diem and Travel**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Lodging	Day	24	\$ 55.00	\$1,320.00
Meals	Day	24	\$ 31.00	\$ 744.00
<b>Subtotal</b>				<b>\$2,064.00</b>

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**Equipment, Supplies and Subcontracts**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Truck 4X4	Week	2	\$ 288.00	\$ 576.00
Truck Pick-Up (Crew Cab)	Week	0.5	\$ 338.00	\$ 169.00
Fuel	Gallon	50	\$ 2.00	\$ 100.00
Handheld Radio	Day	10	\$ 4.25	\$ 42.50
Cellular Telephone	Day	2	\$ 10.29	\$ 20.59
Schonstedt GA-52/CX	Day	10	\$ 6.00	\$ 60.00
Team Operating Equipment	Day	2	\$ 2.85	\$ 5.70
Team Safety Equipment	Day	2	\$ 4.75	\$ 9.50
Miniature Open Front Barricade	Day	1	\$ 30.00	\$ 30.00
MOFB Shipping	Each	2	\$ 300.00	\$ 600.00
Bobcat	Day	1	\$ 120.00	\$ 120.00
Bobcat Delivery/Pickup	Each	2	\$ 120.00	\$ 240.00
Evacuation, Meals & Motel	Day	15	\$ 86.00	\$1,290.00
<b>Total</b>				<b>\$3,263.29</b>

**Summary**

Item	Subtotal
Labor	\$ 7,184.60
Per Diem and Travel	\$ 2,064.00
Equipment and Supplies	\$ 3,263.29
<b>Subtotal</b>	<b>\$ 12,511.89</b>
Proposed Fee @ 8.00%	\$ 1,000.96
<b>Total</b>	<b>\$ 13,512.85</b>

**5.1.2.2 Task 10 - Intrusive Investigation (Blalock Property)**

**Labor**

Position	# Pers	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Senior UXO Supervisor (8% HPD)	1	40	40	\$ 64.09	\$ 2,563.60
UXO Technician III (8% HPD)	2	40	80	\$ 52.65	\$ 4,212.00
UXO Technician II (8% HPD)	2	40	80	\$ 43.94	\$ 3,515.20
UXO QC Specialist (8% HPD)	0.5	40	20	\$ 61.96	\$ 1,239.20
UXO Safety Officer (8% HPD)	0.5	40	20	\$ 61.96	\$ 1,239.20
Local-Hire Security (Police)	2	40	80	\$ 20.00	\$ 1,600.00
<b>Subtotal</b>			<b>320</b>		<b>\$14,369.20</b>

**Per Diem and Travel**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Lodging	Day	42	\$ 55.00	\$2,310.00
Meals	Day	42	\$ 31.00	\$1,302.00
<b>Subtotal</b>				<b>\$3,612.00</b>

**Equipment, Supplies and Subcontracts**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Truck 4X4	Week	4	\$ 288.00	\$1,152.00
Truck Pick-Up (Crew Cab)	Week	2	\$ 338.00	\$ 676.00
Fuel	Gallon	120	\$ 2.00	\$ 240.00
Handheld Radio	Day	8	\$ 4.25	\$ 34.00
Cellular Telephone	Day	8	\$ 10.29	\$ 82.35

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Schonstedt GA-52/CX	Day	20	\$ 6.00	\$ 120.00
Team Operating Equipment	Day	4	\$ 2.85	\$ 11.40
Team Safety Equipment	Day	4	\$ 4.75	\$ 19.00
MHE (Excavator)	Day	4	\$ 225.00	\$ 900.00
MHE Delivery/Pickup	Each	2	\$ 75.00	\$ 150.00
Explosives	Project	1	\$ 800.00	\$ 800.00
Explosives Delivery	Each	3	\$ 500.00	\$1,500.00
Evacuation, Meals & Motel	Day	15	\$ 86.00	\$1,290.00
<b>Total</b>				<b>\$6,974.75</b>

**Summary**

Item	Subtotal
Labor	\$ 14,369.20
Per Diem and Travel	\$ 3,612.00
Equipment and Supplies	\$ 6,974.75
<b>Subtotal</b>	<b>\$ 24,955.95</b>
Proposed Fee @ 8.00%	\$ 1,996.48
<b>Total</b>	<b>\$ 26,952.43</b>

**5.1.3 TASK 11 - REMOVAL REPORT**

**Labor**

Position	# Pers	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Project Manager	1	8	8	\$ 77.32	\$ 618.56
Senior UXO Supervisor (0% HPD)	1	8	8	\$ 59.35	\$ 474.80
UXO Safety Officer (0% HPD)	1	8	8	\$ 57.36	\$ 458.88
<b>Subtotal</b>					<b>\$1,552.24</b>

**Equipment and Supplies**

Item	Basis	# of Units	\$ Per Unit	Subtotal
Reproduction and Binding (Draft)	Copy	12	\$ 75.00	\$ 900.00
Distribution (Draft Report)	Copy	10	\$ 6.00	\$ 60.00
Reproduction (Changes to Draft)	Copy	13	\$ 75.00	\$ 975.00
Distribution (Changes to Draft)	Copy	11	\$ 6.00	\$ 66.00
<b>Total</b>				<b>\$2,001.00</b>

**Summary**

Item	Subtotal
Labor	\$ 1,552.24
Equipment and Supplies	\$ 2,001.00
<b>Subtotal</b>	<b>\$ 3,553.24</b>
Proposed Fee @ 8.00%	\$ 284.26
<b>Total</b>	<b>\$ 3,837.50</b>

FINAL REPORT -- TIME CRITICAL OE REMOVAL ACTION  
 FORMER FORT BUTNER, BUTNER NORTH CAROLINA

5.1.4 TASK 12 - PROJECT MANAGEMENT

**Labor**

Position	# Pers.	Hours Ea	Subtotal Hrs	\$ Per Hr	Subtotal \$
Project Manager	1	16	16	\$77.32	\$1,237.12
<b>Subtotal</b>					<b>\$1,237.12</b>

**Equipment and Supplies**

Item	Basis	# of Units	\$ Per Unit	Subtotal
None				\$ -
<b>Total</b>				<b>\$ -</b>

**Summary**

Item	Subtotal
Labor	\$ 1,237.12
Equipment and Supplies	\$ -
<b>Subtotal</b>	<b>\$ 1,237.12</b>
Proposed Fee @ 8.00%	\$ 98.97
<b>Total</b>	<b>\$ 1,336.09</b>

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## CHAPTER 6

### 6.0 SUMMARY

USA completed all tasks in accordance with the SOW and approved Work Plan safely and efficiently. No UXO or OE was encountered.

### 6.1 REMOVAL AREAS

USA performed the TCRA on two residences, the Riley's and Blalock's, located within the boundaries of the former Camp Butner. Part of the Riley property located within the Lakeview Subdivision was inadvertently skipped during a TCRA performed in 2003 on 26 acres of the Lakeview subdivision; the small portion of the Riley property was cleared under this task order. The Blalock property located in the target area of heavy artillery, up to 155mm artillery consists of ten acres mostly wooded, 2.5 acres of property surrounding the Blalock residence to include their yard was cleared under this task order.

#### 6.1.1 COORDINATION

USA coordinated with the Butner Public Safety Division and hired two of their off duty officers to provide road closures entering into the EZ during intrusive investigation operations at the Riley and Blalock properties. USA also contacted all the homeowners in the Lakeview subdivision and the parcels surrounding the Blalock property that were affected by the proposed EZ for each operating area, to inform the homeowners of the operations being conducted and to coordinate evacuations if necessary. All operations were performed during normal work hours, which lead to very minor interruptions pertaining to the Riley and Blalock families, and the residences affected by the operations and exclusion zones.

#### 6.1.2 EVACUATION

During the times of intrusive operations, USA provided a room at a local hotel for the evacuation of residents who needed a place to stay. During operations at the Riley property, one homeowner utilized the local hotel arrangement for one day; and during two days of operations at the Blalock property, one homeowner utilized the local hotel arrangement for both days.

### 6.2 TARGET INVESTIGATIONS

USA completed the intrusive investigation of all the government-flagged anomalies at the Riley and Blalock properties. Each anomaly target was investigated to depth and outward up to 1.5-foot radius from the center pin flag placed by the government. USA's UXOQCS performed an inspection of all investigated areas once the UXO Team completed their investigation and log the data results for each anomaly.

#### 6.2.1 RILEY PROPERTY

USA investigated twenty-three (23) target locations at the Riley property. All targets investigated and identified were cultural and construction metallic debris (see Appendix B).

#### 6.2.2 BLALOCK PROPERTY

USA investigated eighty-four (84) target locations at the Blalock property. Targets investigated included cultural and construction debris and ORS consisting of: projectile fragmentation; expended 105mm ejection projectile and various components; and small arms cartridge cases (see Appendix B).

**APPENDIX A: SOW**

**A.0 SCOPE OF WORK**

This appendix contains a copy of the Scope of Work for Time Critical Removal Action at the Blalock and Riley properties at Former Camp Butner, Butner, North Carolina, dated 5 March 2004.



**SCOPE OF WORK**  
**for**  
**TIME CRITICAL OE REMOVAL ACTION**  
**At the Blalock and Riley Properties**  
**at**  
**FORMER CAMP BUTNER**  
**BUTNER, NORTH CAROLINA**

**5 March 2004**

**1.0 OBJECTIVE**

The objective of this task order is to perform a Time Critical Ordnance and Explosives Removal Action (TCRA) on two residences at the Former Camp Butner located near Butner, North Carolina. This task order will be to dig Government selected anomalies on the Blalock and Riley properties and complete all other associated tasks involved per this scope of work. These anomalies total 84 on the Blalock property and 23 on the Riley property. This is a firm fixed price contract.

**2.0 INTRODUCTION**

The work required under this Scope of Work (SOW) falls under the Defense Environmental Restoration Program (DERP) and the Formerly Used Defense Site (FUDS) program. Ordnance and explosives (OE) may exist on property that was formerly owned, used, or controlled by the Department of Defense (DOD).

**2.1** Explosive ordnance is a safety hazard and may constitute an imminent and substantial endangerment to site personnel and the local populace, thus the applicable provisions of 29 CFR 1910.120 apply. During this TCRA, it is the Government's intent that the Contractor destroy all OE encountered on-site. The Contractor's work must be performed in a manner consistent with the Comprehensive Environment Response, Compensation, and Liability Act (CERCLA) Section 104, Executive Order No. 12580, and the National Contingency Plan (NCP), Sections 300.120(d) and 300.400(e). All activities involving work in areas potentially containing unexploded

ordnance (UXO) hazards shall be conducted in full compliance with CEHNC, USACE, DA and DOD safety requirements regarding personnel, equipment and procedures and may result in the on-site destruction of UXO.

**2.2** Due to the inherent risk in this type of operation, the Contractor shall be limited to a 40-hour workweek: either five 8-hour days or four 10-hour days. UXO personnel shall not perform OE-related tasks for more than 10 hours per day. The Contractor shall provide at a minimum a UXO Tech II for UXO avoidance escort operations in support of site preparation and surveying. This project does not require an on-site, full time Contract Manager.

**2.3** The site is not suspected to contain Chemical Warfare Materiel (CWM); however, if suspect CWM is encountered during any phase of site activities, the Contractor shall immediately withdraw upwind from the work area, secure the site, and contact the Corps of Engineers, CEHNC OE Safety.

**2.4** Definitions of applicable terms are found in Section C of the basic contract.

### **3.0 BACKGROUND**

**3.1** Camp Butner, a former U.S. Army installation, was located in the north central part of North Carolina in the counties of Granville, Durham and Person. Authorized for construction in 1942, Camp Butner, occupying approximately 40,384 acres, was officially activated in August 1942. Camp Butner was established for training of infantry divisions and miscellaneous artillery and engineer units within the Fourth Services Command, the Army Ground Forces. In addition to the troop cantonment area, the reservation included at least 15 ammunition training ranges, a 1000-inch small arms ammunition range, hand grenade ranges, a gas chamber, flame-thrower training range, a small arms training range and ammunition shipping, receiving, and storage areas. Additionally, Camp Butner supported a large hospital and a prisoner of war camp.

**3.2.1 Site Definition.** There are two sites involved here. The Riley Property is part of

Lake View Subdivision, a community within the boundaries of the former Camp Butner. Live ordnance has been found in this community recently. The Riley's have not found any UXO on their property. A TCRA was done in 2003 on 26 acres of the subdivision and on part of the Riley property. The other part of the Riley property was inadvertently skipped in the original TCRA and this is the reason this small portion of Riley property is to be cleared under this task order.

The other site is the Blalock property several miles away. The Blalock property is in the target area of heavy artillery, up to 155mm artillery. It is very close to what was called the Mock German Village Target. The Blalock's property consists of 10 acres, of which approximately 7.5 acres is wooded with the remaining being their home, garage, and yard. The property owners purchased a metal detector and found a live 155mm White Phosphorus projectile in their yard adjacent to a garage in September 2002, which was subsequently disposed of by EOD from Fort Bragg, NC. At the time of the find, both Wilmington District and Huntsville Center were notified. The Blalocks then found a 105 HE round on one of their walking trails several months later.

The proposed action for this expanded TCRA is approximately 2.5 acres of property surrounding the Blalock residence. The property was geophysically mapped and analyzed. Appendix C is the Mapping results of the Blalock property. Appendix D is the Riley property.

#### **4.0 SPECIFIC REQUIREMENTS**

This TCRA is to clear the anomalies given to the contractor along with their coordinates. The Government will locate the anomaly and place a pin flag where the contractor is to dig. All metal within a 1.5 foot radius of the anomaly coordinate will be removed to depth.

##### **4.1 (TASK 1) POST AWARD SITE VISIT**

This task is not applicable for this Task Order.

##### **4.2 (TASK 2) TECHNICAL PROJECT PLANNING (TPP)**

This task is not applicable for this Task Order.

#### **4.3 (TASK 3) GEOPHYSICAL PROVE-OUT (GPO)**

This task is not applicable for this Task Order. Government personnel will assist the contractor in anomaly reacquisition.

#### **4.4 (TASK 4) REMOVAL ACTION WORK PLAN**

This is a **Firm Fixed Price** task order. The Contractor shall prepare a Removal Action Work Plan (WP) in accordance with Data Item Description (DID) OE-005-01.01, Type II Work Plan except as noted in this sow. WP shall describe the specific work proposed in order to meet the objectives and requirements of this SOW. The previous TCRA work plan used at Lakeview Subdivision is available at [www.projecthost.com](http://www.projecthost.com) and has useful information in it for use on this task order. The WP shall also describe (in specific terms) the policies, organization, objectives, functional activities, Site Specific Health and Safety Plan, Data Quality Objectives (DQO's), OE Investigation, Data Management and specific Contractor Quality Control (QC) activities required to achieve the objectives for this project. The Contractor shall propose and justify methods and procedures that are well suited to the anticipated site conditions. The Contractor shall consider technical requirements for site characterizations as well as safety, security, environmental regulations, endangered species, engineering controls, evacuations, and road closures applicable to this site. The Contractor shall submit a 'Draft', 'Revised Draft' and 'Final' versions of the Work Plan in accordance with this SOW. The WP shall describe the specific work proposed in order to meet the objectives and requirements of this SOW.

#### **4.5 (TASK 5) BRUSH CLEARING**

Not Required

#### **4.6 (TASK 6) LOCATION SURVEYS AND MAPPING**

The Contractor shall document the findings in each of the holes re-acquired by Government Geophysical personnel.

#### **4.7 (TASK 7) GEOPHYSICAL INVESTIGATION AND EVALUATION**

Not used

#### **4.7.1 Investigation and Evaluation**

Not used

#### **4.8 (TASK 8) ESTABLISHMENT AND MANAGEMENT OF GIS**

Not used

#### **4.9 (TASK 9) EXPLOSIVE SAFETY SUBMISSION (ESS)**

Government Furnished

#### **4.10 (TASK 10) INTRUSIVE INVESTIGATIONS**

The contractor shall dig all Government flagged anomalies to depth. Each anomaly target shall be investigated if necessary outward up to 1.5 feet radius from the center pin flag placed by the Government.

##### **4.10.2 OE Inspection and Procedures**

The Contractor shall account for and process all OE and Range Residue for final disposition in accordance with **Appendix A** of this SOW.

##### **4.10.3 Backfilling Excavations**

All access/excavation/detonation holes shall be backfilled by the Contractor to their prior condition. The Contractor shall be responsible for restoration of flowerbeds, shrubbery, and landscaping, if damaged during any site activities.

##### **4.10.4 Quality Control**

The Contractor shall develop a Quality Control (QC) Program that shall ensure a quality product for all aspects of the project, which includes any work performed by a subcontractor on the project. The Contractors' QC procedures for all phase and types of work should be included in the WP. The Contractor shall ensure that documentation is maintained and provided in the Removal Report that supports the QC process.

