

MEMORANDUM FOR RECORD

SUBJECT: Draft Remedial Investigation Report, Former Chemical Laundry and Motor Pool Area 1500, Parcel 94(7), Volumes I and II, May 2002

1. Subject draft report will not be finalized by the U.S. Army. It is maintained in the Administrative Record and Information Repositories to provide information collected by the Army prior to implementation of the Environmental Services Cooperative Agreement (ESCA) between the Army and the Anniston-Calhoun County Fort McClellan Development Joint Powers Authority (JPA) executed on 15 September 2003, and as modified on 30 September 2005. The JPA will complete environmental services and achieve site closeout in accordance with the requirements of the ESCA.
2. Point of contact for this action is Lisa Holstein, Transition Force, Fort McClellan, AL, at 256-848-7455.



May 3, 2002

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IT-MC-CK10-0210
Project No. 796887

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**Contract: Contract No. DACA21-96-D-0018/CK10
Fort McClellan, Alabama**

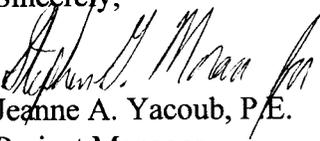
**Subject: Draft Remedial Investigation Report, Former Chemical Laundry and Motor
Pool Area 1500, Parcel 94(7)**

Dear Mr. Pope:

I am enclosing one copy of the subject document for your review. This draft report describes the activities and conclusions of the remedial investigation that IT conducted at the Former Chemical Laundry and Motor Pool Area 1500, Parcel 94(7). The RI results for Parcel 94(7) were presented to the BCT at the October 2001 BCT meeting. During that meeting, the BCT agreed that sufficient data had been collected and that site characterization was complete.

At your request, I have distributed copies of this document as indicated below. If you have questions, or need further information, please contact me at (770) 663-1429 or Steve Moran at (865) 694-7361.

Sincerely,


Jeanne A. Yacoub, P.E.
Project Manager

Attachments

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Philip Stroud, ADEM (2 copies)
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Draft

**Remedial Investigation Report
Former Chemical Laundry and Motor Pool Area 1500
Parcel 94(7)**

**Volume I of II
Text, Tables, and Figures**

**Fort McClellan
Calhoun County, Alabama**

Prepared for:

**U.S. Army Corps of Engineers, Mobile District
109 St. Joseph Street
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Prepared by:

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**Task Order CK10
Contract No. DACA21-96-D-0018
IT Project No. 796887**

May 2002

Revision 0

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1 **Executive Summary**

2
3 In accordance with Contract Number DACA21-96-D-0018, Task Orders CK05 and CK10, IT
4 Corporation completed a remedial investigation (RI) at the Former Chemical Laundry and Motor
5 Pool Area 1500, Parcel 94(7), at Fort McClellan in Calhoun County, Alabama. The RI was
6 conducted to determine the nature and extent of contamination at the site and to assess future
7 risks to human health and the environment.

8
9 Parcel 94(7) was the site of a former vehicle maintenance facility, or motor pool, which housed
10 three gas stations during World War II. The three gas stations included Building 1494 (Parcel
11 133[7]), Building 1594 (Parcel 132[7]), and Building 1594A (Parcel 134[7]). Reportedly, two
12 underground storage tanks (UST) were located at each building. Parcel 94(7) was also the
13 location of two chemical impregnation plants reportedly used during the 1950s and 1960s. The
14 impregnation facilities were used to launder and treat military garments used in chemical warfare
15 material (CWM) training exercises to render them impermeable to CWM. Garments were
16 chemically treated and impregnated with a mixture of wax and chemicals designed to neutralize
17 CWM.

18
19 RI activities at Parcel 94(7) consisted of the sampling and analysis of 4 depositional soil samples,
20 16 surface soil samples, 15 subsurface soil samples, 21 groundwater samples, and 5 surface water
21 and sediment samples. In addition, 18 groundwater monitoring wells were installed at the site to
22 facilitate groundwater sample collection and to provide site-specific geological and
23 hydrogeological characterization information. A geophysical survey was also performed and
24 identified seven anomalies representing potential USTs at the former gas stations. The three
25 anomalies most likely to be USTs were further investigated using exploratory trenching and
26 excavation. There were not any USTs found at Parcels 132(7), 133(7), and 134(7).

27
28 The geology at Parcel 94(7) is characterized as clayey silt and silty sand residuum overlying
29 fractured, weathered limestone and interbedded weathered shale. The depth to bedrock ranged
30 from 6 to 50 feet bgs. Groundwater in the residuum follows surface topography and flows
31 eastward toward Ingram Creek. Groundwater flow within the bedrock aquifer, however, appears
32 to be controlled by structure present at the site and flows approximately radially away from the
33 axis of an anticlinal fold present at the site. Hydraulic conductivity values calculated from slug
34 tests yielded geometric mean values of approximately 4.1 feet per day (ft/day) for residuum

1 wells, and approximately 0.14 ft/day for bedrock wells. Average linear groundwater flow
2 velocities were calculated to be approximately 0.3 ft/day in residuum and approximately 0.03
3 ft/day in bedrock.

4
5 In soils and sediment, polynuclear aromatic hydrocarbon (PAH) compounds were detected in a
6 limited number of samples at concentrations exceeding human health site-specific screening
7 levels (SSSL) and/or ecological screening values (ESV). However, the concentrations of the
8 PAHs were generally low and are most likely related to asphalt pavement at and around Parcel
9 94(7) rather than historical mission-related Army activities.

