



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON
4551 LLEWELLYN AVENUE
FORT GEORGE G. MEADE, MARYLAND 20755-5000

June 15, 2023

Environmental Division

Mr. Robert Stroud
NPL/BRAC/Federal Facilities Branch
U.S. Environmental Protection Agency
701 Mapes Road
Fort Meade, Maryland 20755

Dear Mr. Stroud:

In accordance with the 2009 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 120 Federal Facility Agreement (FFA) for Fort George G. Meade, please find enclosed the 2023 Site Management Plan (SMP) Annual Update.

Copies of the 2023 SMP Annual Update have been furnished to Burl Keller (Architect of the Capitol), Jennifer Greiner (Department of Interior, Patuxent Research Refuge), Elisabeth Green (Maryland Department of the Environment), Fran Coulters (U.S. Army Environmental Command), Shelly Morris (U.S. Army Corps of Engineers), Michael Wassel (Tipton Airport Authority), and the Fort George G. Meade Restoration Advisory Board.

Please direct any active installation site comments or questions to my attention at (301) 677-9168 or erin.l.geiger2.civ@army.mil and any pertaining to the Legacy BRAC sites to Ian Thomas at ian.m.thomas2.civ@army.mil.

Sincerely,

A handwritten signature in cursive script, reading "Erin Geiger".

Erin Geiger
Program Manager, Installation Restoration Program
Directorate of Public Works Environmental Division

A handwritten signature in cursive script, reading "Ian M. Thomas".

Ian M. Thomas
Program Manager, BRAC Ops Branch, ISE
Office of the Deputy Chief of Staff, G-9

Enclosure

DRAFT

Site Management Plan

2023

Fort George G. Meade, MD

June 2023

Prepared for:



**US Army Corps
of Engineers**
Baltimore District

2 Hopkins Plaza
Baltimore, MD 21201

Prepared by:



3740 Johns Bluff Road S Ste 10
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Contract Number: W912DR-23-C-0008
Delivery Order Number: W912DR23R0023

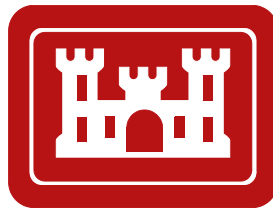
The views, opinions, and/or findings contained in the report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

DRAFT

SITE MANAGEMENT PLAN
2023 ANNUAL UPDATE
FORT GEORGE G. MEADE
FORT MEADE, MARYLAND

June 2023

Prepared for:



United States Army Corps of Engineers
Baltimore District
2 Hopkins Plaza
Baltimore, MD 21201

Contract No.: W912DR-23-C-0008
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Prepared by:

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LIST OF PLATES

2023 Site Management Plan, All Locations (located in the sleeve at the back of this report binder.)

ACRONYMS AND ABBREVIATIONS

AEDB-R	Army Environmental Database-Restoration
Anon.	Anonymous
AOI	area of interest
AS/SVE	air sparge/soil vapor extraction system
AST	above-ground storage tank
ASP	Ammunition Supply Point
AWG HQ	Asymmetric Warfare Group Headquarters
BCM	BCM Engineers, Inc.
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, and xylenes
CAIS	chemical agent identification set
CAP	Corrective Action Plan
CCl ₄	carbon tetrachloride
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFD	Clean Fill Dump
COC	chemicals of concern
CS	ortho-chlorobenzylidene malononitrile
CSA	Comprehensive Site Assessment
CSF	Covered Storage Facility
CSL	Closed Sanitary Landfill (formerly the Active Sanitary Landfill)
DoD	Department of Defense
DOI	Department of the Interior
DOL	Department of Logistics
DPDO	Defense Property Disposal Office
DPT	direct-push technology
DPW	Fort Meade Directorate of Public Works
DRMO	Defense Reutilization and Marketing Office
EBS	Environmental Baseline Survey
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EMO	Environmental Management Office
EPA	United States Environmental Protection Agency
ERD	enhanced reductive dechlorination
ESD	Explanation of Significant Difference
FESI	Focused Enhanced Site Investigation
FFA	Federal Facility Agreement
FFS	Focused Feasibility Study
FGGM	Fort George G. Meade
FS	Feasibility Study
FTA	Fire Training Area
FY	Fiscal Year
HEI	High Explosive Impact and Disposal

ACRONYMS AND ABBREVIATIONS (CONTINUED)

HHA	Helicopter Hangar Area
HHRA	human health risk assessment
HI	Hazard Index
IAL	Inactive Landfill
IAP	Installation Action Plan
IRA	Interim Removal Action
IRACR	Interim Remedial Action Completion Report
IRAR	Interim Removal Action Report
IROD	Interim Record of Decision
IRP	Installation Restoration Program
KACC	Kimbrough Ambulatory Care Center
LPA	Lower Patapsco Aquifer
LPH	liquid petroleum hydrocarbon
LTGM	long-term groundwater monitoring
LTM	long-term monitoring
LTMP	Long-Term Monitoring Plan
LUC	land use control
LUCRD	Land Use Control Remedial Design
MC	munitions constituents
MD	munitions debris
MCL	Maximum Contaminant Level
MCPA	2-methyl-4-chlorophenoxyacetic acid
MCPP	methylchlorophenoxypropionic acid
MDE	State of Maryland Department of the Environment
MEC	Munitions and Explosives of Concern
MGS	Maryland Geological Society
MMRP	Military Munitions Response Program
MNA	monitored natural attenuation
MP	Motor Pool
MRA	Munitions Response Area
MRS	Munitions Response Site
MTBE	methyl tert-butyl ether
MW	monitoring well
NFA	no further action
NPL	National Priorities List
NSA	National Security Agency
NT	North Track
NTCRA	Non-Time Critical Removal Action
Number	No.
OCP	Oil Control Program
ODA	Ordnance Demolition Area
OE	ordnance and explosive

ACRONYMS AND ABBREVIATIONS (CONTINUED)

O&M	Operation and Maintenance
OU	Operable Unit
OWS	oil/water separator
PA	Preliminary Assessment
PAH	polycyclic aromatic hydrocarbon
PCBs	polychlorinated biphenyls
PCE	tetrachloroethene
PFAS	Per-and Polyfluoroalkyl Substance
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PID	photoionization detector
POL	petroleum, oil, and lubricants
PP	Proposed Plan
PRR	Patuxent Research Refuge
PRR-NT	Patuxent Research Refuge-North Track
RACR	Response Action Completion Report
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operation)
RAO	Remedial Action Objective
RAR	Remedial Action Report
RAWP	Remedial Action Work Plan
RBC	risk-based concentrations
RC	Response Complete
RCA	Riot Control Agent
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RDX	Cyclotrimethylene trinitramine
RFA	Resource Conservation and Recovery Act Facility Assessment
RI	Remedial Investigation
RIP	Remedy in Place
ROD	Record of Decision
RSL	Regional Screening Level
RV	Recreational Vehicle
SI	Site Inspection
SMP	Site Management Plan
SSI	Supplemental Site Investigation
SVOC	semivolatile organic compound
SWMU	Solid Waste Management Unit
TAP	Tipton Airfield Parcel
TCE	trichloroethene
TMP	Transportation Motor Pool
TNT	trinitrotoluene
TPH	total petroleum hydrocarbons

ACRONYMS AND ABBREVIATIONS (CONTINUED)

TPH-DRO	total petroleum hydrocarbons – diesel range organics
TPH-GRO	total petroleum hydrocarbons – gasoline range organics
U.S.	United States
URS	URS Group, Inc.
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Command
USACE	United States Army Corps of Engineers
USAOC	United States Architect of the Capitol
USFWS	United States Department of the Interior, Fish and Wildlife Service
UST	underground storage tank
UXO	Unexploded Ordnance
Versar	Versar, Inc.
VOC	volatile organic compound
WR	Wash Rack
WWI	World War I
WWII	World War II

NOTES

The format of this annual update of the Site Management Plan (SMP) is consistent with previous annual updates. Minor changes have been made to text, tables, and figures, as appropriate, to incorporate updated information for the areas of interest (AOIs) on Fort George G. Meade (FGGM) since the prior update in 2022.

The United States Environmental Protection Agency's (EPA) Soil and Groundwater Regional Screening Levels (RSLs) are the default action levels for most sites at the installation. RSLs were historically identified as risk-based concentrations (RBCs); both acronyms are used interchangeably throughout this document. Older studies reference the RBCs, and that term is used in this SMP to be consistent with the source document.

The Army Environmental Database-Restoration (AEDB-R) number (an area of interest designation beginning with FGGM) has been changed to the Headquarters Army Environmental System, which has its own numbering system. However, to be consistent with source documents, this SMP uses the AEDB-R number.

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1 INTRODUCTION

This document is the 2023 Fiscal Year (FY23) SMP Annual Update for FGGM, or installation, located in Anne Arundel County, Maryland. Overall coordination of the SMP update and contract management were provided by the United States (U.S.) Army Corps of Engineers (USACE)-Baltimore District. This work is being performed under USACE-Baltimore District contract W912DR-23-C-0008, Delivery Order W912DR23R0023 with NDN-Sundance JV Alliance, LLC.

The purpose of the SMP is to summarize the status and planned activities, and to project long-term progress for each known area of interest (AOI) at the installation in support of the Federal Facility Agreement (FFA). The SMP and annual updates are a requirement of the FFA.

In 2009, FGGM signed the FFA along with the USEPA, and United States Architect of the Capitol (USAOC). The FFA establishes the role that FGGM and the EPA each play in the restoration of the installation and the formal mechanisms of this process. The Installation Restoration Program's (IRP's) staff works closely with the EPA, Maryland Department of the Environment (MDE), and local government agencies to ensure that cleanup processes are conducted properly and efficiently. The staff also receives input from community groups and nearby residential areas.

1.1 OVERVIEW OF THE SITE MANAGEMENT PLAN

The SMP is a management tool for planning, reviewing, and setting priorities for all remedial response activities to be conducted at the installation. This SMP includes all known AOIs at FGGM. Most of these AOIs have undergone previous environmental investigations, and several have undergone or are undergoing response actions. Proposed environmental cleanup responses, actions, schedules, and milestones for response actions are included in this SMP.

The AOIs listed in the SMP were compiled from many sources. Principal sources include information from the FGGM ED Preliminary Assessment/Site Inspection (PA/SI) (URS Group, Inc. [URS] 2015a, 2015b, 2015c, 2015d), and Installation Action Plans (IAPs) (FGGM 2006, 2007, 2008, 2009, 2010, 2011, 2013, 2023).

Numerous AOIs at FGGM have changed names, designations, or have acquired additional designations over time. To aid the reader in locating specific AOI, a Crosswalk of Environmental AOI are included as Table 1-1. Table 1-1 provides the following, as applicable, for each AOI:

- Operable Unit (OU) number;
- AEDB-R number [a designation beginning with FGGM];
- Solid Waste Management Unit (SWMU) number;
- Building number;
- Site identifier (how the site is commonly referred to, such as the Clean Fill Dump (CFD) or the Pesticide Shop Building); and
- Status (open or closed).

1.2 OBJECTIVES OF THE SITE MANAGEMENT PLAN

The objective of the SMP is to provide the status of each AOI in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process for all response actions at FGGM, including AOIs that fall under the IRP, Base Realignment and Closure (BRAC), and Military Munitions Response Program (MMRP). The SMP includes a history of the AOI evaluated by the FGGM Environmental Partnership in 2003 and 2004. The Fort Meade Environmental Partnership was a consortium consisting of the EPA, MDE, USACE, Fort Meade, U.S. Army Environmental

Command (USAEC), and the Military District of Washington. The Fort Meade Environmental Partnership met to “...collaboratively plan, document, and implement environmental investigations and cleanups (FGGM 1999).” Factors supporting past decisions are discussed in appropriate detail to explain the rationale for site-specific actions and recommendations.

This SMP presents the rationale for future investigations and remediation activities and the estimated FY schedule to complete these activities. The use of this SMP facilitates annual adjustments in scheduled activities for reasons such as Federal budget constraints, changes in scope of investigation/ remediation activities, or other unanticipated events, without modifying the FFA. For each AOI, this SMP includes:

1. A list of all identified AOI names
2. Proposed environmental cleanup responses, actions, and schedules for response actions
3. Deadlines for the submittal of primary documents covering the current fiscal year
4. Any primary actions identified regarding the following:
 - a. Deadlines
 - b. Near-term milestones
 - c. Out-year milestones
 - d. Target dates
 - e. Project end dates

1.3 SITE MANAGEMENT PLAN UPDATES

The SMP is updated annually to reflect revised priorities as work progresses and additional information becomes available. This document is the 2023 annual update of the SMP. Letters of acceptance from the EPA for the 2009 – 2022 annual SMP submittals are included in Appendix A.

1.4 INSTALLATION DESCRIPTION

1.4.1 INSTALLATION LOCATION AND GEOMORPHOLOGY

The U.S. Army Garrison Fort Meade is in Anne Arundel County, Maryland (MD), along the Little Patuxent and Patuxent Rivers, midway between Baltimore, MD, and Washington, DC, and is shown on the Regional Location Map (Figure 1-1). Figure 1-2 presents the FGGM jurisdictional boundary map. The BRAC parcel is located south of the installation. The community of Odenton, MD, borders the eastern edge of FGGM. In general, the topography of FGGM is flat and gently slopes toward scattered water bodies throughout the installation. Local small-scale variations in elevation are abundant. Much of the installation topography has been altered by development.

1.4.2 INSTALLATION HISTORY

FGGM began operation in 1917 as Camp Meade (Maryland Geological Society [MGS] 1917), a 4,000-acre World War I (WWI) training facility. Training activities included infantry combat operations. The U.S. Army Tank School operated at the facility from 1918 to 1932 (FGGM 2014). The facility was renamed Fort George G. Meade in 1928. In 1941, the facility was expanded to 13,596 acres to accommodate the additional training requirements of World War II (WWII).

In 1988, under BRAC, ranges and similar training areas were identified for closure. To date, 8,100 acres have been transferred to the DOI Patuxent Research Refuge (PRR) for use as a wildlife refuge: 7,600 acres in October 1991 and 500 acres in January 1993 as part of Defense Appropriation Bills for 1991 and 1992, respectively (FGGM 2014).

The Army retained 900 acres of the BRAC parcel, which included the 366-acre Tipton Airfield Parcel (TAP). The Army began leasing the TAP to Anne Arundel County for use as a General Aviation Facility in 1998 and officially transferred the property to Anne Arundel County Tipton Airfield Authority on 1 November 1999 (FGGM 2014).

After the 1988 BRAC realignment, the installation covered 5,067 acres (FGGM 2008). The current installation boundaries encompass the area previously referred to as the cantonment area, which is used for administrative, recreational, and housing facilities. FGGM contains approximately 65.5 miles of paved roads, 3.3 miles of secondary roads, and about 1,300 buildings (FGGM 2014).

FGGM's mission is to provide installation operations support for facilities and infrastructure, and quality of life and protective services in support of Department of Defense (DoD) activities and Federal agencies. The wide range of support is provided to 116 partner organizations from all four DoD military services, Homeland Security, and several Federal agencies. Major tenant units include the National Security Agency (NSA), the Defense Information School, Joint Field Support Center–U.S. Army Intelligence Security Command, the 70th Intelligence Wing (Air Force), the 902nd Military Intelligence Group (Army), Defense Information Systems Agency, Defense Media Agency, and EPA Research Laboratory.

1.5 NATIONAL PRIORITIES LISTING

The EPA placed FGGM on the National Priorities List (NPL) on 28 July 1998, after an evaluation of contamination due to past storage and disposal of hazardous substances at the Defense Reutilization and Marketing Office (DRMO), Closed Sanitary Landfill (CSL), CFD, and Post Laundry Facility. Contaminants at these AOIs included solvents, pesticides, polychlorinated biphenyls (PCBs), heavy metals, waste fuels, and waste oils. The FGGM NPL includes the entire installation, from fence line to fence line. However, based on the Army's conclusion that all actions necessary to protect human health and the environment have been completed on the TAP, the EPA removed the TAP from the FGGM NPL listing on 1 November 1999.

1.6 INFORMATION REPOSITORIES

FGGM environmental information can be found at FGGM's Department of Public Works (DPW)-Environmental Division (ED) website: <https://home.army.mil/meade/index.php/my-fort/all-services/environmental>. The Administrative Record and the Information Repository are available at the FGGM DPW-ED office and at the Anne Arundel County Public Library – Odenton Regional Library.

1.7 REPORT ORGANIZATION

This report is organized into four main sections.

Section 1: Introduction. This section describes the regulatory framework, property identification, and background information.

Section 2: AOI Descriptions by Source Funding. This section provides the regulatory driver, contaminants of potential concern, media of concern, site location, site description, previous studies, current use, status, and the cleanup/exit strategy for each AOI. Section 2 is divided based on source funding and whether the AOI is open or closed and consists of eight subsections: IRP open AOI, MMRP open AOI, BRAC open AOI, Unassigned open AOI, IRP AOI designated for no further action (NFA), MMRP AOI designated for NFA, BRAC AOI designated for NFA, and Unassigned AOI designated for NFA.

Section 3: Site Management Schedules. This section provides an FY schedule of projected CERCLA work phase and deliverables for each AOI.

Section 4: Bibliography. This section provides a list of source documents used to compile this SMP.

This SMP also includes Appendix A, which provides EPA approval letters for submitted SMPs.

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Table 1-1: Crosswalk of Environmental AOI at Fort Meade

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-03	OU-6	2.5.1	SWMU 129 and 130	Building 8688	Water Treatment Plant	CLOSED
FGGM-05	OU-2	2.5.2	SWMU 112, 113, and 114	Building 8481	Former Troop Boiler Plant	CLOSED
FGGM-07	OU-5	2.1.1			DRMO Drum Site	OPEN
FGGM-08	OU-7	2.1.2			Comp Ammunition Supply Point (ASP) Number (No.) 1	OPEN
FGGM-10	OU-8 TAP-OU	2.3.1			Inactive Landfill (IAL) 1 – TAP – BRAC; part of the TAP OU	OPEN
FGGM-11	OU-9	2.5.3		Building 73	Gas Training Building	CLOSED
FGGM-13	OU-10	2.1.3		Building 6621	Former Pesticide Shop Building	OPEN
FGGM-14	OU-11	2.5.4	SWMU 104	Building 6527	Control Hazardous Substance Storage Facility	CLOSED
FGGM-17	OU-12	2.1.4			CSL	OPEN
FGGM-18	OU-13	2.5.5			ASP No. 2	CLOSED
FGGM-19	OU-14	2.5.6			Advanced Wastewater Treatment Facility	CLOSED
FGGM-20	OU-15	2.3.3			Ordnance Demolition Area (ODA) – BRAC	OPEN
FGGM-21	OU-16	2.7.1			Medical Waste Site – BRAC	CLOSED
FGGM-31	OU-17	2.3.4			IAL3; also includes IAL2, listed under FGGM-007-R-01	OPEN
FGGM-32	OU-18	2.3.9			Fire Training Area (FTA); part of TAP – BRAC	OPEN
FGGM-33	OU-19/ OU-4	2.1.5.1		Former Building 2283	Battery Shop	OPEN
FGGM-36	OU-20	2.5.8	Non-SWMU 10 and 11	Buildings 4552 and 4553	Administrative/Photographic Laboratory	CLOSED
FGGM-36	OU-20	2.5.7	SWMUs 105, 106, 107, and 108	Building 6530	Photographic Laboratory Building	CLOSED
FGGM-37	OU-21	2.5.9	SWMU 71	Building 2480	Kimbrough Ambulatory Care Center (KACC)	CLOSED
FGGM-45	OU-22/ OU-4	2.1.5.2	SWMU 42	Building 2220	Calibration Laboratory Building; both FGGM-45 and FGGM-91 are identified with Building 2220	OPEN
FGGM-47	OU-4	2.1.5.3	SWMU 59, 60	Building 2250	Post Laundry Facility	OPEN
FGGM-49	OU-23/ OU-4	2.1.5.4		Buildings 2286 and 2246	Department of Logistics (DOL), Buildings 2286 (also under FGGM-86) and 2246 (also under FGGM-92)	OPEN

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-51	OU-24/ OU-4	2.1.5.5		Building 2217	Spill Site, Former Building 2217	OPEN
FGGM-70	OU-25	2.5.10	SWMU 150	Building 6513	Indoor Range, Former Building 6513	CLOSED
FGGM-71	OU-26	2.5.11	SWMU 151 and 152	Building 6522	EX Indoor Range, Former Building 6522	CLOSED
FGGM-72	OU-27	2.7.2			Petroleum, Oil, and Lubricants (POL) Storage Tanks – TAP – BRAC	CLOSED
FGGM-73	OU-28	2.7.3		Buildings 85 and 90	Maintenance Shops Buildings 85 and 90 – BRAC	CLOSED
FGGM-74	OU-29	2.5.12	SWMU 1, 2, 3, 4, 5, 6, 7, 8, and 9	Buildings 71, 72, 72A	USAOC	CLOSED
FGGM-75	OU-30	2.5.13			Underground Storage Tanks (UST) Prior to 1984	CLOSED
FGGM-80	OU-32	2.7.4		Helicopter Hangar #90	Helicopter Hangar 90 – BRAC Helicopter Hangar Area (HHA)	CLOSED
FGGM-81	OU-33	2.3.5			CFD; (the CFD OU consists of the CFD and the Uncontrolled Waste Site, which is immediately south of the main dump. FGGM-001-R-01 is CFD/Munitions and Explosives of Concern [MEC].)	OPEN
FGGM-82	OU-34	2.7.5			Unexploded Ordnance (UXO) Removal – BRAC	CLOSED
FGGM-83	OU-1	2.1.6	SWMU 153 and 154	Former Buildings 2047 and 2046	Former Trap and Skeet Range, Former Buildings 2046 and 2047	OPEN
FGGM-85	OU-35	2.3.6			MEC TAP – BRAC	OPEN
FGGM-87	OU-3	2.1.7	SWMU 22, 23, 24, and 145	Buildings 1974, 1976, 1977, and 1978	Former Nike Fire Control Site	OPEN
FGGM-17	OU-4	2.1.5.12			Monitoring Wells (MW) 125d and 126d	OPEN
FGGM-86		2.1.5.6	SWMU 65, 66, 67, and 70	Building 2286 and former Buildings 2285 and 2290	Former Motor Pool (MP) Maintenance Facility	OPEN
FGGM-88		2.1.5.7	SWMU 37	Building 2200, 2207, 2201, 2204, and 2206	Former Tank Maintenance Facility Shop-1	OPEN
FGGM-89		2.1.5.8	SWMU 39, 40, and 41	Building 2217	Former Tank Maintenance Facility Shop-2	OPEN

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-90	OU-4	2.1.5.9	SWMU 45, 46, 47, 48, 49, 50, 51, 52, 53, and 54	Buildings 2240, 2241, 2242, 2243, 2247, 2248, and 2249	Former Tank Cleaning Supply Warehouse	OPEN
FGGM-91	OU-4	2.1.5.10	SWMU 42	Building 2220	Former Missile Repair Shop	OPEN
FGGM-92	OU-4	2.1.5.11	SWMU 55, 56, 57, 58, 61, and 62	Buildings 2246, 2246D, 2244, 2245, and 2253	Former Heavy Gun Cleaning and Repair Shop	OPEN
FGGM-93	OU-36	2.1.8			Manor View Dump, Including Incinerator and Old Landfill – 1938.	OPEN
FGGM-94	OU-37	2.3.2			Trap and Skeet Range 17 – BRAC	OPEN
FGGM-95 (Former Landfill Sites)	OU-45	2.5.14.3			Possible Dump Site A-1957 – Former Compliance Cleanup Site	CLOSED
		2.5.14.22			Possible Dump Site B-1957	CLOSED
		2.5.14.4			Possible Dump Site C-1957	CLOSED
		2.5.14.5			Possible Dump Site D-1957	CLOSED
		2.5.14.23			Possible Dump Site E-1957	CLOSED
		2.5.14.6			Possible Dump Site F-1957	CLOSED
		2.5.14.7			Possible Dump Site G-1957	CLOSED
		2.5.14.8			Possible Dump Sites – 1970	CLOSED
		2.5.14.9			Site—M - Parcel 1	CLOSED
		2.5.14.10			Site—M - Parcel 2	CLOSED
		2.5.14.11	SWMU 131, 132, 133, 134, 135, 136, and 137	Buildings 21, 8860, 8870, 8880, 8881 8890, 8890A, and 8891	Site—M - Parcel 3	CLOSED
		2.5.14.12			Site—M - Parcel 4	CLOSED
		2.5.14.13			Site—M - Parcel 5	CLOSED
		2.5.14.14			Site—M - Parcel 6	CLOSED
		2.5.14.15			Site—M - Parcel 7	CLOSED
		2.5.14.16			Site—M - Parcel 8	CLOSED
		2.5.14.17			Site—M - Parcel 9	CLOSED
		2.1.9.1			IAL4	OPEN
		2.1.9.2			Pre-WWII Laundry at USAOC	OPEN
		2.5.14.20			Taylor Avenue Buried Drum Site	CLOSED
		2.5.14.21			Waste Storage/Disposal Area – 1938	CLOSED

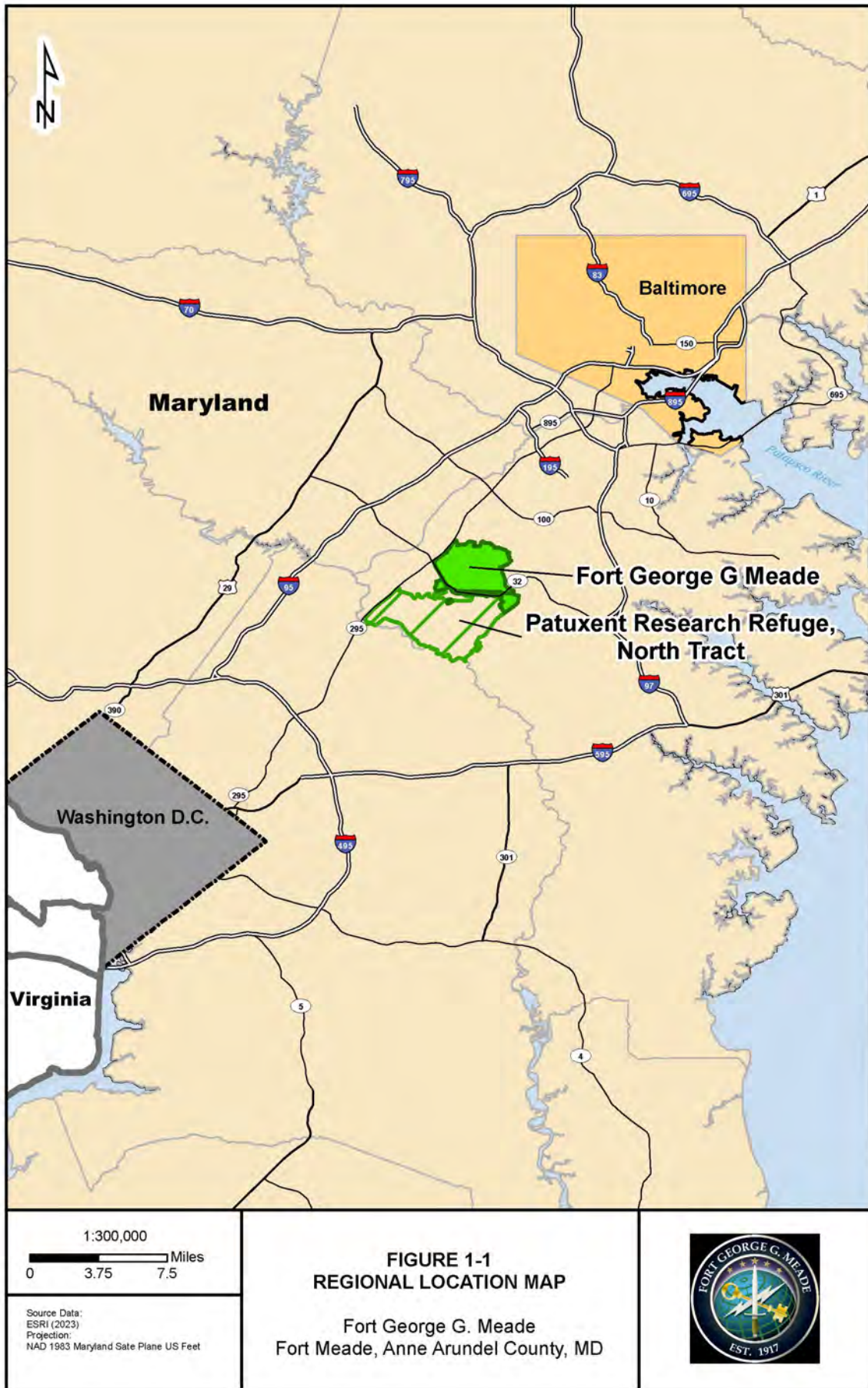
FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-95 (Former Landfill Sites; continued)	OU-45 (continued)	2.5.14.1			Fill – 1988	CLOSED
		2.5.14.19			Small Pit – 1952	CLOSED
		2.5.14.18			Site Y	CLOSED
		2.5.14.2			Pershing Hill Elementary School Burn Pit Stockpile	CLOSED
FGGM-96	OU-46	2.5.15.24			Former MP-1/Wash Rack (WR)-4	CLOSED
		2.5.15.25			Former MP-2	CLOSED
		2.5.15.26			Former MP-3/WR-2	CLOSED
		2.5.15.27			Former MP-4	CLOSED
		2.5.15.47			Former MP-5; Possible Vehicle Storage Area – 1957	CLOSED
		2.5.15.28			Former MP-6	CLOSED
		2.1.10.1			Former MP-7/WR-6	OPEN
		2.5.15.29			Former MP-8	CLOSED
		2.5.15.48			Former MP-9	CLOSED
		2.5.15.53			Former MP-10	CLOSED
		2.5.15.54			Former MP-11/WR-7	CLOSED
		2.5.15.55			Former MP-12/WR-8	CLOSED
		2.5.15.56			Former MP-13/WR-9	CLOSED
		2.5.15.30			Former MP-14	CLOSED
		2.5.15.31			Former MP-17	CLOSED
		2.5.15.57			Former MP-18/WR-12	CLOSED
		2.5.15.32			Former MP-19/WR-13	CLOSED
		2.5.15.33			Former WR-3	CLOSED
		2.1.10.2			6th Street and Chisholm Avenue	OPEN
		2.5.15.1	SWMU 010	Building 294	Directorate of Public Works (DPW) Entomology Department, Former MP	CLOSED
		2.5.15.34	SWMU 011	Building 546	Photography Lab	CLOSED
		2.5.15.35	SWMU 012, 013, and 146	Building 940	MP, WR, and oil/water separator (OWS)	CLOSED
		2.5.15.58	SWMU 014, 015, 016, 017, and 018	Building 1007	Army Reserve MP, Vehicle Maintenance, Motor Repair Shop, OWS, and WR, MP-15/WR-10	CLOSED
		2.5.15.2	SWMU 019, 020, and 021	Building 1251	Associated WR and OWS	CLOSED
		2.5.15.59	SWMU 025, 026, 027, and 028	Building 2120C	Vehicle Storage and Maintenance, WR and OWS	CLOSED
		2.5.15.3	SWMU 029 and 030	Building 2121	Vehicle Maintenance	CLOSED