#### **4.10.4.1 UXO Quality Control (QC) Specialist**

The individual performing the UXO QC shall not be involved in the performance of other OE field tasks unless approved by the Huntsville Safety and the Contracting Officer. Due to the small crew size expected on this job, the contractor may request that the QC and Safety be Dual Tasked. The UXO QC Specialist shall meet the requirements as shown DID OE-025.01.

#### **4.10.5 Quality Assurance**

For QC purposes, if an anomaly target is investigated where the Government placed a pin flag and nothing is found within a 1.5 foot radius, the action will be logged and the contractor will continue to the next target. There is no QA failure involved in this task order because the contractor will be digging where directed to dig. If a target is investigated and nothing is found, the government geophysicist will analyze the reasons separate from this scope of work.

#### **4.11 (TASK 11) REMOVAL REPORT.**

The Contractor shall prepare a Site-Specific Final Report in accordance with DID OE-030.01. The Contractor shall submit a 'Draft', 'Revised Draft', and 'Final' versions of the Removal Report in accordance with this SOW.

#### **4.12 (TASK 12) PROJECT MANAGEMENT**

The Contractor shall perform project management activities necessary to maintain project control, to include but not be limited to the following:

**4.12.1 Schedule** The Contractor shall develop and submit for approval, a project schedule. The Contractor shall use the schedule to coordinate evacuations and other interruptions pertaining to the use of the property. The Contractor is responsible for coordination and scheduling of all activities with homeowners within the Lakeview Subdivision and the surrounding vicinity.

#### **4.12.2 Work Task Proposal**

This task is not applicable for this Task Order.

#### **4.12.3 Public Meetings**

Not used

#### **4.12.4 Reports/Minutes, Record of Meetings**

The SUXOS shall be available during normal work hours to support a progress review meeting. The Contractor shall prepare and submit a report/minutes of all meetings attended in accordance with DID OE-045.01.

#### **4.12.5 Telephone Conversations/Correspondence Records**

The Contractor shall keep a record of each phone conversation and written correspondence concerning this Task Order in accordance with DID OE-055.01.

#### **4.12.6 Monthly Status Reports**

This task is not applicable for this Task Order.

#### **4.12.7 Weekly Status Reports**

This task is not applicable for this Task Order.

#### **4.13 (TASK 13) SAMPLING AND ANALYSIS PLAN**

This task is not applicable for this Task Order.

### **5.0 SUBMITTALS AND CORRESPONDENCE**

#### **5.1 Format of Engineering Reports**

Any and all reports and/or plans not covered by a specific DID shall be prepared according to the following guidelines. The front cover of the report or plan shall be prepared in accordance with Attachment 1 of DID OE-030.01 and shall bear the following statement in addition to other requirements. *“The views, opinions, and/or findings contained in the report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentations”*. The cover shall also denote the

version of the report/plan presented (e.g. Draft, Revised Draft, or Final). When drawings are required, data may be combined to reduce the number of drawings. All drawings shall be of engineering quality in drafted form with sufficient detail to show interrelations of major features. The contents and format of the engineering reports shall be arranged in accordance with all pertinent guidance documents. The report/plan shall be typed on standard size of 8-1/2 inch by 11-inch white paper, with drawings other than the construction drawings folded, if necessary, to this size. Chapters shall be numbered sequentially. Within each chapter, the paragraphs shall be numbered sequentially starting with the chapter number. Within each chapter, any figures, tables, and charts shall be numbered sequentially starting with the chapter number. Appendices shall be lettered alphabetically and shall be identified and referenced in the text of the report/plan. Within each appendix, each page shall be numbered sequentially starting with the appendix letter. Every page of the report/plan shall contain a date footer, contract number, task order number, and version (e.g. draft, final, original, change 1, etc) of the report. The report/plan shall be legible and suitable for reproduction. The final version of each report/plan shall also be submitted on CD-ROM in accordance with the other paragraphs of **Section 5.0** and shall include copies of all drawings, data, documents, reports, etc. All data, including raw analytical and electronic data, generated under this task order are the property of the Department of Defense (DOD) and the government has unlimited rights regarding its use.

## **5.2 Computer Files**

All final text files generated by the Contractor under this contract shall be furnished to the Contracting Officer in Microsoft Word 6.0 or higher software. Spreadsheets shall be in Microsoft EXCEL. All final CADD drawings shall be in Microstation 95 or higher. Any GIS data shall be in ESRI (Arcview/Arcinfo) format.

## **5.3 HTML Deliverables**

In addition to the paper and digital copies of submittals, the final version of any and all reports, drawings, documents, data, etc. and/or plans shall be submitted, uncompressed, on CD ROM in hypertext markup language (HTML) along with a linked table of contents, linked tables, linked



photographs, linked graphs and linked figures, all of which shall be suitable for viewing on the Internet.

#### **5.4 Review Comments**

Various reviewers will have the opportunity to review submittals made by the Contractor under this contract. The Contractor shall review all comments received through the CEHNC Project Manager and evaluate their appropriateness based upon their merit and the requirements of the SOW. The Contractor shall issue to the Project Manager (PM) a formal, annotated response to each in accordance with the established schedule in this SOW. The Contractor shall not non-concur with a comment without discussing the comment with the CEHNC PM. If the PM is not available then the Contractor shall contact the Technical Manager.

#### **5.5 Identification of Responsible Personnel**

Each report shall identify the specific members and title of the Contractor's staff and subcontractors that had significant and specific input into the preparation or review of the report.

#### **5.6 Public Affairs**

The Contractor shall not publicly disclose any data generated or reviewed under this contract. The Contractor shall refer all requests for information concerning site conditions to the local Corps of Engineers Public Affairs Office (Wilmington District) with a copy furnished to the CEHNC PM. Reports and data generated under this contract are the property of the DOD and distribution to any other source by the Contractor, unless authorized by the Contracting Officer, is prohibited.

#### **5.7 Submittals**

The contractor shall furnish copies of the plans, maps, and reports as identified in **Section 5.8**, or as specified in this SOW, to each addressee listed below in the quantities indicated. The Contractor shall submit a CD, with each copy, of the Final version of all submittals (WP, Reports, Plans, etc) in accordance with **Section 5.2**. The Contractor shall submit 1 copy on CD of the Final Versions of all submittals (WP, Reports, Plans, etc) in accordance with **Section 5.3**.

For purposes of the SOW all days are considered calendar days. In addition to the CDs required above the column below shows recipients in which the Draft and Draft Final version must be submitted to also. This shall also be in accordance with **Section 5.2**.

ADDRESSEE	COPIES	CD
Commander US Army Engineering and Support Center, Huntsville Attn: Mr. Roland Belew (CEHNC-OE-DC) 4820 University Square Huntsville, AL 35816-1822	4	2
Commander US Army Corps of Engineers Wilmington District Attn: Mr. John Baden Wilmington, NC	4	2
Commander US Army Corps of Engineers, South Atlantic Attn: Ms. Sharon Taylor (CESAD-PM-H) 77 Forsyth Street Atlanta, GA 30336-6801	1 Final Hardcopy Transmittal	
Commander Headquarters, US Army Corps of Engineers Attn: Mr. Dale Moeller (CEMP-RF) 441 G Street N.W Washington, DC 20314-1000	1 Final Hardcopy Transmittal	
Commander U.S. Army 18 <sup>th</sup> Explosive Ordnance Disposal Company Fort Bragg, N.C.	1 Final Hardcopy Transmittal	

**5.8 Submittals and Due Dates**

SUBMITTAL	DUE DATES
Site Visit Report (if required)	NA
Draft Work Plan	15 working days after award
Government Review	Within 5 working days of receipt of WP

Revised Work Plan	5 working days after receipt of comments
Gov Back Check	Within 2 Days of Receipt of Revised WP
Minor Revision to Final Work Plan	1 days after receipt of back check comments
Draft Removal Report	15 days after completion of fieldwork
Revised Draft Removal Report	15 days after completion of fieldwork
Final Removal Report	15 days after receipt of comments
Final Electronic Copies of all Documents, Plans, Data, Reports, etc.	Provided after approval of Final Report

## **6.0 REFERENCES:**

**6.1** Refer to 'Basic Contract'.

**6.2** 29CFR 1910, Occupational Safety and Health Administration (OSHA) General Industry Standards

**6.3** 29CFR 1926, Construction Industry Standards

**6.4** 29CFR 1910.120/29CFR 1926.65 - Hazardous Waste Site Operations and Emergency Response

**6.5** 40CFR 300, National Contingency Plan

**6.6** NIOSH/OSHA/USCG/EPA (DHHS(NIOSH) Publication #85-115) (OCT 85), Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities

**6.7** Federal Acquisition Regulation (FAR) Clause 52.236.13, Accident Prevention

**6.8** EM 385-1-1 (3 SEP 96), US Army Corps of Engineers Safety and Health Requirements Manual

**6.9** EM 1110-1-4009 (23 June 2000) Engineering and Design – Ordnance and Explosives Response

**6.10** EP 1110-1-18 (24 June 2000) Engineering and Design – Ordnance and Explosives Response

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

**6.12** Interim Guidance Document 01-01, 27 March 2001, Ordnance and Explosives Risk Impact Assessment

**6.13** Interim Guidance Document 01-02 27 June 2001 Implementation of Technical Project Planning (TPP) For Ordnance and Explosives (OE) Formerly Used Defense Sites (FUDS) Projects

### **6.14 Data Item Descriptions**

The following Data Item Descriptions are part of this contract and are available at the following:

<http://www.hnd.usace.army.mil/oew/dids.asp>

## Data Item Descriptions

<b>Number</b>	<b>Title</b>
DID OE-005-01.01	Type II Work Plan
DID OE-005-02.01	Technical Management Plan
DID OE-005-03.01	Explosives Management Plan
DID OE-005-04.01	Explosives Siting Plan
DID OE-005-05.01	Geophysical Investigation Plan
DID OE-005-06.01	Site Safety and Health Plan
DID OE-005-07.01	Location Surveys and Mapping Plan
DID OE-005-08.01	Work, Data, and Cost Management Plan
DID OE-005-09.01	Property Management Plan
DID OE-005-10.01	Sampling and Analysis Plan
DID OE-005-11.01	Quality Control Plan
DID OE-005-12.01	Environmental Protection Plan
DID OE-005-13.01	Investigative Derived Waste Plan
DID OE-005-14.01	Geographical Information System Plan
DID OE-010.01	Engineering Evaluation/Cost Analysis (EE/CA) Report
DID OE-015.01	Accident/Incident Reports
DID OE-025.01	Personnel/Work Standards
DID OE-030.01	Site Specific Final Report
DID OE-040.01	Disposal Feasibility Report
DID OE-045.01	Report/Minutes, Record of Meetings
DID OE-055.01	Telephone Conversations/Correspondence Records
DID OE-080.01	Monthly Status Report
DID OE-085.01	Weekly Status Report
DID OE-090.01	Ordnance Filler Report
DID OE-100.01	Analysis of Institutional Controls

## APPENDIX A

CEHNC-OE

10 April 2003

### Corps of Engineers Contractors Ordnance and Explosive (OE) , Range Residue (RR) Inspection, Certification, and Final Disposition Procedures

#### I. OE & RR Inspection – Contractor Responsibilities and Procedures

1. The U.S. Army Corps of Engineers (USACE) contractors executing projects will comply with the following procedures for processing OE and Range Residue for final disposition as scrap metal. The objective of these procedures is to ensure that an inspection procedure of the exterior and interior surfaces of all recovered items is in place to ensure these items do not present an explosive hazard. These USACE contractor responsibilities and procedures will be contained in the project work plan.

- a. Unexploded Ordnance (UXO) Sweep Personnel will only mark suspected items and will not be allowed to perform any assessment of a suspect item to determine its status.
- b. Unexploded Ordnance (UXO) Tech I will only tentatively identify a located item as scrap or OE.
- c. UXO Technician II will:
  - (1) Inspect each item as it is recovered and determine the following:
    - Is the item a UXO or a component of a military munitions?
    - Does the item contain explosives hazards or other dangerous fillers?
    - Does the item require detonation?
    - Does the item require demilitarization (demil) or venting to expose other dangerous fillers?
    - Does the item require draining of engine fluids, illuminating dials and other visible liquid hazardous, toxic or radiological waste (HTRW) materials?
  - (2) Segregate items requiring demil or venting procedures from those items ready for certification.

- (3) Items found to contain explosives hazards or other dangerous fillers will be processed in accordance with applicable procedures.

d. UXO Technician III will:

- (1) Inspect recovered items to determine if free of explosives hazards or other dangerous fillers and engine fluids, illuminating dials and other visible liquid HTRW materials?
- (2) Supervise detonation of items found to contain explosive hazards or other dangerous fillers and venting/demil procedures.
- (3) Supervise the consolidation of recovered scrap metal for containerization and sealing.

e. UXO Quality Control (QC) Specialist will:

- (1) Conduct daily audits of the procedures used by UXO teams and individuals for processing OE or Range Residue.
- (2) Perform and document, a minimum 10%, random sampling (by pieces, volume or area) of all scrap metal collected from the various teams to ensure no items with explosive hazards, engine fluids, illuminating dials and other visible liquid HTRW materials are identified as scrap metal as required for completion of the Requisition and Turn-in Document, DD Form 1348-1A.

f. UXO Site Safety Officer (UXOSO) will:

- (1) Ensure the specific procedures and responsibilities for processing OE and Range Residue for certification as scrap metal is being followed, performed safely, consistent with applicable regulations, and in accordance with the USACE approved project work plan.
- (2) Will perform random checks of processed OE and Range Residue to ensure items being identified as scrap are free from any explosive hazard engine fluids, illuminating dials and other visible liquid HTRW materials.

g. Senior UXO Supervisor will:

- (1) Be responsible for ensuring work and Quality Control (QC) Plans specify the procedures and responsibilities for processing OE and Range Residue for the final disposition as scrap metal.

- (2) Ensure a Requisition and Turn-in Document, DD Form 1348-1A is completed for all scrap metal to be transferred for final disposition.
- (3) Perform random checks to satisfy that the OE or range residue is free from explosive hazards necessary to complete the Form, DD 1348-1A.
- (4) Certify all scrap metal generated from OE or Range Residue as free of explosive hazards, engine fluids, illuminating dials and other visible liquid HTRW materials.
- (5) Be responsible for ensuring that these inspected materials are secured in a closed, labeled and sealed container and documented as follows;
  - The container will be closed and clearly labeled on the outside with the following information: The first container will be labeled with a unique identification that will start with **USACE/Installation Name/Contractor's Name/0001/Seal's unique identification** and continue sequentially.
  - The container will be closed in such a manner that a seal must be broken in order to open the container. A seal will bear the same unique identification number as the container or the container will be clearly marked with the seal's identification if different from the container.
  - A documented description of the container will be provide by the contractor with the following information for each container; contents, weight of container; location where OE scrap was obtained; name of contractor, names of certifying and verifying individuals; unique container identification; and seal identification, if required (see paragraph I. 1.g. (5)). The contractor in a separate section of the final report will also provide these documents.

## **II. OE Scrap Certification and Verification**

1. The contractor will ensure that scrap metal generated from OE or Range Clearance is properly inspected in accordance with the procedures in I. above. Only personnel who are qualified UXO personnel per USACE's Contract Data Item Description (DID) OE-025 will perform these inspections. The Senior UXO Supervisor will certify and the USACE's OE Safety Specialist will verify that the scrap metal is free of explosive hazards.
2. DD form 1348-1A will be used as certification/verification documentation. All DD 1348-1A must clearly show the typed or printed names of the contractor's Senior UXO Supervisor and the USACE's OE Safety Specialist, organization, signature, and contractor's home office and field office phone number(s) of the persons certifying and verifying the scrap metal.



- a. Local directives and agreements may supplement these procedures. Coordination with the local concerns will identify any desired or requested supplementation to these procedures.
- b. In addition to the data elements required and any locally agreed to directives, the DD 1348-1A must clearly indicate the following for scrap metal:
  - (1) Basic material content (Type of metal; e.g., steel or mixed)
  - (2) Estimated weight
  - (3) Unique identification of each of the containers and seals stated as being turned over.
  - (4) Location where OE scrap was obtained.
  - (5) Seal identification, if different from the unique identification of the sealed container.
- c. The following certification/verification will be entered on each DD 1348-1A for turn over of scrap and will be signed by the Senior UXO Supervisor and the USACE OE Safety Specialist.

"This certifies that the material listed has been 100 percent properly inspected and, to the best of our knowledge and belief, are free of explosive hazards, engine fluids, illuminating dials and other visible liquid HTRW materials."

