

EASTERN BYPASS
ENGINEERING EVALUATION/
COST ANALYSIS

FORT McCLELLAN
FORT McCLELLAN, ALABAMA

Contract No. DACA87-95-D-0026

PARADE GROUND GEOPHYSICAL INVESTIGATION AND REMOVAL

Submitted:

29 JUNE 1999

Prepared for:

US ARMY ENGINEERING AND SUPPORT CENTER
4820 University Square
Huntsville, Alabama 35816-1822

Prepared by:

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***Parade Ground Geophysical Investigation and Removal
Fort McClellan, Alabama
11 May 1999***

Summary

ZAPATAENGINEERING, P.A. conducted the time-critical removal action under Contract No. DACA87-95-D-0026 (Task Order Annex E), from the US Army Engineering and Support Center, Huntsville, Alabama. The purpose of the time-critical removal action was to locate and remove anomalies within the designated areas of the main parade ground which had been leveled with fill dirt brought in from a separate location, and to dispose of them as necessary. ZAPATAENGINEERING coordinated with CEHNC to organize the effective and efficient time-critical removal action. USA Environmental, Inc provided UXO support for the task. No OE items were discovered during the removal effort.

Authorization

ZAPATAENGINEERING, P.A. conducted the time-critical removal action under Contract No. DACA87-95-D-0026 (Task Order Annex E), from the US Army Engineering and Support Center, Huntsville, Alabama.

Purpose and Scope

The purpose of the time-critical removal action was to locate and remove any anomalies within the designated areas containing fill dirt in the main parade ground and to dispose of them as necessary. The areas of investigation included four areas of various sizes, ranging from approximately 50 square feet to approximately 13,000 square feet. Each area contained less than or equal to approximately 12 inches of fill dirt and was covered in grass seed and straw. This removal action was precipitated by the discovery of a 60mm practice mortar on the surface of the largest area. Additional ordnance and/or training items were suspected in the fill dirt.

ZAPATAENGINEERING was notified on Monday 10 March 1999 of a time-critical removal action at Fort McClellan. Dirt from an unknown location was used to fill low spots in the main parade ground. The dirt was seeded and fenced to keep pedestrian traffic off the new grass. Days later, workers discovered a 60mm practice mortar on the surface of the fill dirt. It, apparently, had been transported from the unknown location to the parade ground. Therefore, the fill dirt potentially contained more OE items. A cursory magnetometer investigation conducted by CEHNC representative Hank Hubbard confirmed the presence of many anomalies within the fenced sites. ZAPATAENGINEERING agreed to remediate the site following the same geophysical intrusive investigation and safety guidelines as the currently accepted for the Engineering Evaluation/Cost Analysis study at Fort McClellan.

Site Location

The investigation site was located in the parade ground south of Summerall Gate Road, east of Iron Mountain Road and north of 23rd Street. Figure 1 in Attachment A shows the investigation site within Fort McClellan. The four small sites were within approximately