10
11 In groundwater, five volatile organic compounds (VOC) were detected at concentrations
12 exceeding SSSLs: benzene, chlorobenzene, trichloroethene (TCE), cis-1,2-dichloroethene
13 (DCE), and vinyl chloride. With the exception of benzene, which was detected in only one well,
14 the occurrence of these contaminants is restricted to an area centered on a cluster of three wells
15 located adjacent to an eastward extension of the parcel boundary. Contamination may reflect
16 releases to the ground from historical operations conducted at the former chemical impregnation
17 plants at the site. The association of chlorinated solvents in the wells indicates that reductive
18 dechlorination is occurring. Although the source of benzene in groundwater is not known, it may
19 be related to former motor pool operations. The horizontal extent of benzene, chlorobenzene,
20 TCE, cis-1,2-DCE, and vinyl chloride has been defined. The vertical extent of TCE
21 contamination, however, has not been adequately determined.

22
23 A streamlined human health risk assessment (SRA) was performed to determine the potential
24 threat to human health from exposure to environmental media at Parcel 94(7). Four receptor
25 scenarios were evaluated in the SRA: groundskeeper, construction worker, recreational site-user,
26 and resident. The SRA concluded that exposure to environmental media at Parcel 94(7) does not
27 pose an unacceptable threat to human health for the recreational site-user, construction worker, or
28 groundskeeper. For the resident, the SRA identified the following chemicals of concern (COC):
29 four PAH compounds in soil and two VOCs (TCE and vinyl chloride) in groundwater.

30
31 A screening-level ecological risk assessment (SLERA) was performed that identified metals and
32 PAHs as chemicals of potential ecological concern (COPEC) in surface soils and in one sediment
33 sample. However, the SLERA concluded that none of the COPECs identified presents a risk to
34 the terrestrial or aquatic ecosystems.

1
2 Based on the results of the RI, further investigation of groundwater contamination at Parcel 94(7)
3 is recommended. Additional groundwater samples should be collected during a short-term
4 monitoring period to identify spatial and temporal changes in groundwater contamination of the
5 existing wells, and to provide a preliminary indication of whether contaminants are migrating
6 vertically. In addition, a feasibility study or focused feasibility study is recommended to screen
7 remedial action technologies and process options for groundwater remedial alternatives.

1 **1.0 Introduction**

2
3 The U.S. Army has selected Fort McClellan (FTMC), located in Calhoun County, Alabama, for
4 closure by the Base Realignment and Closure (BRAC) Commission under Public Laws 100-526
5 and 101-510. The 1990 Base Closure Act, Public Law 101-510, established the process by
6 which U.S. Department of Defense (DOD) installations would be closed or realigned. The
7 BRAC Environmental Restoration Program requires investigation and cleanup of federal
8 properties prior to transfer to the public domain. The U.S. Army is conducting environmental
9 studies of the impact of suspected contaminants at parcels at FTMC under the management of the
10 U.S. Army Corps of Engineers (USACE)-Mobile District. The USACE contracted IT
11 Corporation (IT) to perform the remedial investigation (RI) of the Former Chemical Laundry and
12 Motor Pool Area 1500, Parcel 94(7), under Contract Number DACA21-96-D-0018, Task Order
13 CK10. Prior to the RI, IT conducted a site investigation (SI) at the Former Chemical Laundry
14 and Motor Pool Area 1500, Parcels 94(7), 132(7), 133(7), and 134(7), under Task Order CK05.
15 This RI report documents the results of the initial SI and subsequent RI conducted at Parcel
16 94(7).
17

18 **1.1 Scope and Objectives**

19 The scope of the SI was outlined in the *Final Site-Specific Field Sampling Plan (SFSP)*
20 *Attachment for the Former Chemical Laundry and Motor Pool Area 1500, Parcels 94(7), 132(7),*
21 *133(7), and 134(7)* (IT, 1998a). The scope of the first phase of the RI was outlined in the *Final*
22 *Site-Specific Field Sampling Plan Addendum, Remedial Investigation, Former Chemical*
23 *Laundry and Motor Pool Area 1500, Parcel 94(7)* (IT, 2000a). The RI work plan includes the
24 SFSP and the site-specific safety and health plan (SSHP), which were prepared to provide
25 technical guidance for sample collection and analysis at Parcel 94(7). The SFSP was used in
26 conjunction with the SSHP as attachments to the installation-wide work plan (IT, 1998b) and the
27 installation-wide sampling and analysis plan (SAP) (IT, 2000b). The SAP includes the
28 installation-wide safety and health plan and quality assurance plan.
29

30 The second phase of the RI was outlined in the *Site-Specific Work Plan Addendum for the*
31 *Supplemental Remedial Investigation at the Former Chemical Laundry and Motor Pool Area*
32 *1500, Parcel 94(7)* (IT, 2001a). Supplemental RI field activities included the completion of soil
33 borings, the installation of monitoring wells, and the sampling and analysis of soil, surface
34 water/sediment, and groundwater samples.
35

1 The primary objectives of this RI are to determine the nature and extent of contamination at the
2 Former Chemical Laundry and Motor Pool Area 1500, Parcel 94(7), and to identify site-related
3 chemicals that pose an unacceptable risk to human health and the environment. Completion of
4 these objectives enables the support of one or more of the decisions presented below and on
5 Figure 1-1 under the installation restoration program (IRP) process:

- 6
- 7 • Preparation of an engineering evaluation and cost analysis to identify remedial
8 action objectives and evaluate removal alternatives
- 9
- 10 • Preparation of a feasibility study or focused feasibility study for evaluation of
11 potential remedial measures
- 12
- 13 • Recommendation of interim remedial measures
- 14
- 15 • Preparation of a decision document to support no further investigation actions.
- 16

17 **1.2 Site Background**

18 The following sections provide site background information for both FTMC and Parcel 94(7),
19 including previous investigations at Parcel 94(7).