### **III Maintaining The Chain Of Custody And Final Disposition**

The contractor, in coordination with the Corps of Engineers, will arrange for maintaining the chain of custody and final disposition of the certified and verified materials. The certified and verified material will only be released to an organization that will:

- a. Upon receiving the unopened labeled containers each with its unique identified and unbroken seal ensuring a continued chained of custody, and after reviewing and concurring with all the provided supporting documentation, sign for having received and agreeing with the provided documentation that the sealed containers contained no explosive hazards when received. This will be signed on company letterhead and stating that the contents of these sealed containers will not be sold, traded or otherwise given to another party until the contents have been smelted, shredded, or flashed and are only identifiable by their basic content.

- b. Send notification and supporting documentation to the sealed container-generating contractor documenting the contents of the sealed containers have been smelted and are now only identifiable by their basic content.
- c. This document will be incorporated by the contractor into the final report as documentation for supporting the final disposition of this scrap metal.

## APPENDIX B

Trip Report of Huntsville Personnel  
Who Mapped the Blalock and Riley Property  
Includes survey coordinates for each property

Sep 30, 2003

### MEMORANDUM FOR RECORD

SUBJECT: Trip Report for Butner In-house Geophysical Mapping of Riley and Blalock Properties – June 24 through 26, 2003

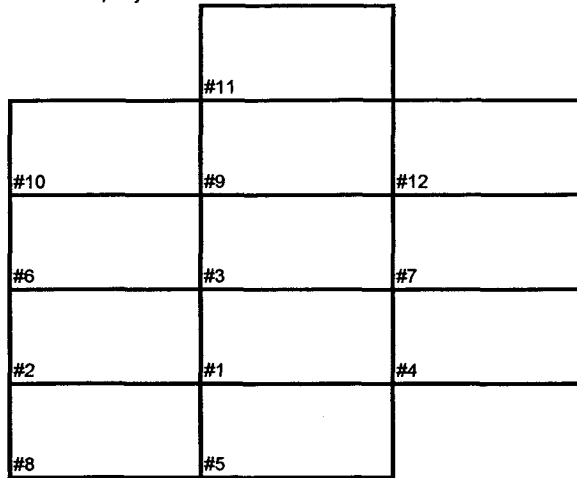
1. On 24 June 2003, Dan Plugge and Bob Selfridge from the Huntsville Center and Mike Blair of RIS Corporation arrived at the Lakeview Subdivision at 7:00 a.m. to geophysically map portions of the Riley property using a towed EM 61 MK II geophysical instrument integrated with an USRADS positioning system. A survey crew from Tim Newcomb Land Surveyors arrived shortly thereafter to relocate existing grids previously installed during a Time Critical Removal Action (TCRA) conducted by Parsons Engineering in December 2000 and to install additional grids, which did not fall within the original 100' buffer zone surrounding the Lakeview Subdivision. Prior to beginning the work, Dan Plugge conducted a safety briefing, advised all personnel that no intrusive activities would be allowed, verified that each team member knew the nearest hospital location, had read the Work Plan (WP) and the Site Safety and Health Plan (SSHP), and acknowledged requirements of the WP and SSHP by signing the signature page.
2. While Dan Plugge assisted the surveyors with grid reacquisition and location of additional grids, Bob Selfridge and Mike Blair began equipment setup and testing. Upon completion of grid reacquisition and the location of additional grids, Dan Plugge accompanied the survey crew to the Blalock property to install a grid coordinate system. Bob Selfridge and Mike Blair completed equipment setup and began mapping the open area located west of the Riley home.
3. Upon arrival at the Blalock property, Dan Plugge conducted a safety briefing, advised all personnel that no intrusive activities would be allowed, and verified that each team member knew the nearest hospital location. Prior to beginning the work, Dan Plugge attempted to relocate two (2) grids previously installed during the EE/CA by Parsons Engineering. After an unsuccessful attempt to find the previously existing grids, it was decided to install a local coordinate grid system using a zero point located fifty (50) feet west of the southwest corner of the Blalock home. After completing the grid layout, Dan Plugge returned to the Lakeview Subdivision to assist with the geophysical survey of the

open area west of the Riley home. Dan Plugge spoke to the homeowner, Mr. Kevin Riley, and asked if he would mind moving equipment and debris within the wooded area located north of the home to prevent interference with the geophysical equipment. Mr. Riley indicated he would move everything out of the way as well as brush clear and mow the area to be mapped. After leaving the site, Bob Selfridge processed the data to ensure complete coverage was obtained and the data was satisfactory.

4. On 25 June 2003, Dan Plugge, Bob Selfridge, and Mike Blair arrived at the Blalock home to geophysically map the area surrounding the house and garage as well as several trails radiating outwards in several directions from the Blalock yard. The geophysical mapping was completed using a man portable EM 61 and USRADS positioning system. After leaving the site, Bob Selfridge processed the data to ensure complete coverage was obtained and the data was satisfactory.
5. On 26 June 2003, Dan Plugge, Bob Selfridge, and Mike Blair returned to the Riley home within the Lakeview Subdivision to complete the geophysical mapping of the wooded area north of the Riley home. As requested, Mr. Riley had moved all equipment as well as brush cleared and mowed the area to be geo-physically mapped with the exception of the burn pit area. Dan Plugge removed all visible surface trash and burn debris from the pit prior to performing the geophysical mapping using a man portable EM 61 and USRADS positioning system. After leaving the site, Bob Selfridge processed the data to ensure complete coverage was obtained and the data was satisfactory.
6. Attached to this Trip Report are two (2) spreadsheets, which identify the southwest corner coordinates for additional grids installed at the Riley property and a detail of the grid coordinate system used at the Blalock property.

Dan Plugge  
Geologist  
US Army Corps of Engineers  
Engineering and Support Center, Huntsville  
CEHNC-ED-CS-G  
4820 University Square  
Huntsville, AL 35807-4301  
phone: 256-895-1622  
fax: 256-895-1602  
Email: [dan.w.plugge@hnd01.usace.army.mil](mailto:dan.w.plugge@hnd01.usace.army.mil)

Grid Coordinate Layout for Blalock Property



Grid # (southwest corner)	Northing	Easting	
#1		5000	5000
#2		5000	4900
#3		5100	5000
#4		5000	5100
#5		4900	5000
#6		5100	4900
#7		5100	5100
#8		4900	4900
#9		5200	5000
#10		5200	4900
#11		5300	5000
#12		5200	5100

Coordinate # (trails)	Northing	Easting	
#100	4937.3263	5046.8220	
#101	4916.34	5063.04	
#102	4918.07	5102.89	
#103 SE (Corner House)	5077.82	5000.08	
#104 SW (Corner House)	5049.94	5000.04	
#105 NW (Corner House)	5049.93	4961.81	
#106 NW (Corner House)	5077.83	4961.66	
#107	4972.82	4860.87	
#108	4919.969	4792.69	
#109	4876.78	4775.36	
#110	4883.57	4738.33	
#111	Not Used	Not Used	
#112	5166.76	4881.42	
#113	5203.92	4842.19	
#114	5231.82	4784.82	
#115	5224.78	4697.75	
#116	5157.51	4706.13	
#117	5212.44	4745.43	
#118	5251.04	4824.15	
#119	5248.78	4888.79	
#120	5154.27	5121.32	
#121	5123.54	5175.11	
#122	5077.16	5161.53	

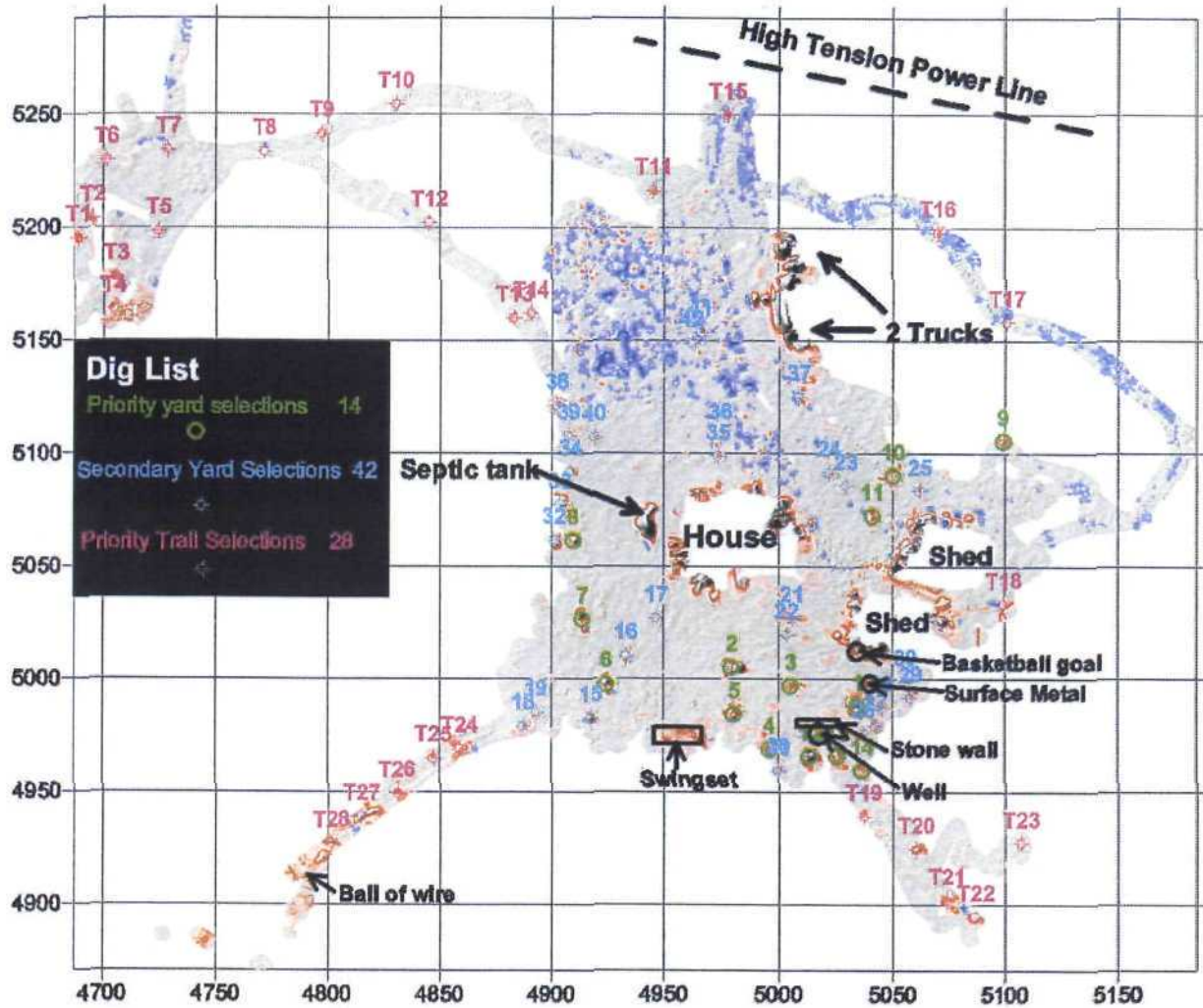
#1 Grid Corner Located 50' West of SW Corner of House (extending straight out from East/West Line of House)  
 Please note, referenced directions are not correlated to true or magnetic north  
 but are aligned with house.  
 East/West measurement of house is 27.85'  
 North/South measurement of house is 38.25'

Riley Property - Additonal Grid Coordinates

Grid #	Northing	Easting
433	888600.0	2069100.0
430	888600.0	2069000.0
450	888700.0	2069000.0
452	888800.0	2069000.0
422	888600.0	2068900.0
423	888700.0	2068900.0
451	888800.0	2068900.0
412	888600.0	2068800.0
413	888700.0	2068800.0
453	888800.0	2068800.0
454	888900.0	2068800.0
402	888700.0	2068700.0
403	888800.0	2068700.0
455	888900.0	2068700.0
392	888700.0	2068600.0
393	888800.0	2068600.0
456	888900.0	2068600.0

APPENDIX C

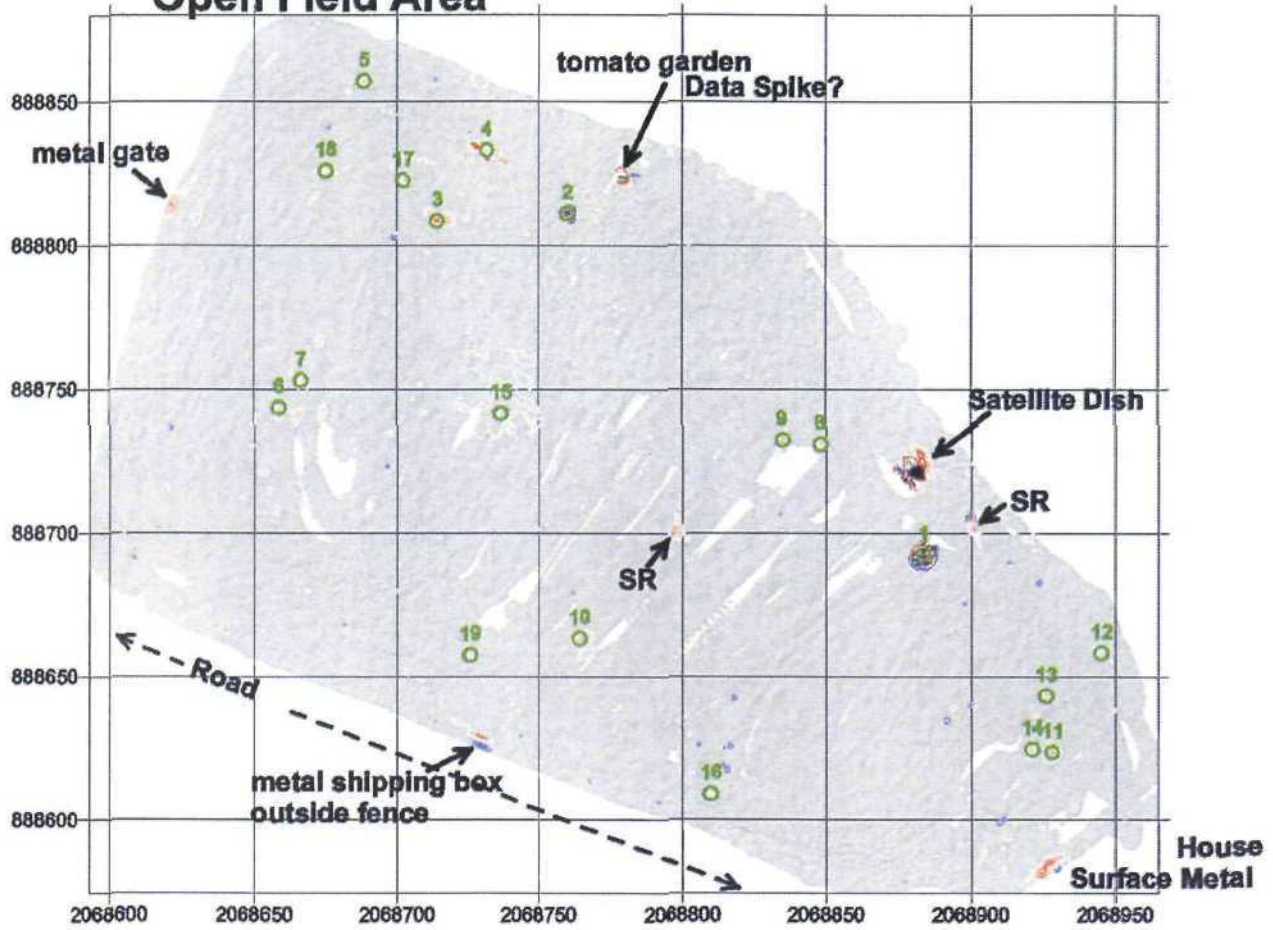
# BLALOCK PROPERTY - EM61-mkII Channel 2 data