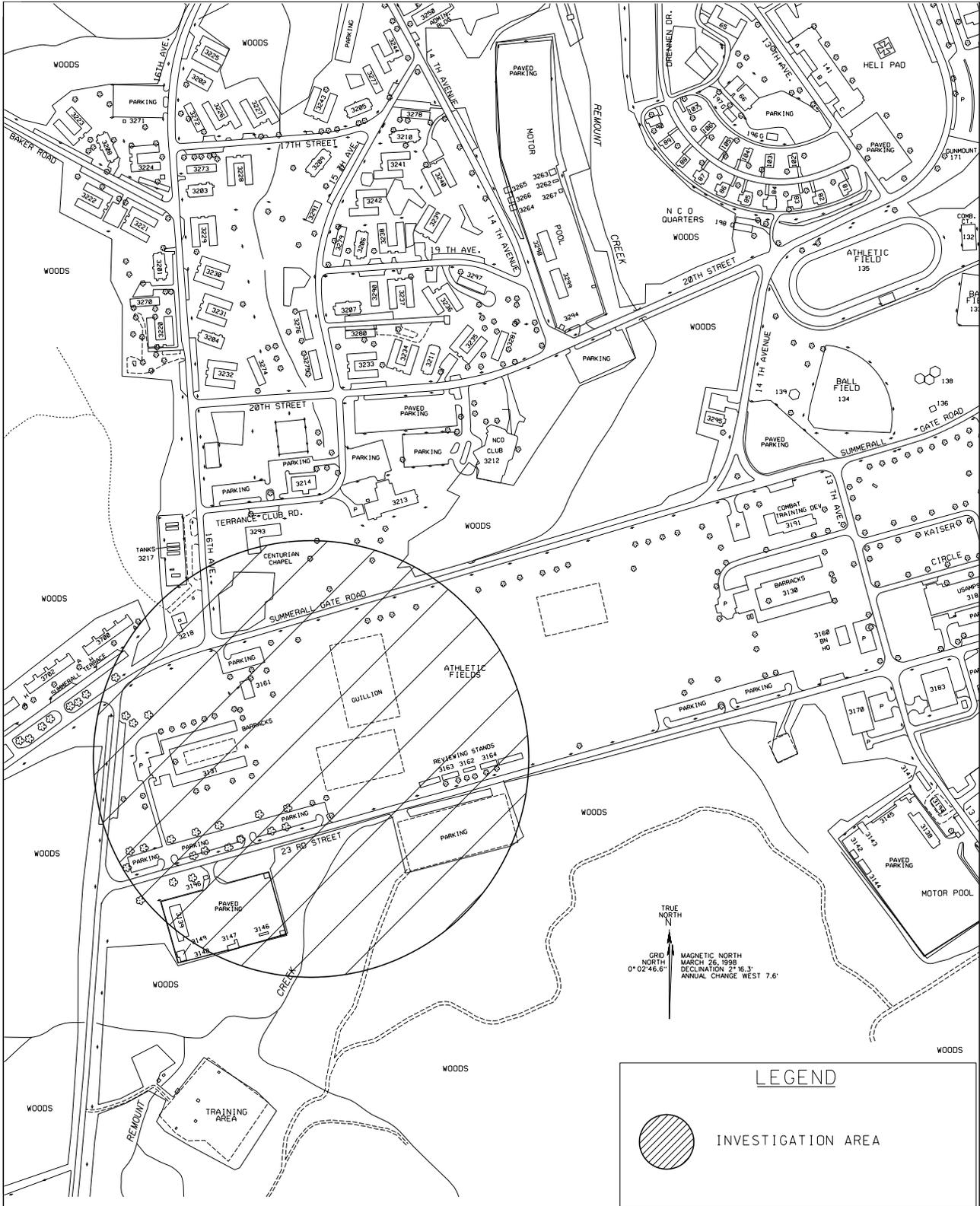
100 feet of the northeast corner of the parking lot north of 23rd Street, due west of the main reviewing stands, as depicted in Figure 2, Attachment A. An orange fence ran the perimeter of each of the four areas. Field Photograph 1, Attachment B shows two of the areas still marked with fencing.

Operation

On Tuesday 11 March 1999, ZAPATAENGINEERING and USA Environmental, Inc began the investigation and removal. Each area was investigated in the same sequential steps as describe below. First, fencing was removed and the perimeter of the area, plus approximately three feet, was marked with pin flags. A visual inspection for obvious surface items was conducted. A Schonstadt Magnetometer was used the sweep the area. Anomalies were marked with non-metallic pin flags. After the entire area was surveyed with the magnetometer, the anomalies were excavated. Due to the proximity of the public to the investigation site, a miniature open-front barricade or “bud light” was used when sampling each anomaly. The open face of the bud light faced 23rd Street. Each flagged anomaly in the area was removed and the holes checked for additional anomalies. Shovels and knives were used to conduct the anomaly removals.

No OE items were discovered during the removal effort. Removed items included nails, stakes, rocks and metal pieces, as shown in Field Photograph 6 in Attachment B. All removed items were collected and transported to a trash bin for disposal. Hank Hubbard conducted a quality control check of each area after the sampling effort was complete and no additional items were discovered.