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-96 (continued)	OU-46 (continued)	2.5.15.4	SWMU 031	Building 2122	Maintenance Facility, Former Building 2122	CLOSED
		2.5.15.5	SWMU 032	Building 2123	Maintenance Facility, Former Building 2123	CLOSED
		2.5.15.6	SWMU 033 and 034	Building 2124	Maintenance Facility	CLOSED
		2.5.15.60	SWMU 035 and 036	Building 2128	Vehicle Maintenance – MP-16/WR-11. Former Building 2128	CLOSED
		2.1.10.3	SWMU 043, 044, and 147	Building 2227, 2224, and 2234	Maintenance Shop, WR, and OWS, Former Buildings 2227 and 2224, and Building 2234.	OPEN
FGGM-96	OU-4 / OU-46	2.1.5.13	SWMU 038	Building 2213	Painting and Sheet Metal Shop, Former Building 2213	OPEN
FGGM-96	OU-4 / OU-46	2.1.5.18			Former WR-5	OPEN
		2.1.5.19			Debris and Stain – 1975	OPEN
		2.1.5.14		Building 2266	Former Building 2266	OPEN
		2.1.5.15	SWMU 063 and 064	Building 2276	Furniture Repair Shop, Former Building 2276	OPEN
		2.1.5.16	SWMU 068	Building 2287	NSA MP Equipment and Chemicals Storage Shed, Former Building 2287	OPEN
		2.1.5.17	SWMU 069	Building 2288	Paint Storage Shed, Former Building 2288	OPEN
FGGM-96	OU-46	2.5.15.61	SWMU 072	Building 2482	Boiler Plant	CLOSED
		2.5.15.7	SWMU 073	Building 2484	Medical Supply/Administration	CLOSED
		2.5.15.49	SWMU 074	Building 2490	Medical Lab	CLOSED
		2.1.10.4	SWMU 075 and 076	Building 2501	Maintenance	OPEN
		2.5.15.36	SWMU 077, 078, and 079	Building 2630	Dispatch, Storage, and Parking Area for Emergency Medical Units and WR Near Building 2630	CLOSED
FGGM-96	OU-46	2.5.15.50	SWMU 080, 081, 082, 083, 084, 085, and 086	Building 2724	Outdoor Recreation Equipment Rentals and WR	CLOSED
		2.5.15.37	SWMU 087, 088, 089, 090, 091, 092, and 148	Building 2728	WRs, Recreational Equipment Storage, OWS, Recreational Vehicle (RV) Storage. and Maintenance Shop	CLOSED
		2.5.15.8	SWMU 093	Building 2802	Dental Research Lab, Former Building 2802	CLOSED

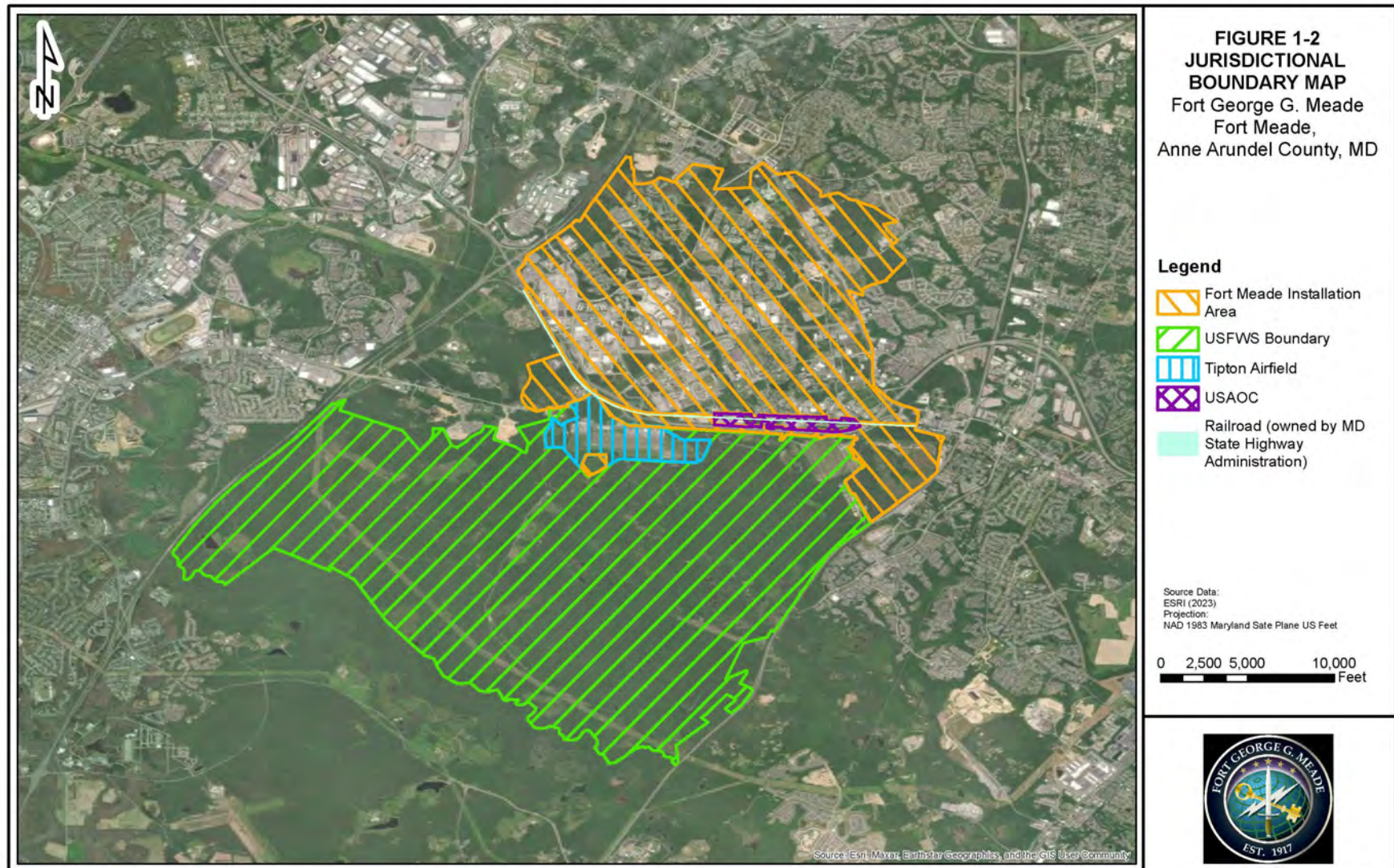
FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-96 (continued)	OU-46 (continued)	2.5.15.9	SWMU 094	Building 2804	Chemical Storage and Electron Microscopy Lab, Former Building 2804	CLOSED
		2.5.15.10	SWMU 095	Building 2805	Laboratory/Chemical Storage/Officers' Mess Hall, Former Building 2805	CLOSED
		2.5.15.11	SWMU 096 and 097	Building 2831	Dental Clinic, Former Building 2831	CLOSED
		2.5.15.38	SWMU 098	Building 3000	Screen Repair, and Industrial Shop	CLOSED
		2.5.15.62	SWMU 099	Building 4411	Former Hospital	CLOSED
		2.5.15.13	SWMU 100	Building 4554	Photo Lab	CLOSED
		2.5.15.46	SWMU 101 and 102	Building 4587	Motor Repair and Garage	CLOSED
		2.5.15.52	SWMU 103	Building 4680	Service Station and Past Vehicle Repair Shop	CLOSED
		2.5.15.16	SWMU 109	Building 8472	Dental Clinic	CLOSED
		2.5.15.40	SWMU 110 and 111	Building 8480	WR and OWS Southeast of Former Building 8480	CLOSED
		2.1.10.5	SWMU 115, 116, and 116A	Building 8485	Vehicle Maintenance and Former WR-1	OPEN
		2.1.10.6	SWMU 117 and 118	Building 8486	Maintenance Shop	OPEN
		2.5.15.17	SWMU 119 and 120	Building 8487	Vehicle Maintenance	CLOSED
		2.5.15.41	SWMU 121, 122, 123, 124, 125, 126, 127, 128, and 149	Building 8549, 8550, and 8551	Former MP and WR	CLOSED
		2.5.15.42	SWMU 138	Building 9581	Wastewater Treatment Plant	CLOSED
		2.5.15.14	SWMU 139 and 140	Building 6800	WR System for Most Recent Golf Course Club House	CLOSED
		2.5.15.15		Building 6865	WR System for Former Golf Course Club House	CLOSED
		2.5.15.21	SWMU 141 and 142		Privately Owned Vehicle WR	CLOSED
		2.5.15.22	SWMU 143 and 144		Former OWS and WR	CLOSED
		2.5.15.18	Non-SWMU 1, 2, 3, 4	Buildings 2454, 2455, 2456, 2457	Administrative, Barracks, and Clinic	CLOSED
		2.5.15.19	Non-SWMU 5	Building 2801	Storehouse	CLOSED
		2.5.15.51	Non-SWMU 6, 7, 8	Buildings 2810, 2811, 2832	Lab and Barracks, Former Buildings 2810, 2811, and 2832	CLOSED

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
FGGM-96 (continued)	OU-46 (continued)	2.5.15.39	Non-SWMU 9	Building 4272	Cold Storage	CLOSED
		2.5.15.12	Non-SWMU 010	Building 4552	Administrative	CLOSED
		2.5.15.20	Non-SWMU 12 and 13	Building 9802 and 9803	Barracks and Administrative	CLOSED
		2.5.15.43			Possible Vehicle Service Area A – 1943	CLOSED
		2.5.15.44			Possible Vehicle Service Area B – 1943	CLOSED
		2.5.15.63			Former Incinerator Building – 1943; 21½ Street	CLOSED
		2.5.15.23			Oil Tanks	CLOSED
		2.1.10.7			Stained Soils Along 3 rd Street	OPEN
		2.5.15.45			Former Incinerator Site – Reece Road	CLOSED
FGGM-001- R-01	OU-38	2.3.7			CFD MMRP	OPEN
FGGM-002- R-01	OU-39	2.3.8			High Explosive Impact and Disposal (HEI) Area – BRAC	OPEN
FGGM-003- R-01	OU-40	2.2.1.1			Mortar Area Munitions Response Site (MRS)	OPEN
FGGM-003- R-02	OU-40	2.2.1.2			Training Area MRS	OPEN
FGGM-004- R-01	OU-41	2.6.1			Grenade & Bayonet Range A	CLOSED
FGGM-005- R-01	OU-42	2.6.3			Pistol Range A	CLOSED
FGGM-006- R-01	OU-43	2.6.4			Pistol Range B	CLOSED
FGGM-007-R-01	OU-44	2.2.2			IAL2	OPEN
FGGM-008-R-01		2.6.2			Grenade & Bayonet Range B	CLOSED
	Unassigned AOI	2.8.4			6-Acre Little Patuxent River Site	CLOSED
CCFGGM-97		2.1.11			Cell 3	OPEN
		2.4.1			Off-Post Groundwater Investigation – Nevada Avenue Area	OPEN
		2.8.1		Building 8484	Grant Street at Building 8484 – Spill Notification	CLOSED

FGGM Number	OU	SMP Section Number	SWMU Number	Building Number	AOI Identifier	Status
		2.8.2		Building 1978	20 th Street at Route 175 Near Building 1978 – Spill Notification	CLOSED
	Unassigned AOI (continued)	2.8.3		Building 195	1st Street in Front of Building 195 – Spill Notification	CLOSED



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2 AREAS OF INTEREST DESCRIPTIONS BY SOURCE FUNDING

2.1 INSTALLATION RESTORATION PROGRAM OPEN AREAS OF INTEREST

2.1.1 FGGM-07 (OU-5) – DEFENSE REUTILIZATION AND MARKETING OFFICE DRUM SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Site Inspection (SI).....1992, 1995

Remedial Investigation/

Feasibility Study(RI/FS).....1994–2011

Focused Feasibility Study (FFS).....2007

FFS Technical Addendum on Pre-Design

Plume Delineation and Data Collection2010

RI/FFS.....2022-2023

Proposed Plan (PP).....2024

Record of Decision (ROD).....2024

Remedial Action Work Plan (RAWP)/

Remedial Design (RD).....2025

Response Action Completion Report (RACR)

.....2026

Contaminants of Potential Concern: Volatile organic compounds (VOCs).

Media of Concern: Groundwater

Site Location: Grid F5, at the intersection of Rock Avenue and Remount Road along the southern boundary of the installation.

Site Description: This AOI is approximately 9 acres and comprises the Covered Storage Facility (CSF) at the former salvage yard portion of the former Defense Property Disposal Office (DPDO). The CSF is also identified as the DRMO warehouse. DPDO was an open storage/disposal area for automobiles, drums, water heaters, heating units, dry cleaning machines, spent battery transformers, pipe, and scrap metal.

Previous Studies: In 1995, a total of 267 drums, 2 transformers, 1 high voltage box, and 3,500 tons of polychlorinated biphenyls (PCB)-contaminated soil were removed.

RI/FS activities were conducted from 1994 to 2011. In 2011, the Army completed additional RI fieldwork including groundwater sampling to address outstanding EPA comments on the 2003 RI and Baseline Risk Assessment. Data gaps identified after the 2010 FFS led to additional RI fieldwork between 2017 and 2019. In 2017, all existing monitoring wells were sampled for baseline sampling.

Additional sampling in 2018-2019 was conducted to address data gaps, and included vapor intrusion sampling, and the installation and sampling of an additional monitoring well in



2018. A tetrachloroethylene (PCE) groundwater plume, approximately 5,000 feet long, extends off-post onto the PRR.

It is anticipated that the final remedy for the site will be dynamic groundwater recirculation, 5-Year Reviews, and land use controls (LUCs).

Current Use: The DRMO currently operates as Defense Logistics Agency Disposition Services.

Current Status: A revised RI was completed in 2022 and incorporates the vapor intrusion and groundwater results to address data gaps. A revised FFS is currently under preparation.

Cleanup/Exit Strategy: Finalizing the FFS, preparing a PP/ROD, RAWP/RD, and RACR.

2.1.2 FGGM-08 (OU-7) – COMP AMMUNITION SUPPLY POINT NO. 1

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA 1989

SI 1992

PA 1995–1996

SI 1995–2011

Interim Removal Action (IRA) 1998–1999

Groundwater RI 2007

The CSL Schedule:

FFS 2014

RD 2020

PP 2017, 2024

Interim ROD (IROD) 2020

ROD 2024

Remedial Action (Construction) [RA(C)] 2020

Remedial Action (Operation)[RA(O)]

..... 2020–2026

Long-Term Monitoring (LTM) 2020–2056

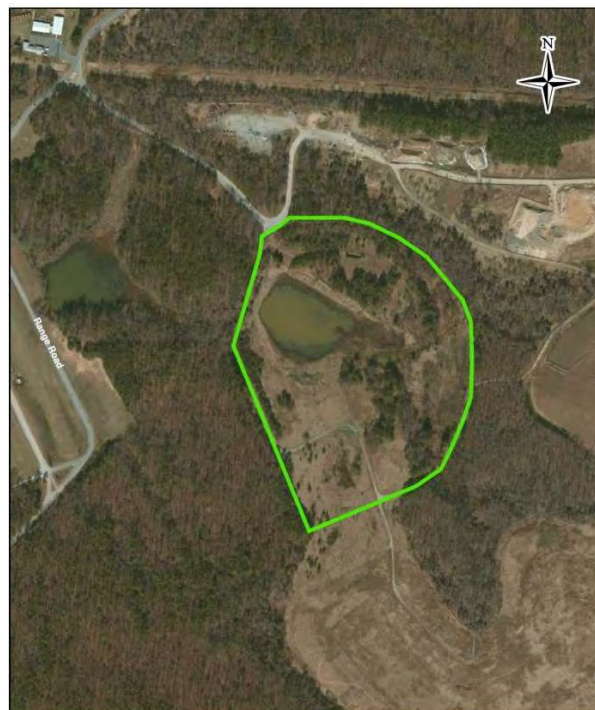
Contaminants of Potential Concern: Metals

Media of Concern: Soil

Site Location: Grids H5/I5 and H6/I6, in the middle of the CSL, in the southeastern portion of the cantonment area.

Site Description: This AOI is within the boundary of the CSL (refer to Section 2.1.4). Chemical munitions used at FGGM included smoke grenades and Riot Control Agents (RCAs) for training purposes (Argonne 1989). These items were stored at ASP No. 1. RCAs were stored in bulk (50-pound drums), canister, and capsule form. Smoke grenades contained a mixture of grained aluminum, zinc oxide, and hexachloroethane, as well as substances to produce colored smoke. In the 1950s, an unknown number of chemical agent identification sets (CAIS) were stored in ASP No. 1. The final disposition of these sets is unknown.

Previous Studies: Over the course of previous investigations at this AOI, 21 surface soil samples, 6 subsurface soil samples, one surface water sample, and 6 sediment samples were collected and submitted for laboratory analysis. In addition, both shallow and deep groundwater at the CSL has been monitored for certain constituents, including explosives, and some wells are located near ASP No. 1. Soil samples were collected around the magazine locations (EM Federal Corporation 2007).



FGGM 08 - Comp Ammunition Supply Point No. 1 (OU-7)
0 200 400 800
Feet

One surface and one subsurface soil sample were collected from each of the six former magazine locations in the former ASP area to assess the potential for soil contamination due to spills or leaks. Based on a risk analysis of the analytical results, concentrations are below site-specific action levels.

Current Use: Grass, trees, and a pond.

Current Status: The CSL (FGGM-17) FFS recommended NFA for this AOI. The PP was finalized in 2017 and the IROD was finalized March 2020.

Cleanup/Exit Strategy: This site has an IRA and RI; and will require a final ROD for closeout. Since this AOI is within the CSL (FGGM-17) footprint it has been included in the CSL IROD (refer to Section 2.1.4). The CSL IROD recommendation for this AOI is NFA. Five-Year Reviews are anticipated.

2.1.3 FGGM-13 (OU-10) – FORMER PESTICIDE SHOP BUILDING, FORMER BUILDING 6621

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS.....2004–2012

ROD.....2012

RD.....2012–2013

RA(C).....2013

5-Year Review.....2016, 2022, 2026

RA(O).....2013–2017

LTM.....2017–2025

Contaminants of Potential Concern: VOCs and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid F4, at the northwestern corner of the intersection of York Avenue and Gordon Street.

Site Description: Between 1958 and 1978, former Building 6621 was used as a pesticide shop and maintenance facility. Pesticides stored at the building included malathion, diazinon, and baygon. Equipment stored at the building included lawn mowers, tractors, and other landscaping equipment. The building was demolished in 1996, and the area was graded.

Previous Studies: Site investigations were conducted after the building was demolished and the site regraded. Soil sampling results indicate that chlordane, alpha-chlordane, gamma-chlordane, 4,4-DDD (dichlorodiphenyldichloroethane), 4,4-DDE (dichlorodiphenyldichloroethylene), 4,4-DDT (dichlorodiphenyltrichloroethane), 2,4-D (dichlorophenoxyacetic acid), heptachlor, dieldrin, arsenic, and mercury were detected above EPA Region 3 RBCs. Groundwater was not assessed during the site investigations. In 2011, the Final RI determined that surface and shallow subsurface soils at the former Pesticide Shop were contaminated with pesticides (primarily chlordane) and arsenic. The pesticide contamination was more extensive than the arsenic contamination (Arcadis 2011). In 2010, additional RI work indicated that groundwater was contaminated with pesticides at low levels (primarily chlordane). Groundwater pesticide concentrations decreased substantially away from the pesticide handling area. Tetrachloroethene (PCE) was also detected in two wells and decreases in concentration away from the pesticide handling area to non-detect. The human health risk assessment (HHRA) prepared as part of the RI concluded: 1) The cancer risk estimates are above the upper end of the



target cancer risk range (1×10^{-4}) and the cumulative non-cancer hazard estimates are above one for the future hypothetical resident, and 2) The cumulative non-cancer hazard estimates are greater than one for the future construction worker.

Current Use: Fenced site used for equipment storage.

Current Status: The ROD was signed in September 2012 to implement soil excavation with off-site disposal, enhanced reductive dechlorination (ERD) with LTM of groundwater, and land-use controls. Implementation of the ROD began with excavation in December 2013. Excavation was completed in February 2014, and ERD was conducted in March 2014. LUCs were implemented in 2014. Following the excavation, LTM of groundwater was conducted quarterly for one year, semi-annually for two years, and annually since 2017. LUC inspections are conducted annually during LTM events. Five-year reviews will continue until unlimited use/unrestricted (UU/UE) exposure is achieved.

Cleanup/Exit Strategy: The ROD remedy was implemented between December 2013 and June 2014. LTM follows the schedule established in the RD and subsequent monitoring reports. The next 5-Year Review will be in 2026.

2.1.4 FGGM-17 (OU-12) – CLOSED SANITARY LANDFILL

Regulatory Driver: CERCLA/Resource Conservation and Recovery Act (RCRA) (for post closure LTM)

Environmental Investigations:

RI/FS 2001–2014

RD 2014–2019

PP 2017

IROD 2020

RA(C) 2020

Interim Remedial Action Completion Report (IRACR) 2021

RA(O) 2020–2026

LTM 2020–2056

Technical Memorandum HHRA 2023

PP 2024

ROD 2024

Contaminants of Potential Concern: VOCs, metals, and nitrate.

Media of Concern: Groundwater

Site Location: Grids H5, I5, H6, I6, along the southeastern boundary of the installation, south of State Route 32.

Site Description: FGGM-17 was constructed as an unlined facility with no leachate collection system, initially designated as the Active Sanitary Landfill. Landfill operations were conducted from 1958 to 1976 using the trench fill method. FGGM-17 was divided into three cells; Cells 1 and 2 were capped with clay in 1992; Cell 3 was not capped or included in the RCRA permit. In 2013, it was discovered that Cell 3 may be larger than originally thought requiring additional RI work. As a result, Cell 3 is being investigated separately as CCFGGM-97.

Surface water retention ponds are located along a small stream that bisects the site. A landfill-gas collection and treatment system operate along the eastern edge of the landfill to control emissions from the site.

ASP No. 1 is located north of Cell 1 and west of Cell 2 within the CSL site boundary (Section 2.1.2).

Previous Studies: Soil borings were drilled to characterize the depth and nature of the waste materials. Surface soil samples were collected from the landfill cells to help assess potential exposure pathways. Groundwater and surface water samples are collected on a semi-annual schedule.

The HHRA completed as part of the 2013 RI indicated the following: 1) Surface/sub-surface soil, sediment, and surface water media from the CSL do not present unacceptable risk to human receptors on site or off site under current and future land-use scenarios.



2) Exposure to groundwater under the hypothetical future resident scenario exceeded the EPA target risk range and hazard level. An off-site investigation to further delineate the presence of benzene near the southeastern CSL boundary was conducted in March 2013 and 2014. Benzene was not detected above the Maximum Contaminant Level (MCL) during

integrates ASP No. 1 and includes land-use controls, an active air sparge system, and continued post-closure care monitoring of the landfill initiated through RCRA. NFA is recommended for ASP No. 1. A separate RI/FS was the investigation; therefore, the delineation is complete. However, arsenic was detected off-post at concentrations exceeding the MCL.

Current Use: Landfill, undeveloped and soil stockpile.

Current Status: Semiannual groundwater and surface water monitoring and active methane collection are ongoing at the CSL. An FFS for Cells 1 and 2 was finalized in December 2014, which evaluates alternatives for handling benzene and arsenic at the property boundary. The PP was finalized in 2017. A remedial air sparge treatment system began continuous operation in December 2020, as documented in the 2021 IRACR.

Cleanup/Exit Strategy: An IROD was finalized in March 2020 for the CSL, which completed for Cell 3 (see Section 2.1.11). An update to the HHRA through a Technical Memorandum is being prepared in 2023 and a revised PP and ROD that will include Cells 1, 2 and 3, will be completed in 2024.

2.1.5 OU-4


Regulatory Driver: CERCLA

Environmental Investigations:

Please see the individual OU-4 AOI for lists of previous investigations.

Contaminants of Potential Concern: VOCs, semivolatile organic compound (SVOCs), PCBs, pesticides, herbicides, total petroleum hydrocarbons – diesel-range organics (TPH-DRO), TPH – gasoline range organics (TPH-GRO), polycyclic aromatic hydrocarbons (PAHs), fuel oil, metals, and herbicides

Media of Concern: Soil, groundwater, surface water, and soil gas.

Site Location: Grids G4, H4, G5, H5, H6, and I6, in the southeastern portion of the installation.

Site Description: OU-4 comprises the following sites:

- FGGM-33: Battery Shop; (Former Building 2283)
- FGGM-45: Calibration Laboratory (Building 2220)
- FGGM-47: Post Laundry Facility (Building 2250)
- FGGM-49: DOL Buildings 2286 and 2246
- FGGM-51: Spill Site (Building 2217)
- FGGM-86: Former MP Maintenance Facility (Building 2286)

- FGGM-88: Former Tank Maintenance Facility Shop 1 (Buildings 2207, 2201, 2204, and 2206)
- FGGM-89: Former Tank Maintenance Facility Shop 2 (Former Building 2217)
- FGGM-90: Former Tank Cleaning Warehouse (Building 2240, 2241, 2242, 2243, 2247, 2248, and 2249)
- FGGM-91: Former Missile Repair Shop (Building 2220)
- FGGM-92: Former Heavy Gun Cleaning and Repair Shop (Buildings 2244, 2245, 2246, 2246D, and 2253)
- FGGM-17: MWs-125d and -126d
- FGGM-96: Painting and Sheet Metal Shop, Former Building 2213
- FGGM-96: Building 2266
- FGGM-96: Furniture Repair Shop (Former Building 2276) (SWMUs 63 and 64)
- FGGM-96: NSA MP Equipment and Chemicals Storage Shed, Former Building 2287 (SWMU 68)
- FGGM-96: Paint Storage Shed (Building 2288) (SWMU 69)
- FGGM-96: Former WR-5
- FGGM-96: Debris and Stain – 1975

(OU-4 Continued) Previous Studies: The precise location, history, and a summary of contamination of each site within OU-4 are presented in subsections 2.1.5.1 through 2.1.5.19. RI activities were completed during multiple phases between 2009 and 2014. The work extended across the overall OU-4 study area and included a series of cone penetrometer / membrane interface probe borings, soil sampling using direct-push technology (DPT), vertical aquifer profiling borings using rotosonic drilling technology, deep and shallow monitoring well installations on- and off-post, numerous monitoring well groundwater sampling events and water level gauging, and completion of a vapor intrusion investigation involving sub-slab gas and indoor air sampling at OU-4 buildings. The HHRA concluded that in areas west of Huber Road (i.e. Buildings 2253, 2250, 2246, 2243, 2242, 2241, 2240, and 2220) for the future trench construction worker scenario, three endpoint-specific hazard indices (cardiovascular system, immune system, developmental effects) exceed the target Hazard Index (HI) of 1, with exposures to trichloroethene (TCE) in shallow Upper Patapsco Aquifer (LPA)/Middle Patapsco Clay groundwater as the primary contributor. Additionally, under a future off-post residential drinking water use scenario, the current concentrations in LPA groundwater at upgradient on-post monitoring wells were defined as representative of future potential exposures to off-post residents who use groundwater for potable purposes (but without any consideration of the effects of treatment, dilution, or attenuation in current on-post LPA groundwater concentrations). The cumulative cancer risk estimate exceeds the upper limit of EPA's acceptable risk range of 1E-06 to 1E-04, with arsenic in on-post LPA groundwater identified as the risk driver. The endpoint-specific hazard estimates for methylchlorophenoxypropionic acid (MCPP), cobalt, TCE, and PCE exceed EPA's target HI of 1.

Current Use: Administrative, storage, industrial, and commercial

Current Status: A Final RI/FS document presenting "final" corrective actions for OU-4 was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding chemicals of concern (COCs). To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan proposing interim "active" remedial alternatives, including in-situ chemical injections (in the vicinity of FGGM-86/Building 2286 and FGGM-96/Former Building 2276 – AOC [AOC] 1), installation and operation of an air sparge/soil vapor extraction system (AS/SVE) (at FGGM-47/Building 2250 – AOC 2), and HC (HC) (within the LPA south of Route 32 – AOC 3), was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impacts to the LPA in off-post areas of Odenton. In AOC 1, in-situ chemical oxidation injections were initiated in May 2014. The most recent in situ chemical oxidation injection was completed in 2023 at Buildings 2286/2276 to address rebounding of VOC concentrations in groundwater. To date, four full-scale in-situ chemical oxidation injections have been completed. The AS/SVE and HC systems were constructed and brought online in March 2014 in Areas of Concern 2 and 3, respectively. The IRA Reports (IRARs) were finalized in October 2014, and groundwater monitoring and operation and maintenance (O&M) activities are underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of a ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, including the sites listed above, is continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the "final" corrective action agreed upon by all stakeholders in the forthcoming ROD for all three AOC's. Soil excavation with off-site disposal is anticipated at AOC 2.

2.1.5.1 FGGM-33 (OU-19/OU-4) – BATTERY SHOP, FORMER BUILDING 2283

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....	1991–1993
SI.....	1991–1994
IRA.....	1993–1994
Comprehensive Site Assessment (CSA).....	2000
RI/FS.....	2002–2014
Well Closure Report.....	2003
PA.....	2010–2012
IRAR.....	2014
RI and FS Addendums.....	2016–2020
PP.....	2024
ROD.....	2025
Remedy in Place (RIP)/Response Complete (RC)	2026

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeastern portion of the installation, approximately 500 feet west of the intersection of Morrison Street and Huber Road.

Site Description: Building 2283 was as a motor repair shop and storage facility (1941–1982) and a battery disposal facility (1982–1992) before being demolished in the mid-1990s.

From 1982 to 1985, battery acid was discharged directly to surface soil in a bermed area along the north wall of the former building (EA Engineering Science and Technology, Inc. 1994). An acid neutralization tank was installed in 1985.

In 1987, discharge of battery acid to the tank ended, but battery rinsing, and cleaning operations continued in a sink in the northeastern corner of the building; a drainpipe from the sink discharged to the surface soil outside the building.

Previous Studies: An IRA was completed in 1994 (EA 1994). Over the course of previous investigations at this AOI, 59 surface soil samples, 67 subsurface soil samples, and 14 groundwater samples (plus one duplicate sample) were collected and submitted for laboratory analysis.

Current Use: Picnic pavilion and repelling tower with grass and tree cover.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses



FGGM 33, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway.

<p>Current Status (Continued): On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM 33, includes continued O&M of the remedial systems and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.2 FGGM-45 (OU-22/OU-4) – CALIBRATION LABORATORY, BUILDING 2220

Regulatory Driver: CERCLA
Environmental Investigations:

PA 2010–2012

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2021

PP 2024

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and soil gas

Site Location: Grid H5, in the southeastern portion of the installation, approximately 150 feet east of the intersection of 3rd Street and Pepper Road.

Site Description: Building 2220 (SWMU 42) was constructed in the late 1950s or early 1960s and was used as a warehouse and troop training center. This site was used in the late 1960s as a missile repair shop, using solvents and producing solvent waste. Small amounts of cleaning solvent and gasoline were formerly stored in a shed outside the building. Two fuel oil USTs were formerly located at the south side of the building; one removed in 1992, and the other removed and replaced in 1988 then removed in 1997. During the 1988 UST removal, corrosion holes were noted at the end of the tank. Building 2220 is also identified as FGGM-91, Former Missile Repair Shop groundwater.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples, 6 subsurface soil samples, and 13 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Administrative/storage

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-45, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and Address outstanding regulatory comments, two supplemental groundwater sampling events targeting a


FGGM 45 - Building 2220 - Calibration Laboratory

0 25 50 100 Feet

select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton.

<p>Current Status (continued): The AS/SVE and HC systems were constructed and brought online in March 2014.</p> <p>In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels.</p> <p>As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-45, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.3 FGGM-47 (OU-4) – POST LAUNDRY FACILITY, BUILDING 2250

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS 2017

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, approximately 400 feet northeast of the intersection of Rock Avenue and Huber Road.

Site Description: Building 2250 (SWMU 59 and 60) was constructed in 1941 and used as a laundry facility through 1991. Dry cleaning operations were introduced in the late 1960s. TCE, PCE, and carbon tetrachloride (CCl_4) were used during dry-cleaning operations. Laundry and dry-cleaning operations were discontinued in 1991, and the facility was converted to a recycling center. This AOI is being investigated under OU-4.

Previous Studies: In 1989, a preliminary soil investigation identified PCE in soil in an area believed to be a former drum storage area north of the building. Five shallow monitoring wells were installed near the building and first sampled in 1996. Surface water samples and sediment samples were collected from the retention pond near State Route 32 in 1998. Surface water in the swale east of Building 2250 was sampled in 1996, 1998, 1999, 2000, and 2013.

Current Use: Recycling center

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-47, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical


FGGM 47 - Post Laundry

0 25 50 100 Feet

parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019.

An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014.

<p>Current Status (continued): In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-47, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD. Soil excavation with off-site disposal is anticipated at AOC 2.</p>
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2.1.5.4 FGGM-49 (OU-23/OU-4) – DEPARTMENT OF LOGISTICS, BUILDINGS 2286 AND 2246**Regulatory Driver:** CERCLA**Environmental Investigations:**

Initial Delineation Report.....	2000
RI/FS	2014
IRAR.....	2014
RI and FS Addendums.....	2016–2020
PP.....	20243
ROD.....	2025
RIP/RC.....	2026

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH-DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5. Building 2286 is north of Morrison Street and Building 2246 is east of Huber Street.