Data Processed by R. J. Selfridge on October 28, 2003 v0.6

APPENDIX D

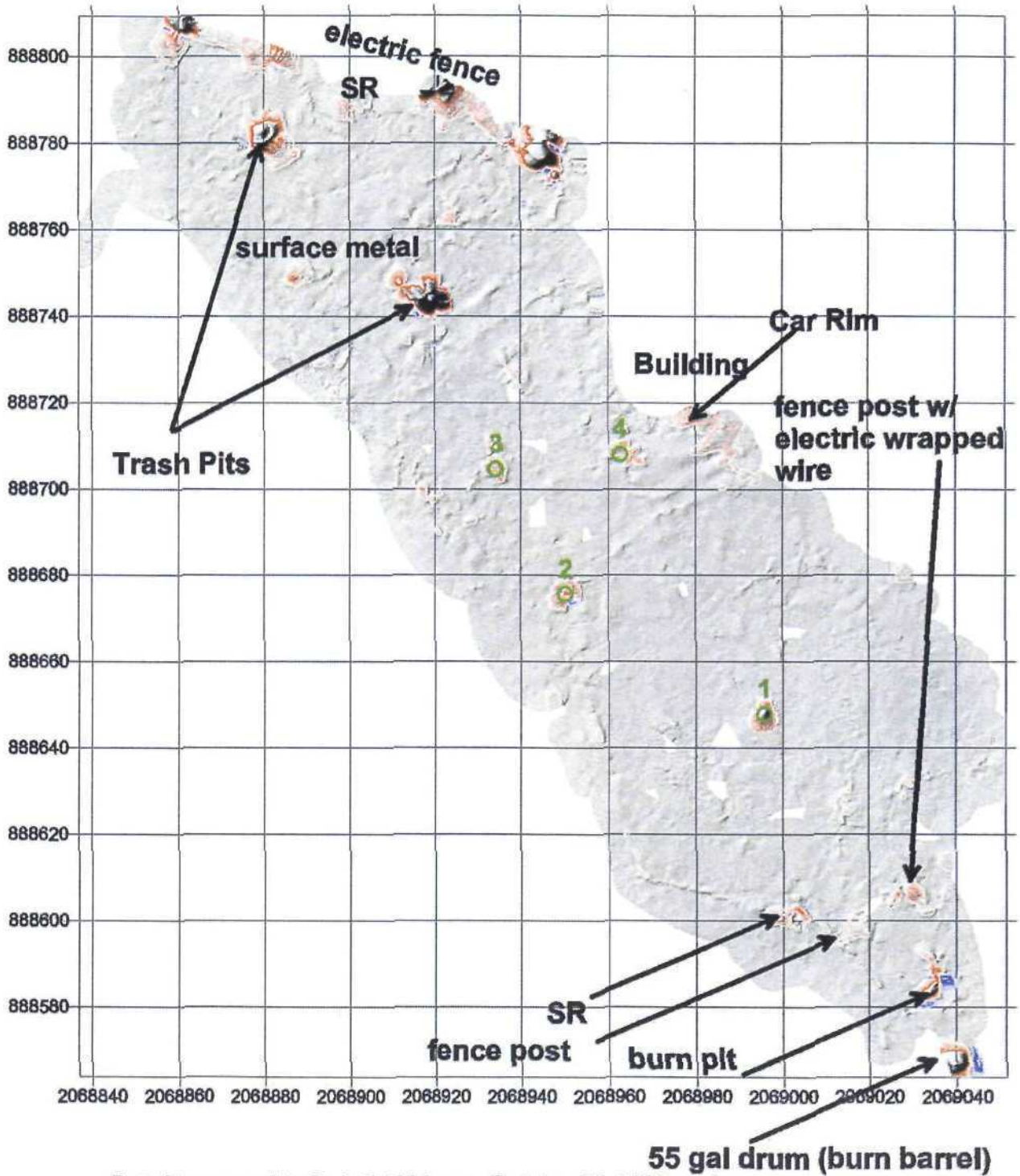
**RILEY PROPERTY - EM61-mkII Channel 2 data  
Open Field Area**



Data Processed by R. J. Selfridge on October 28, 2003 v0.3



# RILEY PROPERTY WOODS - EM61-mkII Channel 2 data



**APPENDIX B: INVESTIGATIONS**

**B.0 TARGET INVESTIGATIONS**

This appendix contains investigation results of excavations of Government-marked targets at the Riley and Blalock properties.

**B.0 TARGET INVESTIGATIONS .....B-1**

SITE LOCATION: RILEY PROPERTY, FORMER CAMP BUTNER, NC ..... B-2

SITE LOCATION: BLALOCK PROPERTY (1), FORMER CAMP BUTNER, NC ..... B-3

SITE LOCATION: BLALOCK PROPERTY (2), FORMER CAMP BUTNER, NC ..... B-6

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc. Anomaly Dig Sheet

<b>SITE LOCATION: RILEY PROPERTY, FORMER CAMP BUTNER, NC</b>		<b>Date:</b> 5/19/2004	<b>Name: Team 1</b> F. T. Ramos			
<b>Easting</b>	<b>Northing</b>	<b>Anomaly ID</b>	<b>QTY</b>	<b>Item Description</b>	<b>Depth</b>	<b>UXO</b>
		R-YA1		Concentration of rust flakes & hot rocks.	10 in.	No
		R-Y10		Concentration of rust flakes & hot rocks.	8-10 in.	No
		R-Y19		Concentration of rust flakes & hot rocks.	4-6 in.	No
		R-Y15		Concentration of rust flakes & hot rocks.	4-8 in.	No
		R-Y16	01	Hot rock, 5 oz. total weight	5 in.	No
		R-Y9	01	10" x 1.5" x 1/4" Metal Bar	10 in.	No
		R-Y8		Multiple hot rocks.	2-3 in.	No
		R-Y1		Multiple hot rocks.	2-3 in.	No
		R-Y13	01	Steel horseshoe & multiple hot rocks.	3-4 in.	No
		R-W1	01	Metal debris, 3lbs.	11 in.	No
		R-W4	15	Steel nails and a screw.	2-3 in.	No
		R-W3	01	Partial metal old style plow blade	13 in.	No
		R-Y11		Multiple hot rocks.	4 in.	No
		R-Y14		Several steel nails & hot rocks, broken wire & 6" x 3/4" steel pipe	2-4 in.	No
		R-Y18		Multiple hot rocks.	14-24 in.	No
		R-Y5		Multiple hot rocks.	10 in.	No
		R-Y17	01	Steel horseshoe & concentration of rust flakes.	6 in.	No
		R-Y4	01	Steel horseshoe & multiple hot rocks.	2 in.	No
		R-Y2	01	Metal grommet & multiple hot rocks.	2 in.	No
		R-Y12	01	5-foot length of steel wire.	16 in.	No
		R-W2	01	Steel bolt, 3/8" x 30"	4 in.	No
		R-Y6	01	Steel Nail	6 in.	No
		R-Y7		Several steel nails, pieces of wire & eyeglass rim.	6 in.	No

**REMARKS**

**Note: Record delta from marked target location in feet east and north.**

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc. Anomaly Dig Sheet						
SITE LOCATION: BLALOCK PROPERTY (1), FORMER CAMP BUTNER, NC		Date: 5/20/2004	Name: Team 1 F. T. Ramos			
Easting	Northing	Anomaly ID	QTY	Item Description	Depth	UXO
		B-P8	1	Steel Rommel Stake	Surface	
		B-S32	20	Several Pieces of small Frag, 3lbs. total.	2-10 in.	
		B-P7	1	Heavy case frag, 5lbs.	3 in.	
		B-S17	2	Heavy case frag, ¼ lb. total.	2 in.	
		B-S16	3	Heavy case frag, 2lbs. total.	1-3 in.	
		D	20	Several pieces of frag, 5lbs. total.	2-8 in.	
		B-P6	3	Heavy case frag, 8lbs. total.	2-4 in.	
		B-S15	3	Heavy case frag, ½ lb. total.	2-4 in.	
		B-P2	1	Expended 105mm Projectile base ejection.	2-10 in.	
		B-P5	1	Tin can lid, 3 inch diameter.	2 in.	
		C	4	Heavy case frag and wire, 2lbs. total.	2-8 in.	
		B-P3	4	Heavy case frag and nails, 3lbs. total.	Surf-4 in.	
		B-S22	2	Nail and frag, ½ lb. total.	2-3 in.	
		B-S21	6	Several pieces of frag, 1 lb. total.	2-8 in.	
		B-P11	6	Several pieces of frag and nails, 3lbs. total.	2-6 in.	
		B-P4	6	Chain, Frag and Wire, 2 lbs. total	1-3 in.	
		B-S21X	1	Small piece of heavy case frag, 3 oz.	2 in.	
		B-S23	2	Base ejection plate and ring, 3 lbs. total.	3 in.	
		B-P10	1	Partial heavy steel bush hog blade, 10 lbs.	1 in.	
		B-S25	2	Frag and metal debris, 1.5lbs. total.	6 in.	
		B-P9	6	81mm Mortar parts and pieces, 4 lbs. total.	3-10 in.	
		B-P12	2	Piece of Frag and hot rock, 4 ozs total.	3 in.	
		B-T23	1	Toy wheel with metal axle and hot rocks.	Surface	
		B-S19	4	Several pieces heavy case frag.	6 in.	
		B-S18	5	Nail and several pieces of frag, 1lb total.	6 in.	
		B-S37A	19	Several pieces heavy case frag, 2lbs total.	6-12 in.	
		F	3	Multiple pieces of 105mm projectile frag.	12 in.	
		B-T24	4	Several pieces of heavy case frag, 1lb total.	6 in.	

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc. Anomaly Dig Sheet						
<b>SITE LOCATION: BLALOCK PROPERTY (1), FORMER CAMP BUTNER, NC</b>		<b>Date:</b> 5/20/2004	<b>Name: Team 1</b> F. T. Ramos			
Easting	Northing	Anomaly ID	QTY	Item Description	Depth	UXO
		B-T25	14	Several pieces of heavy case frag, 2lb total.	6 in.	
		B-T26	1	Heavy case frag, 2 ozs.	Surface	
		L	1	21 feet of steel barbed wire.	Surface	
		B-T27	1	5 feet of steel barbed wire.	Surface	
		B-T28	1	5 feet of steel barbed wire.	Surface	
		M	1	14 feet of steel barbed wire.	Surface	
		N	9	Heavy case frag & 3 feet of barbed wire.	Surf-6 in.	
		I	2	1 lb. of frag & metal bar 2' x 11/2" x 1/4"	2 in.	
		B-T6	4	1 lb. of frag and metal survey pin flag.	Surf-10in	
		B-T2	5	Several pieces of heavy case frag, 2lbs total	Surf-6 in.	
		B-T1	2	Heavy case frag, 2 lbs total.	2-6 in.	
		B-T3	3	Several pieces of heavy case frag, 3lbs total	2-4 in.	
		O	3	Pieces of heavy case frag, 1lb total.	2-3 in.	
		P	1	Heavy case frag, 3lbs.	3 in.	
		B-T4	3	Multiple pieces heavy case frag, 3lbs. total	4-5 in.	
		B-T8	2	Pieces of heavy case frag, 3lbs total.	Surf-3 in.	
		B-T9	2	Pieces of heavy case frag, 2 lbs total.	Surf-3 in.	
		B-T10	2	Pieces of heavy case frag, 2 lbs total.	Surf-3 in.	
		B-T12	4	Several pieces frag ½ lb & barbed wire.	Surface	
		B-T15	1	.38 brass casing, no other contact found	2 in.	
		H	1	Heavy case frag, ½ lb.	3 in.	
		B-T11	1	Heavy case frag, ¼ lb.	8 in.	
		G	2	Pieces of heavy case frag, ¼ lb total.	Surf-2 in.	
		B-S41	2	Pieces of heavy case frag, ½ lb total.	Surf-5 in.	
		B-S36	2	Pieces of heavy case frag, 1/3 lb total.	2 in.	

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc. Anomaly Dig Sheet						
<b>SITE LOCATION: BLALOCK PROPERTY (1), FORMER CAMP BUTNER, NC</b>		<b>Date:</b>  5/20/2004	<b>Name: Team 1</b>  F. T. Ramos			
<b>Easting</b>	<b>Northing</b>	<b>Anomaly ID</b>	<b>QTY</b>	<b>Item Description</b>	<b>Depth</b>	<b>UXO</b>
		B-S42	2	Pieces of heavy case frag, 1 lb total.	Surf-3 in.	
		B-S35	1	Projectile base ejection plate, 4 lbs total.	3 in.	
		B-S33	2	Piece of frag, 3ozs & metal rod 1/2"x36"	Surface	
		B-T16	1	Heavy case frag, 1 lb.	4 in.	
		B-T17	3	Pieces of frag, 2lbs total & 12" length wire	Surf-4 in.	
		B-T18	2	Heavy case frag, 4ozs & hot rocks.	5 in.	
		B-S28	1	12 inch length of steel barbed wire.	3 in.	
		A	1	36 inch length of steel barbed wire.	2 in.	
		B-S29	2	Pieces of heavy case frag, ½ lb total.	4 in.	
		B-S30	1	8 inch steel chisel.	Surface	
		B-T7	7	Several pieces of heavy case frag, 3lbs total	Surf-6 in.	
		B-T5	6	Expended Projo fuze, frag & .38 brass case	6-12 in.	
		B-T13	3	Multiple pieces heavy case frag, 2lbs total.	4 in.	
		B-T14	14	Several pieces heavy case frag, 3lbs total.	16 in.	
		J		Multiple hot rocks.	Surface	
		K	1	Heavy case frag, 8ozs.	6 in.	
		B-S38	1	Heavy case frag, 8ozs.	6 in.	
		B-S34	1	Heavy case frag, 3ozs.	4 in.	
		B-S40	5	Several pieces heavy case frag, 2lbs total.	12 in.	
		B-S39	2	Pieces of heavy case frag, 1lb total.	12 in.	
<b>REMARKS</b>						
<p><b><u>Note: Record delta from marked target location in feet east and north.</u></b></p>						

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
 FORMER FORT BUTNER, BUTNER NORTH CAROLINA

---

USA Environmental, Inc. Anomaly Dig Sheet

<b>SITE LOCATION: BLALOCK PROPERTY (2), FORMER CAMP BUTNER, NC</b>		<b>Date:</b> 5/21/2004	<b>Name: Team 1</b> F. T. Ramos			
Easting	Northing	Anomaly ID	QTY	Item Description	Depth	UXO
		B-P13	3	Metal debris and 6 inch length of wire.	2-4 in.	
		B-P14	2	Pieces of heavy case frag, 1/4lb.	Surf-2 in.	
		B-T19	1	½ inch by 8 inch length of re-bar.	1 in.	
		B-T20		Numerous Hot Rocks.	2-3 in.	
		B-T21	4	Several pieces of heavy case frag, ¾ lb total	3-4 in.	
		B-T22	1	Heavy case frag, ½ lb and hot rocks.	Surf-5 in.	
		B-S24	4	Pieces of frag and nails.	4 in.	
		B	5	Multiple pieces heavy case frag & nails	4-6 in.	
		B-P1	1	35 lb. of steel barbed wire.	12-24 in.	
		B-S26	4	Several pieces of heavy case frag.	6 in.	
		B-S27	3	2ozs of frag, screw and steel barbed wire.	4-6 in.	

**REMARKS**

Note: Record delta from marked target location in feet east and north.

**APPENDIX C: SITE PHOTOGRAPHS**

**C.0 PHOTOGRAPHS**

This appendix contains selected site photographs of intrusive investigations at the Blalock and Riley properties at Camp Butner. These photographs and additional photographs are included on a CD-ROM on the facing tab.