20

21 **1.2.1 FTMC Site Description and History**

22 FTMC was a U.S. Army training installation located in northeast Alabama, near the city of
23 Anniston in Calhoun County (Figure 1-2). Presently under the control of the U.S. Army
24 Training and Doctrine Command (TRADOC), FTMC was closed under the BRAC program in
25 September 1999. FTMC consisted of three portions of land: Main Post, Choccolocco Corridor,
26 and Pelham Range. The majority of FTMC development is in the northwest area of the Main
27 Post. The City of Anniston is located to the south and west of the Main Post; adjoining the Main
28 Post installation to the east are the Choccolocco Mountains of the Talladega National Forest.

29

30 The Main Post, consisting of 18,929 acres, was purchased by the federal government in
31 March 1917 for the construction of a National Guard camp (Camp McClellan). Pistol and rifle
32 ranges were established north of the camp, automatic rifle and machine gun ranges were
33 established southwest of the camp, and artillery firing ranges were established southeast of the
34 camp toward the Choccolocco Mountains (New South Associates, Inc. [NSA], 1993). Camp
35 McClellan expanded throughout the 1920s and 1930s. The advent of World War II in the 1940s
36 brought continued growth for the installation. Most notably, the 22,245 acres of Pelham Range
37 were purchased to the west of the Main Post in early 1940 for artillery, tank, and heavy mortar

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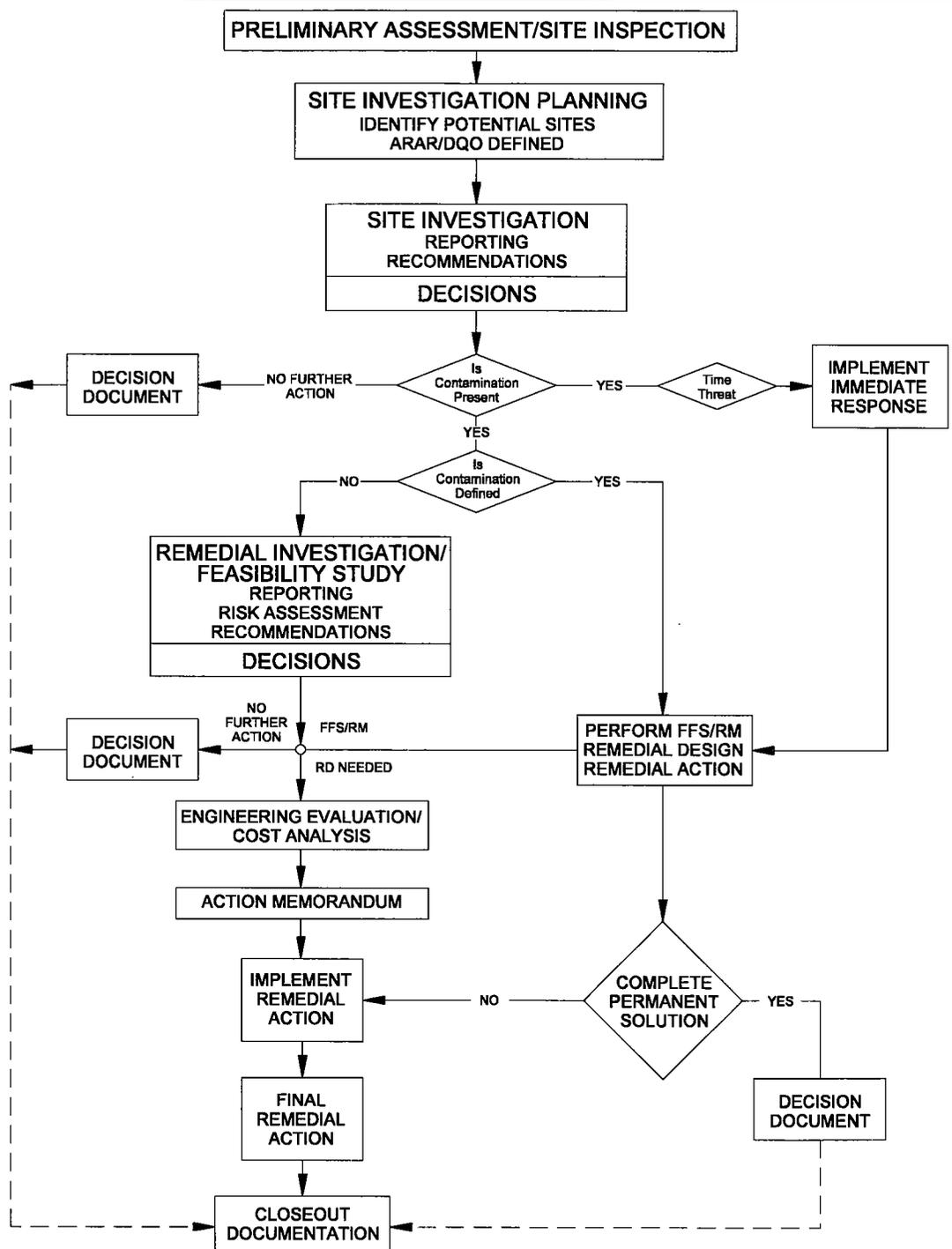