Site Description: FGGM-49 is part of OU-4 and includes Buildings 2286 and 2246. The soil and groundwater investigations and actions around Building 2286 are covered under FGGM-86. The soil and groundwater investigations and actions around Building 2246 are covered under FGGM-92. Both FGGM-86 and FGGM-92 are part of OU-4. These two buildings were initially delineated in 2000 (Versar, Inc. [Versar] 2000a, 2000b). Further actions are required for soil and groundwater and will be conducted under FGGM-86 (for Building 2286) and FGGM-92 (for Building 2246).

Previous Studies: Over the course of previous investigations at this site, 6 subsurface soil samples and 2 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Industrial and administrative

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-49, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives,



FGGM 49 - DOL Buildings 2286 and 2246
0 125 250 500 Feet

including in-situ chemical injections, installation and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014.

In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP

Current Status (continued): (AECOM 2020) and preparation of an ROD, RD, and RACR.	Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-49, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.
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2.1.5.5 FGGM-51 (OU-24/OU-4) – SPILL SITE, FORMER BUILDING 2217

Regulatory Driver: CERCLA

Environmental Investigations:

MDE Inspection Report 1988

SWMU Study 1996

MDE Site Closeout 2000

PA 2010–2012

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: Metals, PAHs, and VOCs

Media of Concern: Soil

Site Location: Grid H5, in the southeastern portion of the installation, west of the intersection of Chisholm Avenue and 2nd Street.

Site Description: Two heating oil USTs were near Building 2217. UST #2217A was installed 1 June 1970 and removed 14 July 1988; UST #2217B was a 1,000-gallon capacity steel UST installed 3 August 1988 and removed 11 December 1997 (FGGM 2010; Horne 1994). The first tank was removed due to corrosion; there were holes at the tank end (FGGM 2010). Free product was observed, the saturated soils were removed, and the soil removal project stopped upon finding a clay area (FGGM 2010).

Building 2217 was demolished in 2003 during which petroleum contamination was encountered underneath the concrete slab. The soil was investigated. The slab and soil beneath it were removed on 24 April 2007 and post-excavation samples were collected.

Previous Studies: Over the course of previous investigations at this site, 6 surface soil samples and 17 subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Grass field

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-51, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs.

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the



FGGM 51 (OU-24) – Building 2217 (Spill Site)

0 25 50 100 Feet

COCs was finalized in 2019. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives

<p>Current Status (continued): were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-51, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.6 FGGM-86 (OU-4) – FORMER MOTOR POOL MAINTENANCE FACILITY

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

RCRA Facility Assessment (RFA)

 3rd Phase 1999

Site Investigations 2001, 2002

Investigation Data Report 2005

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, herbicides, and metals

Media of Concern: Groundwater and soil gas

Site Location: Grid H5, near the intersection of Wilson and Morrison Streets.

Site Description: FGGM-86 consists of Building 2286 and Former Buildings 2285 and 2290.

Building 2286 (SWMUs 66 and 67) has been in use as a paint and body shop since the mid-1980s. Chemicals used in the building include paints, solvents, thinner, antifreeze, acetylene, and argon gas.

Former Building 2285 (SWMU 65) was used for storing paints and solvents until 1991. It was then mostly empty until 1995, when the 55th Signal began using it to store cots, a lawnmower, and gasoline.

Former Building 2290 (SWMU 70) was used by Allied Trades to store paints, thinners, and enamels until 1988. It was empty from 1988 until it was also used by the 55th Signal to store equipment parts, wood, and metal. Buildings 2285 and 2290 were demolished in approximately 2000.

Previous Studies: Over the course of previous investigations at this site, 15 soil samples and 11 groundwater samples were collected and analyzed.

Current Use: Storage and administration

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-86, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs.

To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental



groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway.

Ongoing performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as

<p>Current Status (continued): projected in the IRA Work Plan, COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-86, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.7 FGGM-88 (OU-4) – FORMER TANK MAINTENANCE FACILITY SHOP-1

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, PCBs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, approximately 150 feet southwest of the intersection of 1st Street and Chisholm Avenue.

Site Description: FGGM-88 includes Building 2207 (SWMU 37, DPW Storage and Receiving Warehouse), Building 2201 (DPW Storage and Supply Warehouse), Building 2206 (offices), Building 2204 (storage building), and Building 2200 (metal canopy for outdoor storage).

Constructed in 1918, Building 2207 was used as a tank maintenance facility prior to 1973. Since at least the mid-1980s, it has been used by the DPW as a receiving and storage facility.

Previous Studies: Over the course of previous investigations at this site, at least 17 soil samples and 11 groundwater samples were collected and analyzed.

Current Use: FGGM-88 is currently used for receiving materials for distribution to other facilities (main floor) and storing supplies, such as filters, light bulbs, and pipe clamps (upper floor).

The grounds are also used for storing construction materials, refrigerators, non-PCB-containing transformers, and fluorescent light bulbs.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-88, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments


FGGM 88 - Former Tank Maintenance Facility Shop-1

on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton.

The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated.

<p>Current Status (continued): The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-88, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.8 FGGM-89 (OU-4) – FORMER TANK MAINTENANCE FACILITY SHOP-2

Regulatory Driver: CERCLA

Environmental Investigations:

Sampling visits 1999, 2000, 2001

Delineation Report 2000

SI 2001

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Groundwater

Site Location: Grid H5, on 2nd and 3rd Streets between Pepper Road and Chisholm Avenue.

Site Description: FGGM-89 comprises the DOL Electric Shop Former Building 2217 (SWMU 39) and the DPW storage yard. Former Building 2217 was in the southeastern corner of the site. A former WR (SWMU 41) and a former OWS (SWMU 40) were in the northwestern corner of the site.

Constructed in 1918, Former Building 2217 was used as a tank maintenance facility until 1973. The associated WR was used to wash vehicles and construction equipment; wash water was discharged to the OWS and then to the sanitary sewer system. The WR and OWS were demolished and removed in 1999 or 2000.

Previous Studies: Over the course of previous investigations at this site, at least 32 soil samples and 30 groundwater samples were collected and analyzed.

Current Use: No permanent structures are located on site and the property is currently used for storage of vehicles and equipment.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-89, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments

 FGGM 89 - Former Tank Maintenance Facility Shop-2
 0 40 80 160 Feet

on the CoCs were finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014 and groundwater monitoring and O&M activities are currently underway.

On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final

<p>Current Status (continued): long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-89, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.9 FGGM-90 (OU-4) – FORMER TANK CLEANING SUPPLY WAREHOUSE

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, PAHs, herbicides, pesticides, TPH-DRO, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, comprising the DOL Storage Services and Supply Division Complex located in the northwest quadrant of the intersection of Pepper Road and Rock Avenue.

Site Description: The complex is in OU-4 and includes Buildings 2240 (SWMUs 45 and 46), 2241 (SWMUs 47 and 48), 2242 (SWMUs 49 and 50), 2243, 2247, 2248 (SWMUs 51 and 52), and 2249 (SWMUs 53 and 54). Building 2240 is a separate single-story brick structure. Buildings 2241, 2242, and 2243 are connected in sequence and are elevated on wooden piers. Buildings 2247, 2248, and 2249 are smaller, wooden garage-type structures located behind the larger buildings. Other features on the site include propane storage pen (Building 2247A), flammable gas storage pen (Building 2248A), and an empty compressed gas storage pen north of Building 2249. A former 1,000-gallon above-ground storage tank (AST) storing No. 2 fuel oil located behind Building 2242 was removed in 1995.

Previous Studies: Soil and groundwater samples were collected and analyzed for Buildings 2240, 2241, 2242, 2248, and 2249.

Current Use: Building 2240 has been used as a storage and supply facility since its construction in 1934. Buildings 2241 and 2242 were constructed in 1918 and have always been used for receiving and short-term storage of supplies and materials before shipping. Buildings 2247, 2248, and 2249 are currently being used for assorted military administrative, commercial, and storage activities.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-90, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory


FGGM 90 - Former Tank Cleaning Supply Warehouse

0 60 120 240 Feet

comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed.

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019.

An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway.

On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as

<p>Current Status (continued): originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-90, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.10 FGGM-91 (OU-4) –FORMER MISSILE REPAIR SHOP, BUILDING 2220

Regulatory Driver: CERCLA

Environmental Investigations:

PA/SI1998–1999

Sampling Visits1999, 2000

Soil Background Concentration

Soil Background Concentration Report2001

RI/FS2014

IRAR2014

RI and FS Addendums2016–2020

PP20243

ROD2025

RIP/RC2026

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH-DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, approximately 150 feet southeast of the intersection of Pepper Road and 3rd Street.

Site Description: Building 2220 (SWMU 42) is currently used for an electronic maintenance and calibration shop; but in the 1960s, it was used as a missile repair shop, warehouse, and troop training center. Building 2220 is designated as FGGM-45 and is discussed separately. The FGGM-45 designation is for the building, while FGGM-91 is the groundwater at the site. Solvents, mineral spirits, cleaners, and lubricants were stored and used at the facility in the past. The site had two fuel oil USTs; one was removed in 1992, the other replaced in 1988 then removed in 1997. A 1-gallon spill of fuel oil reportedly occurred in 1993.

Previous Studies: Soil and groundwater samples were collected around Building 2220 as part of a 2000 SI and a 2000 Sampling Visit and analyzed for VOCs, SVOCs, metals, TPH-DRO, herbicides and pesticides.

Current Use: Administrative/storage

Current Status: A Final RI/FS document presenting final corrective actions for OU-4, which encompasses FGGM-91, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.



FGGM 91 - Former Missile Repair Shop
0 25 50 100 Feet

Pending finalization of the FS Addendum, which will finalize the initial RI/FS submitted in December 2014 and present final long-term groundwater alternatives for OU-4, the PP and ROD will be finalized.

An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton.

The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are currently underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS

<p>Current Status (continued): Addendum to address COC impacts at AOC 2.</p>	<p>Cleanup/Exit Strategy: Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>
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2.1.5.11 FGGM-92 (OU-4) – FORMER HEAVY GUN CLEANING AND REPAIR SHOP**Regulatory Driver:** CERCLA**Environmental Investigations:**

RI/FS2014

IRAR2014

RI and FS Addendums2016–2020

PP20243

ROD2025

RIP/RC2026

Contaminants of Potential Concern: VOCs, SVOCs, PCBs/pesticides, herbicides, TPH-DRO, fuel oil, and metals

Media of Concern: Soil, groundwater, and soil gas

Site Location: Grid H5, south of the intersection of Huber and Pepper Roads.

Site Description: FGGM-92 is currently the DOL Tactical and Support Vehicle/Heavy Equipment Maintenance Facility and includes Building 2246/2246D (SWMUs 55–58), Building 2253 (SWMUs 61–62), and two storage sheds (Buildings 2244 and 2245). Building 2246 was used as a heavy gun repair shop from 1934 until the mid-1980s, and a military tank repair shop in the past. Since 1992, the Director of Community Activities has used the facility for storage and maintenance of grounds-keeping equipment and supplies. Building 2253, constructed in 1934, and has been used for vehicle maintenance in the past. Prior to 1992, it was used by the DOL as a warehouse.

FGGM-92 contains an 800-gallon used oil AST that serves as a collection point for used oil from vehicle maintenance, an out-of-service WR, and an out-of-service fuel pump.

Previous Studies: Two investigations were conducted at the site of Building 2253 (CH2M HILL 1999; Versar 2001). Soil and groundwater samples were collected and analyzed during two investigations conducted at the Building 2246 site (Versar 1999a, 2000c).

Current Use: Maryland National Guard 32nd Civil Support Team

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-92, was submitted to EPA and MDE in December 2014; however, comments from EPA are under resolution regarding COCs.

To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset



FGGM-92 - Former Heavy Gun Cleaning and Repair Shop

0 60 120 240 Feet

of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019.

An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and

<p>Current Status (continued): remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-92, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.12 FGGM-17 (OU-4) – MONITORING WELLS 125D AND 126D**Regulatory Driver:** CERCLA**Environmental Investigations:**

Sampling Visits...2004, 2005, 2008, 2009, 2012,
..... 2013, and 2014

Work Plan 2009

RI/FS 2014

IRAR 2014

RI and FS Addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: PCE, TCE, CCl₄,
and metals

Media of Concern: Groundwater

Site Location: Grid I6, two monitoring well clusters (s-shallow and d-deep) 123s/125d and 124s/126d are located off post, east of the northern part of the CSL, at the intersection of North Patuxent and Dovetail Roads in Odenton, MD, in a residential area.

Site Description: Off-post wells MW-123s/125d and MW-124s/126d were installed as part of the CSL RI. PCE and CCl₄ detections above their respective MCLs were confirmed in off-post wells MW-125d and 126d in 2005. The CSL RI determined that the CSL is not the source of contamination in the LPA. Between 2005 and 2008, Anne Arundel County Health Department conducted an annual drinking water sampling program, which included 13 residential drinking water wells downgradient from FGGM. All samples collected met primary EPA drinking water standards. Copper was detected above MCLs and lead was detected above its at-tap action level, but no VOC exceedances were detected in the wells tested by Anne Arundel County.

Previous Studies: MW-123s/125d and MW-124s/126d were sampled in 2004, 2005, 2008, 2009, 2012, 2013, and 2014.

Current Use: Monitoring Wells

Current Status: A Final Non-Time Critical Removal Action (NTCRA) Work Plan approved in 2013 proposed interim active remedial alternatives for OU-4



and the LPA Study Area, including installation and operation of a HC system installed to enhance contaminant flushing in the LPA treating groundwater travelling in a southeast direction toward MW-125d and MW-126d. A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses MW 125d and 126d, was submitted to EPA and MDE in December 2014. Annual groundwater samples were collected from MW-123s/125d and MW-124s/126d and analyzed for VOCs in January of 2014. The MCL for CCl₄ was exceeded in both MW-125d and MW-126d. PCE, toluene, and total xylenes were detected in MW-123s and MW-124s; however, no MCLs were exceeded. An NTCRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an AS/SVE, and HC, was approved in December 2013. The overall objectives of the NTCRA are to improve groundwater quality across the site through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The HC

<p>Current Status (Continued): system and AS/SVE were completed and operational in March 2014. In-situ chemical injections were initiated in May 2014.</p> <p>The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. On-going performance monitoring has demonstrated that the AS/SVE remedy at AOC 2 is not operating as originally projected in the IRA Work Plan, as COC concentrations continue to fluctuate and remain at high levels. As a result, additional alternatives were evaluated in an FS Addendum to address COC impacts at AOC 2. Soil excavation with off-site disposal is anticipated. The 2020 FS Addendum finalizes the initial RI/FS submitted in December 2014 and presents final long-term groundwater alternatives for OU-4. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.</p>	<p>Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses MW 125d and 126d and the LPA, includes continued O&M of the removal systems and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.</p>
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2.1.5.13 FGGM-96 (OU-46/OU-4) - PAINTING AND SHEET METAL SHOP, FORMER BUILDING 2213

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2010–2012

RI/FS 2014

IRAR 2014

RI and FS addendums 2016–2020

PP 20243

ROD 2025

RIP/RC 2026

Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals

Media of Concern: Groundwater

Site Location: Grid H5. Former Building 2213 was in the southeastern portion of the installation, in the northeast quadrant of the intersection of Pepper Road and Rock Avenue. SWMU 38 is located within the outline of OU-4.

Site Description: Former Building 2213 was identified as a potential SWMU in 1996 (BCM Engineers, Inc [BCM] 1996) because it was formerly used as a painting, sheet metal and sign fabrication shop from the 1960s until it was demolished in the mid-2000s.

Building 2213 was used to store small quantities of paints, lubricants, cleaners, and mineral spirits. The building also served as a drop-off point for oil-based and latex paints (unused and waste). The oil-based paints were stored in a hazardous waste locker on the northern side of the building. Latex paints were bulked into a 55-gallon drum and processed as non-regulated waste. Two 550-gallon heating oil USTs, formerly located along the southeast exterior wall, were removed in 1997.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples (plus 1 duplicate), 11 subsurface soil samples (plus 2 duplicates), and 8 groundwater samples (plus 2 duplicates) were collected and submitted for laboratory analysis.

Current Use: Administrative and industrial.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.


Building 2213 - Sheet Metal and Sign Fabrication Shop

0 25 50 100 Feet

An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013. Overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas, and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-96, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.14 FGGM-96 (OU-46/OU-4) – FORMER BUILDING 2266**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study	1996
SI	2002
PA	2010–2012
RI/FS	2014
IRAR	2014
RI and FS Addendums	2016–2020
PP	20243
ROD	2025
RIP/RC	2026

Contaminants of Potential Concern: No sampling took place at this location.

Media of Concern: None identified

Site Location: Grid H5, in the southeastern portion of the installation, west of the intersection of Rock Avenue and Huber Road. Former Building 2266 falls within the geographical boundary of OU-4.

Site Description: Former Building 2266 was identified as an AOI because the 2006 FGGM IAP listed it as an AOI. No other information is available about past use that would qualify this building as an environmental AOI.

Previous Studies: This AOI was not identified in the *Solid Waste Management Unit Study* (BCM 1996) or the EPA (1996) historical aerial photograph study of the installation. Past use of the building is unknown. No stains, stressed vegetation, debris, or solid waste were identified in this area. The 2006 FGGM IAP lists a 6 September 2002 SI Report for Building 2266.

That report is not available for review. The 1952 land use map shows a spur of the railroad near Building 2266 and between Buildings 2271 and 2272. These buildings were probably used as warehouses.

Current Use: Part of the Asymmetric Warfare Group Headquarters (AWG HQ), now known as the 1st Capabilities Integration Group (1st CIG) complex.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017.



An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, as a whole, and encompasses FGGM-96, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.15 FGGM-96 (OU-46/OU-4) – FURNITURE REPAIR SHOP, FORMER BUILDING 2276 (SWMUs 63 AND 64)

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
Historical Aerial Photograph Study	1996
Sampling Visit	2000
SI	2001
PA	2010–2012
RI/FS	2014
IRAR	2014
RI and FS Addendums	2016–2020
PP	20243
ROD	2025
RIP/RC	2026

Contaminants of Potential Concern: VOCs and metals

Media of Concern: Soil and groundwater

Site Location: Grid G5 and H5, in the southeastern portion of the installation, in the northeast corner of the intersection of Rock Avenue and Wilson Street. Former Building 2276 falls within the geographical boundary of OU-4.

Site Description: Building 2276 was constructed between 1910 and 1920 and used as a warehouse. Hazardous chemicals (paint thinners, adhesives, stains, and aerosols) were used and stored in small quantities at the facility. The building also contained a paint booth. The building was demolished in early 2012.

Previous Studies: Over the course of previous investigations at this site, 4 surface soil samples, 6 subsurface soil samples and 10 groundwater samples were collected and submitted for laboratory analysis.

Current Use: Area under development for construction of the AWG HQ (now the 1st CIG) complex and this location is now used for a storm water retention pond

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96/ SWMUs 63 and 64, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum, presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was



Building 2276 - Furniture Repair Shop
0 25 50 100 Feet

finalized in 2019. An IRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an AS/SVE and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-96/ SWMUs 63 and 64, includes continued O&M of the remedial systems and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.16 FGGM-96 (OU-46/OU-4) – NATIONAL SECURITY AGENCY MOTOR POOL EQUIPMENT AND CHEMICALS STORAGE SHED, FORMER BUILDING 2287

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study	1996
RFA 3 rd Phase	1999
PA	2010–2012
RI/FS	2014
IRAR	2014
RI and FS Addendums	2016–2020
PP	20243
ROD	2025
RIP/RC	2026

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

Site Location: Grid H5, in the southeastern portion of the installation, approximately 550 feet from the northeast corner of the intersection of Morrison and Wilson Streets.

Site Description: Former Building 2287, NSA MP Equipment and Chemicals Storage Shed (SWMU 68), was constructed in 1941 and used as a vehicle maintenance shed and later as a carpentry shop and storage facility for airplane platforms associated with the DOL Allied Trades. In 1996, the MP started storing equipment and small quantities of chemicals (lube oil, adhesives, and brake fluid) in the building. The building was demolished around 2000.

Previous Studies: Over the course of previous investigations at this site, six subsurface soil samples and two groundwater samples were collected and submitted for laboratory analysis.

Current Use: Parking lot

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an AS/SVE and



Building 2287 - NSA Motor Pool Storing Equipment and Chemicals

0 25 50 100 Feet

HC systems was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-96/ Building 2287, includes continued O&M of the remedial systems and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.17 FGGM-96 (OU-46/OU-4) – PAINT STORAGE SHED, FORMER BUILDING 2288**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study	1996
Historical Aerial Photograph Study	1996
RFA 3 rd Phase	1999
PA	2010–2012
RI/FS	2014
IRAR	2014
RI and FS Addendums	2016–2020
PP	2024
ROD	2025
RIP/RC	2026

Contaminants of Potential Concern: VOCs**Media of Concern:** Groundwater

Site Location: Grid G5 and H5, in the southeastern portion of the installation, approximately 300 feet northeast of the intersection at Rock Avenue and Wilson Street.

Site Description: Former Building 2288 (SWMU 069) was a small, concrete-block storage building for Building 2276. The building was reportedly used in the past to store paints, thinners, and gasoline. Disposal practices in the building were unknown. Building 2288 is part of OU-4.

Previous Studies: Over the course of previous investigations at this site, three surface soil samples, four subsurface soil samples, and two groundwater samples were collected and submitted for laboratory analysis.

Current Use: Area under development for construction of the AWG HQ (now the 1st CIG) complex.

Current Status: A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan, proposing interim “active” remedial alternatives, including in-situ chemical injections, installation, and operation of an AS/SVE, and HC, was approved in December 2013.



Building 2288 – Paint Storage Shed
0 30 60 120 Feet

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses former Building 2288, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.18 FGGM-96 (OU-46/OU-4) – FORMER WASH RACK 5**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA.....2010–2012

RI/FS.....2014

IRAR.....2014

RI and FS Addendums.....2016–2020

PP.....2024

ROD.....2025

RIP/RC.....2026

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H5. Former WR-5 was located in the southeastern portion of the installation, approximately 650 feet northeast of the intersection of Morrison and Wilson Streets. AOI WR-5 falls within the geographical boundary of OU-4.**Site Description:** WR-5 was identified as an AOI because the circa 1952 land use map (Anonymous [Anon.] 1952) listed WR-5 at this location. The 1996 aerial photograph study (EPA 1996) identified a WR-5 associated with Building 940, located in the northeastern portion of the installation. The circa 1952 land use map (Anon. 1952) did not identify a WR in the vicinity of Building 940; however, the naming of WRs in 1952 and 1996 may have been different. AOI WR-5 is part of OU-4.**Previous Studies:** Over the course of previous investigations, three subsurface soil samples and one groundwater sample were collected.**Current Use:** Parking lot**Current Status:** A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum presenting the supplemental sampling analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an AS/SVE, and

HC systems was approved in December 2013.

The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-96/ former WR-5, includes continued O&M of the remedial systems and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.5.19 FGGM-96 (OU-46/OU-4) – DEBRIS AND STAIN – 1975**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA.....2010–2012

RI/FS.....2014

IRAR.....2014

RI and FS Addendums.....2016–2020

PP.....2024

ROD.....2025

RIP/RC.....2026

Contaminants of Potential Concern: VOCs, SVOCs, metals**Media of Concern:** Soil and groundwater**Site Location:** Grid H5, in the southeastern portion of the installation, south of Morrison Street, east of Wilson Street, and west of Huber Road. Debris and Stain 1975 falls within the geographical boundary of OU-4.**Site Description:** The EPA (1996) study described this AOI in the 1975 aerial photograph as: “debris has been deposited in this area and a dark stain is visible adjacent to a small building. The stain is aligned along a drainage pathway that leads from the building northeast into the nearby woods.” The stain is not labeled on the 1975 aerial photograph (EPA 1996). The write-up for the 1988 aerial photograph (EPA 1996) says that staining is still present along the drainage way and solid waste is present in an accumulation of debris, although these features are not labeled on the photograph itself. The AOI is not labeled in the 1995 aerial photograph (EPA 1996), and no debris or stains are visible.**Previous Studies:** Over the course of previous investigations near this AOI, 15 subsurface soil samples (plus 1 duplicate sample) and 2 groundwater samples were collected and submitted for laboratory analysis.**Current Use:** Area under development for construction of the AWG HQ (now the 1st CIG) complex.**Current Status:** A Final RI/FS document presenting “final” corrective actions for OU-4, which encompasses FGGM-96, was submitted to EPA and MDE in December 2014; however, comments from EPA regarding COCs required resolution. To finalize the RI/FS and HHRA and address outstanding regulatory comments, two supplemental groundwater sampling events targeting a select subset of monitoring wells and analytical parameters (e.g., limited metals) were completed in 2017. An RI Addendum, presenting the supplemental sampling

analytical results and a revised HHRA to resolve the outstanding regulatory comments on the COCs was finalized in 2019. An IRA Work Plan proposing interim “active” remedial alternatives, including in-situ chemical injections, installation and operation of an AS/SVE and HC, was approved in December 2013. The overall objectives of the IRA are to improve groundwater quality across the OU-4/LPA Study Area through active remediation in selected areas and to reduce the potential for long-term impact to the LPA in off-post areas of Odenton. The AS/SVE and HC systems were constructed and brought online in March 2014. In-situ chemical injections were initiated in May 2014. The IRARs were finalized in October 2014, and groundwater monitoring and O&M activities are underway. Future work includes finalizing the Draft PP (AECOM 2020) and preparation of an ROD, RD, and RACR.

Cleanup/Exit Strategy: The cleanup/exit strategy for OU-4, which encompasses FGGM-96/ Debris and Stain 1975, includes continued O&M of the remedial systems, and associated semi-annual groundwater monitoring to monitor system performance under the IRA at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the forthcoming ROD.

2.1.6 FGGM-83 (OU-1) – FORMER TRAP AND SKEET RANGE, FORMER BUILDINGS 2046 AND 2047

Regulatory Driver: CERCLA

Environmental Investigations:

Environmental Baseline Survey (EBS).....1998

 Sensitive Receptor Survey and Risk Assessment
1999 and 2008

CSA1999–2000

Corrective Action Plan (CAP).....2002

SI2004

Supplemental Testing Proposal2007

HHRA2009

RI2013

FS2019

PP2023

ROD2024

RAWP/RD2025

RACR2026

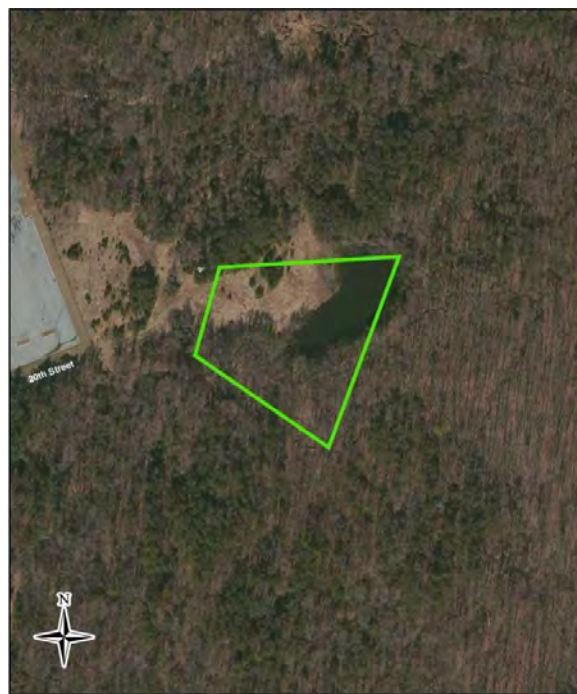
Contaminants of Potential Concern: PAHs and metals

Media of Concern: Sediment, soil, and surface water

Site Location: Grid H2, at the eastern extent of 20th Street, approximately 1,400 feet east of the intersection with State Route 175.

Site Description: FGGM-83 is a former recreational trap and skeet range used by FGGM from the mid-1970s through 1994. The site contains a small concrete-block storage shed, grass-covered areas, a gravel access road, and a manmade pond (Kemron 2008). The former range consisted of a firing line, skeet houses, and a manmade pond. Two former buildings (Buildings 2046 and 2047) were located near the western site boundary. Both buildings were demolished in 2001. Building 2046 was formerly used by FGGM for equipment storage during operation of the trap and skeet range. Building 2047 was identified in 1996 as SWMUs 153 and 154 because disposal practices for the range and other recreation sources were unknown.

Previous Studies: Over the course of previous investigations at this site, 49 shallow soil samples, sediment at 10 locations, surface water at 8 locations, and groundwater at four locations were collected and analyzed. In 2004, over 100 samples were collected from surface soil and shallow subsurface soil. In addition, 10 sediment samples and 7 surface water samples were collected and analyzed.



FGGM 83 - Trap and Skeet Range

0 100 200 400 Feet

Additional pond sediment samples were collected in 2010. An RI was submitted in 2010; regulatory comments were received in March 2011; and a Final RI Report was approved by the EPA in 2011. The Final FS was approved by EPA and MDE in 2019, recommending surface soil removal above the PRGs for lead and lead shot in surface soil.

Current Use: Vacant and tree covered.

Current Status: The FFS was approved in September 2019. Recommended alternative is Soil Removal with LUCs.

Cleanup/Exit Strategy: Future work includes PP, ROD, RD, and RACR.

2.1.7 FGGM-87 (OU-3) – FORMER NIKE CONTROL SITE, BUILDINGS 1974, 1976, 1977, AND 1978

Regulatory Driver: CERCLA

Environmental Investigations:

RI/FS 2008

Final Screening Level Ecological Risk

Assessment 2009

Final Addendum to Safe Work Plan 2010

Revised RI 2011–2013, 2022

FS 2023

PP 2024

ROD 2025

RAWP/RD 2026

RACR 2026

Contaminants of Potential Concern: VOCs, SVOCs, PAHs, TCE, bis (2-ethylhexyl) phthalate, and metals

Media of Concern: Soil, groundwater, and indoor air

Site Location: Grid H2. FGGM-87 is the Directorate of Office Management complex located on Annapolis Road, approximately 200 feet south of the intersection of 20th Street and Annapolis Road.

Site Description: The site consists of four buildings that supported the former Nike missile fire control site from 1955 to 1972.

- Existing Buildings 1976 (SWMU 22) and 1978 (SWMU 24) are one-story, concrete-block, warehouse type structures, connected to each other by a narrow hallway.
- Building 1978 stored small quantities of hazardous materials.
- Building 1977 (SWMU 23) stored hazardous materials including, paints, gasoline, diesel fuel, and adhesives.
- Building 1974 (SWMU 145), formerly located east of Building 1976, was a generator building prior to its demolition sometime between mid-1996 and early 1999.

Previous Studies: An RI/FS was submitted in January 2008. Regulatory comments were received in November 2008 and April 2009. Additional soil and groundwater samples were collected in a supplemental RI field effort in 2009. Based on additional EPA comments, sediment sampling and analysis was conducted adjacent to the site in 2010.

A Revised RI Report was submitted in May 2011. A revised Final RI Report was submitted, and additional EPA comments were received. In March 2013, the RI Revision 03 was submitted, including Responses to EPA comments. A round of baseline sampling for all existing monitoring wells was



completed in 2017. Additional data gap studies were completed in 2019 to address data gaps, including vapor intrusion sampling; an additional groundwater monitoring well was installed and sampled in 2018. The revised RI was finalized in 2022 and the draft FS is currently under regulatory review. Monitored Natural Attenuation, LUCs, and 5-year Reviews are anticipated.

Current use: Building 1976 is used as a supply warehouse to store electronic equipment and computers. Building 1978 accommodates administrative activities. Building 1977 is used for metal storage.

Current Status: A draft FS incorporating the RI vapor intrusion and data gap results is currently underway.

Cleanup/Exit Strategy: Future work includes a Final RI/FS, preparing a PP, ROD, RD, and RACR.

2.1.8 FGGM-93 (OU-36) – MANOR VIEW DUMP, INCLUDING INCINERATOR AND OLD LANDFILL – 1938

Regulatory Driver: CERCLA

Environmental Investigations:

PA/SI 2003

RI/FS 2003–2014

IRA 2005–2012

RA(C) 2007–2008

RA(O) 2008–2023

NTCRA 2011–2012

revised HHRA, FS, PP, and ROD 2014

RD 2015

RACR 2015

Explanation of Significant Difference (ESD).....