Figure C-1: Riley Residence ..... C-2

Figure C-2: Riley Investigation Area..... C-3

Figure C-3: Reacquisition ay Riley Property ..... C-4

Figure C-4: Reacquisition (Riley) ..... C-5

Figure C-5: Typical Target Investigation ..... C-6

Figure C-6: Blalock Property ..... C-7

Figure C-7: Blalock Property ..... C-8

Figure C-8: Media Day At Blalock ..... C-9

Figure C-9: Reacquisition At Blalock..... C-10

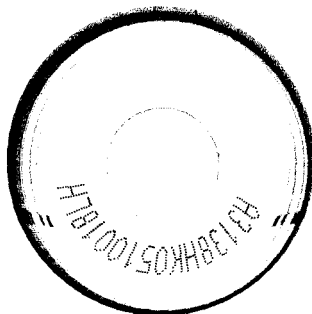
Figure C-10: Reacquisition (Blalock)..... C-11

Figure C-11: Expeded 105mm Illumination Round ..... C-12



**Final Report - Time Critical OE Removal Action  
(TCRA)**

**Blalock & Riley Properties  
Former Camp Butner, Butner, NC**



**Site Photographs**

**6/18/2004**



*FIGURE C-1: RILEY RESIDENCE*



*FIGURE C-2: RILEY INVESTIGATION AREA*



*FIGURE C-3: REACQUISITION AT RILEY PROPERTY*



FIGURE C-4: REACQUISITION (RILEY)



*FIGURE C-5: TYPICAL TARGET INVESTIGATION*



*FIGURE C-6: BLALOCK PROPERTY*

**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION**  
**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**



***FIGURE C-7: BLALOCK PROPERTY***





*FIGURE C-8: MEDIA DAY AT BLALOCK*



*FIGURE C-9: REACQUISITION AT BLALOCK*



*FIGURE C-10: REACQUISITION (BLALOCK)*



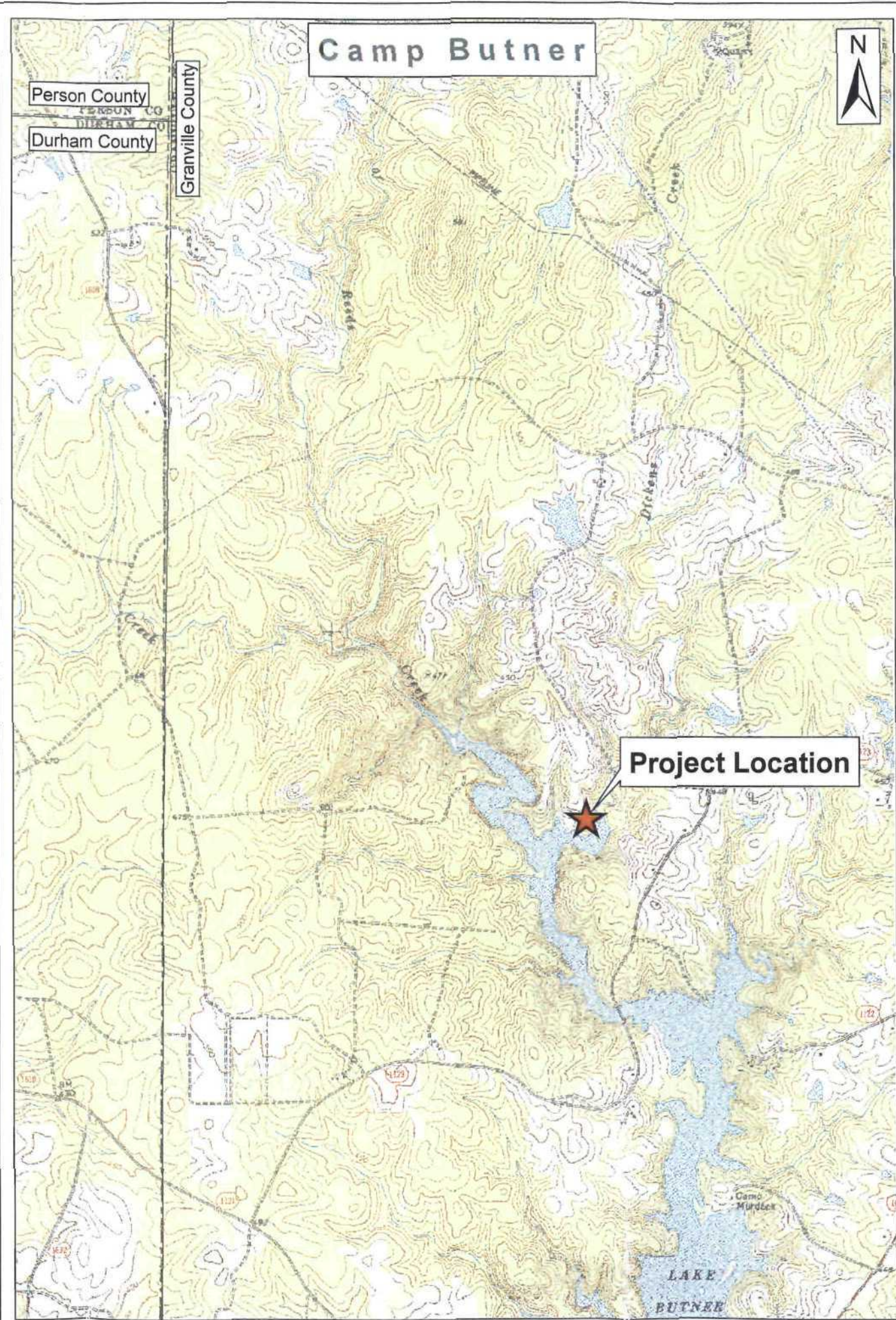
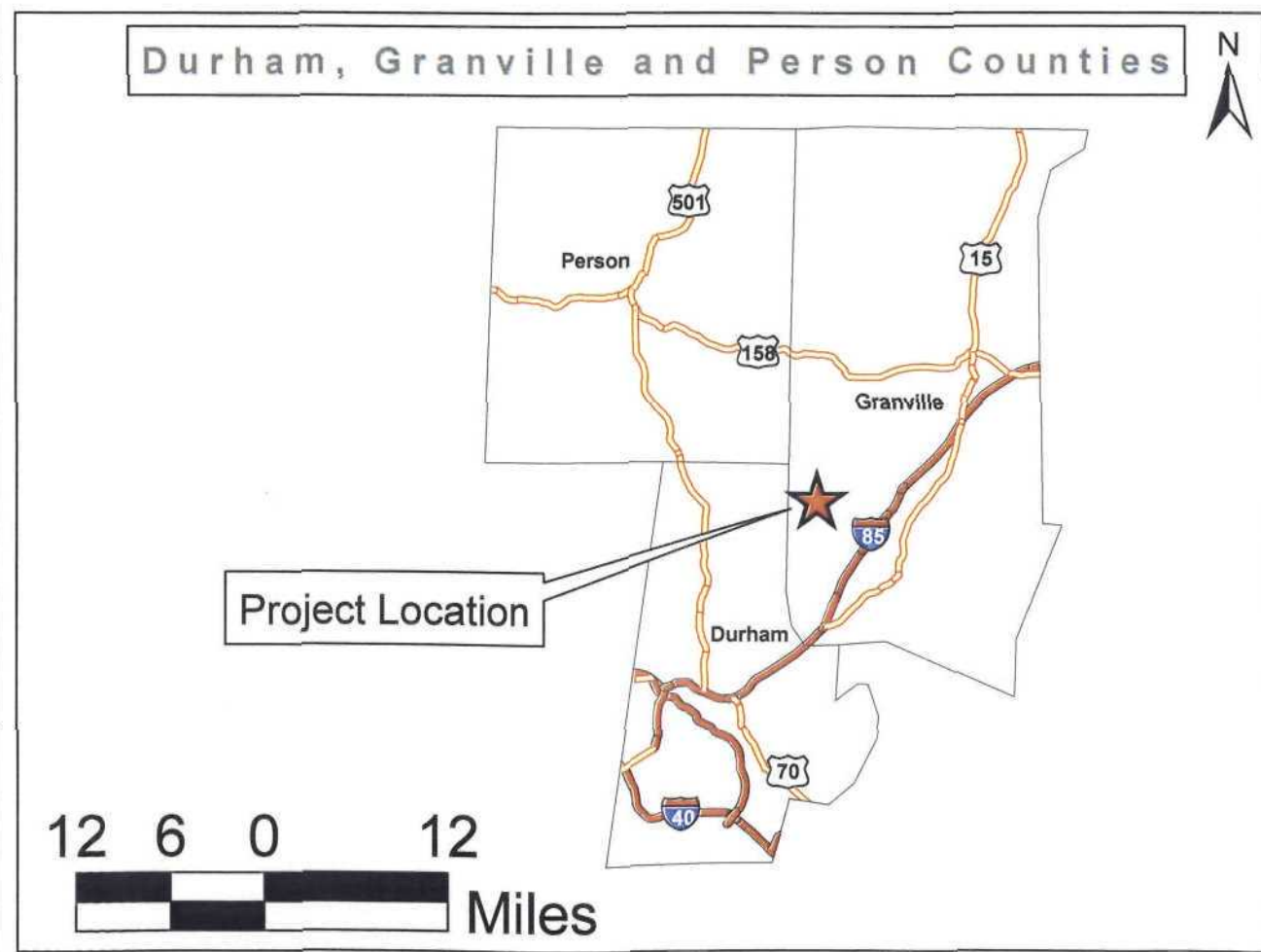
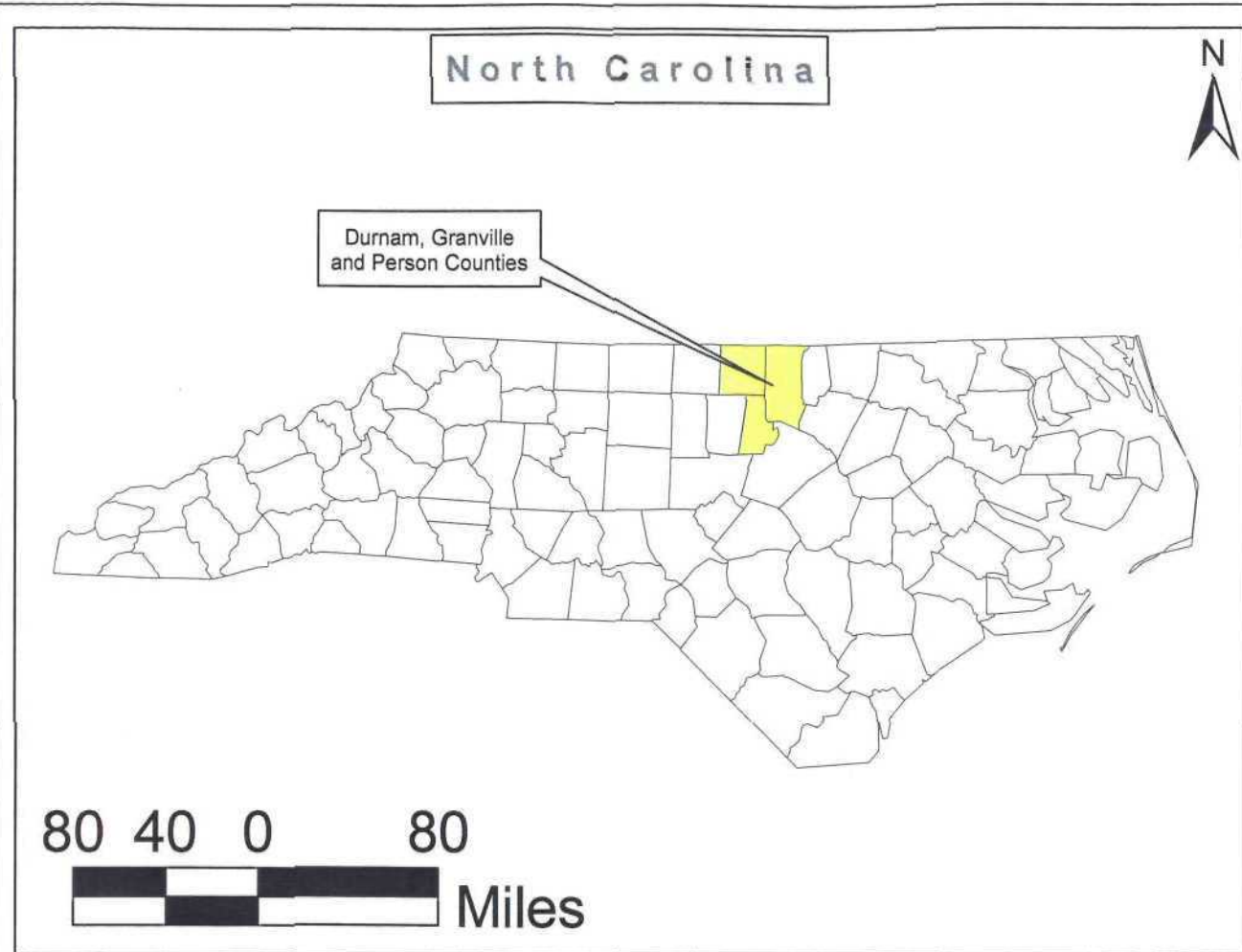
*FIGURE C-11: EXPENDED 105MM ILLUMINATION ROUND*

**APPENDIX D**

**D.0 MAPS AND DRAWINGS**

This appendix contains site drawings including:

- Overall site location;
- Riley site location and Quantity Distance (QD) for exclusion zones;
- Blalock site location and QD for exclusion zones.



US Army Engineering  
And Support Center

Huntsville

Designed By:	JAL	Date:	6-16-04	Rev.	1
Dwn By:	JAL	Design File No.:			
Reviewed By:	RH	Drawing Code:			
Submitted by:	RH	Path:	c:\projects\butner\location map.mxd		
		Plot Date:	6-16-04		
		Plot Scale:	Varies		

U.S. ARMY ENGINEERING  
AND SUPPORT CENTER  
HUNTSVILLE, ALABAMA

PREPARED BY:  
**USA Environmental, Inc**  
Tampa, FL

**Former Camp Butner TCRA**

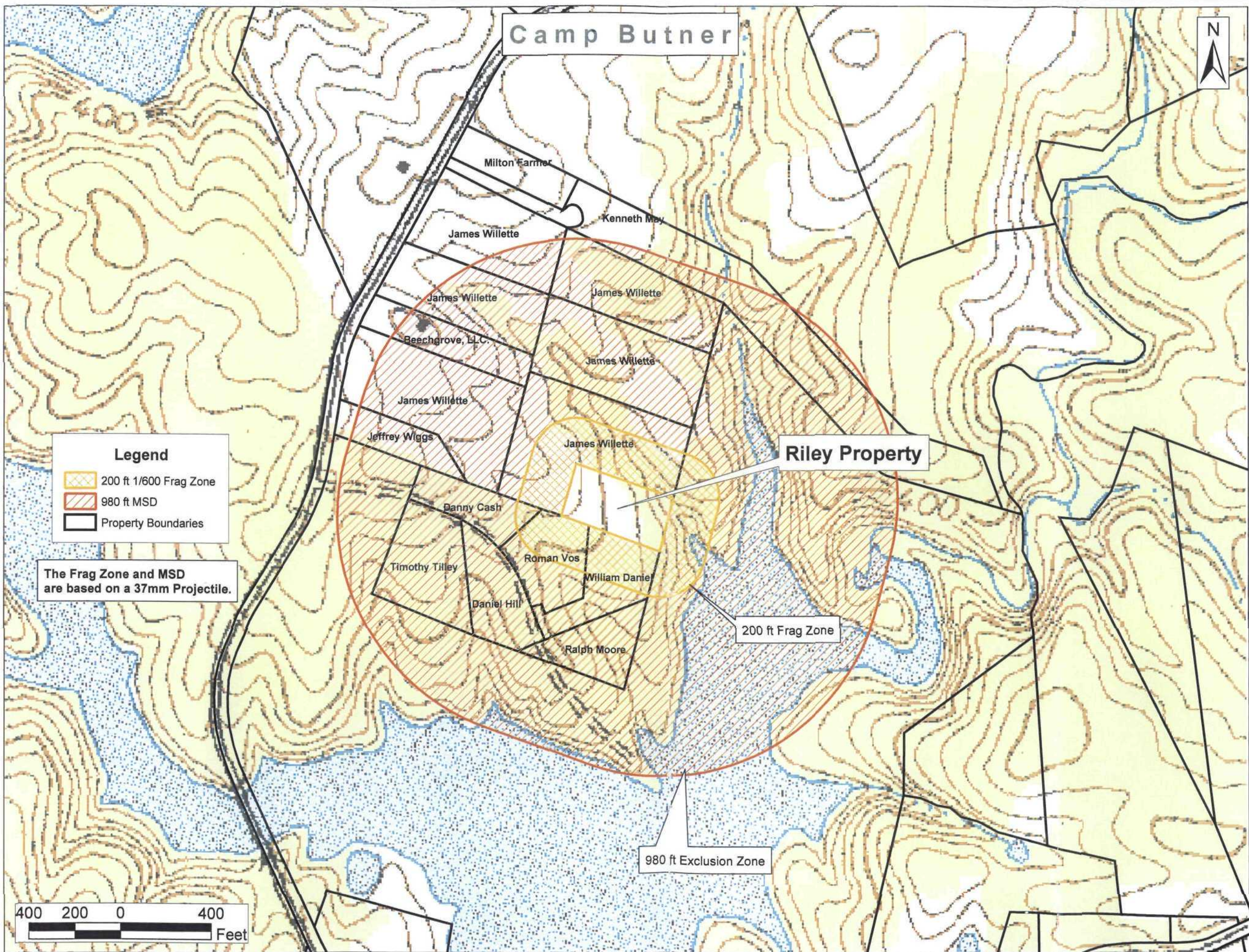
**Location Map**

Granville County, North Carolina

Contract Number:  
**DACW45-03-P-0087**

Task Order:  
**0001**

Sheet 1 of 1



Designed By:	JAL	Date:	6-16-04	Rev.	1
Drawn By:	JAL	Design File No.:			
Reviewed By:	GS	Drawing Code:			
Submitted by:	GS	Path:	c:\projects\butner\ Riley Site Map.mxd		
		Plot Date:	6-16-04		
		Plot Scale:	1" = 400'		

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**USA Environmental, Inc**  
Tampa, FL