FIGURE 1-1
INSTALLATION RESTORATION
PROGRAM FLOW CHART
FORMER CHEMICAL LAUNDRY
AND MOTOR POOL AREA 1500
PARCEL 94(7)

- LEGEND:**
- ARAR APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS
 - DQO DATA QUALITY OBJECTIVES
 - FFS/RM FOCUSED FEASIBILITY STUDY/ REMEDIAL MEASURE
 - RD REMEDIAL DESIGN
 - RI/FS REMEDIAL INVESTIGATION/ FEASIBILITY STUDY

U. S. ARMY CORPS OF ENGINEERS
 MOBILE DISTRICT
 FORT McCLELLAN
 CALHOUN COUNTY, ALABAMA
 Contract No. DACA21-96-D-0018



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 PROJ. NO.: 796887
 INITIATOR: T. WINTON
 PROJ. MGR.: J. YACOUB
 DRAFT. CHCK. BY:
 ENGR. CHCK. BY: S. MORAN
 DATE LAST REV.:
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 STARTING DATE: 04/22/02
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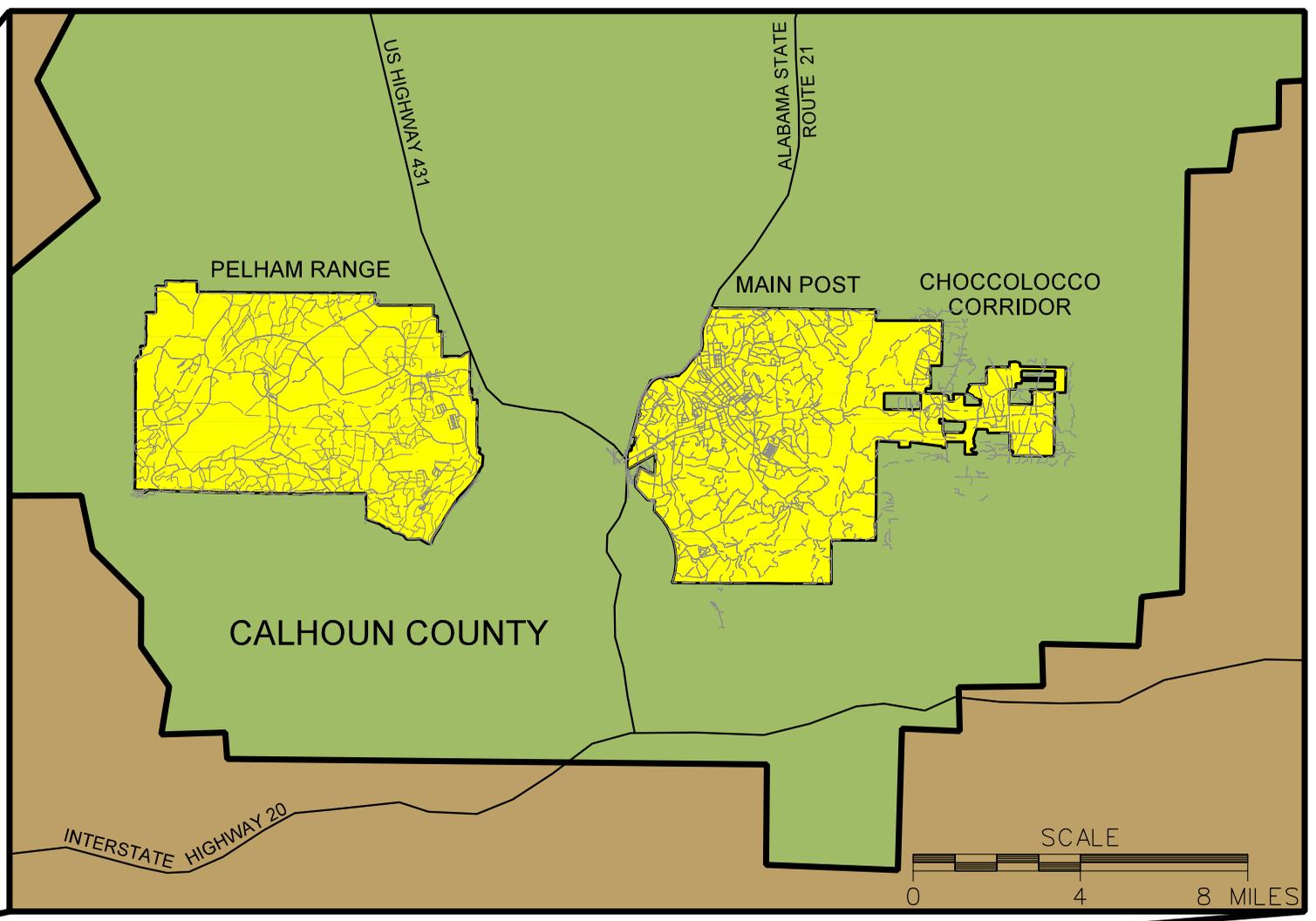


FIGURE 1-2
REGIONAL LOCATION MAP
FORT McCLELLAN
CALHOUN COUNTY, ALABAMA

U. S. ARMY CORPS OF ENGINEERS
 MOBILE DISTRICT
 FORT McCLELLAN
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1 firing. Approximately 4,488 additional acres to the east of the Main Post (Choccolocco
2 Corridor) were leased from the State of Alabama to connect the Main Post to the Talladega
3 National Forest (CH2M Hill, 1994). Historically, Choccolocco Corridor was used for various
4 range training activities. The lease was terminated in May 1998.