..... 2021

5-Year Review 2022, 2026

LTM 2014–2053

Contaminants of Potential Concern: Methane in soil gas, metals, and VOCs.

Media of Concern: Groundwater, soil, and soil gas

Site Location: Grid G3, near the intersection of MacArthur Road and 2nd Corps Boulevard.

Site Description: The boundaries of the site include a group of residential housing units to the north (Phelps Avenue), 2nd Corps Boulevard to the south, Hayden Drive to the west, and MacArthur Road to the east. The developed land surrounding the former dump site includes the Potomac Place neighborhood and Manor View Elementary School. FGGM-93 was discovered in 2003 while moving earth for the housing privatization initiative at FGGM. Municipal waste from the 1940s (based on recovered, dated materials) was uncovered.

Previous Studies: Soil, groundwater, sediment, surface water, ambient/indoor air, and soil gas data were collected and analyzed.

The area of buried waste was temporarily fenced with barricade safety fencing, which was replaced with chain-link fence when the landfill gas migration control system was installed in August 2005 (Plexus 2008). A passive vent trench was installed and later upgraded to a soil vapor extraction system with a blower to enhance vapor capture (Plexus 2006). An NTCRA to remove 27,700 tons of nonhazardous methane-generating waste was completed in the summer of 2012, and the extraction system was turned off in August 2012. A revised HHRA, and FS were finalized in June 2014.



FGGM 93 - Manor View Dump
0 60 120 240 Feet

Current Use: Grass field

Current Status: The methane extraction system is shut off, and semi-annual methane monitoring is being performed as part of the LTM activities. The residents of Hayden Drive and Phelps Avenue in the Potomac Place neighborhood were relocated in December 2005, and the houses were reoccupied in 2015. The PP and ROD were finalized in June and October 2014, respectively, and a Variance Request Report was approved in July 2013, which provided an engineering analysis request for a variance from Code of Maryland Regulations landfill requirements. The selected remedy is maintenance of existing soil cover, LUCs, and LTM of groundwater, soil gas, and indoor air. In 2020, a submembrane depressurization system was installed in the Elementary School crawl space to address TCE in indoor air, as documented in the 2021 ESD report. A 5-Year Review was completed in 2021 and signed in 2022.

Cleanup/Exit Strategy: The alternative in the ROD includes monitoring and maintenance of the existing soil cover, groundwater monitoring, soil gas methane monitoring, indoor air sampling, and LUCs. The Revised Final RD was submitted in August 2015, and the Final RACR was submitted in December 2015.

	Cleanup/Exit Strategy (continued): Currently, soil gas and groundwater are monitored on an annual basis, indoor air in Manor View Elementary School on an annual basis and mowing and LUCs inspections are performed annually in addition to continuous operation of the submembrane depressurization system. The next 5-Year Review will be in 2026.
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2.1.9 FGGM-95 (OU-45) – FORMER LANDFILL SITES

2.1.9.1 FGGM-95 (OU-45) – INACTIVE LANDFILL 4

Regulatory Driver: CERCLA

Environmental Investigations:

SI.....	1992
Sampling Visit.....	1992
Historical Aerial Photograph Study.....	1996
RI.....	1998
PA/SI.....	2010–2015
RI/FS.....	2016–2020
PP.....	2021
ROD.....	2023

Contaminants of Potential Concern: VOCs, SVOCs, pesticides, PCBs, and metals

Media of Concern: Groundwater, soil, and sediment

Site Location: Grid F5, in the southwestern portion of the installation, north and adjacent to State Route 32 along the southwestern border of the installation.

Site Description: IAL4 is approximately 2 acres. Historical aerial photographs indicate that the AOI was active from the 1950s to the 1970s as a rubble disposal area.

Previous Studies: Although IAL4 is within current installation boundaries, it was initially characterized during an SI Study for the BRAC parcel (EA 1992a). Over the course of previous investigations at this AOI, two sediment samples (plus one duplicate) and nine groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

As part of the PA/SI, test pits were excavated, and two subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-GRO, TPH-DRO, PCBs, and dioxins. The concentrations of arsenic, iron, and copper in soil cause excess risk at this AOI.

Current Use: Wooded area

Current Status: The Final PA/SI Report has been approved. The RI/FS was finalized in 2020, and the Proposed Plan was finalized in March 2021.



Inactive Landfill 4
0 70 140 280 Feet

Cleanup/Exit Strategy: The selected remedy includes excavation of accessible waste with a capping of remaining waste adjacent to Route 32, followed by LTM of the cap, LUCs if waste remains, and LTM of groundwater and soil gas. A ROD will be completed in 2023.

2.1.9.2 FGGM-95 (OU-45) – PRE-WORLD WAR II LAUNDRY AT UNITED STATES ARCHITECT OF THE CAPITOL

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....1996

Phase I Site Assessment.....1994

RI.....2013

FS.....June 2014

PP.....July 2014

ROD.....September 2014

Contaminants of Potential Concern: Metals and VOCs

Media of Concern: Groundwater

Site Location: Grid H5, in the southern portion of the installation, on the northern boundary of the USAOC parcel.

Site Description: The Pre-WWII Laundry Facility was identified as an AOI because the 1934 Special Military Map (Camp Meade 1934) listed a laundry facility at this location. The laundry was also identified on a circa 1917 map of Camp Meade (MGS 1917) and a 1923 Special Military Map (Camp Meade 1923). The laundry was demolished (date unknown), and the USAOC firefighting water tank now resides on the former laundry site. The EPA reviewed historical aerial photographs (from 1938 to 1995) of FGGM and found no stains, stressed vegetation, debris, solid waste, or other areas of environmental concern at this AOI (EPA 1996).

Previous Studies: Two Geoprobe™ borings (DPT/GW9 and DPT/GW10) were advanced near this site in 2007. Soil and groundwater grab samples were collected. In 2010, two closely spaced wells (MW-102s and MW-101d) were installed just east of the site. MW-102s and MW-101d were sampled in 2010, and volatile organics, most notably PCE, were detected at 3.82 µg/L and 139 µg/L, respectively.

Current Use: USAOC firefighting water tank. The area is fenced.

Current Status: The USAOC PP and ROD were finalized in July and September 2014, respectively. The selected remedy is hot spot soil excavation with off-site disposal. Groundwater is being addressed under OU-4 since there are no specific identifiable sources on the USAOC parcel (refer to Section 2.1.5).



Cleanup/Exit Strategy: The groundwater cleanup/exit strategy for OU-4, which encompasses the Pre-WWII Laundry Facility area, includes continued O&M of the removal actions currently operating at OU-4 followed by the “final” corrective action agreed upon by all stakeholders in the OU-4 ROD.

2.1.10 FGGM-96 (OU-46) – FORMER MOTOR POOLS, WASH RACKS, AND BUILDINGS

2.1.10.1 FGGM-96 (OU-46) – FORMER MOTOR POOL 7/WASH RACK 6

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

PA/SI2007

PA/SI2010–2015

Supplemental Site Investigation (SSI)

.....2016–2020

RI2025

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H4/5, in the southeastern portion of the installation, northeast of Chamberlain Avenue, southwest of State Route 175, southeast of 4th Street, and northwest of State Route 32.—SWMU 10 - Building 294 is in the northwest corner of this AOI. SWMU 10 is being addressed separately (Section 2.5.15.1).

Site Description: Staining was observed at this AOI in the 1943, 1957, and 1963 aerial photographs (EPA 1996). In the write-up for the 1995 aerial photograph, the EPA (1996) no longer identifies this AOI as a vehicle service and storage area.

Previous Studies: Over the course of previous investigations at this AOI, five subsurface soil and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, iron, vanadium, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, six surface soil samples were collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals; two subsurface soil samples were collected and analyzed for metals; six groundwater monitoring wells were installed, and groundwater samples were collected and analyzed for VOCs, TPH-DRO, TPH-GRO, total metals, and dissolved metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, thallium, arsenic, iron, manganese, nickel, aluminum, and cadmium in groundwater cause excess risk at this AOI.


 MP-7 and WR-6
 0 100 200 400
 Feet

Current use: Building 294 and a grass field

Current Status: The Final PA/SI and SSI Reports have been approved. The Final SSI report recommended an RI for this site for cobalt in groundwater. An RI workplan was initiated in 2023 for cobalt in groundwater. Anticipate completion of the RI in 2025.

Cleanup/Exit Strategy: The site will proceed to an RI/FS.

2.1.10.2 FGGM-96 (OU-46) – 6TH STREET AND CHISHOLM AVENUE**Regulatory Driver:** CERCLA**Environmental Investigations:**

Site Assessment.....2010

PA/SI.....2010–2015

SSI.....2016–2020

RI.....2025

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the southeastern portion of the installation, along Chisholm Avenue and 6th Street.**Site Description:** 6th Street and Chisholm Avenue is an AOI because discolored soil with an unusual odor was uncovered during trenching for the installation of a communications duct bank.

The SSI report combined this AOI with Building 2501 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, 11 subsurface soil samples (plus 1 duplicate) and 3 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, 1,2,4-trimethylbenzene, iron, naphthalene, cobalt, and chromium elevate the risk numbers above the site-specific action levels.

The U.S. Army Public Health Command (2010) report recommended the installation of two additional temporary monitoring wells. One temporary monitoring well should be installed to the east of former temporary monitoring well 6TH-TWP-1. The second monitoring well should be installed to the northwest of former temporary monitoring well 6TH-TWP-1. The additional monitoring wells will be used to determine the horizontal extent of petroleum-affected groundwater.

As part of the PA/SI, eight subsurface soil samples were collected and analyzed for VOCs, TPH-DRO, and TPH-GRO, and eight groundwater monitoring wells were installed and sampled for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of 1,2,4-trimethylbenzene and iron in soil and chromium, naphthalene, vinyl chloride, arsenic, cobalt, iron, mercury, manganese, nickel, beryllium, and TPH in groundwater cause excess risk at this AOI.

**Current Use:** Vacant lot**Current Status:** The Final PA/SI and Final SSI Reports have been approved. USTs were found and excavated along with petroleum-contaminated soil in 2018. The MDE Oil Control Program (OCP) site for liquid petroleum hydrocarbon (LPH) was approved to be closed in 2020 pending abandonment of monitoring wells. The Final SSI report recommended an RI for this site. An RI workplan was initiated in 2023 for cobalt in groundwater. Anticipate the completion of the RI in 2025.**Cleanup/Exit Strategy:** The site will proceed with an RI/FS.

2.1.10.3 FGGM-96 (OU-46) – MAINTENANCE SHOP, WASH RACK, AND OIL/WATER SEPARATOR, FORMER BUILDINGS 2227 AND 2224, AND BUILDING 2234

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

SWMU Study1996

Sampling Visit1999

Initial Delineation Report2001

PA/SI2010–2015

SSI2016–2020

RI2025

Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeastern portion of the installation, northeast of the intersection of 3rd Street and Pepper Road.

Site Description: Constructed in 1941, Building 2227 (SWMU 147) was used as a vehicle repair shop until the mid-1980s. The WR (SWMU 44 and Building 2234) was used to wash vehicles and equipment; it discharged waste wash water to the OWS (SWMU 43), which discharged to the sanitary sewer system. By 1996, Building 2227 was no longer in use, and by 1999 the building, WR, and OWS had been demolished and removed. A former gas station was located southwest of Building 2234.

The SSI report combined this AOI with Stained Soils Along 3rd Street due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, 27 subsurface soil samples (plus 2 duplicate samples) and 18 groundwater samples (plus 1 duplicate sample) were collected and submitted for laboratory analysis. Petroleum-free product was observed at locations GW18 and GW25. Based on a risk analysis of the analytical results, arsenic, chromium, naphthalene, benzene, toluene, xylenes (total), ethylbenzene, mercury, and toluene elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, four surface soil samples were collected and analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO; four subsurface soil samples were collected and analyzed for VOCs, TPH-DRO, TPH-GRO, and metals; and three groundwater monitoring wells were installed and sampled VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI.



The concentrations of chromium, arsenic, thallium, mercury, cobalt, and other metals in groundwater cause excess risk at this AOI.

Current Use: Grass field and administrative

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for Building 2234 on 18 April 2016. The Final SSI report recommended an RI for this site for cobalt and manganese in groundwater for Former Buildings 2227 and 2224. An RI workplan was initiated in 2023 for cobalt in groundwater. Anticipate the completion of the RI in 2025.

Cleanup/Exit Strategy: The site will proceed with an RI/FS.

2.1.10.4 FGGM-96 (OU-46) – MAINTENANCE, BUILDING 2501**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study.....1996

Sampling Visit.....2000

RCRA and Data Gap Reports.....2003

PA/SI.....2010–2015

SSI.....2016–2020

RI.....2025

Contaminants of Potential Concern: TPH-DRO, TPH-GRO, VOCs, and metals**Media of Concern:** Soils and groundwater**Site Location:** Grid H4, in the eastern portion of the installation, northwest of the intersection of Chisholm and Llewellyn Avenues.**Site Description:** Building 2501 (SWMUs 075 and 076) was used as an equipment receiving and shipping facility in support of intelligence agencies. The facility had a foam pack machine that used a foam component and a hardener component (polymeric isocyanate). The polymeric isocyanate was stored in drums inside the building, and when the drums were empty, they were disposed through the DRMO.The SSI report combined this AOI with 6th and Chisholm due to the proximity of the two AOIs.**Previous Studies:** Over the course of previous investigations at this site, 5 surface soil samples, 18 subsurface soil samples, and 1 groundwater sample were collected and submitted for analysis. A sheen was observed at location SB-1. Based on a risk analysis of the analytical results, arsenic elevates the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, and cyanide. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, cobalt, mercury, beryllium, nickel, thallium, and aluminum in groundwater cause excess risk at this AOI.



Building 2501 - Shipping and Receiving
0 25 50 100 Feet

Current Use: Administrative**Current Status:** The Final PA/SI and SSI Reports have been approved. The Final SSI report recommended an RI for this site for cobalt in groundwater. An RI workplan was initiated in 2023 for cobalt in groundwater. Anticipate the completion of the RI in 2025.**Cleanup/Exit Strategy:** The site will proceed with an RI/FS.

2.1.10.5 FGGM-96 (OU-46) – VEHICLE MAINTENANCE AND FORMER WASH RACK 1, BUILDING 8485

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....1996

Historical Aerial Photograph Study1996

 RFA 3rd Phase.....1999

SI.....2001, 2002

PA/SI.....2010–2015

SSI.....2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, and PCBs

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the southwestern portion of the installation in the southeast quadrant of the intersection of O'Brien Road and Simonds Street.

Site Description: Building 8485 (SWMUs 115 and 116) was an MP and maintenance shop. A former WR (SWMU 116A) located west of Building 8485 was discontinued in 1994 and paved with concrete in 1999. The WR discharged wash water to the sanitary sewer, where it was treated at a sewage treatment plant.

A used oil AST was located on the north side of the building. A 2,000-gallon UST, used to store No. 2 heating oil, was formerly located on the eastern side of the building. It was removed and clean closed in 1989 and replaced by another 2,000-gallon heating oil UST that was removed and clean closed in 1999.

The SSI report combined this AOI with Building 8486 due to the proximity of the two AOIs.

Previous Studies: A dark stained liquid (1970), vertical tanks (1943–1947), and possible dump/waste storage (1943) were identified in the EPA (1996) study.

Over the course of previous investigations at this AOI, 5 surface soil samples, 35 subsurface soil samples (plus 3 duplicates), and 23 groundwater samples (plus 5 duplicates) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium, benzene, arsenic, naphthalene, 1,2,4-trimethylbenzene, ethylbenzene, iron, and toluene elevate the risk numbers above the site-specific action levels.

During the PA/SI, 3 surface soil samples and 2 subsurface soil samples were collected, and 13 additional groundwater monitoring wells were installed and sampled.



Building 8485 - Military Vehicle and Equipment Storage

0 40 80 160 Feet

All samples were analyzed for VOCs, SVOCs, metals, PCBs (only four groundwater samples), and TPH-DRO and TPH-GRO (one subsurface soil sample). The concentrations of chromium, cobalt, and 1,2,4-trimethylbenzene in soil and naphthalene, arsenic, benzene, chromium, ethylbenzene, benzo(a)pyrene, iron, 2-methylnaphthalene, 1,2,4-trimethylbenzene, dibenzofuran, manganese, thallium, 1,3,5-trimethylbenzene, xylenes, and cobalt in groundwater cause excess risk at this AOI.

Current Use: Parking lot and vehicle storage

Current Status: The Final PA/SI and SSI Reports have been approved. The MDE OCP is requesting further analysis for LPH. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021, approving NFA for this AOI.

Cleanup/Exit Strategy: Although this AOI has been approved by the EPA for NFA, the site remains open with MDE OCP.

2.1.10.6 FGGM-96 (OU-46) – MAINTENANCE SHOP, BUILDING 8486**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996 SWMU

Study 1996

RFA 3rd Phase 1999

SI 2001

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, PCBs, TPH-DRO, and TPH-GRO**Media of Concern:** Soils and groundwater**Site Location:** Grid F5, in the southwestern portion of the installation, southeast of the intersection of Grant Road and Simonds Street.**Site Description:** Building 8486 (SWMUs 117 and 118) was constructed in 1950 and used as a military vehicle and equipment maintenance and repair shop.

Asphalt and concrete parking lots that contain several sheds used to house paints, oils, antifreeze, and used oil are located west of Building 8486.

An 800-gallon used oil AST is present on the east side of Building 8486.

Two USTs (one 2,000-gallon and one 2,500-gallon) once existed between the building and Grant Road. The tanks were used to store heating oil for the building's furnace. The 2,000-gallon tank was installed in 1979 and removed in 1994. The 2,500-gallon tank was installed in 1995 and removed in 1999.

Small quantities of hazardous chemicals have historical been used and stored in storage cabinets at designated areas at this AOI.

The SSI report combined this AOI with Building 8485 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, 19 subsurface soil samples and 19 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, 1,2,4-trimethylbenzene, arsenic, naphthalene, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, five groundwater monitoring wells were installed and sampled for VOCs, total and dissolved



metals, PCBs, TPH-DRO, and TPH-GRO.

Soil does not pose a risk at this AOI. The concentrations of naphthalene, arsenic, 2-methylnaphthalene, iron, manganese, dibenzofuran, 1,1-biphenyl, cobalt in groundwater cause excess risk at this AOI.

Current Use: Maintenance**Current Status:** The Final PA/SI and SSI Reports have been approved. The MDE OCP is requesting further analysis for LPH. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021, approving NFA for this AOI.**Cleanup/Exit Strategy:** Although this AOI has been approved by the EPA for NFA, the site remains open with MDE OCP.

2.1.10.7 FGGM-96 (OU-46) – STAINED SOILS ALONG 3RD STREET

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study 1996

Initial Response 2009

PA 2009

PA/SI 2010–2015

SSI 2016–2020

RI 2025

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid H5, in the southeastern portion of the installation, along 3rd Street, between Chisholm Avenue and Pepper Road.

Site Description: Stained Soils along 3rd Street is an AOI because on 9 March 2009, discolored soils with an unusual odor were encountered during trenching operations for a communications duct bank. The location is near former Building 2227, a former vehicle maintenance shop. Along a 30-foot section of the trench, there appeared to be areas of petroleum seepage from the trench wall at a depth of 3 feet. Approximately 160 feet of excavated soil was screened with a photoionization detector (PID).

The SSI report combined this AOI with Building 2227 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, eight subsurface soil samples (plus one duplicate sample) and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, di(2-ethylhexyl) phthalate, iron, arsenic, chromium, and manganese elevate the risk numbers above the site-specific action levels. Di-(2-ethylhexyl)phthalate was detected above its MCL.

 The PA/SI included collecting five subsurface soil samples, installing three groundwater monitoring wells and collecting groundwater samples. Soil and groundwater samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of bis(2-ethylhexyl) phthalate and arsenic in soil and chromium, arsenic, CCl₄, cobalt, manganese, thallium, and nickel in groundwater cause excess risk at this AOI.


Stained Soils along 3rd Street

0 30 60 120 Feet

Current Use: Open field

Current Status: The Final PA/SI and SSI Reports have been approved. The Final SSI report recommended RI for this site for cobalt and manganese in groundwater for Former Buildings 2227 and 2224. An RI workplan was initiated in 2023 for cobalt in groundwater.

Cleanup/Exit Strategy: The site will proceed with an RI/FS.

2.1.11 CCFGGM-97 – CELL 3

Regulatory Driver: CERCLA/RCRA (for post closure LTM)

Environmental Investigations:

RI/FS.....2001–2014 (CSL)

PP.....2016–2020 (CSL)

ROD.....2016–2020 (CSL)

RI/FS.....2016–2020 (Cell 3)

Engineering Evaluation/Cost Analysis (EE/CA)

.....2019–2019 (Cell 3)

Action Memo.....2019–2019 (Cell 3)

PP.....2020, 2024 (Cell 3)

Interim After Action Report.....2021 (Cell 3)

ROD.....2024 (CSL & Cell 3)

Contaminants of Potential Concern: No chemical contaminants identified; concern is buried waste exposed at the ground surface, pending an RI.

Media of Concern: None identified, pending an RI

Site Location: Grids H5, I5, H6, I6, along the southeastern boundary of the installation, south of State Route 32.

Site Description: Cell 3 is part of the CSL (FGGM-17). Please see Section 2.1.4 for a description of the CSL. FGGM-17 was divided into three cells; Cells 1 and 2 were capped with clay in 1992; Cell 3 is not a defined disposal area, so it was not capped or included in the RCRA permit. In 2013, it was discovered that Cell 3 may be larger than originally thought requiring additional RI work. As a result, Cell 3 is being investigated and included in a separate CERCLA Decision Document as CCFGGM-97.

Previous Studies: During implementation of the 2007 Groundwater RI for the CSL, six test pits were installed across Cell 3. Test pits and soil samples identified buried waste and exceedances of industrial risk-based criteria in soil at Cell 3. Additional fieldwork was completed for the RI/FS to fully characterize the site.



Current Use: Undeveloped and soil stockpile

Current Status: An EE/CA has been completed, and the public comment period occurred in June 2019. An Action Memo has been completed and was approved by EPA in November 2019. The RI/FS was finalized in October 2020, and a draft PP was submitted for regulatory review in July 2020. Repair and maintenance of the two-foot soil cover on Cell 3, as an Interim Action, began in 2019 and completed in 2020 with removal of erosion and sediment controls pending soil stabilization.

Cleanup/Exit Strategy: Maintenance of the two-foot soil cover on Cell 3 is anticipated to continue. A revised PP/ROD will be completed presenting the proposed and selected final remedial alternatives for Cell 3 and will also include Cells 1 and 2, respectively.

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2.2 MILITARY MUNITIONS RESPONSE PROGRAM OPEN AREAS OF INTEREST

2.2.1 FGGM-003-R (OU-40) – FORMER MORTAR RANGE MUNITIONS RESPONSE SITE

2.2.1.1 FGGM-003-R-01 (OU-40) – MORTAR AREA MUNITIONS RESPONSE SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Geophysical Survey	2004
EBS	2007
SI	2007
RI	2008–2011
FFS	2012
PP	2012
ROD	2012
RD	2013
Remedial Action Report (RAR)	2014
5-Year Review	2016, 2022, 2026

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grid F4, in the southern portion of the Munitions Response Area (MRA), extending from Mapes Road northwest.

Site Description: This AOI consists of the approximately 62-acre former training mortar range. The period of use for the Mortar Area MRS is estimated as the early 1920s to the early 1940s. Evidence supports that only practice mortar rounds were fired at the Mortar Area MRS. The firing point is estimated to be in the southwest corner of the Mortar Area MRS. Also, unused small arms ammunition was reportedly discarded at the MRS; however, no evidence supports the use of small arms ammunition at this MRS.

Previous Studies: Over the course of previous investigations, approximately 36 soil samples and 2 groundwater samples were collected and analyzed for selected metals and explosives in the Mortar Area MRS. Stakeholders confirmed NFA for munitions constituents (MC).

Current Use: A secure DoD facility is present in the northern portion. The southwest corner is a gas station, and the southeast corner remains undeveloped.

Current Status: The qualitative risk evaluation performed revealed a low probability for human receptors to encounter MEC at the MRS. The low probability result of this evaluation is compatible with current and determined, or reasonably anticipated future use.



Cleanup/Exit Strategy: An RD for the selected response action consisting of LUCs with LTM was implemented in August 2013, and the Final RACR was signed by the Army and EPA in May 2014.

The first annual LUC inspection (visual inspection of engineering controls/signs and surface sweep for MEC in undeveloped areas) occurred in September 2014. Annual LUC inspections were completed in August 2015, December 2016, December 2017, November 2018, October 2019, December 2020, November 2021, and November 2022. Future work includes continued annual LUC inspections and surface sweeps for MEC. LUC maintenance, if required, will be conducted, as recommended in the annual reports. The next 5-year review is scheduled in 2026.

2.2.1.2 FGGM-003-R-02 (OU-40) – TRAINING AREA MUNITIONS RESPONSE SITE**Regulatory Driver: CERCLA****Environmental Investigations:**

Geophysical Survey	2004
EBS	2004
SI	2007
RI	2008–2011
FFS	2012
PP	2012
ROD	2012
RD	2013
RAR	2014
5-Year Review	2016, 2022, 2026

Contaminants of Potential Concern: MEC**Media of Concern: Soil**

Site Location: Grid F4, in the northern portion of the MRA, extending from Mapes Road northwest to Rockenbach Road. The Training Area MRS surrounds the Mortar Area MRS (see FGGM-003-R-01, Section 2.2.1.1).

Site Description: This AOI consists of the 260-acre Training Area MRS, where five munitions debris (MD) items were found, including practice grenades, an expended flare, and a small arms ammunition casings disposal pit. The practice grenades and expended flare are indicative of general troop training, and the small arms ammunition casing disposal pit is indicative of disposal.

Previous Studies: Over the course of previous investigations, approximately 20 soil samples and 6 groundwater samples were collected in the Training Area MRS and analyzed for selected metals and explosives. Stakeholders confirmed NFA for MC in the RI.

Current Use: A secure DoD facility is present in the eastern portion of the MRS, and the western portion is already developed.

Current Status: The qualitative risk evaluation performed revealed a low probability for human receptors to encounter MEC on the MRS. The low probability result of this evaluation is compatible with current and determined or reasonably anticipated future use.



Cleanup/Exit Strategy: An RD for the selected response action consisting of LUCs with LTM was implemented in August 2013, and the Final RAR was signed by the Army and EPA in May 2014.

The first annual LUC inspection (visual inspection of engineering controls/signs and surface sweep for MEC in undeveloped areas) occurred in September 2014.

Annual LUC inspections were completed in August 2015, December 2016, December 2017, November 2018, October 2019, and December 2020. Future work includes continued annual LUC inspections and surface sweeps for MEC. LUC maintenance, if required, will be conducted, as recommended in the annual reports. The next 5-year review is scheduled in 2026.

2.2.2 FGGM-007-R-01 (OU-44) – INACTIVE LANDFILL 2

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....	1989
SI.....	1991
RI.....	1998
DoD Safety Precautions.....	1998
ROD.....	1999
Long-Term Monitoring Plan (LTMP).....	2001
Maintenance Inspection Reports.....	Annually
MMRP Historical Records Review.....	2006
MMRP SI.....	2007
5-Year Reviews.....	2022, 2026

Contaminants of Potential Concern: MEC

Media of Concern: Soil

Site Location: Grid E6, east of State Route 198, south of State Route 32, and south of the TAP, on approximately 10 acres of land north of Wildlife Loop.

Site Description: IAL2 was initially operated as a soil borrow area starting around 1938.

Sometime after 1952, the area was operated as an unlined rubble disposal area, but it reached its maximum capacity by 1963. Continued disposal activity occurred after 1980 in the northern portion of IAL2, where graded and disturbed areas are visible in 1986 aerial photographs.

During the RI fieldwork, piles of rubble (brush, concrete, and asphalt debris), which appear to be of more recent origin, were observed in a marshy area on the north side of IAL2. The site could not be cleared of ordnance due to large amounts of rubble debris and wetlands.

This site is currently in the MMRP. IAL2 is also part of AEDB-R number FGGM-31, along with IAL3. FGGM-31 is discussed separately in this SMP (Section 2.3.4) because it is funded under the BRAC program. IAL3 is a BRAC site, and information about IAL3 can be found under the BRAC Section 2.3.4 of the SMP. Groundwater at IAL2 and IAL3 is covered under FGGM-31.

Previous Studies: Over the course of previous investigations, a fence was constructed around IAL2. The 2015 Annual Maintenance Inspection Report recommended to continue inspection, clear vegetation from the fence line, and remove downed trees. The 2016 Annual Maintenance Inspection Report recommended to continue annual inspections, clear vegetation along the fence line, monitor water levels in the wetland area along the northern portion of the site, complete repairs to fence, inspect the site after significant storm events and inspect



warning signs.

Current Use: Grass, trees, and wetlands

Current Status: A maintenance inspection of the fence and signage surrounding IAL2 is conducted annually. Mowing and vegetation clearing around the perimeter fence are conducted as needed, and surface sweeps of the mowing path for MEC are conducted prior to mowing activities. Any necessary repairs to the perimeter fence or associated LUC signage are addressed as necessary. Vegetation was cleared along the perimeter fence, and the integrity of the fence has been maintained annually since 2012. In 2016, five faded warning signs were replaced. In 2017, six additional warning signs were added to the fence perimeter and the fence was repaired. Additional fence repairs were completed in 2018, 2019, and 2022. Groundwater is currently monitored under a 1999 ROD for FGGM-31. A 5-Year Review was completed in 2021 and signed in 2022.

Cleanup/Exit Strategy: Future work includes continued monthly and annual maintenance inspections as indicated in the schedule in Section 3. LUC maintenance, if required, will be conducted, as recommended in the annual reports. The next 5-Year Review is scheduled for 2026.

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2.3 BASE REALIGNMENT AND CLOSURE OPEN AREAS OF INTEREST

2.3.1 FGGM-10 (OU-8) – INACTIVE LANDFILL 1

Regulatory Driver: CERCLA
Environmental Investigations:

PA 1989

SI 1991

RI 1998, 2023

DoD Safety Precautions 1998

ROD 1999

LTMP 2001, 2012

LTM 2004–2053

5-Year Reviews 2005, 2011, 2017, 2021, 2026

ESD 2014

Land Use Control Remedial Design (LUCRD)

..... 2015

Contaminants of Potential Concern: Arsenic, iron, manganese, and MEC

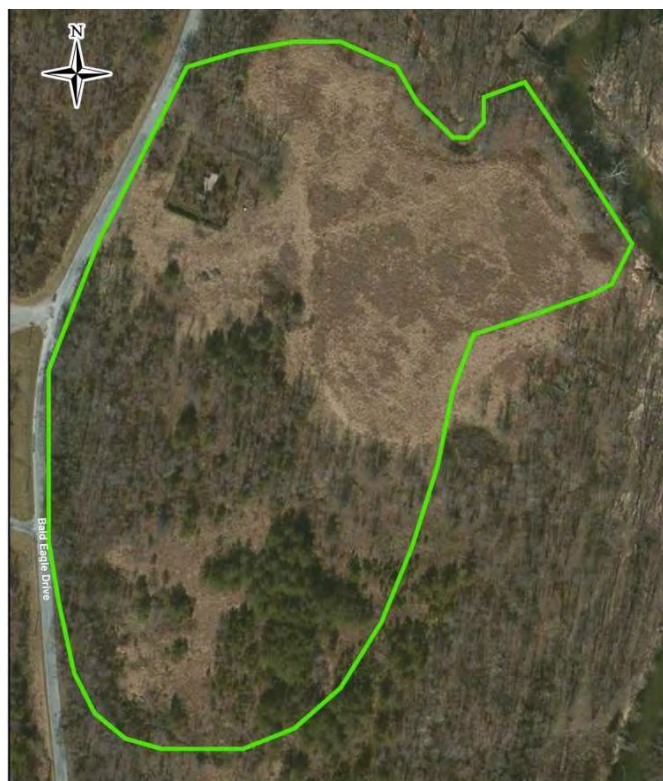
Media of Concern: Groundwater

Site Location: Grid E5, east of State Route 198 and south of State Route 32, in the western portion of the TAP, between Bald Eagle Drive and the Little Patuxent River.