**Former Camp Butner TCRA**

**Riley Property Site Map**

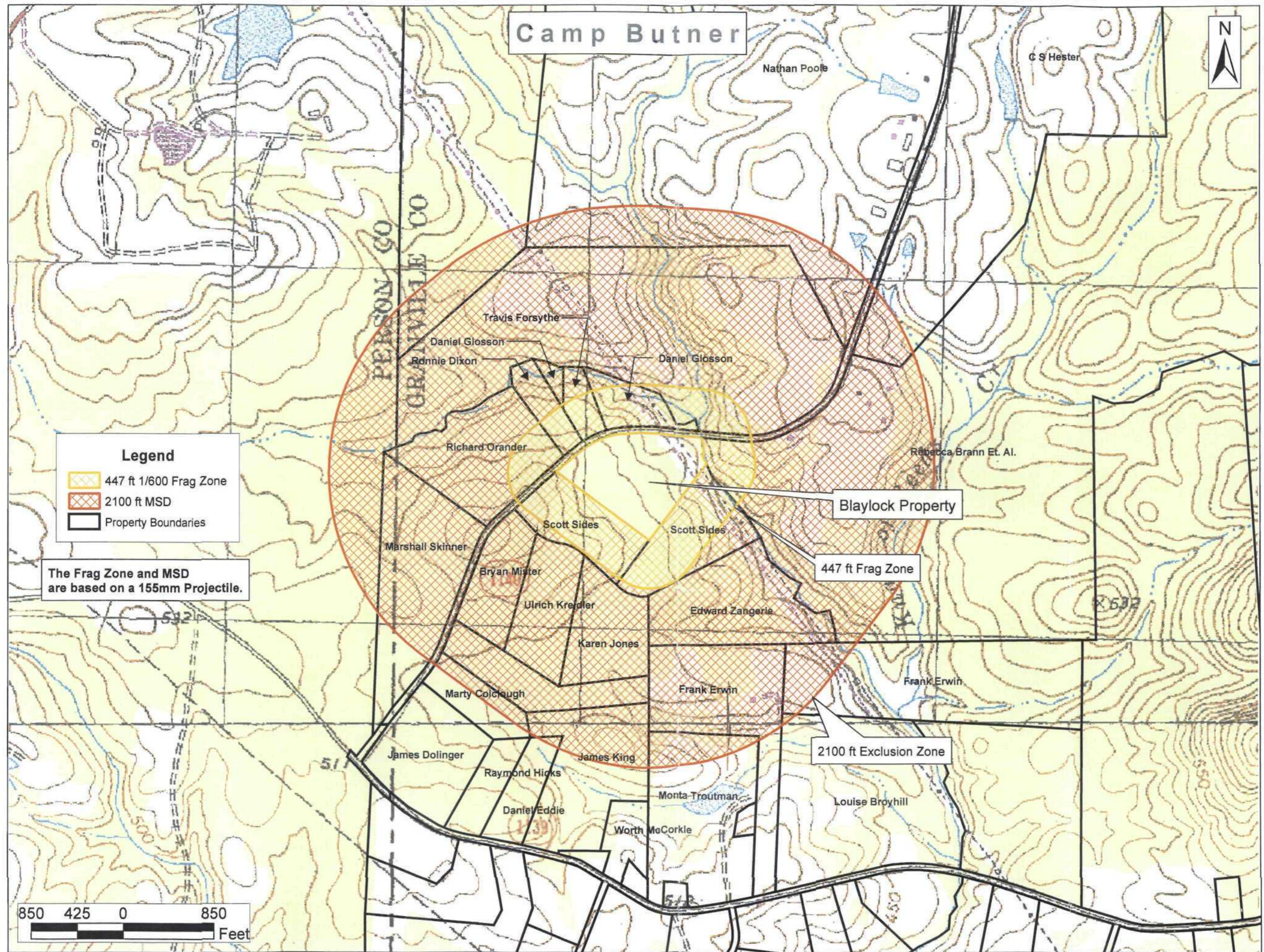
Granville County, North Carolina

Contract Number:  
**DACW45-03-P-0087**

Task Order:  
**0001**

Sheet 1 of 1





**Legend**

-  447 ft 1/600 Frag Zone
-  2100 ft MSD
-  Property Boundaries

The Frag Zone and MSD are based on a 155mm Projectile.

US Army Engineering  
And Support Center



Huntsville

Designed By:	JAL	Date:	6-16-04	Rev.	1
Drawn By:	JAL	Design File No.:			
Checked By:	GS	Drawing Code:			
Reviewed By:	GS	Submitted by:	GS		
Path: c:\projects\butner\Blaylock Site Map.mxd Plot Date: 6-16-04 Plot Scale: 1" = 850'					

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HUNTSVILLE, ALABAMA

PREPARED BY:  
**USA Environmental, Inc**  
Tampa, FL



**Former Camp Butner TCRA**

**Blaylock Property Site Map**

Granville County, North Carolina

Contract Number:  
DACW45-03-P-0087

Task Order:  
0001

Sheet 1 of 1



**APPENDIX E: QA/QC DOCUMENTATION**

**E.0 QA/QC**

This appendix contains a copy of the Government Quality Assurance acceptance of operations at the former Camp Butner and USA daily QC reports.

FINAL REPORT - TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA

U.S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE ORDNANCE AND EXPLOSIVE GROUP MEMO		
TO: <i>USA Environmental</i>	DATE: <i>21 May 2004</i>	TIME:
CONTRACT NUMBER: <i>DACA87-00-D-0036</i>	PROJECT LOCATION: <i>TERRA on Riley and Black properties, Camp Butner North Carolina</i>	
DO #: <i>TO # 0036</i>		
SUBJECT ITEM(S) (Check all that apply): <input type="checkbox"/> Work Plan <input checked="" type="checkbox"/> Quality Control <input type="checkbox"/> Safety Violation <input type="checkbox"/> Other <input type="checkbox"/> Safety Comments		
DESCRIPTION: <i>USA Environmental has successfully completed investigating the 23 (Riley) and 84 (Black) government selected anomalies TAW the approved work plan paragraphs 2.2.8+2.2.9/4 nothing follows</i>		
<input type="checkbox"/> Prompt correction or compliance with contract specifications is requested.		
<i>Kenneth D. Bennett</i> USACE Site Representative		
RECEIPT ACKNOWLEDGED: <i>[Signature]</i> Contractor's Representative		
ACTION TAKEN:		
CEHNC FORM 948 (Revised) 1 APR 96      COPY 1 - Contractor's Representative		

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc.

DAILY QUALITY CONTROL REPORT

Date: 5/19/2004 Contract #: DACA87-00-D-0026 Task Order #: 0036

Site/Location: Filey Property / Former Camp Butner, NC

Weather: SUNNY/CLEAR Temperature: 89° Rainfall: late afternoon

1. Preparatory Inspection:

Results:

2. QC Audits Performed

a. Operations: DAILY SCHEDULED MAG CHECK AND ANOMALY INVESTIGATION INTENSIVE OPERATIONS.

Results: SATISFACTORY

b. Safety: PPE, FIRST AID KITS

Results: SATISFACTORY

c. Administrative: ANOMALY DIG DATA SHEETS

Results: SATISFACTORY

d. Equipment:

Results:

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

---

Daily Quality Control Report Con't:

3. QC Performed (Grids)

Number of Grids QC'd: 23 TARGETS Results: 23 # Pass 0 # Fail

Comments: 100% OF THE SELECTED ANOMALY TARGETS WERE INSPECTED AT THE RILEY PROPERTY. ALSO EACH TARGET AREA WAS RE-SURVEYED WITH THE EM-61.

4. Follow Up Inspections and Results

Section(s): \_\_\_\_\_

Results: \_\_\_\_\_

5. Instructions Received: \_\_\_\_\_

Remarks: \_\_\_\_\_

QC Signature: [Signature]

Date: 5/19/04

Printed Name: DANIEL MILLER UROGC

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc.

DAILY QUALITY CONTROL REPORT

Date: 5/20/2004 Contract #: DACA8700-D Task Order #: 0036

Site/Location: BIALOCK PROPERTY / FORMER CAMP BUTNER, NC

Weather: SUNNY / CLEAR Temperature: 91 Rainfall: 0

1. Preparatory Inspection: \_\_\_\_\_  
\_\_\_\_\_  
Results: \_\_\_\_\_

2. QC Audits Performed

a. Operations: DAILY SCHWABERT MAG INSTRUMENT CHECK,  
ANOMALY INVESTIGATION INTENSIVE OPERATIONS, AND SERAP  
SEGREGATION AND CERTIFICATION.  
Results: ALL SATISFACTORY

b. Safety: PPE, MORNING SAFETY BRIEF AND TAIL GATE  
SAFETY BRIEF.  
Results: ALL SATISFACTORY

c. Administrative: TEAM LEADER DAILY JOURNAL AND ANOMALY  
DIG DATA SHEETS  
Results: SATISFACTORY

d. Equipment: TEAM PICK-UP TRUCK  
\_\_\_\_\_  
Results: SATISFACTORY

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

---

Daily Quality Control Report Con't:

3. QC Performed (Grids)

Number of Grids QC'd: 73 Targets Results: 73 # Pass 0 # Fail

Comments: 100% OF THE SELECTED ANOMALY INVESTIGATED  
THIS DAY AT THE BLACK PROBEY WERE QC INSPECTED

4. Follow Up Inspections and Results

Section(s): \_\_\_\_\_

Results: \_\_\_\_\_

5. Instructions Received: \_\_\_\_\_

Remarks: \_\_\_\_\_

QC Signature: [Signature] Date: 5/20/04

Printed Name: DANIEL MILLER WQC

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

USA Environmental, Inc.

DAILY QUALITY CONTROL REPORT

Date: 5/21/2004 Contract #: DACA87-00-D Task Order #: 0036

Site/Location: BLALOCK PROPERTY / FORMER CAMP BUTNER, NC

Weather: SUNNY/CLEAR Temperature: 89 Rainfall: 0

1. Preparatory Inspection:

Results:

2. QC Audits Performed

a. Operations: INTENSIVE INVESTIGATION OPERATIONS, SCRAP CERTIFICATION AND VERIFICATION.

Results: SATISFACTORY

b. Safety: TEAM TAIL GATE SAFETY BRIEF

Results: SATISFACTORY

c. Administrative: ANOMALY INVESTIGATION DIG DATA RECORDS

Results: SATISFACTORY

d. Equipment:

Results:

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

Daily Quality Control Report Con't:

3. QC Performed (Grids)

Number of Grids QC'd: 11 Targets Results: 11 # Pass 0 # Fail

Comments: 100% of the anomalies investigated this  
day on the Black Property were QC inspected. All  
64 anomaly targets at the Black Property were QC  
inspected SRT.

4. Follow Up Inspections and Results

Section(s): \_\_\_\_\_

Results: \_\_\_\_\_

5. Instructions Received: \_\_\_\_\_

Remarks: \_\_\_\_\_

QC Signature: [Signature]

Date: 5/21/04

Printed Name: Daniel Miller UXOQC



**APPENDIX F: DAILY LOGS**

**F.0 DAILY LOGS**

This appendix contains copies of Daily Operations Summaries of OE Investigations at the Riley and Blalock properties.

DAILY OPERATIONS SUMMARY

DATE: 5/19/04

PAGE 1 OF 5 PAGES

SITE / LOCATION: CAMP BUTNER RILEY REPORT

1. WORK SUMMARY

a. Work Accomplished:	Number Completed	Total Remaining
(1) Survey	_____	_____
(2) Preparation	_____	_____
(3) Mag & Flag	_____	_____
(4) Geophysical	_____	_____
(5) Intrusive	<u>28/58 DWS</u>	<u>0</u>
(6) Quality Control	_____	_____
(7) Quality Assurance	_____	_____

b. Discrepancies: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

c. Inspection Results:	Pass	Fail
(1) Quality Control	_____	_____
(2) Quality Assurance	_____	_____
(3) Safety	_____	_____

2. INSTRUCTIONS RECEIVED FROM CUSTOMER REPRESENTATIVE: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



Daily Operations Summary Con't.

PAGE 3 of 5 PAGES

b. Demolition Supplies Expended:

Type:	Quantity:	Remarks:

c. Scrap Generation / Deposition:

Type:	Quantity:	Weight:	Remarks:
CONSTRUCTION WASTE		6 1/4 LBS	

OPS-1 Form

Daily Operations Summary Con't.

PAGE 4 of 5 PAGES

4. Utilization

a. Daily Man-hours:

Labor Category:	Task #:	M/H Used Today:	M/H Remaining:	% M/H Remaining:	Remarks:
Project Manager					
SUXO		10			
UXO Supervisor		10			
UXO Specialist		30			
UXO Assistant					
Laborer					
UXOSO		10			
UXOQCS		10			
Admin Personnel					
Visitor					
<b>Sub-Contractor Personnel (List by Category)</b>					

OPS-1 Form

Daily Operations Summary Con't.

PAGE 5 of 5 PAGES

b. Daily Equipment:

Description:	Task:	Hours Used:	Hours Remaining:	% Hours Remaining:	Remarks:
Schonstedt		30			
Geophysical					
Truck (Heavy)					
Truck (Light)		30			
Radio, Base					
Radio, Handheld		60			
Backhoe					
Front-end Loader					
Rental Car					
GPS					
Weedeater					
Chainsaw					
Chipper					

5. Operational Remarks:


CONTACTED 28 HOUSEHOLD ANIMALS WITH A TOTAL OF 58 DAYS  
ALL CONTACTS WERE ASSOCIATED WITH CONSTRUCTION DABLES.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Signature / Date:

  
 \_\_\_\_\_  
 SUXO / Project Manager

Date: 5/17/04

OPS-1 Form

DAILY OPERATIONS SUMMARY

DATE: 5/20/04 PAGE 1 OF 5 PAGES

SITE / LOCATION: Camp Butner - Blalock Property

1. WORK SUMMARY

a. Work Accomplished:	Number Completed	Total Remaining
(1) Survey	_____	_____
(2) Preparation	_____	_____
(3) Mag & Flag	_____	_____
(4) Geophysical	_____	_____
(5) Intrusive	<u>73/1050-rs</u>	<u>11</u>
(6) Quality Control	_____	_____
(7) Quality Assurance	_____	_____

b. Discrepancies: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

c. Inspection Results:	Pass	Fail
(1) Quality Control	_____	_____
(2) Quality Assurance	_____	_____
(3) Safety	_____	_____

2. INSTRUCTIONS RECEIVED FROM CUSTOMER REPRESENTATIVE: ON  
GOVERNMENT HOLD UNTIL ALL PROBLEMS WITHIN MSU  
W/IN VACATED.  
 \_\_\_\_\_  
 \_\_\_\_\_

OPS-1 Form





Daily Operations Summary Con't.

PAGE 3 of 5 PAGES

b. Demolition Supplies Expended:

Type:	Quantity:	Remarks:

c. Scrap Generation / Deposition:

Type:	Quantity:	Weight:	Remarks:
NON-OIL		15.5 LBS	
OE		64.5 LBS	

OPS-1 Form

Daily Operations Summary Con't.

PAGE 4 of 5 PAGES

4. Utilization

a. Daily Man-hours:

Labor Category:	Task #:	M/H Used Today:	M/H Remaining:	% M/H Remaining:	Remarks:
Project Manager					
SUXO		10			
UXO Supervisor		10			
UXO Specialist		30			
UXO Assistant					
Laborer					
UXOSO		10			
UXOQCS		10			
Admin Personnel					
Visitor					
<b>Sub-Contractor Personnel (List by Category)</b>					

OPS-1 Form

Daily Operations Summary Con't.

PAGE 5 of 5 PAGES

b. Daily Equipment:

Description:	Task:	Hours Used:	Hours Remaining:	% Hours Remaining:	Remarks:
Schonstedt		30			
Geophysical					
Truck (Heavy)					
Truck (Light)		30			
Radio, Base					
Radio, Handheld		20			
Backhoe					
Front-end Loader					
Rental Car					
GPS					
Weedeater					
Chainsaw					
Chipper					

5. Operational Remarks:

SKIDDER'S WOULD NOT DAMAGE THIN PLYWOOD, GIVEN 60  
RIIAD FOR INTENSIVE OPERATIONS AT 11:20 AM, OPERATIONS STOPPED  
(3) TIMES FOR VEHICLE'S PASSING AWAY. CLEARED 73 AMMUNITION  
MIXTURE OF CONVT DEBRIS, FRAG AND ONE EMPTY 105MM HC  
SMOKE (M-84 WITH M-54 FUMX).

6. Signature / Date:

  
 SUXO / Project Manager

Date: 5/20/04

OPS-1 Form

**DAILY OPERATIONS SUMMARY**

DATE: 5/21/04

PAGE 1 OF 5 PAGES

SITE / LOCATION: CAMP BUTNER - BLACK LOCK PROPERTY

**1. WORK SUMMARY**

a. Work Accomplished:	Number Completed	Total Remaining
(1) Survey	_____	_____
(2) Preparation	_____	_____
(3) Mag & Flag	_____	_____
(4) Geophysical	_____	_____
(5) Intrusive	<u>1166 hrs</u>	_____
(6) Quality Control	_____	_____
(7) Quality Assurance	_____	_____

b. Discrepancies: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

c. Inspection Results:	Pass	Fail
(1) Quality Control	_____	_____
(2) Quality Assurance	_____	_____
(3) Safety	_____	_____

2. INSTRUCTIONS RECEIVED FROM CUSTOMER REPRESENTATIVE: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

OPS-1 Form



Daily Operations Summary Con't.