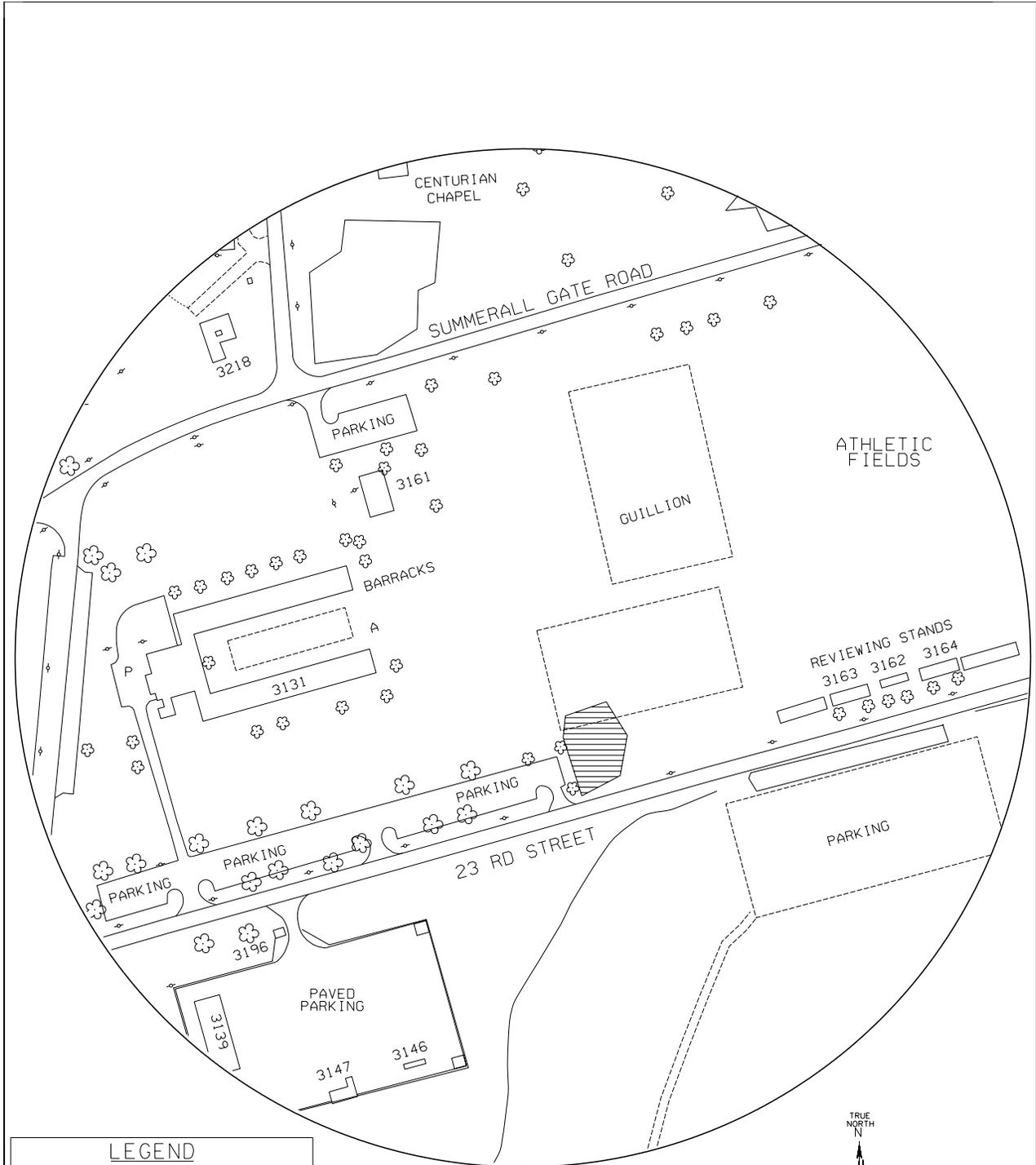
Attachment A
Investigation Figures



TRUE NORTH
 ↑
 GRID NORTH
 0° 02' 46.8"
 MAGNETIC NORTH
 MARCH 26, 1998
 DECLINATION 2° 16.3'
 ANNUAL CHANGE WEST 7.6"

LEGEND	
	INVESTIGATION AREA

ZAPATAENGINEERING, P.A. 1100 KENILWORTH AVENUE CHARLOTTE, NC 28204 E-MAIL: ZAPATA@ZAPENG.COM TRUST • INTEGRITY • QUALITY	 US ARMY ENGINEERING & SUPPORT CENTER HUNTSVILLE, ALABAMA	PROJECT TITLE: PARADE GROUND GEOPHYSICAL INVESTIGATION AND REMOVAL		
		DRAWING TITLE: PARADE GROUND LOCATION		
CONTRACT #:	PROJECT #:	DATE:	DRAWN BY:	SCALE:
DACA87-95-D-0026-0004	982500	28 JUNE 1999	J. SHIFLET	1" = 500'
				FIGURE: 1



LEGEND

 SAMPLE AREAS

 INVESTIGATION AREA

TRUE NORTH
N

GRID NORTH
0° 02' 46.6"

MAGNETIC NORTH
MARCH 26, 1988
DECLINATION 2° 16.3'
ANNUAL CHANGE WEST 7.6"

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US ARMY ENGINEERING
& SUPPORT CENTER
HUNTSVILLE, ALABAMA

PROJECT TITLE: PARADE GROUND GEOPHYSICAL
INVESTIGATION AND REMOVAL

DRAWING TITLE: INVESTIGATION AREA

CONTRACT #: DACA87-95-D-0026-0004	PROJECT #: 982500	DATE: 28 JUNE 1999
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DRAWN BY: J. SHIFLET	SCALE: 1" = 200'	FIGURE: 2
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Attachment B
Field Photographs



1. One large and one smaller fenced area, prior to fence removal and investigation.



2. Straw covered, grass seeded fill dirt inside large fenced area.



3. Fence removed from smaller area. Initial visual inspection conducted.



4. Seeded fill dirt inside smaller area. Flags mark former fence post locations.



5. USA Environmental, Inc. conducts magnetometer investigation of small area.



6. Items removed from large area include pins, nails, stakes, rocks and metal pieces.