Site Description: IAL1 was used as an unlined sanitary landfill from approximately 1950 to 1964. No information has been found on the types of material disposed of at this location. A small concrete blockhouse, formerly used as a communications building, is present on the northwest corner of IAL1.

Previous Studies: Over the course of previous investigations at this site, an earthen MEC safety cap was installed over IAL1.

Current Use: Inactive

Current Status: Soil LUCs prohibit groundwater use, conducting any surface or subsurface excavations, digging, well drilling, or other disturbance of soil. Groundwater LUCs prevent use of groundwater extraction for purposes other than monitoring. LTGM is conducted every 5 years to coincide with 5-Year Reviews. The Final TAP ESD was submitted in May 2014.

 FGGM 10 - Inactive Landfill 1 - Tipton Army Airfield
 0 75 150 300 Feet

The ESD modifies the June 1999 ROD to address 1) the need for sweeps for ordnance, 2) appropriate disposal of ordnance if discovered, and 3) LUC requirements. The Army submitted a TAP LUCRD in June 2015 that details how to implement, maintain, and enforce the LUCs at IAL1 and incorporate them into the CERCLA process. Sampling for PFAS was initiated in May 2023 during an RI.

Cleanup/Exit Strategy: Continue the corrective measures (LUCs with LTGM every 5 years) and continue 5-Year Reviews. The next 5-Year Review is due September 2026. Inspection and monitoring of the LUCs are documented in accordance with the LUCRD. PFAS remediation requirements pending RI results.

2.3.2 FGGM-94 (OU-37) – TRAP AND SKEET RANGE 17

Regulatory Driver: CERCLA

Environmental Investigations:

Ordinance Survey.....	1995
Site-Wide Groundwater Study.....	1999
HHRA/Ecological Risk Assessment.....	2004, 2014
Statement of Work for RI.....	2008, 2013
RI/FS	2011, 2014
PP	2014
ROD	2014
LUCRD	2016
Remedial Action Completion Report.....	2018
MEC LUCs LTM.....	2014–2053
5-Year Review.....	2021, 2026

Contaminants of Potential Concern: Arsenic, lead, copper, PAHs, nitroglycerin, and MEC

Media of Concern: Soil

Site Location: Grid D7, in the central portion of the PRR-North Track (PRR-NT).

Site Description: This AOI consists of the remnants of trap and skeet ranges. The skeet range was present as early as 1965, and the trap range was present as early as 1984. Features that were present include a high house, a low house, cement walkways, and a rather heavily forested area.

Previous Studies: Investigations over the course of several years, determined elevated lead, arsenic, copper, lead shot and PAHs were detected in soil. The September 2014 ROD selected soil excavation and disposal as the remedial action and MEC LUCs. Remediation fieldwork to achieve the remedial action objectives (RAOs) included the excavation of approximately 18,360 cubic yards of contaminated soil. A total of 27,372.1 tons of non-hazardous and hazardous characteristic soil was transported and disposed of offsite. Additionally, 1,278 tons of tree stump mulch was transported and disposed of offsite (including 219.3 tons of hazardous characteristic mulch). Site restoration included backfill and topsoil across the entire excavation area and the area was permanently seeded. The Vernal Pools Trail was restored with mulch, and trees were planted and maintained for 1 year to ensure survivability.



Current Use: Inactive

Current Status: A Final Remedial Action Completion Report was submitted in December 2018.

Cleanup/Exit Strategy: The next MEC LUCs 5-Year Review for this site will be conducted in 2026.

2.3.3 FGGM-20 (OU-15) – ORDNANCE DEMOLITION AREA

Regulatory Driver: CERCLA

Environmental Investigations:

SI 1994

RI/FS 2002

FFS 2002

LTMP 2003, 2012

LTM 2004–2024

PP 2011

ROD 2011

LUCRD 2013

Interim Remedial Action Completion

Report (IRACR) 2013

5-Year Review December 2021

Contaminants of Potential Concern: Cyclotrimethylene trinitramine (RDX), trinitrotoluene (TNT), amino-dinitrotoluene, chlorinated VOCs, cadmium, and MEC.

Media of Concern: Groundwater

Site Location: Grid F10, in the southern part of the BRAC parcel, in an otherwise undeveloped wooded area south of Wildlife Loop Road.

Site Description: The ODA covers 2.5 acres and is bounded by an outer berm, which is approximately 8 feet high and constructed of rubble and earthen material. The area outside the berm is heavily forested and contains wetlands to the east and south. An inner berm, constructed similarly to the outer berm, bounds the demolition pit. The demolition pit area inside the inner berm is approximately 40 feet by 80 feet and predominantly filled with sand.

Previous Studies: Over the course of previous investigations at this site, soil and groundwater samples were collected for the RI, FFS, and LTGM.

Current Use: Inactive

Current Status: The Decision Document of 2005 selected monitored natural attenuation (MNA) as a remedial alternative in conjunction with Institutional Controls that limit the use of groundwater until RAOs have been met.

The Army rescinded the 2005 Decision Document and submitted a Final ROD in September 2011 that established MNA as the groundwater remedial alternative. The Army submitted a Final LUCRD in June 2013 to better



FGGM 20 - Ordnance Demolition Area
0 40 80 160 Feet

implement, maintain, and enforce LUCs at the ODA and incorporate them into the CERCLA process. The Army submitted a Final IRACR in July 2014.

Cleanup/Exit Strategy: Ten wells will be sampled until compliance with RAOs has been established. Future work includes continuing the corrective measures MNA and LTGM in accordance with the approved ROD. Inspection and monitoring of the LUCs will be documented in accordance with the LUCRD. Contaminant levels are decreasing, and it is anticipated this site will be closed in FY 24.

2.3.4 FGGM-31 (OU-17) – INACTIVE LANDFILLS 2 AND 3

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA	1989
ROD	1998
RI	1998, 2023
ROD	1999
LTMP	2001, 2012
5-Year Reviews	2005, 2011, 2017
LTGM	2004–2053
Maintenance and Repairs	2014, 2019
LUCRD	2015
5-Year Review	2021, 2026

Contaminants of Potential Concern: Benzene, 1,1,2,2-Tetrachloroethane, CCl₄, cis-1,2-dichloroethene, vinyl chloride, arsenic, iron, manganese, perfluorooctanesulfonic acid (PFOS)/perfluorooctanoic acid (PFOA), and MEC.

Media of Concern: Groundwater

Site Location: Grids E5 and F5, in the TAP, in the eastern portion of the runway area.

Site Description: FGGM-31 includes IAL2 and IAL3. Information about IAL2 can be found under the MMRP section (Section 2.2.2) of the SMP.

IAL3 is 78 acres and originally used as a sand borrow area. During the late 1940s and 1950s, the area was used as a sanitary and “leaf-dump” landfill. TAP was constructed over the fill area in 1963. Landfill materials were removed from beneath all runway construction areas for structural reasons, but landfill materials are still present in areas adjacent to the runways.

Previous Studies: The Decision Document (U.S. Army 1998) stated that surface sweeps will be performed at the landfill at years 3 and 7, and every 5 years thereafter, to remove any potential MEC that might migrate to the surface. Ordnance sweeps were conducted in 2001, 2006, 2011, 2016, and 2020 at IAL3.

Current Use: Airport runway and grassy areas

Current Status: The ROD requires 5-Year Reviews and LTGM. The Final TAP ESD was submitted in May 2014.

The ESD modifies the December 1998 and June 1999 RODs for IAL3 to address 1) the needs for sweeps of ordnance; 2) appropriate disposal of ordnance if dis-



covered; and 3) LUC requirements.

The Army regraded the surface settling in the vegetated (grass) sections of the landfill and Final Report was accepted in December 2014. The Army submitted a TAP LUCRD in June 2015 to implement, maintain, and enforce the LUCs at IAL3 and incorporate them into the CERCLA process. Five-Year Reviews were submitted December 2017 and April 2022, with the next review due in 2026. PFOS/PFOA was discovered in groundwater at the former FTA. Additional PFAS sampling was initiated in May 2023 during an RI.

Cleanup/Exit Strategy: Future work includes continuation of the Corrective Measure O&M, which includes LTGM, 5-Year Reviews, and annual maintenance inspections in accordance with the June 1999 ROD. Inspection and monitoring of the LUCs will be implemented and documented in accordance with the LUCRD. PFOS remediation requirements pending RI results.

2.3.5 FGGM-81 (OU-33) – CLEAN FILL DUMP

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1989

SI 1992

RI 1992, 1998

Action Memorandum 2000–2001

PP 2000

ROD 2000

LTMP 2002, 2012

5-Year Review ... 2009, 2011, 2017, 2021, 2026

LTGM 2004–2053

Contaminants of Potential Concern:

Chlorinated VOCs, metals, and MEC

Media of Concern: Groundwater and surface water

Site Location: Grids G7 and H7, in the southeastern portion of the BRAC parcel along Boundary Road. The CFD covers approximately 13 acres and is partially within the boundaries of the Firing Range 9 downrange fan.

Site Description: The CFD was used from approximately 1972 until approximately 1985 for the disposal of miscellaneous debris.

Previous Studies: Previous studies have resulted in an ROD that recommended annual LTGM and 5-Year Reviews.

Current Use: Inactive

Current Status: The ROD (U.S. Army 2000a) identified the selected remedial alternative for the CFD OU (U.S. Army 2000b) as “NFA with monitoring.” The LPA is monitored on an annual basis. In 2018 regulators approved reducing GW LTM frequency to every 5 years to coincide with the 5-Year Review. The ROD incorporates the 2000 *Action Memorandum: Safety Precautions to Be Taken at Clean Fill Dump*, which includes provisions for residential use restrictions, groundwater use limitations, and UXO issues (U.S. Army 2000a).



FGGM 81 - Clean Fill Dump
0 60 120 240 Feet

MEC LUCs for the MMRP portion (FGGM-001-R-01) of the CFD are addressed under the HEI LUCRD (January 2017) for the HEI Area (FGGM-002-R-01).

Cleanup/Exit Strategy: Continue the corrective measures O&M (GW LUCs with LTGM every 5 years basis) and continue 5-Year Reviews. The next 5-Year Review is due September 2026.

2.3.6 FGGM-85 (OU-35) – MUNITIONS AND EXPLOSIVES OF CONCERN TIPTON ARMY AIRFIELD

Regulatory Driver: CERCLA

Environmental Investigations:

ROD 1999

Historical Records Review 2006

ESD 2014

LUCRD October 2015

MEC LTM 2001–2053

5-Year Review 2011, 2017, 2021, 2026

Contaminants of Potential Concern: MEC

Media of Concern: Soil, groundwater, and surface water

Site Location: Grid E5, east of State Route 198 and south of State Route 32.

Site Description: This AOI is composed of sites HHA, FTA, IAL1, IAL2, and IAL3. It is also bisected by the Little Patuxent River.

Previous Studies: Over the course of previous investigations at this site, an earthen MEC safety cap was installed over IAL 1 & 3. A fence is installed and maintained around IAL2, and surface sweeps for MEC have been conducted at IAL3.

Current Use: IAL1 & 2 are inactive landfills. IAL3 is an airfield.

Current Status: The soil safety cover at IAL1 and IAL3 is inspected and sweeps of a portion of the Little Patuxent River are conducted yearly. MEC LUCs at IAL 2 are conducted by the Fort Meade IRP. The TAP Final ESD was submitted in May 2014 and 5-Year Reviews are conducted. The ESD modifies the December 1998 and June 1999 RODs for IAL3 to address 1) the needs for sweeps of ordnance; 2) appropriate disposal of ordnance if discovered; and 3) LUC requirements. The Army regraded the surface settling in the vegetated (grass) sections of the landfill and Final Report was accepted in December 2014. The Army submitted a TAP LUCRD in June 2015 to implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process. The Army submitted a TAP LUCRD in June 2015 to better implement, maintain, and enforce the MEC LUCs.

Cleanup/Exit Strategy: MEC sweeps and inspections will continue for the foreseeable future. No munitions were found during the 2020 LPR MEC sweep. LPR MEC sweeps were adjusted to every five years per the 2018 MEC Sweep Report. Continue visual soil cap inspections at IAL3. Continue maintenance and repairs as needed. Visual instrument assisted MEC sweeps at IAL3 are discontinued per the 2020 TAP MEC LUCs LTM Final Report (February 2021). Continue 5-Year Reviews. The next 5-Year Review is due September 2026.

2.3.7 FGGM-001-R-01 (OU-38) – CLEAN FILL DUMP MILITARY MUNITIONS RESPONSE PROGRAM

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1989

SI 1992

RI 1992, 1998

Action Memorandum 2000–2001

PP 2000

ROD 2000

LTMP 2002, 2012

MEC LUCs LTM 2004–2053

5-Year Review 2021, 2026

Contaminants of Potential Concern: MEC

Media of Concern: Groundwater

Site Location: Grids G7 and H7, in the southeastern portion of the BRAC parcel along Boundary Road. The CFD covers approximately 13 acres and is partially within the boundaries of the Firing Range 9 downrange fan.

Site Description: The CFD was used from approximately 1972 until 1985 for the disposal of miscellaneous debris.

Previous Studies: Previous studies have resulted in an ROD and LTGM with 5-Year Reviews.

Current Use: Inactive

Current Status: The ROD (U.S. Army 2000a) incorporates the Action Memorandum (July 2000), which addresses the risks related to MEC at the CFD and the protection of human health and the environment. The Action Memo establishes MEC land use restrictions and their enforcement. MEC LUCs for the CFD MMRP are included in the December 2018 HEI Area ROD.



FGGM 81 - Clean Fill Dump
0 60 120 240 Feet

Cleanup/Exit Strategy: Future MEC LUCs-related work at the CFD will be associated with FGGM-002-R-01 – HEI Area. The HEI Area MEC LUCRD will better enforce and maintain the existing MEC LUCs at the PRR-NT parcel, which includes the CFD MMRP OU. The next 5-Year Review is due September 2026.

2.3.8 FGGM-002-R-01 (OU-39) – HIGH EXPLOSIVE IMPACT AND DISPOSAL AREA

Regulatory Driver: CERCLA
Environmental Investigations:

Ordnance Survey.....	1992–1993
Engineering Evaluation.....	2001
MEC Survey	2001
MEC LUC Action Memorandum.....	2001
PP	May 2018
ROD	December 2018
Final LUCRD	September 2019
Final RACR.....	September 2020
MEC LUCs LTM.....	2019–2053
5-Year Reviews.....	2023

Contaminants of Potential Concern: MEC
Media of Concern: Soil

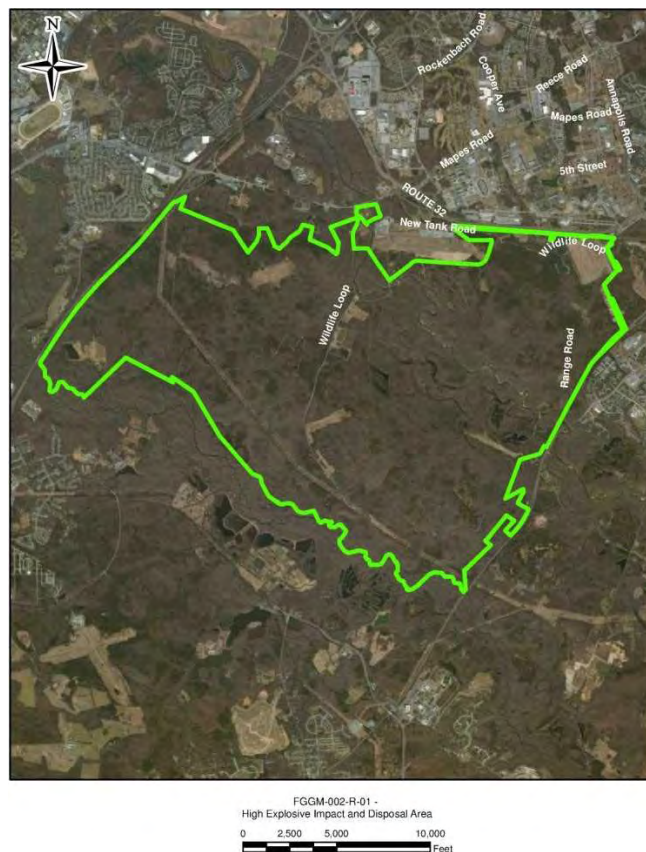
Site Location: Grids B5-H5, A6-I6, A7-H7, C8-G8, C9-G9, D10-G10; FGGM-002-R-01 consists of the approximately 8,100-acre PRR-NT, south of FGGM and the TAP.

Site Description: This AOI consists of the PRR-NT, which is composed of two areas, one totaling 7,600 acres and the other about 500 acres. Both areas were transferred to the DOI in the early 1990s. Numerous ordnance and explosive (OE) training and MEC items were found in this tract during site investigations. The potential munitions suspected on the PRR-NT are representative of troop training and fighting using live and practice items designed to simulate a service item in weight and ballistic properties. These items may be inert or have a small quantity of explosive filler.

Previous Studies: Over the course of previous investigations at this site, surveys were conducted to locate, identify, and remove MEC located on the surface and within a depth of 6 inches below ground surface. An NTCRA of MEC to a depth of 6 inches was completed for 24 areas in the PRR-NT identified by the U.S. Fish and Wildlife Service (USFWS) as high traffic areas.

Current Use: Wildlife refuge

Current Status: A 2001 Action Memo selected LUCs with surface and subsurface clearance to depth in selected areas. The December 2018 Final ROD incorporated these



MEC LUCs into a formal remedy for the HEI Area.

Cleanup/Exit Strategy: A LUCRD was submitted in September 2019 that documents inspection and monitoring procedures for the MEC LUCs for the HEI Area. A 5-Year Review is due in 2023; the Work Plan was approved by MDE in May 2023.

2.3.9 FGGM-32 (OU-18) – FIRE TRAINING AREA (PART OF TIPTON ARMY AIRFIELD)

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA 1989

SI 1992

OE Removal Action 1997

RI 1998, 2023

Removal Action Report 1998

LTMP 2001, 2012

LTM 2004–2014

5-Year Reviews 2005, 2011

ESD 2014

LUCRD October 2015

5-Year Review 2021

Contaminants of Potential Concern: PFAS

Media of Concern: Groundwater

Site Location: Grid E5, in the northern portion of TAP, off Airfield Road, north of the airfield and east of the HHA.

Site Description: The FTA was constructed around 1979 by the FGGM Fire Department for training purposes. The northern half of the FTA is fenced off and previously enclosed the fire training pit and adjacent training areas. Fires were typically set inside the pit or in portable burn pans using gasoline or aviation fuel. The fires were then extinguished with water or aqueous foam, a synthetic extinguishing agent. Other emergency response training, such as self-contained breathing apparatus training and emergency rescues, were performed at this location. An OWS located on the south side of the fire training pit was used when draining the pit. Water from the separator was transported from the site via an underground pipeline to a sanitary sewer. Both the fire training pit and OWS were removed in 1998.

Previous Studies: The TAP OU ROD presents the final remedy for soils as NFA. The TAP Final ESD was submitted in May 2014. In 2016 and 2018, Army sampled GW at the FTA and determined impact to localized shallow groundwater from PFOS, PFOA; commonly found in AFFF. The TAP GW OU was sampled in 2020 for PFOS/PFOA. Results from each sampling event determined that PFOS/PFOA was present in shallow GW at levels greater than the Army screening level of 40 microgram per liter.


Current Use: Inactive

Current Status: Army is conducting an RI to determine nature, extent and risk associated with PFOS/PFOA in groundwater. Any risk associated with munitions will continue to be addressed under the MMRP and the TAP LUCRD (FGGM-85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs.

Cleanup/Exit Strategy: FGGM-32 has been administratively opened to appropriately fund a remediation investigation for PFAS only. The TAP groundwater OU will continue to be monitored for historical CERCLA identified COCs under FGGMs 10 and 31. MEC LUCs for all the TAP is addressed under FGGM-85. Sampling for PFAS was initiated in May 2023 during an RI.

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2.4 UNASSIGNED OPEN AREAS OF INTEREST

2.4.1 OFF-POST GROUNDWATER INVESTIGATION – NEVADA AVENUE AREA

Regulatory Driver: CERCLA

Environmental Investigations:

Interim Measures 2009–2011

Groundwater Investigation 2011–2016

Contaminants of Potential Concern: VOCs

Media of Concern: Groundwater

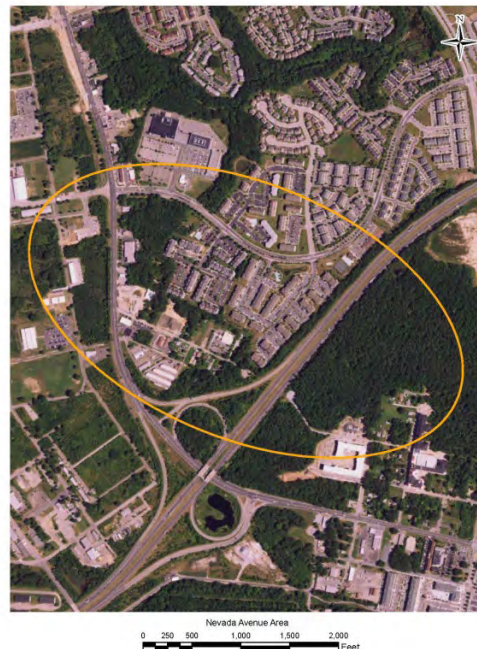
Site Location: The area surrounding Nevada Avenue, Odenton, MD.

Site Description: The Nevada Avenue Area consists of the area surrounding the one private drinking water well on Nevada Avenue, in Odenton, with a PCE concentration recorded above the MCL in 2009. This area contains existing monitoring wells both on- and off-post. The area is approximately 0.9 mile in radius.

Previous studies: Interim Measures activities began in June 2009 to investigate groundwater contamination identified in MW-125d/123s and MW-126d/124s, along the southeastern boundary of FGGM, and are ongoing. As required by the EPA, during the Interim Measures activities, 62 private wells were sampled within a 1-mile radius of MW-125d/123s and MW-126d/124s. PCE near or exceeding the EPA MCL, was detected in three private wells on Nevada Avenue. Because the Nevada Avenue Study Area is not projected downgradient of MW-125d/123s and MW-126d/124s and their associated known or suspected sources on FGGM, the PCE detected in the samples collected from this area is concluded to be associated with a separate source area. Other VOCs, such as TCE, cis-1,2-dichloroethene, total xylenes, mp-xylene, and toluene, were also detected, but at levels below the EPA MCL; therefore, PCE was determined to be the primary contaminant of concern for the investigation.

Current Use: Residential, light industrial, and commercial

Current Status: The groundwater investigation field activities were completed in 2013. Five deep and one shallow monitoring wells were installed within the study area (one shallow and two deep on FGGM and three deep off-post within the study area). Groundwater samples collected in July and September 2013 from the newly installed wells were analyzed for VOCs. Water levels were also measured in 19 existing wells and the 6 newly installed monitoring wells during the two groundwater sampling events.



The results of the water level measurements suggest that the groundwater in the study area is flowing in a south-southeasterly direction. PCE was detected in all the off-post wells, with the highest concentration (10.5 micrograms per liter) detected in the off-post well directly upgradient from Nevada Avenue. PCE was not detected in the on-post study area wells. Based on the analytical results and the observed groundwater flow direction, it was concluded that the source of the PCE is originating from a location north-northwest of Nevada Avenue, and not from the investigated area on FGGM. The regulatory comments received on the report indicate additional investigative activities are required to determine if FGGM is the PCE source. Quarterly sampling of the three affected private wells and providing bottled water service to those residents (both ongoing since 2009) will continue.

Cleanup/Exit Strategy: Perform groundwater investigation or use existing data to confirm the contamination does not originate from FGGM. Monitoring will continue quarterly, and an exit strategy will be determined based on the outcome of the investigation.

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2.5 INSTALLATION RESTORATION PROGRAM AREAS OF INTEREST DESIGNATED FOR NO FURTHER ACTION

2.5.1 FGGM-03 (OU-6) – WATER TREATMENT PLANT, BUILDING 8688

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1980–1982

IRA 1994

SWMU Study 1996

Sampling Visits 1999

SI 2001

PA/SI 2010–2014

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, in the southwestern portion of the installation at the southeast corner of O'Brien and Mapes Roads.

Site Description: Building 8688 – OU-6 (SWMUs 129 and 130) is a water treatment plant constructed in 1941. The facility stores and uses lime and chlorine. An on-site laboratory stores acids and buffers for test purposes.

Building 8688 was identified as an SWMU (BCM 1996) because of routine discharge of waste to the sanitary sewer.

Previous Studies: Over the course of previous investigations at this site, three surface soil samples (plus one duplicate sample) and nine subsurface soil samples were collected and analyzed. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

Current Use: Water treatment plant

Current Status: On 16 July 2012, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA.



FGGM 03 - Building 8688 - Water Treatment Plant
0 40 80 160 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.2 FGGM-05 (OU-2) – FORMER TROOP BOILER PLANT, BUILDING 8481

Regulatory Driver: MDE

Environmental Investigations:

Evaluation of Groundwater System..... 1996

Groundwater Monitoring 2001

Well Removal/Replacement..... 2002

Groundwater Sampling Event..... 2008

Site Model and Assessment Report..... 2008

Contaminants of Potential Concern: Benzene, toluene, ethylbenzene, and xylenes (BTEX); methyl tert-butyl ether (MTBE); naphthalene; caustic soda; sodium sulfite; phosphates; and sodium hydroxide

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the southwestern portion of the installation, south of Simonds Street and east of Grant Road.

Site Description: Former Building 8481 (SWMU 112/113) was constructed in the 1940s as a boiler plant fueled by coal and then converted to fuel oil in the 1960s. This AOI also includes OWS-14 and WR-14 (SWMU 114), a storage shed (no building number) for flammable material, nine USTs, and one 500-gallon diesel fuel tank used for the emergency generator.

In 1991, a 1,500-gallon waste oil UST and a 20,000-gallon No. 2 fuel oil tank failed precision testing. The tanks were excavated, and it was determined that they had been leaking for several years.

Previous Studies: Over the course of previous investigations at this site, 29 monitoring wells were installed, a recovery system to remove floating and dissolved product was installed and operated from 1993 to 1997, and a solar-powered oil removal skimmer system was operated from 2001 to 2003. Groundwater was sampled from eight wells in March, April, August, and October 2008, and oil absorbent booms were inserted into four of the MWs.

Current Use: Vacant land / parking lot



FGGM 05 - Troop Boiler Plant
0 25 50 100
Feet

Current Status: On 9 December 2009, MDE OCP, having determined that site conditions met site remedial objectives and seven MDE Maryland Environmental Assessment Technology risk factors, issued a Notice of Compliance for FGGM-05.

Cleanup/Exit Strategy: This AOI has been closed, the wells have been abandoned, and the system components have been removed. NFA is recommended for this AOI.

2.5.3 FGGM-11 (OU-9) – GAS TRAINING BUILDING, BUILDING 73

Regulatory Driver: CERCLA

Environmental Investigations:

CSA 1997

PA 1997

SI 1997–2011

PA/SI 2010–2015

Contaminants of Potential Concern: Cyanide and ortho-chlorobenzylidene malononitrile tear gas (CS)

Media of Concern: Soil and groundwater

Site Location: Grid H6, in the southeastern portion of the installation, in the southwestern portion of the CSL.

Site Description: Building 73 was formerly a Gas Training Building and is identified as a gas chamber on maps from 1976 (Defense Mapping Agency 1976) and 1980 (USACE 1980).

Building 73 has concrete floors and walls. Building 73 was used for tear gas training during WWI and respiratory protection training for RCAs from 1965 to 1979. Building 73 was later converted by the Defense Information School for urban facility inspection training.

Previous Studies: Seven wipe samples were collected from interior building material surfaces on 14 March 1997 and submitted for laboratory analysis. No tear gas components were reported in the analytical results.

Building 73 has concrete floors and walls, and the tear gas agent was only released inside the building. There is very low potential for the tear gas agent or its decomposition products to have entered the soil or groundwater surrounding Building 73.

Site investigation activities under the PA/SI occurred. Surface soil and groundwater samples were collected and analyzed for CS and cyanide.

Current Use: Storage

Current Status: Although no tear gas components were detected on interior building material surfaces, the soil and groundwater surrounding the building have not been tested. Building 73 has been properly decontaminated in a manner appropriate for CS, which is a strong irritant that is incompatible with strong oxidizers.

 FGGM 11 - Gas Training Building 73
 0 40 80 160 Feet

The Final PA/SI Report recommends NFA for soils and groundwater for this AOI. An NFA Consensus Letter was received from the EPA on 11 January 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.4 FGGM-14(OU-11)– CONTROL HAZARDOUS SUBSTANCE STORAGE FACILITY, BUILDING 6527

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....1980–1982

SI.....1980–2011

SWMU Study.....1996

Hazardous Waste Closure Report.....1999

Sampling Visit.....2000

Data Gap Investigation.....2002

PA.....2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F4, in the southern portion of the installation on Taylor Avenue between Simonds and MacKall Streets.

Site Description: Former Building 6527 (SWMU 104/OU-11) was used as a short-term (90-day) storage facility for hazardous and non-regulated chemicals before handling and shipping for off-site disposal. The facility handled wastes from the PCB removal program as well as accepted paints, oils, oil filters, antifreeze, and fluorescent lights and ballast. The building was demolished in the late 1990s.

Previous Studies: Over the course of previous investigations at this AOI, 20 surface soil samples and 4 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels. Building 6527 obtained clean closure in 1999.

Current Use: Parking lot

Current Status: On 5 October 2011, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA.



Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.5 FGGM-18 (OU-13) – AMMUNITION SUPPLY POINT NO. 2

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1996

SI 2009–2011

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: metals and explosives

Media of Concern: Soil

Site Location: Grid F6, in the north-central portion of the PRR-NT, south of the TAP.

Site Description: The 1989 Enhanced PA Report (Argonne 1989) states: “the chemical munitions used at Fort Meade included smoke grenades and RCAs for training purposes. These items were stored at ASP No. 1. RCAs were stored in bulk (50 lb. drums), canister, and capsule form. The smoke grenade includes a mixture of grained aluminum, zinc oxide, and hexachloroethane as well as substances for colored smoke. In the 1950s, an unknown number of CAIS were stored in ASP No. 1 and transferred to ASP No. 2. The final disposition of these sets is unknown.” The site is currently vacant and unused.

Previous Studies: According to the IAP (FGGM 2008), a PA was completed for this AOI in 1996. According to the analytical results provided in the Environmental Restoration Information System database, one surface water sample, one sediment sample, and two soil samples were analyzed for VOCs, SVOCs, metals, pesticides, herbicides, and PCBs. Based on a risk analysis of the analytical results, the concentrations were below site-specific action levels. However, the AOI was in use after this sampling, so additional sampling to characterize current conditions was conducted.

PA/SI activities were conducted. Surface soil samples were collected and analyzed for metals and explosives, and an SSI for soils for CAIS, chemicals, cyanide, and chromium.

Current Use: Grass, trees, roadways, and igloos

Current Status: An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.


FGGM 18 - Comp Ammunition Supply Point No. 2 (OU-13)

0 250 500 1,000 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.6 FGGM-19 (OU-14) – ADVANCED WASTEWATER TREATMENT FACILITY

Regulatory Driver: CERCLA

Environmental Investigations:

PA..... 1980–1982

SI..... 1980–2012

SWMU Study..... 1996

 RFA 3rd Phase..... 1999

Geophysical Survey..... 2004

PA/SI..... 2010–2014

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E4, in the southwestern portion of the installation, approximately 600 feet southwest of State Routes 32 and 198.

Site Description: FGGM-19 is identified as the Advanced Wastewater Treatment Facility. FGGM-19 includes Building 9581 – Wastewater Treatment Plant (also identified as SWMU 138). All future environmental investigations and remediation activities for FGGM-19 are covered under SWMU 138.

Previous Studies: Over the course of previous investigations at this site, 1 surface soil sample, 18 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels.

Current Use: Wastewater treatment facility

Current Status: The AEDB-R number FGGM-19 has been administratively closed. All further action at this AOI is covered under SWMU 138.

Cleanup/Exit Strategy: Not applicable; and NFA is required for FGGM-19.

2.5.7 FGGM-36 (OU-20) – PHOTOGRAPHIC LABORATORY, BUILDING 6530

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU 1996

Historical Aerial Photograph Study 1996

 RFA 3rd Phase 1999

Data Gap Investigation 2002

PA/SI 2010–2015

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southwestern portion of the installation, at the intersection of Taylor Avenue and Gordon Street.