PAGE 3 of 5 PAGES

b. Demolition Supplies Expended:

Type:	Quantity:	Remarks:

c. Scrap Generation / Deposition:

Type:	Quantity:	Weight:	Remarks:
<i>OE</i>		<i>85 LBS</i>	

OPS-1 Form

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
 FORMER FORT BUTNER, BUTNER NORTH CAROLINA

Daily Operations Summary Con't.

PAGE 4 of 5 PAGES

4. Utilization

a. Daily Man-hours:

Labor Category:	Task #:	M/H Used Today:	M/H Remaining:	% M/H Remaining:	Remarks:
Project Manager					
SUXO		10			
UXO Supervisor		10			
UXO Specialist		30			
UXO Assistant					
Laborer					
UXOSO		10			
UXOQCS		10			
Admin Personnel					
Visitor					
<b>Sub-Contractor Personnel (List by Category)</b>					

OPS-1 Form

Daily Operations Summary Con't.

PAGE 5 of 5 PAGES

b. Daily Equipment:

Description:	Task:	Hours Used:	Hours Remaining:	% Hours Remaining:	Remarks:
Schonstedt		12			
Geophysical					
Truck (Heavy)					
Truck (Light)		30			
Radio, Base					
Radio, Handheld		28			
Backhoe					
Front-end Loader					
Rental Car					
GPS					
Weedeater					
Chainsaw					
Chipper					

5. Operational Remarks:

COMPLETED THE BLALOCK PROPERTY. DID NOT LOCATE /  
FIND ANY LULU CANNON.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

6. Signature / Date:

  
 \_\_\_\_\_  
 SUXO / Project Manager

Date: 5/21/04

OPS-1 Form



APPENDIX G: DOCUMENTATION

G.0 DOCUMENTATION

This appendix contains copies of submittals, approvals, scrap certification, and other site documentation and correspondence.

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Figure D-3: DDESB Approval .....	G-3
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Figure D-5: Blalock 2,100-Foot Approval .....	G-9
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FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

---

***USA Environmental, Inc.***

April 30, 2004

USA-CE-OERS-796

US Army Engineering and Support Center, Huntsville  
ATTN: CEHNC-CT-E (Mr. Eduardo J. Marrero)  
4820 University Square  
Huntsville, AL 35816-1822

RE: Contract Number DACA87-00-D-0036, Task Order 0014, Ordnance and Explosives (OE) Removal  
Action at Castner Range, Fort Bliss, Texas

Dear Mr. Marrero;

In accordance with the Task Order 0014 Scope of Work and Contract Requirements, USA Environmental, Inc. is submitting the Draft Final Report.

Distribution and number of copies are in accordance with the Scope of Work.

USA Environmental, Inc. is pleased that the US Army Engineering and Support Center, Huntsville selected us to perform this work and we look forward to working with USAESCH on this project.

Sincerely,



George R. Spencer  
Operations Manager

Copies/Distribution:

- 4 Copies - U.S. Army Engineering and Support Center, Huntsville, ATTN: CEHNC-OE (Mr. Bob Nore), 4820 University Square, Huntsville, AL 35816-1822
- 5 Copies - Commander, US Army Air Defense Artillery Center Fort Bliss, ATTN: ATZC-DOE-M (David Dodge), Building 624, Fort Bliss, TX 79916-6803

---

5802 Benjamin Center Drive, Suite 101, Tampa, FL 33634 Tel.: (813) 884 5722 Fax: (813) 884 1876

**FIGURE G-1: DRAFT WORK PLAN SUBMITTAL**

PAGE G-1

DACA87-00-D-0036  
TASK ORDER: 0026

JUNE 18, 2004  
ORIGINAL

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

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***USA Environmental, Inc.***

---

May 7, 2004

USA-CE-OERS-808

US Army Engineering and Support Center, Huntsville  
ATTN: CEHNC-CT-E (Mr. Eduardo J. Marrero)  
4820 University Square  
Huntsville, AL 35816-1822

RE: Contract Number DACA87-00-D-0036, Task Order 0026, Time Critical OE Removal Action at the Bialock and Riley Properties, Former Camp Butner, Butner, North Carolina

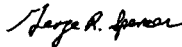
Dear Mr. Marrero;

In accordance with the Task Order 0026 Scope of Work and Contract Requirements, USA Environmental, Inc. is submitting the Final Work Plan. CEHNC Form 7 comments have been addressed and changes approved.

Distribution and number of copies are in accordance with the Scope of Work.

USA Environmental, Inc. is pleased that the US Army Engineering and Support Center, Huntsville selected us to perform this work and we look forward to working with USAESCH on this project.

Sincerely,



George R. Spencer  
Operations Manager

Copies/Distribution:

- 4 Copies - Commander, U.S. Army Engineering and Support Center, Huntsville, ATTN: CEHNC-OE-DC (Mr. Roland Belew), 4820 University Square, Huntsville, AL 35816-1822
- 4 Copies - Commander, U.S. Army Corps of Engineers Wilmington District, ATTN: Mr. John Baden, 69 Darlington Ave, Wilmington, NC 28403
- 1 Copy - Commander, US Army Corps of Engineers, South Atlantic, ATTN CESAD-PM-H (Ms. Sharon Taylor), 77 Forsyth Street, Atlanta, GA 30336-6801
- 1 Copy - Commander, Headquarters US Army Cops of Engineers, ATTN: CEMP-RF (Mr. Dale Moller), 441 G Street N.W., Washington, DC 20314-1000
- 1 Copy - Commander, U.S. Army, 18<sup>th</sup> Explosive Ordnance Disposal Company, Building D-9040, McRidge Road, Fort Bragg, NC 28307-5000

---

5802 BENJAMIN CENTER DRIVE, SUITE 101, TAMPA, FL 33634 TEL.: (813) 884-5722 FAX: (813) 884-1876

**FIGURE G-2: FINAL WORK PLAN SUBMITTAL**

PAGE G-2

DACA87-00-D-0036  
TASK ORDER: 0026

JUNE 18, 2004  
ORIGINAL

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

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REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
US ARMY DEFENSE AMMUNITION CENTER  
1 C TREE ROAD  
MCALESTER OK 74501-9053

SJMAC-ESM

00 MAY 2004

MEMORANDUM FOR US Army Engineering and Support Center, Huntsville,  
(CEHNC-OE-CX/Mr. Younghans), P.O. Box 1600, Huntsville, AL 35807-4301

SUBJECT: Time Critical Removal Action (TCRA) Explosives Safety Submission (ESS) Former  
Camp Butner, Butner, NC

1. References:

- a. Memorandum, Huntsville Center, Corps of Engineers, CEHNC-OE-CX, 23 Apr 04, SAB.
- b. AR 385-64, U.S. Army Explosives Safety Program, 28 November 1997.
- c. Memorandum, Department of Defense Explosives Safety Board, DDESB-KO, 5 May 04,  
SAB (encl).
- d. DOD 6055.9-STD, Ammunition and Explosives Safety Standards (Re-write),  
13 Dec 2002, with Rev 4, 5 Jan 2004.

2. The subject submission transmitted by reference 1.a. has been reviewed in accordance with reference 1.b. Reference 1.c. provides DDESB approval for the intrusive work area and the intentional detonation of any explosive items found during the TCRA described in the subject site plan. This approval applies only to the TCRA effort to remove MEC from the Riley and Blalock properties. A separate ESS must be submitted for review and approval for other MEC response actions within the former Camp Butner that are not covered by this TCRA.

3. Reference 1.c. reiterates the conditions listed in the ESS along with the additional stipulations listed in subparagraph a. of the enclosed memorandum.

4. The POC is Mr. James Toburen, SJMAC-ESM, DSN 956-8784, or COMML (918) 420-4652,  
email james.toburen@dac.army.mil.

FOR THE DIRECTOR:

Encl  
as

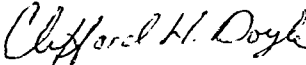
  
CLIFFORD H. DOYLE  
OE Team Leader  
Explosives Safety Knowledge,  
OE and Chemical Division

FIGURE G-3: DDESB APPROVAL

PAGE G-3

**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION**

**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

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**SJMAC-ESM**

**SUBJECT: Time Critical Removal Action (TCRA) Explosives Safety Submission (ESS) Former  
Camp Butner, Butner, NC**

**CF (w/encl):**

**Office of the Director of Army Safety (DACS-SF), 2211 South Clark Street, Room 980,  
Arlington, VA 22202**

**Office of the Assistant Secretary of the Army for Installations & Environment), (Asst. for  
Munitions) (DESOH/Mr. King), 110 Army Pentagon, Washington, DC 20310-0110 U.S. Army  
Corps of Engineers (CESO/Ms Roberts), 441 G Street, NW,  
Washington, DC 20314-1000**

FINAL REPORT -- TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA



DEPARTMENT OF DEFENSE EXPLOSIVES SAFETY BOARD  
2461 EISENHOWER AVENUE  
ALEXANDRIA VIRGINIA A 22331-0600



DDFSB-KO

05 MAY 2004

MEMORANDUM FOR DIRECTOR, DEFENSE AMMUNITION CENTER  
ATTENTION: SJMAC-ESM

SUBJECT: Time Critical Removal Action (TCRA) Explosives Safety Submission (ESS)  
Former Camp Butner, Butner, NC

References: (a) DAC SJMAC-ESM Memorandum, Subject as above, 27 April 2004

(b) DoD 6055.9-STD (Re-write) approved by DoD Explosives Safety Board at its  
325<sup>th</sup> Meeting, 11 December 2002

The DoD Explosives Safety Board (DDESB) Secretariat has reviewed the subject explosives safety submission (ESS), forwarded by reference (a), against the requirements of reference (b). Based on our review of the information provided, we approve the ESS for a time critical removal action (TCRA) to locate, identify, recover, and dispose of munitions and explosives of concern (MEC) from the Riley and Blalock properties at the former Camp Butner, Butner, NC. In summary:

- a. In addition to the stipulations outlined below, the Army must establish procedures to reduce the risk to residents and others who may be exposed to MEC hazards from areas within former Camp Butner that have not yet undergone MEC removal. The Army needs to establish procedures to monitor frost heave effects, as required in chapter 12 of reference (b), and to protect those potentially exposed during construction or other intrusive projects in areas not covered by this TCRA effort, but that are known or suspected to contain MEC.
- b. The area of coverage of both properties is approximately three acres and the current and intended use is residential. The planned clearance depth is removal-to-depth of all MEC found.
- c. Per reference (a), the DDESB approved sand bag blast and fragment mitigation method will be used for all intentional detonations. However, the maximum fragmentation range for the munition with the greatest fragmentation distance (MGFD) at each site will apply as the minimum separation distance (MSD) for intentional detonations.
- d. The MSD for the respective MGFD also will be applied during intrusive activities that could result in unintentional detonations. Recommend that during intrusive activities, Army consider using engineering controls, such as the Open Front Barricade (OFB) and the Miniature OFB. These engineering controls help reduce the potential fragmentation hazard during unintentional detonations.

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encl

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

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2

e. The minimum intraline separation distance between work teams is 200 feet.

f. Residences and other inhabited structures located within the MSD arc of each of the properties will be evacuated while intrusive activities are underway.

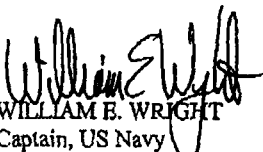
g. Riley Property covers 0.5 acres. The MGF D within this property is the 37mm HE MKII projectile with a maximum fragmentation range of 980 feet, applicable as the MSD for all intrusive activities.

h. Blalock Property covers 2.5 acres. The MGF D within this property is the 155mm M107 HE projectile with a maximum fragmentation range of 2,577 feet, applicable as the MSD for all intrusive activities.

i. Per reference (a), there will be no explosives storage on site and demolition explosives will be delivered to the site as needed.

This approval applies only to the TCRA effort to remove MEC from the Riley and Blalock properties. A separate ESS must be submitted for DDESB review and approval for other MEC response actions within the former Camp Butner that are not covered by this TCRA.

The point of contact for this action is Ms. Lydia E. Sanchez, (703) 325-1373, DSN 221-1373, E-mail address [Lydia.Sanchez@ddesb.osd.mil](mailto:Lydia.Sanchez@ddesb.osd.mil).

  
WILLIAM E. WRIGHT  
Captain, US Navy  
Chairman

PAGE 0-0

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

FORMER FORT BUTNER, BUTNER NORTH CAROLINA



DEPARTMENT OF THE ARMY  
HUNTSVILLE CENTER, CORPS OF ENGINEERS  
P.O. BOX 1600  
HUNTSVILLE, ALABAMA 35807-4301

REPLY TO  
ATTENTION OF:

May 11, 2004

Design Center for Ordnance  
and Explosives Directorate.

SUBJECT: Approval of Work Plan for TCRA for Riley and Blalock  
Properties at the Former Camp Butner, NC, Contract DACA87-00-D-  
0036 T.O. 0026

Mr. George Spencer  
USA Environmental  
5802 Benjamin Center Drive, Suite 101  
Tampa, Florida 33634

Mr. Spencer:

Your revised work plan for the subject project has been reviewed and is approved. You are authorized to mobilize to the site after you submit a letter to me for verification of data base check. I will sign approval at the bottom of your personnel approval letter if your workers qualify and that approval will be your authorization to mobilize.

Mr. Bob Selfridge will be on the site Monday afternoon, May 17, 2004 and will start working Tuesday morning to reacquire all anomalies to dig.

As a reminder of your contract requirements, if you believe certain comments included herein constitute a change to your contract that has not been negotiated and agreed to, then do not proceed with performance. Instead, formally notify me of the basis of your position and await instructions. I may (1) confirm that it is a change, direct the mode of further performance, and plan for its funding; (2) countermand the alleged change; or (3) notify you that no change is considered to have occurred. Proceeding with performance without first notifying me of your position will be at your own risk.

FIGURE G-4: USAESCH WORK PLAN APPROVAL

PAGE G-7

DACA87-00-D-0036  
TASK ORDER: 0026

JUNE 18, 2004  
ORIGINAL



FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION

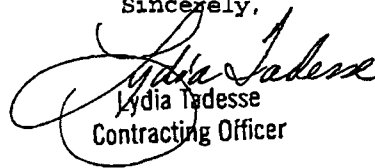
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

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-2-

If you have any questions, please contact Mr. Roland Belew at commercial (256) 895-1553 or via cellular phone at (256) 426-3717.

Sincerely,



Lydia Tadesse  
Contracting Officer

FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION  
FORMER FORT BUTNER, BUTNER NORTH CAROLINA

---

EMAIL MESSAGE – EXCLUSION ZONE

FW: Blalock House (Camp Butner) Residents refusing to evacuate. Can we go with 2,100 feet exclusion zone

From: Belew, Roland G HNC [Roland.G.Belew@hnd01.usace.army.mil]

Sent: Thursday, May 20, 2004 11:34 AM

To: George Spencer; 'USA Env. John Chionchio'; 'USA Env - Al Rhew (E-mail) (E-mail)'; Richard Hanoski

Cc: Keistler, Robert W SAW; Baden, John A III SAW; Schmitt, Penny SAW; 'Seaduxo@aol.com'; Potter, John C HNC; Galloway, Wayne H HNC; Crull, Michelle M HNC; Barnett, Ken D HNC; Selfridge, Bob J HNC

Subject: FW: Blalock House (Camp Butner) Residents refusing to evacuate. Can we go with 2,100 feet exclusion zone

Importance: High

George and all

Dr. Crull reviewed the conditions at the Blalock house and concluded it is safe to dig. Wayne Galloway deferred to Dr Crull and therefore Ken Barnett is proceeding to the site now to get the digging started.

thanks

Roland

-----Original Message-----

From: Crull, Michelle M HNC

Sent: Thursday, May 20, 2004 10:14 AM

To: Galloway, Wayne H HNC; Belew, Roland G HNC; Barnett, Ken D HNC

Subject: Blalock House (Camp Butner)

At 2100 ft, the fragments from an unintentional detonation of a 155mm M107 will not penetrate the siding and/or roof of a standard wood frame house. People in the house will be protected from the fragments and overpressure provided they stay away from the windows. If they have drapes or blinds I would recommend that they close those on the side facing the work area.