5
6 The period after World War II initially brought a decline in operations at FTMC. A decrease in
7 military spending placed the installation on inactive status. However, in 1950 the installation was
8 reinstated to active status because of the Korean Conflict. The U.S. Army Chemical School was
9 established at FTMC in 1951; the large outdoor training areas allowed for specialized chemical
10 training involving chemical warfare protection, decontamination procedures, flame throwers, and
11 the operation of smoke generators. The Base hospital was renovated to specialize in chest diseases.
12 The first permanent Women's Army Corps (WAC) training facility was established in 1955,
13 although two previous WAC detachments had been established at the installation during the 1940s.
14 Radiological training was conducted in the mid-1950s at Iron Mountain, Alpha Field, and Bromine
15 Field, all located on the Main Post, as well as at Rideout Field on Pelham Range (NSA, 1993).

16
17 The mission of FTMC was changed in 1966, and it became the U.S. Army School/Training
18 Center. An Advanced Individual Training Infantry Brigade was activated in 1966 to meet
19 requirements for the Vietnam War. The brigade was deactivated in 1970 due to continued force
20 reduction in Vietnam.

21
22 In 1973, the Chemical Corps School closed, along with the U.S. Army Combat Developments
23 Command Chemical/Biological Radiological Agency. Five years later, in 1978, the WAC was
24 disbanded and the WAC school closed.

25
26 In 1979, the Military Police (MP) School was moved to FTMC. In the same year, the U.S. Army
27 Chemical Corps school was re-established, along with a Brigade for Basic Training. U.S. Army
28 Forces Command units, such as D Company, 46th Engineers, were also garrisoned at the post
29 during the 1970s and 1980s.

30
31 The mid-1980s brought additional operations to Pelham Range, which is located approximately two
32 miles northwest of Anniston. This area was used for maneuver training and a wide range of
33 activities from small-arms training to tank and artillery training. Pelham Range has also been used
34 for chemical decontamination training and radiological training.

1 The main missions and support organizations at FTMC have been:

- 2
- 3 • U.S. Army Chemical School
- 4
- 5 • U.S. Army Military Police School
- 6
- 7 • Training Center Command
- 8
- 9 • Training Brigade
- 10
- 11 • Directorate of Contracting
- 12
- 13 • Directorate of Community Activities
- 14
- 15 • Directorate of Resource Management
- 16
- 17 • Provost Marshal Office Directorate of Community Safety
- 18
- 19 • Office of the Staff Judge Advocate
- 20
- 21 • Safety Office
- 22
- 23 • Equal Employment Opportunity Office
- 24
- 25 • Office of the Inspector General
- 26
- 27 • Internal Review and Audit Compliance
- 28
- 29 • Public Affairs Office
- 30
- 31 • Directorate of Engineering and Housing
- 32
- 33 • Directorate of Environment
- 34
- 35 • Directorate of Information Management
- 36
- 37 • Directorate of Logistics
- 38
- 39 • Directorate of Plans, Training, Mobilization, and Security and Reserve Component
- 40 Support
- 41
- 42 • Women's Army Corps.
- 43