Building 6530 is part of FGGM-36, an Auto Repair and Craft Center, which also includes Building 4553, which is discussed separately (Section 2.5.8).

Site Description: Building 6530 is a vehicle maintenance facility (SWMU 105) with nearby OWS (SWMU 106) and WRs (SWMUs 107 and 108). Approximately one-third of the building is used as a craft center for installation residents involved in woodworking, ceramics, framing, and similar recreational activities. No chemicals except typical cleaners are kept in the crafts portion of the building. The auto repair facility stores oil, antifreeze, and Freon. Used oil cans, oil filters, and rags are stored in 55-gallon drums for eventual removal. All floor drains in the auto repair area flow to an OWS (SWMU 106), which also receives wastewater from two WRs (SWMUs 107 and 108) at the site. An 800-gallon waste oil AST is located at the northern exterior wall of the building.

Previous Studies: As part of the RFA 3rd Phase, 16 direct-push borings were advanced around the building.

Three surface soil samples, 12 subsurface soil samples, and 1 groundwater sample were collected using a direct-push sampling rig. Based on a risk analysis of the analytical results, mercury, arsenic, and chromium concentrations exceed the site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for metals.



FGGM 36 (OU20) -- Building 6530 - Auto Repair and Craft Center
0 30 60 120 Feet

Current Use: Auto Repair and Craft Center

Current Status: The Final PA/SI Report has been approved. The EPA approved this AOI for NFA on 18 April 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.8 BUILDINGS 4552 AND 4553 PHOTOGRAPHIC LABORATORY, PART OF FGGM-36 (OU-20)

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

Historical Aerial Photograph Study..... 1996

RFA 3rd Phase..... 1999

Data Gap Investigation..... 2002

PA..... 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G4, in the southeastern portion of the installation, northwest of the intersection of Llewellyn and Cooper Avenues.

Building 4553 (Non-SWMUs 10 and 11) is part of FGGM-36, which also includes Building 6530 (SWMUs 105–108). Building 6530 (SWMUs 105–108) is discussed separately (Section 2.5.7).

Site Description: Building 4553 was not identified as an SWMU in the 1996 SWMU study (BCM 1996) because no routine waste is stored or produced at this AOI. However, it was investigated as part of the SWMU study and included in the SWMU report (BCM 1996). BCM indicated there were no spills or reported releases in the area surrounding this building.

Current and past use of Building 4553 consisted of support facilities, primarily administrative, for intelligence agencies. It typically stored cleaners and office supplies. There are no reports of pesticides being stored at this building.

Previous Studies: There had never been a release of hazardous substances resulting in contamination to soil, groundwater, or surface water at this AOI (BCM 1996). The EPA reviewed historical aerial photographs (from 1938 to 1995) of FGGM and found no stains, stressed vegetation, debris, solid waste, or other areas of environmental concern at this AOI (EPA 1996).



Building 4553
0 30 60 120 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.9 FGGM-37 (OU-21) – KIMBROUGH AMBULATORY CARE CENTER, BUILDING 2480

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....1996

Sampling Visit.....2000

PA/SI.....2010–2015

SSI.....2016–2020

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the southeastern portion of the installation, approximately 100 feet southeast of the intersection of Llewellyn and Wilson Avenues.

Site Description: KACC (previously referred to as Kimbrough Army Hospital), Building 2480 (SWMU 71) has been used as a hospital since its construction in 1968. Hospital operations were downsized to those of a clinic in the early 1990s. Chemicals stored in flammable storage cabinets and on shelves during the SWMU study included acetic acid, acetone, alcohol, phenol, trichloric acid, silver nitrate, hydrochloric acid, fixer and developer, iodine, peroxides, and sodium chloride. Areas of the hospital that use chemicals include the pharmacy, laboratories, x-ray rooms, emergency rooms, operating rooms, dental labs, podiatry rooms, and orthopedic rooms.

Building 2480 routinely discharges waste from silver recovery units from photographic processing. Medical Maintenance properly disposes of the chemicals from the silver recovery (BCM Engineers, Inc. [BCM] 1996). Any other discharge would go to the sanitary sewer. The SSI report combined this AOI with Building 2482 and MP 10 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, eight subsurface soil samples, and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for metals.



FGGM 37 (OU-21) -- Kimbrough Army Hospital
0 50 100 200 Feet

Current Use: Medical clinic

Current Status: The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.10 FGGM-70 (OU-25) - INDOOR RANGE, FORMER BUILDING 6513

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Historical Aerial Photograph Study 1996

Sampling Visit 2000

SI 2001

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southern portion of the installation, west of the intersection of York Avenue and Simonds Street.

Site Description: Building 6513 (SWMU 150) was identified as a past SWMU in the 1996 SWMU study (BCM 1996) because it was formerly used as an indoor shooting range, and disposal practices for the impact range were unknown. There were no spills or reported releases identified during the SWMU study (BCM 1996). Building 6513 was demolished in 2001 after standing vacant (but locked) for several years. A 550-gallon heating oil UST was located outside the southeast corner of Building 6513. The UST was removed in January of 1997 (Versar 2003).

Previous Studies: This AOI was not identified in the EPA (1996) review of historical aerial photographs; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.

Over the course of previous investigations at this AOI, four surface soil samples (plus one duplicate sample), five subsurface soil samples, and five groundwater samples (plus one duplicate sample) were collected and analyzed. Based on a risk analysis of the analytical results, 1,2,4-trimethylbenzene and naphthalene elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples were collected and analyzed for VOCs and SVOCs. An SSI was conducted for groundwater for TPH-DRO and total dissolved metals, including chromium speciation.



FGGM 70 (OU-25) - Indoor Range, Building 6513
0 25 50 100 Feet

Current Use: Parking lot

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.11 FGGM-71 (OU-26) – EX INDOOR RANGE, FORMER BUILDING 6522 (SWMUs 151 AND 152)**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

Sampling Visits 2000

PA/SI 2010–2015

Contaminants of Potential Concern: Metals**Media of Concern:** Soil and groundwater

Site Location: Grid F4, in the southern portion of the installation, 100 feet northwest of the intersection of York Avenue and Simonds Street.

Site Description: Building 6522 (SWMUs 151 and 152) was identified as a past SWMU in the 1996 SWMU study (BCM 1996) because it was formerly used as an indoor small arms target range, and disposal practices for the impact range were unknown. There were no spills or reported releases identified by BCM during the SWMU study (BCM 1996). Building 6522 was demolished in the late 1990s. A 550-gallon heating oil UST was located outside the eastern wall of Building 6522. The UST was removed in August of 1995 (Versar 2003).

Previous Studies: This AOI was not identified in the EPA (1996) review of historical aerial photographs; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.

Over the course of previous investigations at this site, four subsurface soil samples and three groundwater samples were collected and analyzed. Based on a risk analysis of the analytical results, mercury, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

In 2013, as part of the PA/SI, one groundwater monitoring well was installed, and groundwater samples and surface soil samples were collected and analyzed for metals.



FGGM 71 (OU-26) -- EX Indoor Range, Building 6522
0 25 50 100 Feet

Current Use: Parking lot

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.12 FGGM-74 (OU-29) – UNITED STATES ARCHITECT OF THE CAPITAL, BUILDINGS 71, 72, AND 72A

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....	1996
Phase I Site Assessment.....	1994
RI	2013
FS	June 2014
PP	July 2014
ROD	September 2014
RD/WP	2016
RACR	2017

Contaminants of Potential Concern: Lead in soil; inorganics in shallow groundwater; and VOCs in shallow groundwater associated with OU-4 and OU-5

Media of Concern: Groundwater and soil

Site Location: Grid G5/H5. FGGM-74 is the USAOC parcel along the southern border of FGGM. It is situated between State Route 32 and Rock Avenue and between Remount and Pepper Roads.

Site Description: This area (SWMUs 1 through 9) was authorized by Congressional action in 1993 for transfer from the Department of the Army to the USAOC to accommodate long-term storage and service needs of the Library of Congress and other Legislative Branch agencies. The USAOC parcel was contaminated by past Army activities. This area was evaluated in 1994 for feasibility of developing it to support Legislative Branch agencies. At the time of the study, the area contained temporary warehouses with several USTs nearby, buildings formerly used as the Fort commissary, and buildings associated with the Transportation Motor Pool (TMP). A stream (Rogue Harbor Branch) flows south through the site, and wetlands are present in the vicinity of the stream.

Previous Studies: A Phase I site assessment was performed as part of the 1994 development study (RK&K 1994). The assessment identified VOCs, pesticides, PCBs, and metals detections in the OU-5 area.

Current Status: The USAOC RI Package was finalized in April 2013. The Final RI included an updated HHRA and an evaluation of background concentrations of inorganics in groundwater. The 2014 Final FFS evaluated alternatives to address inorganics in groundwater and lead in soil.



FGGM 74 - Architect of the Capitol
0 500 1,000 2,000 Feet

The PP and ROD were finalized in July and September 2014, respectively. The selected remedy is hot spot soil excavation with off-site disposal. Groundwater is being addressed under OU-4 since there are no specific identifiable sources on the USAOC parcel (refer to Section 2.1.5).

The assessment also identified petroleum hydrocarbon detections at the TMP and in the vicinity of several USTs in the warehouse area. Based on the results of the 1994 assessment, a Phase II investigation was recommended. Subsequent RI sampling and HHRA identified potential risks limited to 1) hypothetical use of shallow groundwater for potable purposes related to inorganics detections, and 2) potential exposure to lead in subsurface soil in two small, approximately 10-foot by 20-foot areas under a hypothetical regrading scenario.

Current Use: Currently, much of the improved areas of the USAOC parcel are used for storing documents. Approximately 10 acres of the extreme western part of the USAOC property are operated by the Army as a TMP.

Cleanup/Exit Strategy: The USAOC Soil Lead Hot Spot has been remediated and the Final RACR has been signed by the EPA on 27 September 2017. Note that the USAOC groundwater is being handled through OU-4 and that USAOC GW response action will be formalized in the forthcoming OU-4 ROD.

2.5.13 FGGM-75 (OU-30) – UNDERGROUND STORAGE TANKS PRIOR TO 1984

<p>Regulatory Driver: CERCLA</p> <p>Environmental Investigations:</p> <p>Environmental Restoration, Army..... 2008</p> <p>UST Facility Summary 2010</p> <p>PA..... 2012</p> <p>Contaminants of Potential Concern: Gasoline, diesel fuel, and oil</p> <p>Media of Concern: Soil</p> <p>Site Location: USTs prior to 1984 were located throughout the installation.</p> <p>Site Description: In July 1985, the EPA promulgated 40 Code of Federal Regulations 280, which required the registration of all USTs used for dispensing regulated substances. The State of Maryland published UST regulations in 1984. USTs had to be registered, and among the requirements for UST registration are tank and line leak detection requirements, spill and overfill protection equipment, and maintaining tank release detection records. FGGM-75 consists of USTs prior to 1984 that had leaked or potentially leaked product to the environment. Since 1984, all USTs under the control of FGGM DPW have been closed, and leaking USTs have been remediated. The installation-wide conversion from heating oil to natural gas resulted in most of these UST closures. Only seven active USTs are currently on installation under the jurisdiction of FGGM DPW. All seven USTs were installed after 1984.</p> <p>Previous Studies: Numerous samples were collected throughout the time the USTs were closed out. Results were presented to MDE with closeout documents.</p>	<p>No image available - these are multiple sites throughout the installation.</p> <p>Current Use: The sites of the former USTs are used for installation support functions.</p> <p>Current Status: The MDE has no open UST cases with FGGM DPW. EPA approved NFA for this AOI on 23 February 2012.</p> <p>Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.</p>
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2.5.14 FGGM-95 (OU-45) – FORMER LANDFILL SITES

2.5.14.1 FGGM-95 (OU-45) – FILL – 1988

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals

Media of Concern: Soil

Site Location: Grid E4, near the southwestern perimeter of the installation, north of Perimeter Road and west of O'Brien Road.

Site Description: Fill – 1988 is an AOI because the EPA (1996) aerial photographic investigation of FGGM labeled potential fill in this area in a 1988 historical aerial photograph; however, the potential fill was not discussed in the text of the EPA report. Fill was also labeled in this area on the 1995 aerial photograph, but it also was not discussed in the text of the report (EPA 1996).

No stained soils or stressed vegetation were identified at this location or its surroundings on any of the historical aerial photographs. In the 1984 aerial photograph, this AOI and the adjacent square lot to the northwest are graded, possibly as part of site preparation for construction. By 1988, a building was constructed on the adjacent lot to the west, and the “Fill – 1988” lot is covered with piles of dirt. By 1993, the AOI was graded, but by 1996, additional fill was brought in, most likely to complete leveling of the site. By 1999, the AOI is again leveled, and by 2002 a building and parking lot are constructed on this AOI.

Previous Studies: A historical aerial photograph study was completed in 1996. No previous sampling was undertaken.

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



Current Use: Administrative, parking lot, and grass areas.

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.2 FGGM-95 (OU-45) – PERSHING HILL ELEMENTARY SCHOOL BURN PIT STOCKPILE

Regulatory Driver: CERCLA/MDE Solid Waste Program

Environmental Investigations:

Burn Pit 2009

Contaminants of Potential Concern: Metals and DRO. Possibly dioxin and furan.

Media of Concern: Soil stockpile.

Site Location: Grid I5, north of Lokus Road in the northern portion of the CSL.

Site Description: A burn pit was discovered during the reconstruction of Pershing Hill Elementary School. The pit was probably dug in the late 1950s or early 1960s during the construction of the original school to place and burn the trees that were cut for the school construction.

Previous Studies: The pit was sampled for a variety of parameters, including petroleum hydrocarbons, dioxins, and furans, with trace levels of dioxins and furans detected along with low levels of petroleum hydrocarbons.

The contents of the burn pit were removed and stockpiled on-site (approximately 25,000 cubic yards). The stockpile exceeded site capacity and was transported to a permitted and controlled location at the CSL. The soil stockpile was re-sampled and disposed at an approved off-post facility.

Current Use: Soil stockpile

Current Status: The stockpiled soil from the Pershing Hill Elementary School Burn Pit was disposed of off post.



FGGM 95 (OU-45) - Pershing Hill Elementary School
Burn Pit Stockpile
0 250 500 1,000 1,500 2,000
Feet

Cleanup/Exit Strategy: This site is within the Cell 3 (CCFGGM-97) footprint, and an RI/FS is currently underway (Refer to Section 2.1.12). NFA is recommended for the stockpiled soil from the Pershing Hill Elementary School Burn Pit because it was disposed of off post.

2.5.14.3 FGGM-95 (OU-45) – POSSIBLE DUMP SITE A – 1957, FORMER COMPLIANCE CLEANUP SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

Geophysical Investigation2004

PA/SI2010–2015

SSI2016–2018

Contaminants of Potential Concern: None identified

Media of Concern: Soils and groundwater

Site Location: Grid G1, near the northern border of the installation, 1,000 feet west of the Fort Meade Middle School.

Site Description: Possible Dump Site A – 1957 was identified as an AOI because the EPA (1996) photographic study of the installation listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. No activity was visible at this AOI in subsequent aerial photographs. The EPA study (1996) did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site A – 1957 provided little evidence that the AOI contains metallic or conductive buried waste or disturbed soil. A magnetic anomaly on the eastern perimeter of the geophysical survey was further investigated with ground penetrating radar, which “showed a well-developed soil column with no anomalies, indicating that soil at this site is undisturbed.” No buried drums were apparent in the soil column, and there does not appear to be much indication that something is buried here (Versar 2004).

As part of the PA/SI, a test pit was excavated to investigate an anomaly. No elevated PID readings were recorded, and no signs of staining were noted during excavation; therefore, no soil samples were collected. An SSI for soils was conducted for VOCs, SVOCs, metals, and chromium speciation.


Current Use: Wooded

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.4 FGGM-95 (OU-45) – POSSIBLE DUMP SITE C – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Investigation 2004

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F2, in the northern portion of the installation, adjacent to the intersection of Evans Court and Leslie Road.**Site Description:** Possible Dump Site C – 1957 was identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.**Previous Studies:** A geophysical investigation of Possible Dump Site C – 1957 did not identify any geophysical anomalies on the AOI, except for a few features associated with utilities (Versar 2004). There is little geophysical evidence to suggest that this AOI is a former dump or landfill.**Current Use:** Grass, trees, portions of Evans Court and Leslie Road, and buildings.**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

Possible Dump Site C - 1957

0 50 100 200 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.5 FGGM-95 (OU-45) – POSSIBLE DUMP SITE D – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Investigation 2004

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F2, in the northern portion of the installation, on Riordan Court.**Site Description:** Possible Dump Site D – 1957 was identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed “possible solid waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.**Previous Studies:** A geophysical investigation of Possible Dump Site D – 1957 did not identify any geophysical anomalies at the AOI that were not associated with utilities or buildings (Versar 2004).**Current Use:** Site D – 1957 encompasses Riordan Court and the lawns and driveways associated with four small houses.**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

Possible Dump Site D - 1957

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.6 FGGM-95 (OU-45) – POSSIBLE DUMP SITE F – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Investigation 2004

PA/SI 2010–2014

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid E3, in the western portion of the installation, between Eubanks Loop and Christian Loop.

Site Description: Possible Dump Site F – 1957 was identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed “possible solid waste” at this AOI during an analysis of a 1957 aerial photograph. In the analysis of the 1963 aerial photograph, EPA stated that “the possible accumulation of solid waste observed in 1957 is no longer present due to construction of new housing.” The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.

Previous Studies: A geophysical investigation of Possible Dump Site F – 1957 provided little evidence that the AOI contains metallic or conductive buried waste. There is little geophysical evidence to suggest that this AOI is a former dump or landfill (Versar 2004).

Current Use: The AOI is currently a grass lawn bordered to the north and south by townhouses.

Current Status: EPA approved NFA for this AOI on 15 June 2011.



Possible Dump Site F - 1957
0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.7 FGGM-95 (OU-45) – POSSIBLE DUMP SITE G – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

Geophysical Survey2004

PA/SI.....2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid E5, in the southwestern portion of the installation, just southwest of the pumping station where the Little Patuxent River crosses Maryland Route 198.**Site Description:** Possible Dump Site G – 1957 was identified as an AOI because the EPA (1996) study of the installation listed “possible dump” at this AOI during an analysis of a 1957 aerial photograph. In an analysis of a 1963 aerial photograph, the EPA labeled the AOI as a “re-vegetated dump site.”**Previous Studies:** A geophysical investigation of Possible Dump Site G – 1957 provided little evidence that the AOI contains metallic or conductive buried waste. There is little geophysical evidence to suggest that this AOI is a former dump or landfill (Versar 2004).

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.

Current Use: Trees and grass**Current Status:** The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.

Possible Dump Site G - 1957
0 30 60 120 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.8 FGGM-95 (OU-45) – POSSIBLE DUMP SITES – 1970**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

Contaminants of Potential Concern: None identified**Media of Concern:** Soils**Site Location:** Grid E2, in the northwestern portion of the installation, east of the Baltimore-Washington Parkway.**Site Description:** Possible Dump Sites – 1970 were identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed “Possible Dump Location” at these locations during an analysis of a 1970 aerial photograph.

The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.

Previous Studies: No previous sampling or geophysical investigations have been conducted at this AOI.

Possible Dump Site – 1970 has a long history of probable housing and farming. Agricultural activity may have been mistaken for dumping in the February 1970 aerial.

As part of the PA/SI, test pits were excavated, and subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-GRO, TPH-DRO, and PCBs.

Current Use: Wooded area**Current Status:** The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.

Possible Dump Sites - 1970
0 50 100 200
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.9 FGGM-95 (OU-45) – SITE M - PARCEL 1**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Investigation 2004

EBS 2004

PA/SI 2007

PA/SI 2011

Contaminants of Potential Concern: VOCs, metals, and explosives**Media of Concern:** Groundwater**Site Location:** Grid F3, in the 9200 Block, east of O'Brien Road.**Site Description:** This location was initially identified because a review of a 1938 aerial photograph identified it as a possible dump (EPA 1996).**Previous Studies:** A geophysical investigation (Versar 2004) confirmed this AOI as a landfill.

Over the course of previous investigations at this site, 1 surface soil sample, 16 subsurface soil samples and 1 groundwater sample were collected and analyzed. Based on a risk analysis of the analytical results, iron, cobalt, manganese, and arsenic elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL.

As part of the 2011 SI, three groundwater samples were collected and analyzed for VOCs, metals, and explosives.

Current Use: Building 9250 and future NSA Construction site.**Current Status:** Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Site M - Parcel 1
0 50 100 200 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.10 FGGM-95 (OU-45) – SITE M - PARCEL 2**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

EBS 2004

Geophysical Survey 2004

PA/SI 2007

PA/SI 2011

Contaminants of Potential Concern: VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins

Media of Concern: Soil and groundwater

Site Location: Grid F3, in the 8800 Block, north of the intersection of Zimborski and Taylor Avenues.

Site Description: This location was initially identified because the EPA (1996) historical aerial photograph study suggests there may have been a solid waste landfill at this location in the 1943 aerial photograph.

Previous Studies: Over the course of previous investigations at this site, 13 subsurface soil samples and 3 groundwater samples (2 total and 2 dissolved) were collected and analyzed. Based on a risk analysis of the analytical results, arsenic, vanadium, manganese, cobalt, and iron elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL.

Fill material containing ash was encountered at 6 of the 10 direct-push locations.

As part of the 2011 SI, four surface soil samples were collected and analyzed for VOCs, metals, herbicides, pesticides, explosives, PAH, furans, and dioxins and four subsurface soil samples were collected and analyzed for metals, PAH, furans, and dioxins.

Current Use: NSA, Building 9225



Site M - Parcel 2
0 50 100 200
Feet

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.11 FGGM-95 (OU-45) – SITE M - PARCEL 3**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

SWMU Study1996

EBS2004

Geophysical Survey2004

PA/SI2007, 2010–2012

Environmental Site Assessment.....2013

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil and groundwater**Site Location:** Grid F3, within the golf course complex, west of Zimborski Avenue.

Site Description: Former Building 8880 (SWMU 131/132), constructed in 1949, was a storage area and a pesticide mixing area from 1955 to the late 1970s. It was demolished prior to 2005. Building 8860 (SWMU 133), constructed in 1949, was used for topsoil and chemical storage. The pump house is in the eastern half of the building and contains a well that distributed treated effluent water from the sanitary sewer to the sprinkler system for the former golf course.

Former buildings 8870 (SWMU 134) and 8890A (SWMU 136) were used for storage, Building 8890 (SWMU 135) was a mechanic shop and storage area, Building 8891 (SWMU 137) was a storage building/ maintenance area, Building 8881 was a storage/ maintenance building, Building 21 was a metal storage locker used to store hazardous waste awaiting disposal. There was also a storage shed/rollaway (no building number) north of former Building 8890 that was used to store old tires and a lawnmower. Four ASTs and one UST were associated with the maintenance buildings. All the buildings have been demolished as part of NSA development/construction.

Previous Studies: During previous investigations at this site, 8 surface soil samples, 35 subsurface soil samples, and 10 groundwater samples were collected and



Site M - Parcel 3
0 40 80 160 Feet

analyzed. Based on a risk assessment of the analytical results, arsenic, benzo(a)pyrene, mercury, heptachlor epoxide, and 1,1,2,2-tetrachloroethane elevate the risk numbers above the site-specific action levels.

Current Use: NSA property.

Current Status: This AOI received NFA status on 17 February 2012 based on site conditions at that time. EPA approved NFA for this AOI on 25 June 2015.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.12 FGGM-95 (OU-45) – SITE M - PARCEL 4**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

EBS 2004

PA 2011

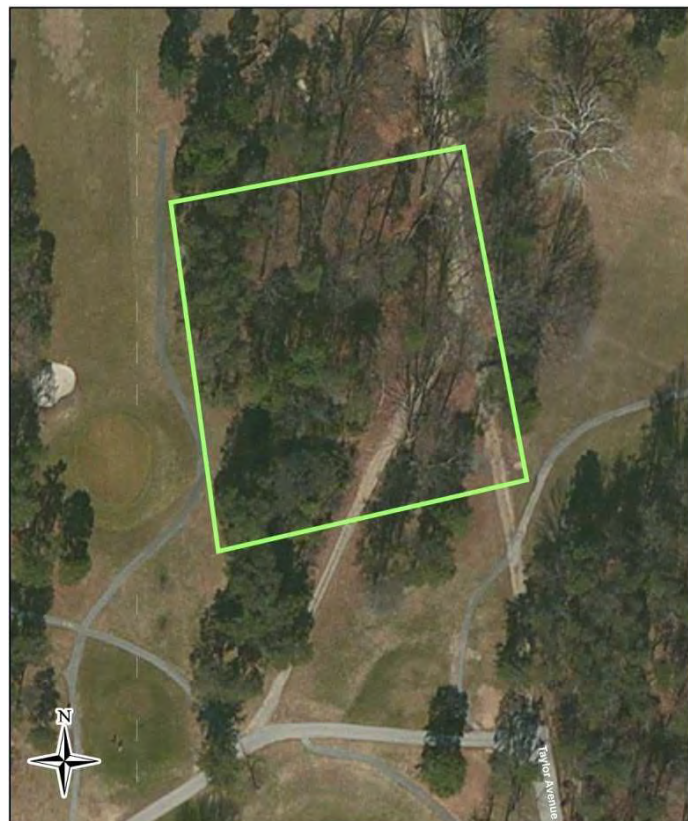
Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F3, east and west of Taylor Avenue.

Site Description: This location was initially identified because ground scarring was observed at this AOI during a review of a 1943 historical aerial photograph (Berger EA 2004). A “disturbance” was observed in the northeastern part of this AOI in the 1952 through 1995 historical aerial photographs (Berger EA 2004).

Previous Studies: Results: Over the course of previous investigations at this AOI, two subsurface soil samples and one groundwater sample were collected and submitted for laboratory analysis.

Current Use: NSA property and building 9230.

Current Status: EPA approved NFA for this AOI on 7 January 2011.



Site M - Parcel 4
0 40 80 160 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.13 FGGM-95 (OU-45) – SITE M - PARCEL 5**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

EBS 2004

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F3, east of Taylor Avenue.

Site Description: The EBS identified this location because a concrete foundation for an outbuilding and a telephone pole were observed in a wooded area. The foundation was reportedly adjacent to a former farmhouse and was identified as a “pit” in the EBS. The concrete foundation and telephone pole were observed during the December 2003 Site Investigation that was conducted as part of the EBS. Upon review of the Site Investigation, the concrete foundation is probably from an old outbuilding near a former barn. It was described as “Building 6927 Foundation” in the description of AOI 11. AOI 11 was later renamed Parcel 5.

Previous Studies: Over the course of previous investigations at this site, one subsurface soil sample was collected and analyzed.

Current Use: NSA Construction site

Current Status: EPA approved NFA for this AOI on 7 January 2011.



Site M - Parcel 5
0 25 50 100
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.14 FGGM-95 (OU-45) – SITE M - PARCEL 6**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Survey.....2004

EBS2004

PA/SI2007

PA2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F3/F4, northwest of the intersection of Mapes Road and Cooper Avenue.

Site Description: The EBS identified ground disturbance/ground scar at this location in historical aerial photographs (Berger EA 2004). The EPA (1996) historical aerial photograph review of the same location did not identify anything they would classify as a disturbance or scarring, in fact, the EPA (1996) report did not identify any AOI at this location. In the sandy coastal plain sediments typical of this location, ground can be easily disturbed by driving over an area with thin vegetation. The Patapsco sands crop out at this location. The Patapsco sands are a white to buff to vari-colored sand that shows up as light spots when exposed on historical aerial photographs. A thin covering of grass covers this location in most of the historical aerial photographs. The ground disturbance/scarring could be from repeated vehicle or foot traffic. Digging, trenching, filling, or any other activity that would suggest landfilling or dumping was not identified for this location.

Previous Studies: Over the course of previous investigations at this site, two subsurface soil samples and one groundwater sample were collected and analyzed.

Current Use: Parking lot.**Current Status:** EPA approved NFA for this AOI on 7 January 2011.

Site M - Parcel 6
0 70 140 280
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.15 FGGM-95 (OU-45) – SITE M - PARCEL 7**Regulatory Driver:** CERCLA**Environmental Investigations:**

EBS 2004

PA/SI 2007, 2011

Contaminants of Potential Concern: VOCs, SVOCs, metals, pesticides, and explosives**Media of Concern:** Groundwater**Site Location:** Grid F4, northwest of the intersection of Mapes Road and Taylor Avenue.

Site Description: The 2004 EBS (Berger EA 2004) suggested that a possible landfill may be in the northern portion of this site, north of former Parks Golf Course hole 14 and east of the NSA property. This assessment is based on ground scars observed in historical aerial photographs and surficial debris (metal cans, pipes, and a fire hydrant) seen at this location during a 2004 site visit (Berger EA 2004).

This AOI was also the Former Mortar Range. This AOI is the IRP portion of the Mortar Range; the MMRP portion is covered in Section 2.2.1. The foldout map in the pocket of the SMP containing all SMP AOI shows the overlap of this AOI with the MMRP AOI.

Previous Studies: Over the course of previous investigations at this site, 40 surface soil samples (and 4 duplicate surface soil samples), 21 subsurface soil samples, and 4 groundwater samples (plus 1 duplicate) were collected and analyzed. Based on a risk analysis of the analytical results, heptachlor epoxide, cobalt, and manganese elevate the risk numbers above the site-specific action levels. Methylene chloride was detected above its MCL.

As part of the 2011 SI, two groundwater samples were collected and analyzed for VOCs, SVOCs, pesticides, and explosives. No compounds exceeded risk levels.



Site M - Parcel 7
0 200 400 800
feet

Current Use: Vacant land / NSA Construction site**Current Status:** Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.14.16 FGGM-95 (OU-45) – SITE M - PARCEL 8**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

EBS.....2004

PA/SI.....2007

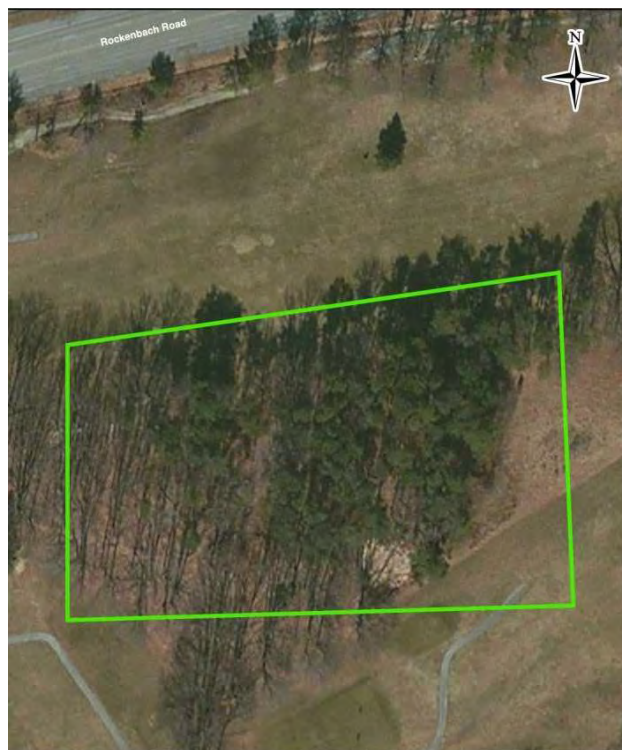
PA/SI.....2010–2014

Focused Enhanced Site Investigation (FESI) Sept 2012–
Nov/2012

FESI Final Report.....May 2013

Contaminants of Potential Concern: Metals**Media of Concern:** Soil and groundwater**Site Location:** Grid F3, in the 8800 Block, 500 feet southeast of the intersection of Rockenbach and 29th Division Roads.**Site Description:** This location was identified in the EBS as a possible dump site during a review of a 1938 aerial photograph (Berger EA 2004).**Previous Studies:** Over the course of previous investigations at this AOI, one surface soil sample, six subsurface soil samples, and two groundwater samples (one total metals and one dissolved metals) were collected and analyzed. Based on a risk analysis of the analytical results, antimony, arsenic, cobalt, nickel, and iron elevate the risk numbers above the site-specific action levels. Lead was detected above its MCL.

An EPA-approved soil removal effort was conducted.

Current Use: NSA Construction site.**Current Status:** Based on the closure report for Site M Parcel 8, EPA approved NFA for this AOI on 16 December 2013.