Michelle

*FIGURE G-5: BLALOCK 2,100-FOOT APPROVAL*

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DACA87-00-D-0036  
TASK ORDER: 0026

JUNE 18, 2004  
ORIGINAL

## ***USA Environmental, Inc.***

April 27, 2004

USA-CE-OERS-794

US Army Engineering and Support Center, Huntsville  
ATTN: CEHNC-OE-DC (Mr. Roland Below)  
4820 University Square  
Huntsville, AL 35816-1822

RE: Contract Number DACA87-00-D-0036, Task Order 0026, Time Critical OE Removal Action (TCRA) at the Blalock and Riley Properties, Former Camp Butner, Butner, North Carolina

Subject: Request for use of 1 Hazardous fragment/600 sq ft at the Riley Property

Dear Mr. Below;

In accordance with (IAW) EM 1110-1-4009 USA Environmental, Inc. (USA) requests authorization to use the 1/600 Minimum Separation Distance (MSD) of 200-feet at the Riley Property. The Most Probable Munition (MPM) IAW the Scope of Work (SOW) is the 37mm, MKII projectile with a maximum fragment range of 980 feet (see Attachment 1) and a 1/600 MSD of 200-feet.

Previous investigations during a TCRA (Parsons, August 2003) that included portions of the Riley Property in the Lakeview buffer zone did not show any evidence of unexploded ordnance (UXO) or Ordnance and Explosives (OE). Five of the six UXO located during the 2003 TCRA were located in the northwest quadrant of the site and none were located in the portion of the Riley Property (northeast quadrant).

We believe no UXO will be encountered at the Riley Property however will use engineering controls and/or evacuations for any inhibited buildings or public traffic routes that fall within the 200-foot MSD.

Sincerely,



George R. Spencer  
Operations Manager

Attachments:

- 1 CEHNC MSD Calculations for the 37mm MkII dated 12 April 2004
- 2 Risk Assessment Procedures for Military Munitions Response Projects dated 27 April 2004
- 3 EP 385-1-95a, Basic Safety Concepts and Considerations for Ordnance and Explosives Operations

5802 BENJAMIN CENTER DRIVE, SUITE 101, TAMPA, FL 33634 TEL.: (813) 884-5722 FAX: (813) 884-1876

**FIGURE G-6: REQUEST & APPROVAL FOR 1/600' AT RILEY PROPERTY**

**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION**  
**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

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1 in 600 is approved for Riley Property at Camp Butner

Page 1 of 1

**George Spencer**

---

**From:** Belew, Roland G HNC [Roland.G.Belew@hnd01.usace.army.mil]  
**Sent:** Monday, May 03, 2004 9:05 AM  
**To:** George Spencer  
**Cc:** Andrews, Alonzo L HNC  
**Subject:** 1 in 600 is approved for Riley Property at Camp Butner

George,  
Please call me.

Roland Belew  
U.S. Army Engineering and Support Center  
ATTN: CEHNC-OE-DC  
4820 University Square  
Huntsville, Al 35816-1822

(256) 895-1553 Desk Phone  
(256) 895-1378 Fax  
(256) 426-3717 Cell

6 week schedule from today:

Week of:

26-30 April - Full Mob on Sierra AD, 29-30 tdy to Brooksville FI

3-7 May I am in the office - Sending Team to Osborn Pond Meeting

10-14 May I am in the office - Sending Team to Lake Erie TPP kickoff. Sending Gamp Green Recurring Review Team to NC.

17-21 May I am in the office - Mob Blalock TCRA Butner NC contractor

24-28 May - I am in the office - Storm King workplan approval - premob coordination with CENAN.

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DACA87-00-D-0036  
TASK ORDER: 0026

JUNE 18, 2004  
ORIGINAL

FINAL REPORT - TIME CRITICAL OE REMOVAL ACTION  
 FORMER FORT BUTNER, BUTNER NORTH CAROLINA

1. TOTAL PRICE	2. SHIP FROM Blalock & Riley Properties, Former Camp Butler, NC	3. SHIP TO Timberline Environmental Services, Cold Springs, CA
4. MARK FOR Terry Northcutt, (209) 965-3118	5. DOC DATE	
6. NMFC	7. FRT RATE	8. TYPE CARGO
9. PS	10. QTY. REC'D	11. UP
12. UNIT WEIGHT	13. UNIT CUBE	14. UFC
15. SL	16. FREIGHT CLASSIFICATION NOMENCLATURE Miscellaneous Ordnance Related Scrap (ORS) Metal	
17. ITEM NOMENCLATURE ORS Container Number 0001		
18. TY CONT	19. NO CONT	20. TOTAL WEIGHT
22. RECEIVED BY		23. DATE RECEIVED
21. TOTAL CUBE		

DD FORM 1348-1A (10-99) PREVIOUS EDITION MAY BE USED

24. DOCUMENT NUMBER  
(4-74)  
(94-14)

25. NATIONAL STOCK NO. & ADD (8-8)-22)

26. (99-74) (99-86) (99-55) (99-58) (99-59) (99-60) (99-61) (99-62) (99-63) (99-64) (99-65) (99-66) (99-67) (99-68) (99-69) (99-70) (99-71) (99-72) (99-73) (99-74) (99-75) (99-76) (99-77) (99-78) (99-79) (99-80) (99-81) (99-82) (99-83) (99-84) (99-85) (99-86) (99-87) (99-88) (99-89) (99-90) (99-91) (99-92) (99-93) (99-94) (99-95) (99-96) (99-97) (99-98) (99-99)

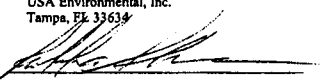
27. ADDITIONAL DATA

USACE/TCRA Former Camp Butler, NC/USA Environmental, Inc.  
 Contract Number: DACA87-00-D-0036  
 Task Order Number: 0036  
 Project Number: I04NC000902

Container Number 0001/Container Seal Numbers 4415172/4415173

"This certifies that the AEDA residue, Range residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and to the best of our knowledge and belief are inert and/or free of explosives or related materials."

Certified By: Robert Shauger  
 Senior UXO Supervisor  
 USA Environmental, Inc.  
 Tampa, FL 33634

Signature: 

Verified By: Ken D. Barnett  
 Ordnance and Explosives Safety Specialist  
 U.S. Army Engineering and Support Center/CEHNC  
 Huntsville, AL

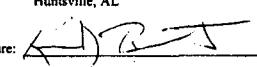
Signature: 

FIGURE G-7: DD FORM 1348-1A

DACA87-00-D-0036  
 TASK ORDER: 0026

**FINAL REPORT - TIME CRITICAL OE REMOVAL ACTION**  
**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

1. QUANTITY 2. LB 3. 75	4. SUPPLIER'S ADDRESS 5. USACE/TCRA Former Camp Butner, NC/USA Environmental, Inc. 6. Contract Number: DACA87-00-D-0036 7. Task Order Number: 0036 8. Project Number: 104NC000902  9. Container Number 0002/Container Seal Numbers 4415174/4415175	10. FREIGHT CLASSIFICATION NOMENCLATURE 11. Miscellaneous Ordnance Related Scrap (ORS) Metal  12. ITEM NOMENCLATURE 13. ORS Container Number 0002	14. TOTAL PRICE 15. DOLLARS 16. CTS	17. SHIP FROM 18. Blalock & Riley Properties, Former Camp Butner, NC  19. SHIP TO 20. Timberline Environmental Services, Cold Springs, CA  21. MARK FOR 22. Terry Northcutt, (209) 965-3118	23. DOC DATE 24. NMFC 25. FRT RATE 26. TYPE CARGO 27. PS  28. QTY. REC'D 29. 11. UP 30. 12. UNIT WEIGHT 31. 13. UNIT CUBE 32. 14. UFC 33. 15. SL  34. TY CONT 35. 19. NO CONT 36. 20. TOTAL WEIGHT 37. 21. TOTAL CUBE  38. RECEIVED BY 39. DATE RECEIVED
-------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

"This certifies that the AEDA residue, Range residue and/or Explosive Contaminated Property listed has been 100 percent properly inspected and to the best of our knowledge and belief are inert and/or free of explosives or related materials."

Certified By: Robert Shauger Senior UXO Supervisor USA Environmental, Inc. Tampa, FL 33634  Signature:	Verified By: Ken D. Barnett Ordnance and Explosives Safety Specialist U.S. Army Engineering and Support Center/CEHNC Huntsville, AL  Signature:
-----------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------

DD FORM 1348 (10-99) PREVIOUS EDITION MAY BE USED  
 1. QUANTITY  
 2. LB  
 3. 75  
 4. SUPPLIER'S ADDRESS  
 5. USACE/TCRA Former Camp Butner, NC/USA Environmental, Inc.  
 6. Contract Number: DACA87-00-D-0036  
 7. Task Order Number: 0036  
 8. Project Number: 104NC000902  
 9. Container Number 0002/Container Seal Numbers 4415174/4415175  
 10. FREIGHT CLASSIFICATION NOMENCLATURE  
 11. Miscellaneous Ordnance Related Scrap (ORS) Metal  
 12. ITEM NOMENCLATURE  
 13. ORS Container Number 0002  
 14. TOTAL PRICE  
 15. DOLLARS  
 16. CTS  
 17. SHIP FROM  
 18. Blalock & Riley Properties, Former Camp Butner, NC  
 19. SHIP TO  
 20. Timberline Environmental Services, Cold Springs, CA  
 21. MARK FOR  
 22. Terry Northcutt, (209) 965-3118  
 23. DOC DATE  
 24. NMFC  
 25. FRT RATE  
 26. TYPE CARGO  
 27. PS  
 28. QTY. REC'D  
 29. 11. UP  
 30. 12. UNIT WEIGHT  
 31. 13. UNIT CUBE  
 32. 14. UFC  
 33. 15. SL  
 34. TY CONT  
 35. 19. NO CONT  
 36. 20. TOTAL WEIGHT  
 37. 21. TOTAL CUBE  
 38. RECEIVED BY  
 39. DATE RECEIVED

PerFORM (DLA)

DACA87-00-D-0036  
 TASK ORDER: 0026

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 JUNE 18, 2004  
 ORIGINAL



## Public Affairs Office —

United States Army Corps of Engineers  
Wilmington District  
P.O. Box 1890  
Wilmington, North Carolina 28402-1890  
(910) 251-4626

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3 May 2004

### Corps of Engineers Ordnance Investigations on Uzzle Road and at Lake View Subdivision the week of 17 May 2004

Butner, North Carolina – The U.S. Army Corps of Engineers will perform a week long ordnance investigation at Mr. and Mrs. Blalocks on Uzzle Road at the intersection of the Electric Transmission Lines and Uzzle Road. A second investigation will be conducted on Mr. and Mrs. Riley's property in Lake View Subdivision. Part of the Riley property was missed during the original investigations done in 2002.

This work will be done starting:

Monday, 17 May 2004  
And continue thru  
28 May 2004

The removal action at the Blalock property will require the temporary evacuation of residents within 2,577 feet of the Blalock property. The Riley property will require evacuations within 200 feet of the Riley Property. We know what families are within this radius and will be leaving this notice on your door. Please contact Mr. Keistler below with your questions.

We would like to do the work when residents are away at work, however if you do not work, we would like to offer you a room at a local hotel for the day only. The Corps of Engineers contractor, USA Environmental, will only work during daylight hours. They will dig specific targets that were located from geophysical mapping of the properties in June of 2003. The digging of these targets will go quickly and the 2 weeks set aside for the work may be reduced substantially if no ordnance is found.

The Butner Police have been hired by the contractor to assist in the coordination and verification of evacuations. If we can get all at the Blalock property, then all targets can be dug in 1 to 2 days. If there is no ordnance, then the job is finished and you will be notified the investigation is done. Then the contractor will move to the Riley property. Again, the Riley targets can be dug in 1 to 2 days and if there is no ordnance, then the job will be done. If there is ordnance at either residence, then you will be notified that a demolition shot will be done at a specific time so no one is alarmed. The demolition shot will be heavily sand bagged and may not even be heard.

Since demolition supplies will be ordered on an if needed basis, then any found ordnance will be guarded over night until the demo supplies arrive the next day. All residents will be kept fully informed of all activities.

**FIGURE G-8: SAW NOTIFICATION LETTER**

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**FINAL REPORT – TIME CRITICAL OE REMOVAL ACTION**

**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

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Please refer your questions to:

U.S. Army Corps of Engineers, Wilmington District  
ATTN: CESA W (Robert Keistler)  
P.O. Box 1890  
Wilmington, N.C. 28402-1890  
Phone (910) 251-4709  
Robert.w.keistler@saw02.usace.army.mil

Or

U.S. Army Corps of Engineers, Wilmington District  
ATTN: CESA W (John Baden)  
P.O. Box 1890  
Wilmington, N.C. 28402-1890  
Phone (910) 251-4754  
john.a.baden@saw02.usace.army.mil





**Public Affairs Office**

United States Army Corps of Engineers  
Wilmington District  
P.O. Box 1890  
Wilmington, North Carolina 28402-1890  
(910) 251-4626

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**18 May 2004**

**Corps of Engineers Ordnance Investigations at Lake View Subdivision 19 and  
20 May 2004**

In reference to the U.S. Army Corps of Engineers Public Affairs Notice dated 3 May 2004, USA Environmental, Inc. under the direction of the U.S. Army Corps of Engineers will perform an intrusive investigation/removal action on Mr. and Mrs. Riley's property in Lake View Subdivision. USA Environmental will only work during daylight hours and will dig specific targets that were located from geophysical mapping of the property in June of 2003. USA Environmental will make every effort to ensure that operations in this area cause as little disruption as possible to the area and its residents. The work on the Riley Property will be started:

**Wednesday, 19 May 2004 at 7:00 A.M.**  
And is expected to be completed on  
**Wednesday, 19 May 2004 at 5:00 P.M.**

The intrusive investigation/removal action on the Riley property will require the temporary evacuation of residents within 200 feet of the investigation area. USA Environmental plans to conduct the investigation while residents are away at work, however if you do not work, we will have a room reserved at a local hotel for you and family members residing with you for the day of evacuation only. The Holiday Inn Express Butner, located at 2578 West Lyon Station RD, Creedmoor, NC 27522, phone (919) 575-5942 has been notified and a room for you and your family has been reserved for the day of evacuation if needed. If transportation is needed to and from the hotel for you or anyone in your family on the day of evacuation, USA Environmental will provide a courtesy shuttle on that day.

The Butner Police have been hired by USA Environmental to assist in the coordination and verification of evacuations and road closures. You will be kept fully informed of all ongoing activities and their completion. Please refer your questions and or concerns to:

Dan Miller, Site Manager Former Camp Butner  
USA Environmental, Inc.  
5802 Benjamin Center Drive Suite 101  
Tampa, FL 33634  
Cell Phone (813) 786-0785

Or

Robert Schauger, Senior UXO Supervisor Former Camp Butner  
USA Environmental, Inc.  
5802 Benjamin Center Drive Suite 101  
Tampa, FL 33634  
Cell Phone (813) 245-2387

**FIGURE G-9: USA NOTIFICATION LETTERS**

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**FINAL REPORT -- TIME CRITICAL OE REMOVAL ACTION**  
**FORMER FORT BUTNER, BUTNER NORTH CAROLINA**

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**Public Affairs Office**

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Wilmington, North Carolina 28402-1890  
(910) 251-4626

**18 May 2004**

**Corps of Engineers Ordnance Investigations on Uzzle Road 20, 21, 24 and 25  
May 2004**

In reference to the U.S. Army Corps of Engineers Public Affairs Notice dated 3 May 2004, USA Environmental, Inc. under the direction of the U.S. Army Corps of Engineers will perform an intrusive investigation/removal action on Mr. and Mrs. Blalock property on Uzzle Road. USA Environmental will only work weekdays during daylight hours and will dig specific targets that were located from geophysical mapping of the property in June of 2003. USA Environmental will make every effort to ensure that operations in this area cause as little disruption as possible to the area and its residents. The work on the Blalock Property will be started:

**Thursday, 20 May 2004 at 7:00 A.M.**  
And is expected to be completed on  
**Tuesday, 25 May 2004 at 5:00 P.M.**

The intrusive investigation/removal action on the Blalock property will require the temporary evacuation of residents within 2,577 feet of the investigation area. USA Environmental plans to conduct the investigation while residents are away at work, however if you do not work, we will have a room reserved at a local hotel for you and family members residing with you for the day of evacuation only. The Holiday Inn Express Butner, located at 2578 West Lyon Station RD, Creedmoor, NC 27522, phone (919) 575-5942 has been notified and a room for you and your family has been reserved for the day of evacuation if needed. If transportation is needed to and from the hotel for you or anyone in your family on the day of evacuation, USA Environmental will provide a courtesy shuttle on that day.

The Butner Police have been hired by USA Environmental to assist in the coordination and verification of evacuations and road closures. You will be kept fully informed of all ongoing activities and their completion. Please refer your questions and or concerns to:

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5802 Benjamin Center Drive Suite 101  
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Or

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Tampa, FL 33634  
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