1 Past tenant activities included the following:

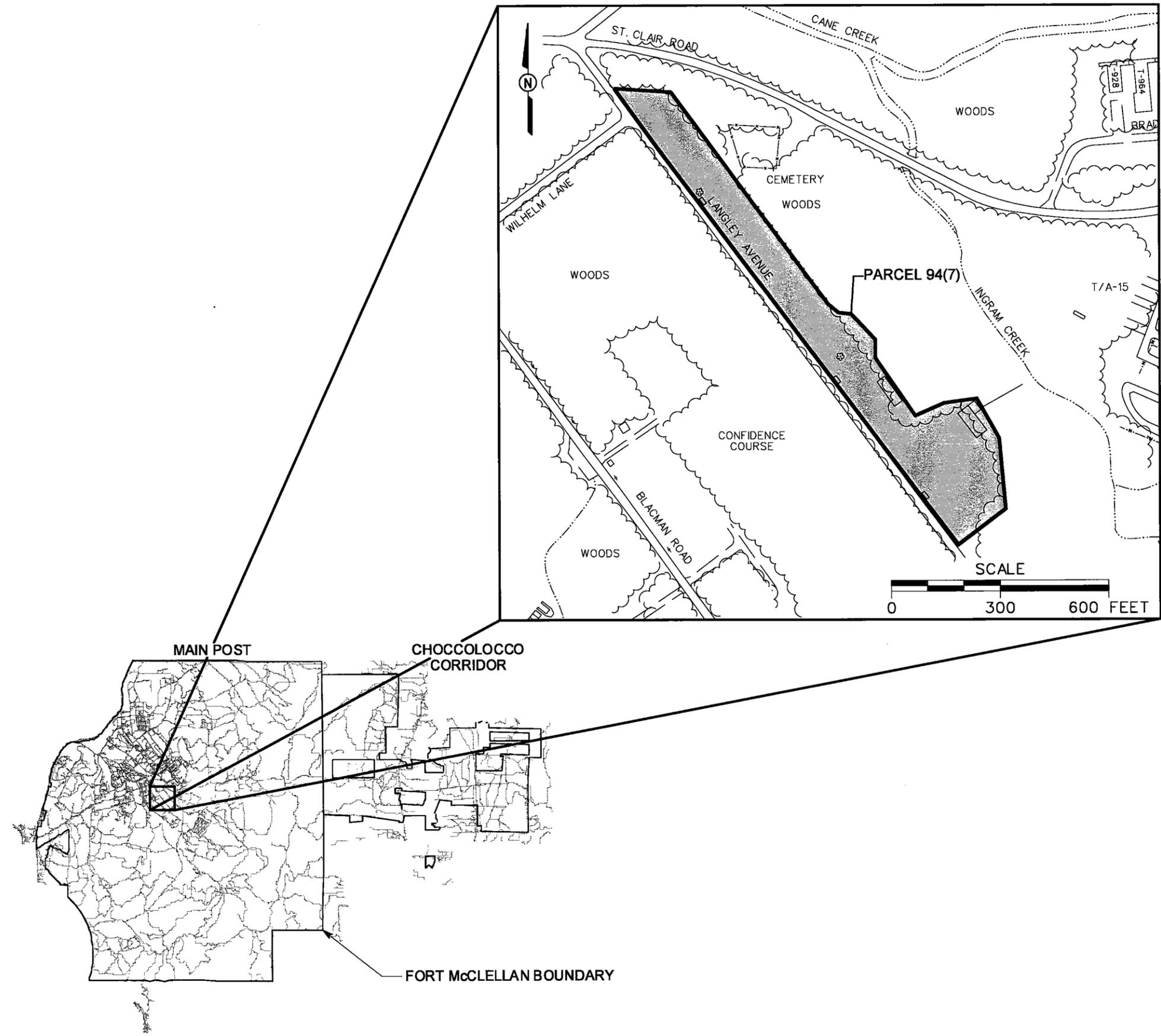
- 2
- 3 • U.S. Army Medical Department Activity
- 4 • U.S. Army Dental Activity
- 5 • U.S. Department of Defense Polygraph Institute
- 6 • Defense Finance and Accounting Services
- 7 • Defense Investigative Service
- 8 • Marine Corps Administrative Detachment
- 9 • Criminal Investigation Division
- 10 • 902nd Military Intelligence Group
- 11 • Army National Guard
- 12 • U.S. Army Reserves
- 13 • TRADOC Manpower Activity
- 14 • 722nd Explosive Ordnance Detachment
- 15 • Army Air Force Exchange Service
- 16 • Defense Commissary Agency
- 17 • Defense Reutilization and Marketing Office
- 18 • U.S. Department of Defense Security Operation Testing Support
- 19 • Fort McClellan Elementary School
- 20 • Naval Construction Training Center Detachment
- 21 • U.S. Army Corps of Engineers (Mobile District)
- 22 • U.S. Air Force Disaster Preparedness School.
- 23

24 FTMC operations were deactivated and missions completed with the installation closure on
25 September 30, 1999.

27 **1.2.2 Parcel 94(7) Site Description and History**

28 The Former Chemical Laundry and Motor Pool Area 1500, Parcel 94(7), is located in the central
29 area of the FTMC Main Post, east of Langley Avenue (formerly 5th Avenue) and south of St.
30 Clair Road (formerly 22nd Street) (Figure 1-3). Parcel 94(7) is approximately 5 acres in size.
31 The site was formerly used as a vehicle maintenance facility, or motor pool, which housed three
32 gas stations during World War II. The three gas stations included Building 1494 (Parcel 133[7]),
33 Building 1594 (Parcel 132[7]), and Building 1594A (Parcel 134[7]) (Figure 1-4), constructed in
34 1941. Each building consisted of a 9-by-21-foot cement foundation and a corrugated steel wall.
35 Two fuel pumps were reportedly located on an island directly in front of each building,
36 approximately 20 feet away. Reportedly, two 10,000-gallon underground storage tanks (UST),
37 one containing motor vehicle gasoline and one containing diesel, were located at each building.
38 However, the status of the USTs was not known by Environmental Science and Engineering, Inc.
39 (ESE) when it conducted the environmental baseline survey (EBS) in 1998. Three structures that