Site M - Parcel 8

0 40 80 160 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.17 FGGM-95 (OU-45) – SITE M – PARCEL 9**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

EBS 2004

PA/SI 2007

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F3, northwest of the intersection of Cooper Avenue and Reece Road.**Site Description:** Disturbed ground was identified at this location in a 1938 historical aerial photograph, and ground scarring/disturbance was identified here in a 1943 aerial (Berger EA 2004). Ground scarring/disturbance, stressed vegetation, or staining was not identified at this location in the EPA (1996) historical aerial photograph study of the installation.**Previous Studies:** A geophysical investigation (Berger EA 2004) was conducted to inspect the disturbed ground and ground scarring. The geophysical investigations of this area revealed some anomalies.

As part of the EBS for this site, four subsurface soil samples and two groundwater samples were collected and analyzed for the anomalies that could not be attributed to utilities or the cart path.

Current Use: Office building**Current Status:** EPA approved NFA for this AOI on 7 January 2011.

Site M - Parcel 9

0 75 150 300 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.18 FGGM-95 (OU-45) – SITE Y

Regulatory Driver: CERCLA/MDE Solid Waste Program

Environmental Investigations:

MDE Site Number SC-O-12-SW-251.....2012

Waste Characterization Report2012

Draft Final Site Y Cleanup Plan.....2013

Confirmatory Sampling Data Summary Report
.....2013

PA/SI.....2014–2016

Final Removal Completion Report.....2015

Contaminants of Potential Concern: VOCs, metals, and pesticides

Media of Concern: Unknown (investigation pending)

Site Location: Grid H4, southwest of the intersection of 9th Street and Ernie Pyle Road.

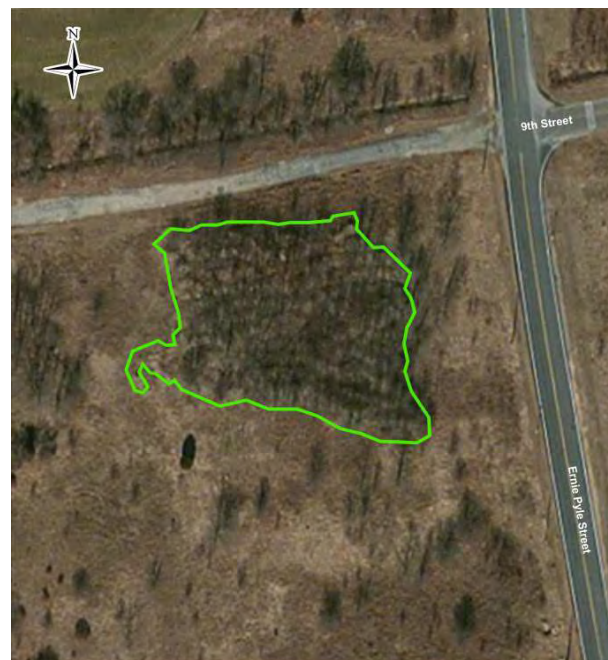
Site Description: Site Y was identified as an AOI when waste was observed on the ground surface in 2012. Site Y is a 0.9-acre, uncontrolled dumpsite where demolition debris and soil from an unknown source were placed between the years of 2000 and 2001.

In 2012, MDE issued a Site Complaint Number concerning the debris at FGGM Site Y.

Previous Studies: Site Y has undergone an investigation and remediation.

On 29 April 2013, soil samples were collected at Site Y to characterize the soil for waste disposal.

During the removal action at Site Y, two types of debris were observed at the site. The northern third of the site consisted primarily of construction debris; the southern two thirds contained what appeared to be landfill debris consisting of bottles, china, refractory brick, and demolition debris. There was an estimated 3,500 cubic yards of soil and demolition debris disposed of in the Site Y debris pile. After removal and disposal of the waste piles, surface soil samples were collected and analyzed. Confirmation sampling of soils remaining in place were collected and analyzed for SVOCs, VOCs, metals, mercury, herbicides, and pesticides.



Due to elevated benzo(a)pyrene levels at two separate locations, additional soils were excavated. Confirmation samples indicated that these two sources were removed but another exceedance of benzo(a)pyrene was found on the new south wall. It was determined that no further excavation was required to address benzo(a)pyrene.

The PA/SI was initiated in the summer of 2014. Soil and groundwater samples were collected and analyzed to assess current site conditions.

Current Use: The debris at Site Y has been removed. This AOI is currently an open field.

Current Status: The Final Site Y Addendum to the Southeast PA/SI Report was approved in March 2016. The EPA approved NFA for this AOI on 18 April 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.19 FGGM-95 (OU-45) – SMALL PIT – 1952**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2007, 2010–2015

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid H3, in the northeastern portion of the installation, northeast of Forrest Avenue.

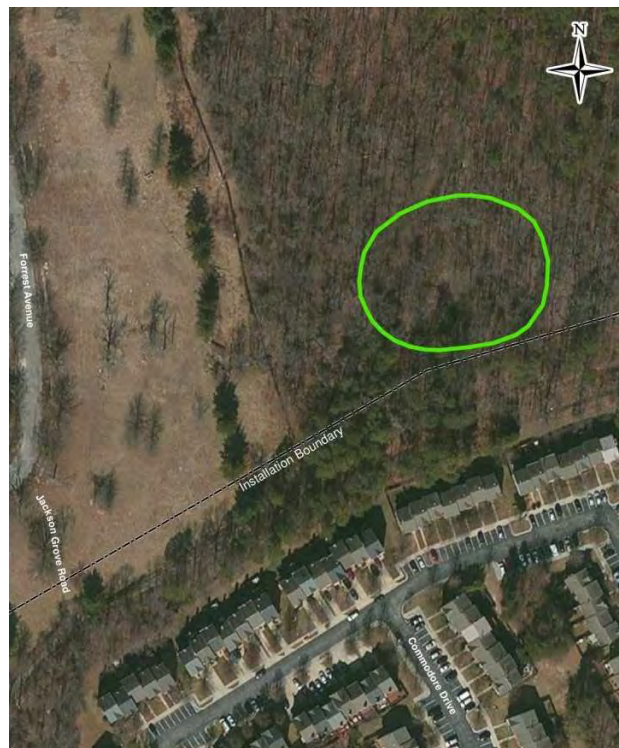
Site Description: Small Pit – 1952 was identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed a small pit on the 1952 aerial. The small pit was not specifically called out in the text of the EPA (1996) report. The small pit was also not called out in subsequent aerial photographs, nor did the EPA (1996) suggest it was filled in. There is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs (EPA 1996).

Previous Studies: No previous sampling was undertaken. This area was extensively walked as part of a PA/SI (URS 2007), and no signs of pits or stressed vegetation were identified. The EPA (1996) study did not identify stained soils or stressed vegetation in this area.

As part of the PA/SI, three surface and three subsurface soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides, TPH-DRO, and TPH-GRO. The concentrations of cobalt in surface soil cause excess risk at this AOI.

Current Use: Wooded

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.



FGGM 95 - Small Pit - 1952
0 60 120 240 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.14.20 FGGM-95 (OU-45) – TAYLOR AVENUE BURIED DRUM SITE**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Survey 2007

SI 2007

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F4, in the south-central portion of the installation, approximately 150 feet south of the intersection of Taylor Avenue and Gordon Street.**Site Description:** The Taylor Avenue Buried Drum site was identified as an AOI on 24 February 2006, when, while mapping a gas line for Baltimore Gas & Electric, Soft Dig crews discovered a buried drum along Taylor Avenue. The drum was located between Building 6500, the Defense Information School, and Building 6530, the Auto Craft Shop. The AOI is confined to the eastern edge of Taylor Avenue.**Previous Studies:** Over the course of previous investigations at this AOI, one drum composite sample and three post-excavation subsurface soil samples were collected and submitted for laboratory analysis.**Current Use:** Roadways and grass fields**Current Status:** EPA approved NFA for this AOI on 5 October 2011.

Buried Drum Site - Taylor Avenue

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

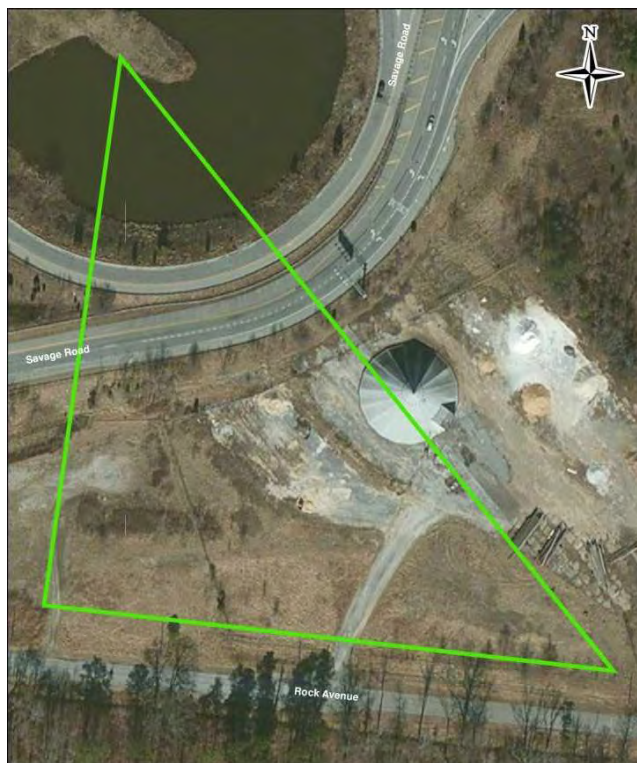
2.5.14.21 FGGM-95 (OU-45) – WASTE STORAGE/DISPOSAL AREA – 1938**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI.....2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid I5, in the southeast corner of the installation, at the State Route 175/32 interchange.**Site Description:** Waste Storage/Disposal Area – 1938 was identified as an AOI because possible waste storage or disposal was identified at this AOI during analysis of a 1938 aerial photograph. However, the EPA (1996) aerial photograph study of the installation did not identify this AOI until 1943.**Previous Studies:** The EPA (1996) aerial photograph study of the installation identified a “Possible Dump or Waste Storage” area approximately 1,000 feet west of this AOI in the 1938 aerial. That site is being further studied under OU-4 as FGGM-88. A building and vehicles are observed at the AOI in the 1943 aerial photograph. The building number or past use is not known. The description for the 1952 aerial photograph states “This possible waste storage/disposal site has changed since 1943. It is now being used to store stockpiled raw materials. No evidence of waste material exists.” The outline of the eastern area appears on the 1963 aerial, but there is no discussion of this area in the text of the EPA (1996) report. A possible ground scar can be seen in the 1970 aerial; however, the EPA (1996) study does not address it. The description for the 1975 aerial photograph states “almost all of the raw materials previously stored at this site are removed.”

As part of the PA/SI, subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals.

Current Use: State Route 175/32 interchange, raw material storage, and grassy area.

WASTE STORAGE / DISPOSAL AREA - 1938

0 50 100 200 Feet

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016. In addition, groundwater in this area is being investigated under OU-4.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.14.22 FGGM-95 (OU-45) – POSSIBLE DUMP SITE B – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

Geophysical Investigation 2004

PA/SI 2007

PA/SI 2010–2015

SSI 2017–2019

Contaminants of Potential Concern: Metals and dioxins**Media of Concern:** Soil and groundwater**Site Location:** Grid F2, in the northern portion of the installation, 200 feet north of Clark Road and 700 feet west of the Clark Road/ Rockenbach Road intersection.**Site Description:** Possible Dump Site B – 1957 was classified as a “solid waste/dump” by EPA during an analysis of a 1957 aerial photograph. The solid waste was no longer present in the 1963 aerial photograph (EPA 1996). Bricks, steel pipes, and other construction debris were found at this AOI, but no drums were observed.**Previous Studies:** A geophysical investigation (Versar 2004) revealed two areas of elevated terrain conductivity and numerous significant metal anomalies throughout the AOI. The ground penetrating radar profiles indicated disturbed soil to a depth of at least 5 feet.

The 2007 PA/SI involved the excavation of six test pits and four direct-push samples. Nine subsurface soil samples and two groundwater samples were collected and analyzed. Fill material approximately 1.5 feet thick and consisting of household trash and cinders was encountered in two of the direct-push borings.

Based on a risk analysis of the analytical results, iron, cobalt, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected and analyzed for dioxins, and two groundwater monitoring wells were installed, and groundwater samples were collected and analyzed for total and dissolved metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and thallium in groundwater cause excess risk at this AOI.



Possible Dump Site B - 1957
0 25 50 100
Feet

Current Use: Grass-covered area surrounded by trees. The cleared area is littered with numerous piles of soil and debris.**Current Status:** The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.14.23 FGGM-95 (OU-45) – POSSIBLE DUMP SITE E – 1957**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

Geophysical Survey.....2004

PA/SI.....2007

PA/SI.....2010–2015

SSI.....2016–2019

Contaminants of Potential Concern: Metals and dioxins**Media of Concern:** Groundwater, sediment, and soil**Site Location:** Grid F2, in the northern portion of the installation, west of the intersection of Rockenbach Road and Cooper Avenue.**Site Description:** Possible Dump Site E – 1957 was identified as an AOI because the EPA (1996) historical aerial photograph study of the installation listed “burning waste” at this location during an analysis of a 1957 aerial photograph. The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs.**Previous Studies:** A geophysical investigation of Site E – 1957 showed erratic, lower-intensity signals, but nothing consistent enough to signify extensive buried material (Versar 2004). During the geophysical investigation, rusted 55-gallon drums, tires, and construction debris were found in a stream that runs through this AOI. Several groundwater seeps were noted along the stream’s southern bank.

Over the course of previous investigations at this AOI, five subsurface soil samples, four groundwater samples, three sediment samples, and three surface water samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, cobalt, manganese, iron, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, soil samples were collected and analyzed for dioxins; a groundwater monitoring well was installed; and groundwater, sediment, and soil samples were collected and analyzed for metals.



Possible Dump Site E - 1957
0 50 100 200 Feet

Current Use: Forested**Current Status:** The final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15 FGGM-96 (OU-46) – FORMER MOTOR POOLS, WASH RACKS, AND BUILDINGS

2.5.15.1 FGGM-96 (OU-46) – DIRECTORATE OF PUBLIC WORKS ENTOMOLOGY DEPARTMENT, FORMER MOTOR POOL, BUILDING 294

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Historical Aerial Photograph Study 1996

SI 1999

Data Gap Investigation 2002

PA 2011

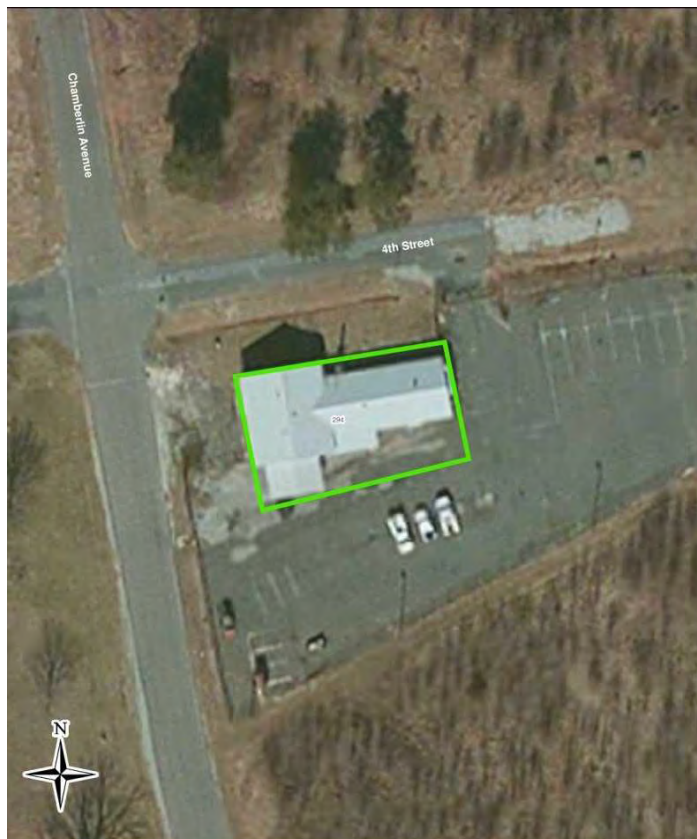
Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, on the eastern portion of the installation, in the southeast corner of the intersection of 4th Street and Chamberlin Avenue. Building 294 is in the northwest corner of MP-7/WR-6. MP-7/WR-6 is being addressed separately.

Site Description: Building 294 (SWMU 010) was identified as a potential past SWMU in the 1996 SWMU study (BCM 1996) because it was formerly used as an MP. Building 294 is used for administrative purposes and houses the DPW Entomology Department, where pesticides are stored and mixed. Pesticides, herbicides, fungicides, and rodenticides are stored inside; an outdoor concrete slab is used for mixing chemicals. The AOI is also identified as a “vehicle service and staging area” in historical aerial photographs dated 1943 through 1988, and as a “former vehicle service and staging area” in a 1995 historical aerial photograph (EPA 1996).

Previous Studies: During previous investigations at this AOI, 6 surface soil samples and 11 subsurface soil samples were collected and submitted for laboratory analysis.



Building 294 - Entomology Department
0 25 50 100 Feet

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 20 June 2011.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.2 FGGM-96 (OU-46) – ASSOCIATED WASH RACK AND OIL/WATER SEPARATOR, BUILDING 1251

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

Sampling Visits..... 1999, 2001

SI 2001

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid G1, in the northern portion of the installation, in the southeast quadrant of the intersection of 26th Street and Annapolis Road.

Site Description: Building 1251 was identified as SWMU 19 because a portion of the building is used for vehicle maintenance (BCM 1996). The adjacent WR (SWMU 21) and OWS (SWMU 20) were identified as SWMUs because of systematic wash water discharge into the OWS from the WR (BCM 1996).

The maintenance shop in the building uses and stores small quantities of lube oil, waste oil, brake fluid, and antifreeze. Four former storage sheds, two near Building 1251 and two on the east side of Building 1252, were used to store hazardous materials and petroleum products; the sheds were removed in the late 1990s.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples and 16 subsurface soil samples (plus 1 duplicate subsurface soil sample) were collected and analyzed.

Current Use: Administrative functions and storage of military vehicles and equipment; a portion of the building is used for minor vehicle maintenance.

Current Status: EPA approved NFA for this AOI on 15 June 2011.


Building 1251 - Administrative and Vehicle and Equipment Storage, Wash Rack

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.3 FGGM-96 (OU-46) – VEHICLE MAINTENANCE, BUILDING 2121**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Sampling Visits 1999

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

Site Location: Grid H2, Former Building 2121 was located in the northeastern portion of the installation, at the southeast quadrant of the intersection of Annapolis Road and 21½ Street.

Site Description: Building 2121 (SWMUs 29 and 30) was constructed in 1941. It was identified as two SWMU facilities in the 1996 SWMU study (BCM 1996) because of its past operation as a vehicle and small engine maintenance repair facility (SWMU 30) and its more recent use for equipment maintenance and repair (SWMU 29). There were no spills or reported releases identified by BCM during the SWMU study (BCM 1996).

At the time of the 1998 sampling activities (Versar 1999c), vehicles and equipment were parked in the yard, and limited quantities of antifreeze, gasoline, diesel fuel, and motor oil were stored on the AOI. The building was demolished in early 1999, shortly after the 1998 sampling activities.

Previous Studies: Over the course of previous investigations at this AOI, 6 surface and 13 subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Parking lot

Building 2121 - Vehicle Maintenance
0 25 50 100 Feet

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.4 FGGM-96 (OU-46) – MAINTENANCE FACILITY, FORMER BUILDING 2122**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study1996

Historical Aerial Photograph Study.....1996

Sampling Visits.....1999

PA.....2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid H2, in the northeastern portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.**Site Description:** Building 2122 was identified as SWMU 31 during the 1996 SWMU study (BCM 1996) because of its past use as a vehicle maintenance facility. There were no spills or reported releases identified during the SWMU study (BCM 1996). Former Building 2122 was used as a vehicle maintenance facility from its construction in 1941 until 1975, for camouflage painting from 1975 to 1978, and for storing miscellaneous military supplies (tents and small motors) from 1978 until its demolition in early 1999.**Previous Studies:** Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis.**Current Use:** Administrative**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

Building 2122 - Vehicle Maintenance

0 25 50 100 Feet

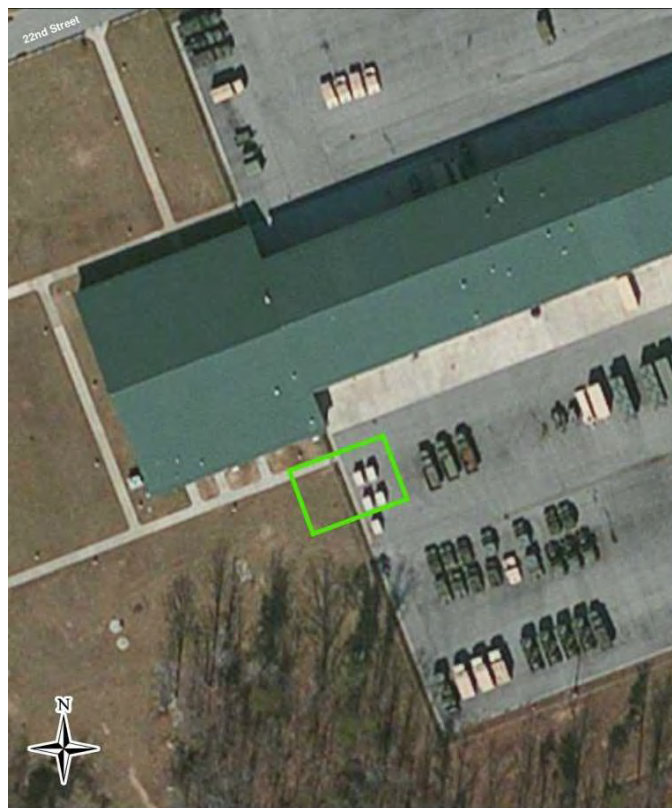
Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.5 FGGM-96 (OU-46) – MAINTENANCE FACILITY, FORMER BUILDING 2123**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study..... 1996

Sampling Visits..... 1999

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid H2, in the northeastern portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.**Site Description:** Former Building 2123 (SWMU 032) was constructed in 1941. It was used as a vehicle maintenance facility in the 1970s, and for equipment storage since that time until it was removed, sometime between 2001 and 2003.**Previous Studies:** Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis.**Current Use:** Parking lot and grassy area**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

Building 2123 - Tent/Jeep Storage

0 30 60 120 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.6 FGGM-96 (OU-46) – MAINTENANCE FACILITY, BUILDING 2124**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Sampling Visits 1999

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

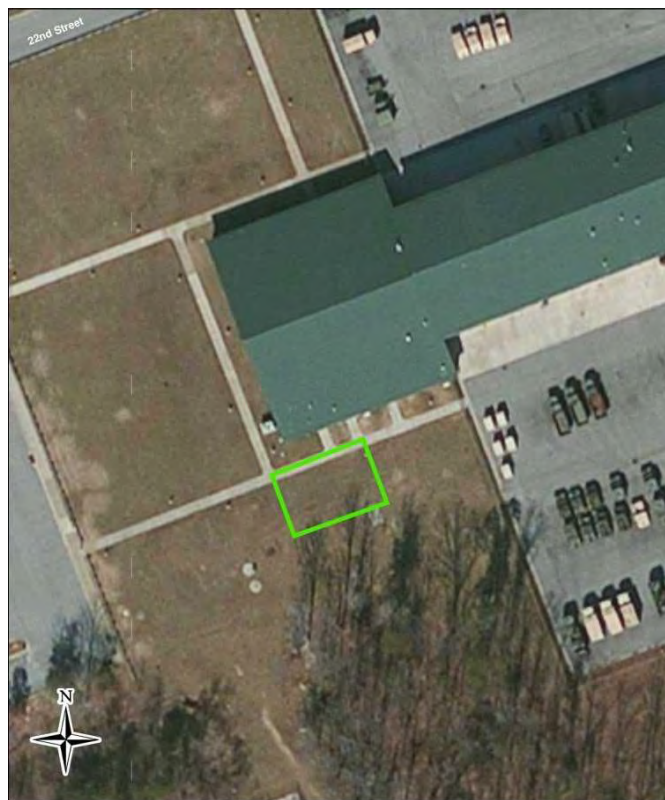
Site Location: Grid H2, in the northeastern portion of the installation, approximately 800 feet southeast of the intersection of 21½ Street and Annapolis Road.

Site Description: Building 2124 was constructed in 1941 and identified as two SWMUs during the 1996 SWMU study (BCM 1996) because it was used as a vehicle and tool storage area (SWMU33) and because routine waste from the building may have been contained and discarded on site during the building's former use as a vehicle maintenance facility (SWMU 34). There were no spills or reported releases identified during the SWMU study (BCM 1996). It is unknown when the building was removed.

Previous Studies: Over the course of previous investigations at this AOI, four subsurface soil samples (and one duplicate subsurface soil sample) were collected and submitted for laboratory analysis.

Current Use: Trees and grass

Current Status: EPA approved NFA for this AOI on 15 June 2011.



Building 2124 - Vehicle and Tool Storage, Vehicle Maintenance

0 30 60 120 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.7 FGGM-96 (OU-46) – MEDICAL SUPPLY/ADMINISTRATION, BUILDING 2484**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Sampling Visit 2000

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid H4, in the southeastern portion of the installation, approximately 250 feet northwest of the intersection of Ernie Pyle and 4th Streets.**Site Description:** Building 2484 (SWMU 073) served as a warehouse for receiving and storing hospital supplies. The building stored unopened containers of chemicals, including cleansers, acetone, methanol, ammonia, alcohol pads, and developers and fixers for the hospital's X-ray machine. In the past, products were stored in a flammable room in the building. These chemicals are reportedly no longer stored in this building.**Previous Studies:** Over the course of previous investigations at this site, four subsurface soil samples and one groundwater sample were collected and submitted for laboratory analysis.**Current Use:** Administrative**Current Status:** EPA approved NFA for this AOI on 20 June 2011.

Building 2484 -- Hospital Chemical Facility

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.8 FGGM-96 (OU-46) – DENTAL RESEARCH LABORATORY, FORMER BUILDING 2802**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study.....1996

Historical Aerial Photograph Study.....1996

Sampling Visit2001

PA2012

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

Site Location: Grid H3, in the eastern portion of the installation, approximately 1,200 feet north of the intersection of Mapes Road and Chisholm Avenue.

Site Description: Former Building 2802 (SWMU 093) was constructed in 1941 and used as a dental research laboratory for approximately 10 years starting in the early 1970s. The dental research laboratory used radioactive materials until it was decommissioned. Radioactive waste was removed by the Forest Glen health physics office, and the radioactive materials license was relinquished in 1994. The building was used in the mid-1990s for administrative purposes and storing laboratory equipment, and it was demolished by early 2000.

Previous Studies: Over the course of previous investigations at this site, four subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

Current Use: Grassy field

Current Status: EPA approved NFA for this AOI on 18 April 2012.



Building 2802 - Dental Research Lab
0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.9 FGGM-96 (OU-46) – CHEMICAL STORAGE AND ELECTRON MICROSCOPY LAB, FORMER BUILDING 2804

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Sampling Visit 2000

Data Gap Investigation 2002

PA 2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, north of the intersection of Ernie Pyle and 13th Streets.

Site Description: Building 2804 was identified as a potential former SWMU (094) because it was formerly used as an electron microscopy laboratory. The building was used as barracks before it became a laboratory (BCM 1996).

Chemicals were stored in flammable cabinets, storage shelves, and in a chemical waste cabinet. Chemicals on the shelves included potassium permanganate, buffer solutions, hydrochloric acid, and uranium acetate (uranyl acetate). The amount of uranium acetate stored and used at this AOI would have been minimal.

Previous Studies: Over the course of previous investigations at this AOI, 3 surface soil samples, 10 subsurface soil samples, and 3 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

Current Use: Grass field

Current Status: EPA approved NFA for this AOI on 18 April 2012.


Building 2804 - Chemical Storage, Electron Microscopy Lab

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.10 FGGM-96 (OU-46) – LAB/CHEMICAL STORAGE/OFFICERS' MESS HALL, FORMER BUILDING 2805

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Sampling Visit 2000

Data Gap Investigation 2002

PA 2012

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, southeast of the intersection of Ernie Pyle and 13th Streets.

Site Description: Building 2805 was identified as a potential past SWMU (095) in the 1996 SWMU study (BCM 1996) because it was formerly used as a high-performance liquid chromatography lab and microencapsulation lab since the 1970s, and exactly how waste was managed in the past is unknown. There were no spills or reported releases identified during the SWMU study (BCM 1996).

Building 2805 stored chemicals, including lithium bromide, magnesium sulfate, potassium phosphate, heptane, acetonitrile, dextran, polyvinyl alcohol, and buffer solution. Prior to being used as a laboratory, the building was used as barracks. Building 2805 was demolished in the late 1990s.

Previous Studies: Over the course of previous investigations at this site, 7 direct-push borings were advanced around Building 2805; three surface soil samples, 13 subsurface soil samples, and one groundwater sample were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.



Building 2805 - Laboratory/Chemical Storage
0 25 50 100 Feet

Current Use: Grassy field

Current Status: EPA approved NFA for this AOI on 18 April 2012.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.11 FGGM-96 (OU-46) – DENTAL CLINIC, FORMER BUILDING 2831**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996
 Historical Aerial Photograph Study 1996
 Environmental Impact Statement (EIS) 1997
 Sampling Visit 2000
 PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the eastern portion of the installation, approximately 1,500 feet north of the intersection of Mapes Road and Chisholm Avenue.

Site Description: Former Building 2831 (SWMUs 96 and 97) was constructed in 1941 for administrative purposes. It was also used for dentistry training and as a dental clinic, an x-ray processing lab, and chemical storage. There were two silver recovery units inside the building. Wastewater from the silver recovery units was flushed down the sanitary sewer, where it was treated at a wastewater treatment plant. The building was demolished in 1999.

Previous Studies: Over the course of previous investigations at this site, six direct-push borings were completed adjacent to Former Building 2831, and six subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Vacant, grass-covered lot

Current Status: EPA approved NFA for this AOI on 20 June 2011.



Building 2831 - Dentistry Training and Clinic, X-Ray Processing Lab, and Chemical Storage
 0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.12 FGGM-96 (OU-46) – ADMINISTRATIVE, BUILDING 4552**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

SWMU Study.....1996

PA.....2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid G4, in the southeastern portion of the installation, northwest of the intersection of Llewellyn and Cooper Avenues.**Site Description:** Building 4552 – administrative and 1940 barracks (Non-SWMU 10), was not identified as an SWMU in the 1996 SWMU study (BCM 1996) because no routine waste was stored or produced here. Current and past use of Building 4552 consisted of support facilities, primarily administrative, for intelligence agencies. It typically stored cleaners (floor wax, strippers, and detergents) and office supplies. There are no reports of pesticides being stored at this building.**Previous Studies:** Building 4552 was investigated as part of the SWMU study and included in the SWMU report (BCM 1996). BCM indicated there were no spills or reported releases in the building or the area surrounding this building during the SWMU study (BCM 1996).**Current Use:** Administrative**Current Status:** EPA approved NFA for this AOI on 20 June 2011.