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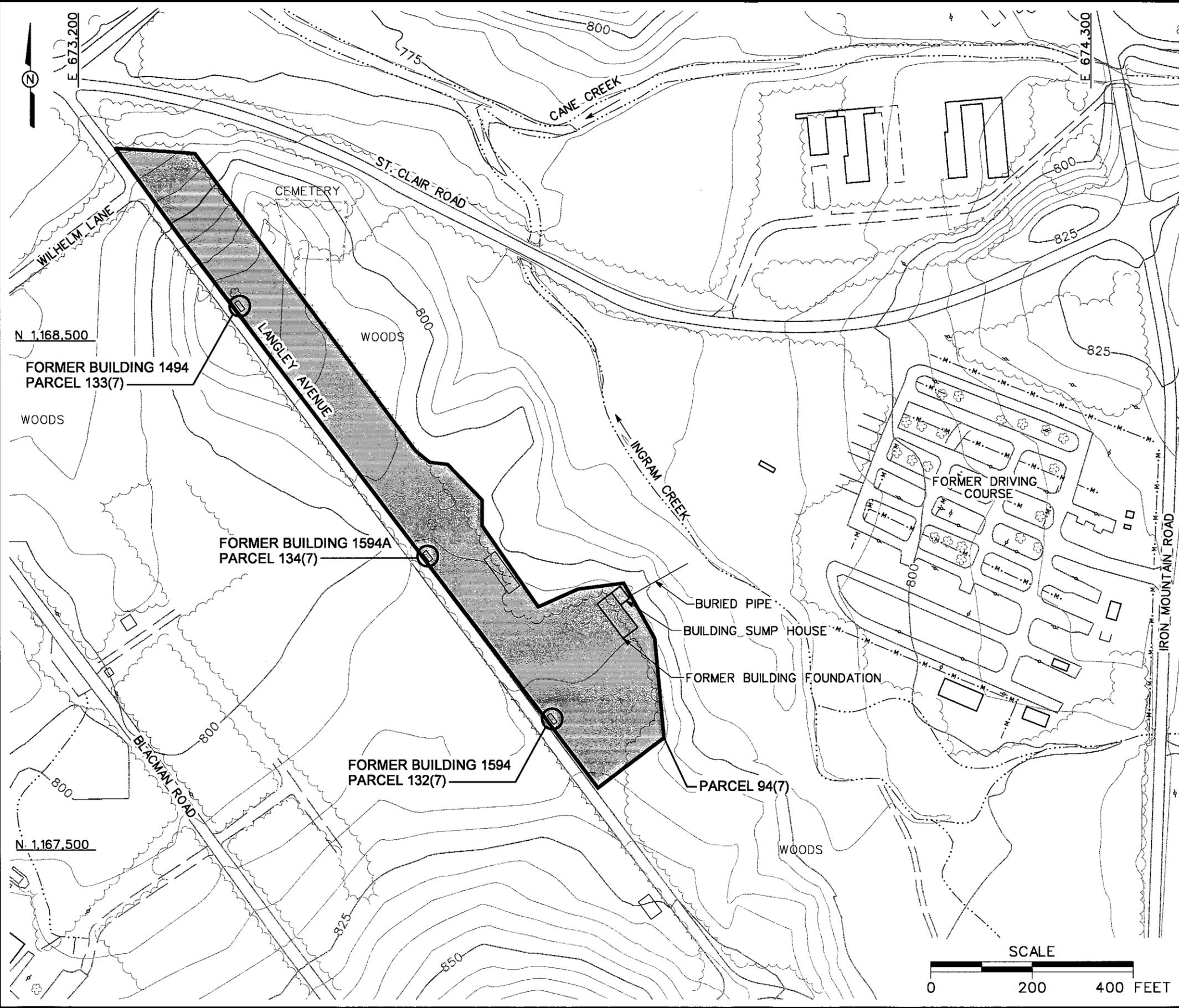
- LEGEND**
- UNIMPROVED ROADS AND PARKING
 - PAVED ROADS AND PARKING
 - BUILDING
 - TREES / TREELINE
 - PARCEL BOUNDARY
 - CULVERT WITH HEADWALL
 - SURFACE DRAINAGE / CREEK
 - MANMADE SURFACE DRAINAGE FEATURE
 - FENCE
 - UTILITY POLE

FIGURE 1-3
SITE LOCATION MAP
FORMER CHEMICAL LAUNDRY
AND MOTOR POOL AREA 1500
PARCEL 94(7)

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- LEGEND**
- UNIMPROVED ROADS AND PARKING
 - PAVED ROADS AND PARKING
 - BUILDING
 - TOPOGRAPHIC CONTOURS (CONTOUR INTERVAL - 5 FOOT)
 - TREES / TREELINE
 - PARCEL BOUNDARY
 - CULVERT WITH HEADWALL
 - SURFACE DRAINAGE / CREEK
 - MANMADE SURFACE DRAINAGE FEATURE
 - FENCE
 - UTILITY POLE

FIGURE 1-4
SITE MAP
FORMER CHEMICAL LAUNDRY
AND MOTOR POOL AREA 1500
PARCEL 94(7)

U. S. ARMY CORPS OF ENGINEERS
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1 correspond to the probable locations of the gas stations are visible on aerial photographs taken in
2 1944 and 1954 (ESE, 1998).

3
4 Two chemical impregnation plants, the 111th Garment Impregnation Plant and the 317th
5 Garment Impregnation Plant, were reportedly located at this area. The exact dates of operation
6 of these facilities are not known. However, it has been estimated that chemical impregnation
7 activities began with the arrival of the U.S. Army Chemical School at FTMC in 1951 and
8 continued through the mid-1960s, when butyl-rubber protective garments began to be issued
9 (ESE, 1998).

10
11 The garment impregnation facilities were reportedly used to launder and treat military garments
12 used in chemical warfare material (CWM) training exercises to render them impermeable to
13 CWM. Decontaminated used garments were chemically treated and re-impregnated with a
14 mixture of wax and chemicals designed to neutralize CWM. Interviews conducted by ESE in
15 1998 rendered various accounts as to the specific procedures used. Some personnel recalled that
16 the impregnation plants used large volumes of toluene or ethyl alcohol. Although one individual
17 reported use of "B-1 dye," confirmed use of B-1 dye or information about the dye was not
18 obtained during EBS activities (ESE, 1998). The standard operating procedure for typical
19 impregnation plants describes only the use of water, paraffin wax, and chlorinated oil.

20
21 The buildings at the site have been demolished. Two concrete slab foundations corresponding to
22 the former motor pool and chemical laundry facilities remain at the site. In addition, concrete
23 sumps or grease pits are also located at the site. The remainder of the area is covered with
24 asphalt pavement.

25
26 The site's topography slopes slightly to the north and east toward Ingram Creek, a tributary of
27 Cane Creek. Elevation at the site ranges from approximately 800 to 815 feet above mean sea
28 level (msl).

29 30 **1.2.3 Previous Investigations**

31 ESE conducted an EBS to document current environmental conditions of all FTMC property
32 (ESE, 1998). The study identified sites that, based on available information, have no history of
33 contamination and comply with DOD guidance on fast-track cleanup at closing installations.
34 The EBS also provided a baseline picture of FTMC properties by identifying and categorizing
35 the properties by seven criteria.

- 1
- 2 1. Areas where no storage, release, or disposal of hazardous substances or petroleum
- 3 products has occurred (including no migration of these substances from adjacent
- 4 areas)
- 5
- 6 2. Areas where only release or disposal of petroleum products has occurred
- 7
- 8 3. Areas where release, disposal, and/or migration of hazardous substances has
- 9 occurred, but at concentrations that do not require a removal or remedial response
- 10
- 11 4. Areas where release, disposal, and/or migration of hazardous substances has
- 12 occurred, and all removal or remedial actions to protect human health and the
- 13 environment have been taken
- 14
- 15 5. Areas where release, disposal, and/or migration of hazardous substances has
- 16 occurred, and removal or remedial actions are underway, but all required remedial
- 17 actions have not yet been taken
- 18
- 19 6. Areas where release, disposal, and/or migration of hazardous substances has
- 20 occurred, but required actions have not yet been implemented
- 21
- 22 7. Areas that are not evaluated or require additional evaluation.
- 23

24 The EBS was conducted in accordance with protocols of the Community Environmental
25 Response Facilitation Act (CERFA) (Public Law 102-426) and DOD policy regarding conta-
26 mination assessment. Record searches and reviews were performed on all reasonably available
27 documents from FTMC, the Alabama Department of Environmental Management (ADEM), the
28 U.S. Environmental Protection Agency (EPA) Region 4, and Calhoun County, as well as a
29 database search of Comprehensive Environmental Response, Compensation, and Liability Act-
30 regulated substances, petroleum products, and Resource Conservation and Recovery Act-regu-
31 lated facilities. Available historical maps and aerial photographs were reviewed to document
32 historical land uses. Personal and telephone interviews of past and present FTMC employees
33 and military personnel were conducted. In addition, visual site inspections were conducted to
34 verify conditions of specific property parcels.

35
36 In October 1997, Science Applications International Corporation (SAIC) installed a background
37 monitoring well (MW-BK-G11) at the site. Soils encountered during well installation activities
38 included clayey silt interbedded with fine to very coarse sand from 3.6 to 23.5 feet below ground
39 surface (bgs) and sandy clay with medium to coarse sand from 23.5 to 42.5 feet bgs. Ground-
40 water was encountered at 22.5 feet bgs. The well was sampled for target analyte list (TAL)

1 metals and common anions, including sulfate, bicarbonate, chloride, bromide, fluoride,
2 carbonate, nitrate, and phosphate.

3
4 In July 2000, IT investigated three geophysical survey anomalies representing potential USTs at
5 Parcels 132(7), 133(7), and 134(7). However, no USTs were found using exploratory trenching
6 and excavation. Detailed information regarding the investigation for potential USTs at the site is
7 included in Section 4.1.

8 9 **1.3 Report Organization**

10 This RI report is organized as follows:

- 11
12 • **Chapter 1.0 – Introduction.** This chapter provides site description and history
13 information for FTMC and Parcel 94(7) and summarizes previous investigations at
14 Parcel 94(7).
- 15
16 • **Chapter 2.0 – Study Area Investigation.** This chapter summarizes the SI and
17 supplemental RI field activities conducted by IT at Parcel 94(7), including
18 geophysical survey, environmental sampling and analysis, monitoring well
19 installation, seep survey, and slug testing.
- 20
21 • **Chapter 3.0 – Physical Characteristics of Study Area.** This chapter
22 describes the physical characteristics of Parcel 94(7), including demography and
23 land reuse, meteorology, physiography, sensitive environments, soils, geology, and
24 hydrogeology.
- 25
26 • **Chapter 4.0 – Nature and Extent of Contamination.** This chapter
27 summarizes the analytical results and compares data with human health site-
28 specific screening levels (SSSL), ecological screening values (ESV), and
29 background screening values to determine the nature and extent of contamination
30 and probable sources. The geophysical survey results are also presented in this
31 chapter.
- 32
33 • **Chapter 5.0 – Contaminant Fate and Transport.** This chapter evaluates the
34 chemical and physical properties of the chemicals of concern identified in Chapter
35 4.0. It also describes potential routes of migration, contaminant persistence, and
36 contaminant migration.
- 37
38 • **Chapter 6.0 – Streamlined Human Health Risk Assessment.** This
39 chapter presents the results of the streamlined human health risk assessment,
40 including the conceptual site exposure model, chemicals of potential concern, risk
41 characterization, chemicals of concern, and remedial goal options.
- 42

1
2
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12

- **Chapter 7.0 – Screening-Level Ecological Risk Assessment.** This chapter presents the results of the screening-level ecological risk assessment, including the environmental setting, potential contaminants, site conceptual model, screening-level risk estimation, constituents of potential ecological concern, and uncertainty analysis.
- **Chapter 8.0 – Summary, Conclusions, and Recommendations.** This chapter summarizes the major conclusions of the RI report and provides recommendations for further investigation.
- **Chapter 9.0 – References.** This chapter lists the references cited in this RI report.