Building 4552 - Non-SWMU 10

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

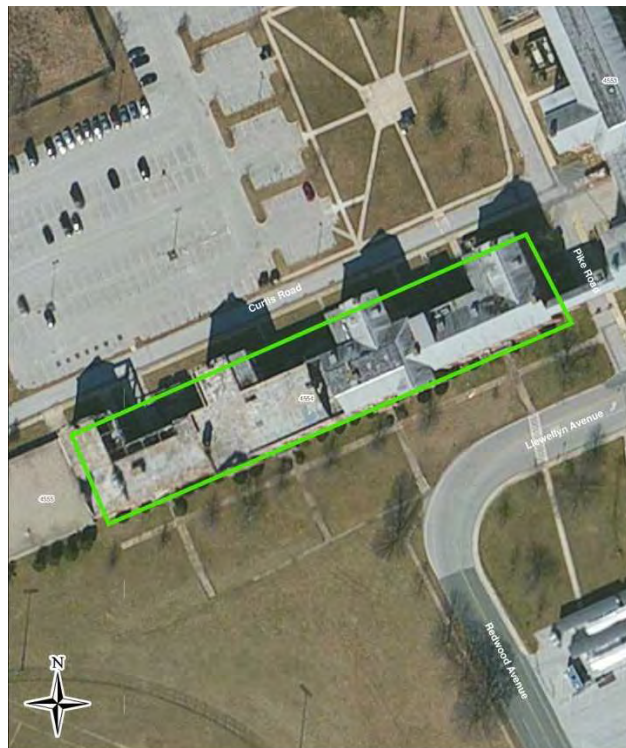
2.5.15.13 FGGM-96 (OU-46) – PHOTO LAB, BUILDING 4554**Regulatory Driver:** CERCLA**Environmental Investigations:**

EIS.....1977

SWMU Study.....1996

Sampling Visit.....2000

PA.....2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid G4, in the southern portion of the installation near the intersection of Llewellyn and Cooper Avenues.**Site Description:** Building 4554 (SWMU 100) was used as a support facility for the intelligence agencies; it consists of a photo lab, electronics fabrication, and administrative functions. Typical maintenance chemicals such as cleaners, floor waxes, strippers, and detergents were stored in the building. The photo lab contained a silver recovery system for the developer and fixer, and after recovery the developers and process chemicals were flushed into the sanitary sewer system, where it was treated by a wastewater treatment plant. These operations reportedly no longer occur at this facility.**Previous Studies:** Over the course of previous investigations at this AOI, eight direct-push borings were advanced around Building 4554, and eight subsurface soil samples were collected and submitted for laboratory analysis.**Current Use:** Administrative**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

Building 4554 - Support Facility for Intelligence Agencies

0 40 80 160 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.14 FGGM-96 (OU-46) – WASH RACK SYSTEM FOR MOST RECENT GOLF COURSE CLUB HOUSE, BUILDING 6800

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Historical Aerial Photograph Study 1996

Sampling Visits 1998–1999

Data Gap 2002

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F3, east of Taylor Avenue.

Site Description: The SWMU study (BCM 1996) identified an OWS (SWMU 139) and WR (SWMU 140) adjacent to and northeast of Building 6865, the former clubhouse, which was located east of Taylor Avenue. The SWMU Sampling Visit and Data Gap studies involved collecting samples east of Building 6800, the site of the most recent Golf Course Club House. The WR associated with the most recent Golf Course Club House (Building 6800) off Taylor Avenue is used for rinsing and washing golf carts and golf course maintenance equipment. Building 6800 was constructed in 1993. The former Golf Course Club House, Building 6865, was located directly south of Building 6800, and is addressed as a separate site (Section 2.5.15.15).

Previous Studies: Over the course of previous investigations at this AOI, three surface soil samples and six subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Vacant building

Current Status: EPA approved NFA for this AOI on 7 January 2011.



Building 6800 - WR System for Most Recent Golf Course Club House

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.15 FGGM-96 (OU-46) – WASH RACK SYSTEM FOR FORMER GOLF COURSE CLUB HOUSE, BUILDING 6865

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

Historical Aerial Photograph Study..... 1996

PA/SI..... 2011

Contaminants of Potential Concern: VOCs, SVOCs, metals, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid F3, east of Taylor Avenue.

Site Description: The SWMU study (BCM 1996) identified an OWS (SWMU 139) and WR (SWMU 140) adjacent to and northeast of Building 6865, the former clubhouse. Building 6865 was located east of Taylor Avenue. The site of former Building 6865 is currently a parking lot. The SWMU Sampling Visit and Data Gap studies collected samples east of Building 6800, the site of the most recent Golf Course Club House. The WR associated with the former Golf Course Club House (Building 6865) was not investigated. The former Golf Course Club House, Building 6865, was located directly south of Building 6800, and is addressed as a separate site.

Previous Studies: As part of the 2011 SI, two surface soil samples, three subsurface soil samples, and one groundwater sample were collected and analyzed for VOCs, SVOCs, metals, herbicides, and pesticides.

Current Use: Parking lot

Current Status: Based on the results of the 2011 SI, EPA approved NFA for this AOI on 17 February 2012.



Building 6865 - WR System for Former Golf Course Club House

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.16 FGGM-96 (OU-46) – DENTAL CLINIC, BUILDING 8472**Regulatory Driver:** CERCLA**Environmental Investigations:**

Draft EIS..... 1977

SWMU Study..... 1996

Sampling Visit..... 2000

PA..... 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

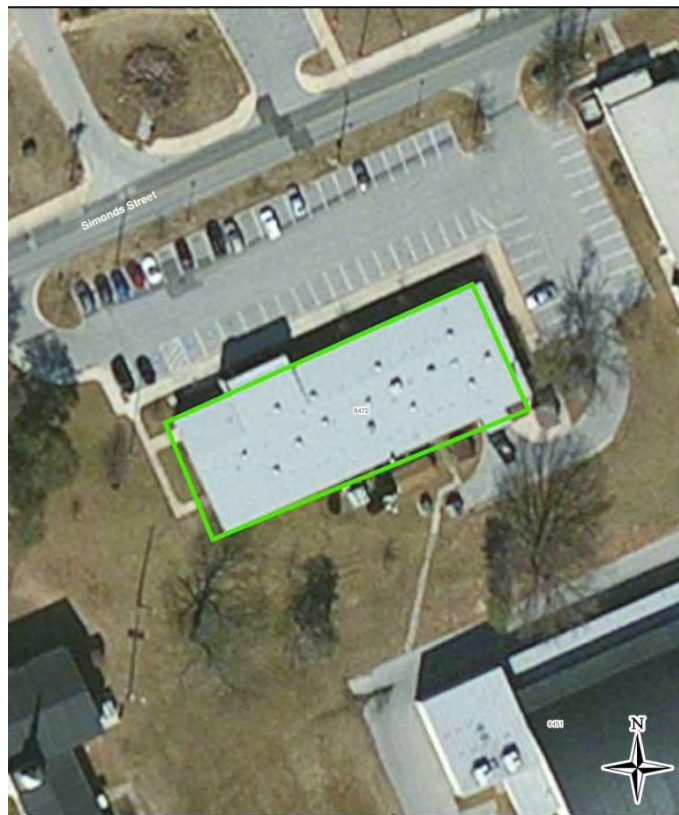
Site Location: Grid F4, in the southern portion of the installation on Simonds Road between Zimborski Avenue and 6th Armored Calvary Road.

Site Description: Building 8472 (SWMU 109) was constructed in the early 1960s and replaced a building constructed in the mid-1950s. Building 8472 was used as a dental clinic, and it contained a silver recovery system. After recovery, developers and process chemicals were flushed into the sanitary sewer system. Chemicals not in active use were stored in a locked room in several flammable materials cabinets and on storage shelves. These activities reportedly stopped.

Previous Studies: Over the course of previous investigations at this AOI, four subsurface soil samples were collected and submitted for laboratory analysis.

Current Use: Administrative

Current Status: EPA approved NFA for this AOI on 15 June 2011.



Building 8472 - Dental Clinic
0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.17 FGGM-96 (OU-46) – VEHICLE MAINTENANCE, BUILDING 8487**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

RFA 3rd Phase 1999

PA 2011

Contaminants of Potential Concern: TPH, VOCs, and SVOCs**Media of Concern:** Soil and groundwater**Site Location:** Grid F5, in the southwestern portion of the installation, southwest of the intersection of O'Brien Road and Simonds Street.**Site Description:** Building 8487 (SWMUs 119 and 120) was used as an MP for conducting maintenance checks on military vehicles, including oil changes. This AOI also contains five sheds west of Building 8487 that used to store paints, oils, antifreeze, and waste oil. Building 8487 stores acetylene and argon for welding.**Previous Studies:** Over the course of previous investigations at this site, two surface soil samples and eight subsurface soil samples were collected from eight different borings around Building 8487. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.**Current Use:** Administrative**Current Status:** EPA approved NFA for this AOI on 5 October 2011.

Building 8487 - Motor Pool

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.18 FGGM-96 (OU-46) – ADMINISTRATIVE, BARRACKS, AND CLINIC, BUILDINGS 2454, 2455, 2456, AND 2457

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study 1996

PA 2011

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H4, in the southeastern portion of the installation, in the northeast quadrant of the intersection of Wilson and 4½ Streets.

Site Description: Former Building 2454 was used for administration since its construction in the early 1940s and was demolished in 1999/2000.

Former Building 2455 was used as barracks beginning in the early 1940s and later served as the Dental Headquarters administration.

Former Building 2456 served as the Community Counseling Center for social drug rehabilitation.

Former Building 2457 served as the eye clinic and administrative offices of Optometry Services, and they stored/used alcohol preps, acetone, office supplies, and household cleaners.

Previous Studies: No soil or groundwater samples have been collected at this AOI. The 1996 SWMU study did not identify these AOI as SWMUs (non-SMWU 1–4), and it recommended NFA. The Fort Meade Environmental Partnership approved this AOI for NFA in 1999. There are no recent or historical indications of releases or contamination at these AOI (BCM 1996). There is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs (EPA 1996).

Current Use: Buildings 2454-2457.

Current Status: EPA approved NFA for this AOI on 20 June 2011.



Former Buildings 2454, 2455, 2456, and 2457
0 40 80 160 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.19 FGGM-96 (OU-46) – STOREHOUSE, BUILDING 2801**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study..... 1996

Historical Aerial Photograph Study..... 1996

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

Site Location: Grid H3, in the eastern portion of the installation, in the northwest corner of the intersection of Chisholm Avenue and 13th Street.

Site Description: Former Building 2801 (non-SWMU 5) was constructed in the early 1940s. Prior to 1985, the building was used as a warehouse to store lab equipment for the Corps of Engineers. More recently it was used as a research/administrative facility that utilized computers, video equipment, and robotics. Chemicals stored inside the building included small amounts of oils for the lathe and dry Polaroid films for photographic supplies. Chemicals were generally used entirely, and if any waste was produced, it was moved to Building 2832. Building 2801 was demolished in 1999 or 2000.

Building 2801 was not identified as an SWMU in the 1996 SWMU study (BCM 1996). The SWMU study recommended NFA for this AOI (BCM 1996). There are no recent or historical indications of releases or contamination at this AOI. There is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs (EPA 1996).

Previous Studies: No soil or groundwater samples have been collected at this AOI.

Current Use: Grass field

Current Status: EPA approved NFA for this AOI on 20 June 2011.



Building 2801 -- Former Research/Administration
0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.20 FGGM-96 (OU-46) – BARRACKS AND ADMINISTRATIVE, BUILDINGS 9802 AND 9803

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Historical Aerial Photograph Study 1996

PA 2011

Contaminants of Potential Concern: Not determined

Media of Concern: Not determined

Site Location: Grid E3, in the western portion of the installation, southeast of the intersection of Canine Road and Cochrane Lane.

Site Description: Buildings 9802 (non-SWMU 12) and 9803 (non-SWMU 13) have been used for troop housing since their construction in the mid-1950s. No chemicals are used or stored in these buildings except typical cleaners, and no routine waste is generated, discharged, or stored in these buildings. Buildings 9802 and 9803 were not identified as SWMUs in the 1996 SWMU study because there was no storage of waste material or systematic waste discharges. However, they were investigated as part of the SWMU study and included in the SWMU (1996) report.

Previous Studies: Over the course of previous investigations at this site, personnel knowledgeable about the buildings were interviewed and historical aerial photographs were reviewed. In both cases, no evidence of a release of hazardous substances resulting in contamination to soil, groundwater, or surface water was found. There is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs (EPA 1996).

Current Use: Barracks and administrative



Buildings 9802 and 9803 -- Troop Housing
0 50 100 200 Feet

Current Status: EPA approved NFA for this AOI on 15 June 2011.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.21 FGGM-96 (OU-46) – PRIVATELY OWNED VEHICLE WASH RACK**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

RFA 3rd Phase 1999

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid F5, SWMUs 141 and 142 are located in the southern portion of the installation, southeast of Dutt Road.**Site Description:** The WR system located southeast of Dutt Road is not associated with any building. The system was identified as two SWMUs during a 1996 SWMU study because it routinely discharged wash water from the WR (SWMU 142) to the OWS (SWMU 141) (BCM 1996). The WR was in use during the 1999 RFA for washing privately owned vehicles. Its construction date is unknown, but buildings occupied the AOI from the early 1940s through the 1960s. This AOI was not identified in the EPA (1996) review of historical aerial photographs of the installation; no stains, stressed vegetation, standing liquid, or other environmental concerns were identified at this location.**Previous Studies:** Over the course of previous investigations at this AOI, six subsurface soil samples were collected and analyzed.**Current Use:** Grass and trees**Current Status:** EPA approved NFA for this AOI on 15 June 2011.

SWMUs 141 and 142 - Privately Owned Vehicles Wash Rack

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.22 FGGM-96 (OU-46) – FORMER OIL/WATER SEPARATOR AND WASH RACK**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

RFA 3rd Phase 1999

SI 2001

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid H4, in the southeastern portion of the installation, northwest of the intersection of 4th and Y Streets.

Site Description: SWMUs 143 and 144 were identified as two SWMUs because the WR (SWMU 144) discharged to the OWS (SWMU 143), and then to the sanitary sewer system when washing military vehicles and equipment. The area was converted to a family campground at the end of 2001. The construction date is unknown for the WR system. It consisted of a concrete-lined WR and associated OWS and was demolished and removed in 1999.

Previous Studies: No spills or reported releases were identified during the SWMU study (BCM 1996).

Over the course of previous investigations at this AOI, six surface soil samples (plus one duplicate sample), five subsurface soil samples, and two groundwater samples (plus one duplicate sample) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

Current Use: Roadways and grassy areas**Current Status:** EPA approved NFA for this AOI on 20 June 2011.

SWMUs 143 and 144 - Wash Rack and Oil/Water Separator

0 50 100 200 300 400 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.23 FGGM-96 (OU-46) – OIL TANKS**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA 2011

Contaminants of Potential Concern: None identified**Media of Concern:** None identified**Site Location:** Grid E3/E4, in the western portion of the installation, west of Dennis Road, south of Emory Road, and south of Building 9807.**Site Description:** Two oil tanks and a heating plant are located at this AOI. The oil tanks probably held heating oil for the adjacent heating plant and did not hold any hazardous material. It is unknown why these oil tanks are considered an AOI. This location was not identified as an AOI during the 1996 SWMU study (BCM 1996) or the EPA (1996) historical aerial photograph study of the installation. The EPA (1996) study did not identify stained soils, stressed vegetation, standing liquid, or other environmental concerns in this area in any of the historical aerial photographs.**Previous Studies:** No previous sampling has been undertaken.**Current Use:** Oil tanks**Current Status:** EPA approved NFA for this AOI on 15 June 2011.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.24 FGGM-96 (OU-46) – FORMER MOTOR POOL 1/WASH RACK 4**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

PA/SI..... 2010–2015

SSI..... 2016-2018

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid G4, in the south-central portion of the installation, west of Cooper Avenue, east of Griffin Avenue, south of Bundy Street, and north of Williams Road.**Site Description:** MP-1/WR-4 was identified as an AOI because they were identified on the circa 1952 land use map (Anon. 1952). The EPA (1996) study identified a vehicle service and storage area at this location on the 1963 and 1970 aerial photographs. The write-up for the 1975 aerial photograph specifically states “No Longer a Vehicle Service and Storage Area, Now a Parking Lot” for this location.**Previous Studies:** Potential environmental concerns were not cited for this location in the EPA report. There are no recent or historical indications of releases or contamination at this AOI. Also, there is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs. This site may have been used as a parking lot for an MP and for washing cars (WR) for a limited time. It is unknown if vehicles were serviced at any of the former buildings at this AOI. Three of the four buildings have been removed, and most likely the soil has been graded. No stains or stressed vegetation was observed on any of the historical aerial photographs of this location.

There has been no previous environmental sampling at MP-1/WR-4. As part of the PA/SI, 14 surface soil samples were collected and analyzed for VOCs, SVOCs, and metals. The concentrations of PAHs (Benzo(a)pyrene, Benzo(a)fluoranthene, Benzo(a)anthracene) in surface soil cause excess risk at this AOI.



MP-1 and WR-4
0 75 150 300 Feet

Current Use: Parking lot with grassy areas.**Current Status:** The Final SSI recommended NFA for this AOI. An NFA Consensus Letter was received from the EAP on 12 June 2018 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.25 FGGM-96 (OU-46) – FORMER MOTOR POOL 2**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

Soil and Groundwater Quality

Investigation.....2009

PA/SI2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals**Media of Concern:** Soil and groundwater**Site Location:** Grid G4, in the south-central portion of the installation, west of Griffin Avenue and north of Simonds Street.**Site Description:** MP-2 was identified as an AOI because it was identified on the circa 1952 land use map (Anon. 1952). This AOI was also identified in the EPA (1996) review of historical aerial photographs, which shows a vehicle service and storage area at this location on the 1963, 1970, 1975, and 1988 aerial photographs.**Previous Studies:** Stains, standing liquid, or stressed vegetation was observed at this AOI in the 1963, 1970, 1975, and 1988 aerial photographs (EPA 1996). Presently, the AOI does not exhibit signs of staining, runoff, or stressed vegetation.

Over the course of previous investigations at this AOI, five surface soil samples, five subsurface soil samples (plus one duplicate sample), and four groundwater samples were collected and submitted for laboratory analysis.

The soil and groundwater quality investigation (United States Army Center for Health Promotion and Preventive Medicine [USACHPPM] 2009) concluded that the results of the soil and groundwater analytical data suggest there has not been a contaminant release at the Former MP-2 area. However, the four areas of historical surficial staining have not been fully evaluated.

As part of the PA/SI, four subsurface soil samples were collected, and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-GRO, TPH-DRO, and metals. Soil does not pose a risk at this AOI. The concentrations of benzo(a)pyrene and chromium in groundwater cause excess risk at this AOI.

Current Use: Grassy field/vacant lot

MP-2
0 40 80 160
Feet

Current Status: The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.26 FGGM-96 (OU-46) – FORMER MOTOR POOL 3/WASH RACK 2**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid F4, east of Zimborski Avenue, north of Simonds Street, in the southern portion of the installation.

Site Description: MP-3/WR-2 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The EPA (1996) report shows a vehicle service and storage area at this location on the 1963, 1970, 1975, and 1988 aerial photographs. The write-up for the 1995 aerial photograph specifically states “Former Vehicle Service and Storage Area” for this location. The EPA study did not report any environmental conditions for this location. There are no recent or historical indications of releases or contamination at this AOI. Also, there is no evidence of scarring, staining, or disturbance in any of the historical aerial photographs. This site may have been used as a parking lot (MP) and for washing cars (WR) for a limited time. The potential for contamination in this area is minimal. It is unknown if vehicles were serviced at any of the former buildings in this AOI. All buildings have been removed, and the soil has been excavated and graded.

Previous Studies: As part of the PA/SI, surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.



MP-3 and WR-2
0 30 60 120 Feet

Current Use: Parking lot with grassy areas.**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.27 FGGM-96 (OU-46) – FORMER MOTOR POOL 4**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid F5, in the southern portion of the installation, south of Dutt Road, west of Zimborski Avenue.**Site Description:** MP-4 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The EPA (1996) study shows a vehicle service and storage area at this location on the 1943 and 1947 aerial photographs. Potential environmental concerns (e.g., stained soil or stressed vegetation) were not cited for this location in the EPA (1996) report.**Previous Studies:** There were no previous samples collected at this AOI. As part of the PA/SI, five surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.**Current Use:** Grassy and wooded area.**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.28 FGGM-96 (OU-46) – FORMER MOTOR POOL 6**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

PA/SI..... 2010–2015

SSI..... 2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid H5, in the southeastern portion of the installation, at the State Route 175/32 interchange.

Site Description: MP-6 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). According to the 1952 map, there are no buildings within the outline of this MP. This AOI was not identified in the EPA (1996) historical aerial photograph study of the installation. Since there were no former buildings at this AOI, it is unlikely that vehicles were serviced at this AOI. All surrounding buildings were removed by 1993, and the soil has been excavated and graded. No stains or stressed vegetation was observed on any of the historical aerial photographs of this location. The buildings were gone at the time of the 1996 SWMU study (BCM 1996), so the SWMU study did not cover this portion of the installation.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals. The Final PA/SI Report recommended an SSI be conducted for soils for chromium speciation for this AOL.

Current Use: Grassy area and part of State Route 175/32 interchange

Current Status: The SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.



MP-6
0 40 80 160
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.29 FGGM-96 (OU-46) – FORMER MOTOR POOL 8**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the southeastern portion of the installation, east of Ernie Pyle Street, west of Chisholm Road, south of 4th Street, and north of Huber Road.**Site Description:** MP-8 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The EPA (1996) study shows a vehicle service and storage area at this location on aerial photographs from 1943, 1952, and 1957. This area is not shown in the 1947 aerial photograph. The 1952 land use map (Anon., 1952) identifies MP-8 in the southwestern portion of the AOI outlined in the EPA study (1996).**Previous Studies:** There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, manganese, cobalt, and thallium in groundwater cause excess risk at this AOI. The Final PA/SI Report recommended NFA for soils and an SSI be conducted for groundwater for total and dissolved metals, including hexavalent and trivalent chromium speciation.**Current Use:** Grass field

MP-8
0 40 80 160 Feet

Current Status: The SSI recommended NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.30 FGGM-96 (OU-46) – FORMER MOTOR POOL 14**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

PA/SI..... 2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H2, in the northeastern portion of the installation, east of State Route 175 and south of 20th Street.

Site Description: MP-14 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The AOI is also identified in the EPA (1996) historical aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1952, 1957, 1963, 1970, and 1975 aerial photographs. Five sumps are shown in the southern and eastern portions of this area on the 1957 aerial photograph (EPA 1996). The sumps, or the area around them, were not discolored or stained. A stain is visible in the southwestern portion of this area in the 1963 aerial photograph, but not in subsequent aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH- GRO, and metals.

Current Use: Parking lot and grass field**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.

MP-14
0 45 90 180 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.31 FGGM-96 (OU-46) – FORMER MOTOR POOL 17**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI.....2010–2015

SSI.....2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid G2, in the northeastern portion of the installation, north of Clark Road, east of MacArthur Road, and west of 21st Street.**Site Description:** MP-17 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). This AOI was also identified in the EPA (1996) historical aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, and 1970 aerial photographs.**Previous Studies:** No stains or stressed vegetation was observed at this AOI during the EPA (1996) review of historical aerial photographs of this AOI. There were no previous samples collected at this AOI.

As part of the PA/SI, six subsurface soil samples were collected and analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals.

The concentrations of chromium and iron in subsurface soil samples cause excess risk at this AOI. The Final PA/SI Report recommended NFA for groundwater and an SSI be conducted for soils for chromium speciation.

Current Use: Ball field and grassy area**Current Status:** The SSI recommended NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.32 FGGM-96 (OU-46) – FORMER MOTOR POOL 19/WASH RACK 13**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid G2, in the northern portion of the installation, north of Clark Road, east of 27th Street, and west of Oliver Street.**Site Description:** MP-19/WR-13 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The AOI was also identified in the EPA (1996) review, which shows a vehicle service and storage area at this location on the 1943, 1952, 1957, 1963, 1970, and 1975 aerial photographs.**Previous Studies:** The EPA (1996) study identified a stain in the southwestern portion of the AOI, stressed vegetation directly to the north, and a runoff pattern off the northwest corner of the vehicle service and storage area on the 1957 aerial photograph. Over the course of previous investigations at this AOI, six surface soil samples (plus one duplicate sample), six subsurface soil samples, and three groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium elevates the risk numbers above the site-specific action levels.

As part of the PA/SI, eight subsurface soil samples were collected, and eight groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH- DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, thallium, and iron in groundwater cause excess risk at this AOI.

**Current Use:** Buildings, parking areas, and a grass field**Current Status:** The EPA approved this AOI for NFA on 15 August 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.33 FGGM-96 (OU-46) – FORMER WASH RACK 3**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil**Site Location:** Grid F4, in the southern portion of the installation, north of Simonds Street and east of York Avenue.**Site Description:** This WR was probably used for washing cars. Chemicals potentially used at this WR may have included soap and car wax. Neither this WR nor nearby Building 6507 were identified as SWMUs during the SWMU study (BCM 1996), so there are no reports of hazardous chemicals being used or stored at the building or the WR. Access to WR-3 appears to be from York Avenue or along a path leading from Building 6507.**Previous Studies:** The WR first appears on the 1943 aerial and is last seen on the 1977 aerial. By 1984, it is no longer visible. The EPA (1996) review of historical aerial photographs did not identify potential concerns at this area. No stained soils or stressed vegetation was identified on any aerial photographs.

As part of the PA/SI, four surface soil samples were collected and analyzed for VOCs, SVOCs, and metals.

Current Use: Undeveloped**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.

Wash Rack 3

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.34 FGGM-96 (OU-46) – PHOTOGRAPHY LAB, BUILDING 546**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU 1996

Sampling Visit 1999

Delineation Reports 2000

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: SVOCs and metals**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the eastern portion of the installation, on 8th Street between Chamberlin and Chisholm Avenues.**Site Description:** Building 546 (SWMU 011) was identified as an SWMU because of routine discharge of water from a silver recovery unit (BCM 1996). The discharge point was the Fort Meade sanitary sewer system. There were no spills or reported releases identified during the SWMU study (BCM 1996). Prior to 1985, the building was used as a visual information training center, and since 1985 it has been used as a full-service photographic laboratory, offices, and graphic arts department.**Previous Studies:** Over the course of previous investigations at this AOI, 12 subsurface soil samples (plus 1 duplicate subsurface soil sample) and 12 groundwater samples (plus 1 duplicate groundwater sample) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, copper, mercury, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, three groundwater monitoring wells were installed and sampled for SVOCs and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, thallium, mercury, copper, cobalt, and cadmium in groundwater cause excess risk at this AOI. The Final PA/SI Report recommended NFA for soil and an SSI be conducted for groundwater for bis(2-ethylhexyl)phthalate, polyfluorinated chemicals, and total and dissolved metals, including hexavalent and trivalent chromium speciation for this AOI.



Building 546 - Photography Laboratory
0 25 50 100 Feet

Current Use: Vacant (demolished building)**Current Status:** The SSI recommended NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.35 FGGM-96 (OU-46) – MOTOR POOL, WASH RACK, AND OIL/WATER SEPARATOR, BUILDING 940

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Sampling Visits 1999

SI 2001

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: Metals

Media of Concern: Soils and groundwater

Site Location: Grid G3/H3, in the eastern portion of the installation, in the northwest corner of the intersection of 18th and Ernie Pyle Streets.

Site Description: Former Building 940 (SWMU 146) was identified as a potential past SWMU in the 1996 SWMU study (BCM 1996) because it was formerly used as an MP and it is not known exactly how waste from the MP was managed. The associated former WR (SWMU 13) and OWS (SWMU 12) were identified as potential SWMUs because of systematic discharge of wash water to the OWS from the WR (BCM 1996). No spills or reported releases were identified during the SWMU study (BCM 1996). Building 940 was vacant for a while and demolished in 1999. The OWS and WR were also removed in 1999.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples (plus 1 duplicate surface soil sample), 14 subsurface soil samples (plus 1 duplicate subsurface soil sample), and 6 groundwater samples (plus 2 duplicate groundwater samples) were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, cobalt, iron, aluminum, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, two groundwater monitoring wells were installed and sampled for metals. Arsenic, beta-BHC, chromium, and thallium were listed as contaminants of potential concern. The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for TPH-DRO, TPH-GRO, and chromium speciation.



Building 940 - Motor Pool, Wash Rack and Oil/Water Separator

 0 35 70 140
Feet

Current Use: Parking lot

Current Status: The SSI recommends NFA for this AOI pending regulatory approval. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.36 FGGM-96 (OU-46) – DISPATCH, STORAGE, AND PARKING AREA FOR EMERGENCY MEDICAL UNITS AND WASH RACK NEAR BUILDING 2630

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Sampling Visits 1999

SI 2001

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H4, in the eastern portion of the installation, west of the intersection of Ernie Pyle and 10th Streets, and north of Building 2630.

Site Description: The SWMU 78 WR was used for washing military vehicles and was constructed of a bermed concrete platform with a catch basin that drained to the OWS (SWMU 77).

Formerly two WRs, identified as SWMU 79, were in a former building north of Building 2630. They were removed sometime prior to 1999.

Previous Studies: Over the course of previous investigations at this site, 17 direct-push borings were completed; four surface soil, 17 subsurface soil, and two groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, MCPP and arsenic elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, two surface soil samples were collected and analyzed for herbicides, and two groundwater monitoring wells were installed and sampled for VOCs, SVOCs, TPH-DRO, TPH-GRO, metals, herbicides, and pesticides. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and thallium in groundwater cause excess risk at this AOI. The Final PA/SI Report recommends NFA for soils and an SSI be conducted for groundwater for total dissolved metals, including hexavalent and trivalent chromium speciation.

Current Use: Administrative and vacant lot


Building 2630 - Dispatch, Storage, and
Parking Area for Emergency Medical Units Wash Rack

0 25 50 100
Feet

Current Status: The SSI recommends NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.37 FGGM-96 (OU-46) – WASH RACKS, RECREATIONAL EQUIPMENT STORAGE, OIL/WATER SEPARATOR, AND RECREATIONAL VEHICLE STORAGE, AND MAINTENANCE SHOP, BUILDING 2728

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

 RFA 3rd Phase..... 1999

SI..... 2001

PA/SI..... 2010–2015

SSI..... 2016–2018

Contaminants of Potential Concern: VOCs, metals, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, 700 feet north of the intersection of Mapes Road and Ernie Pyle Street. The WRs associated with the building are located approximately 800 feet west of Ernie Pyle Street and 500 feet north of Mapes Road.

Site Description: Building 2728 (SWMU 148) was built in the 1950s and was formerly used as a military vehicle and equipment maintenance facility. It stored relatively small quantities of hazardous chemicals (motor and lubricating oil, antifreeze, used oil, degreasers, and batteries).

Four WRs (SWMUs 89 and 92) and two OWS (SWMUs 87 and 88) were removed and paved over with concrete in 1999 and 2000.

Previous Studies: Over the course of previous investigations at this site, 20 direct-push borings were completed; 4 surface soil, 20 subsurface soil, and 10 groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, 2-methyl-4-chlorophenoxyacetic acid (MCPA), MCPP, chloroform, and bromodichloromethane elevate the risk numbers above the site-specific action levels.

As part of the 2013 PA/SI, two surface soil samples were collected and analyzed for herbicides and two groundwater monitoring wells were installed and sampled for VOCs and metals. Soil does not pose a risk at this AOI. The concentrations of chloroform, chromium, manganese, and thallium in groundwater cause excess risk at this AOI.



Building 2728 - Out of Service Wash Racks,
Recreational Equipment and Storage

0 50 100 200
Feet

Current Use: Storage of outdoor recreational equipment/vehicles

Current Status: The SSI recommends NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.38 FGGM-96 (OU-46) – SCREEN REPAIR AND INDUSTRIAL SHOP, BUILDING 3000**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Sampling Visit 2000

Data Gap Investigation 2002

PA/SI 2010–2015

Contaminants of Potential Concern: VOCs**Media of Concern:** Soils and groundwater

Site Location: Grid G2, in the northeastern portion of the installation, approximately 300 feet east of the intersection of 21st and Ernie Pyle Streets.

Site Description: Building 3000 (SWMU 098) was identified as an SWMU because waste is systematically discarded and contained at the facility (BCM 1996). Freon recovery and disposal also occurs. In addition, materials stored in the parking lot may have been spilled, though no spills or reported releases were identified during the SWMU study (BCM 1996). The building is surrounded by pavement. At the time of the sampling visits, this AOI was handling chemicals properly, used secondary containment, and everything was on paved surfaces. No spills or leaks were reported, and no signs of spills or leaks were noted during site visits.

Previous Studies: Over the course of previous studies at this AOI, 9 surface soil samples (plus 1 duplicate surface soil sample) and 11 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

As part of the PA/SI, one groundwater monitoring well was installed and sampled for VOCs.



Building 3000 - Maintenance Shop
0 25 50 100 Feet

Current Use: Community

Current Status: The EPA approved this AOI for NFA on 18 April 2016.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.39 FGGM-96 (OU-46) – 1941 COLD STORAGE, BUILDING 4272**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

SWMU Study 1996

PA/SI 2010–2015

Contaminants of Potential Concern: None identified**Media of Concern:** None identified

Site Location: Grid G5, in the southern portion of the installation, northeast of the intersection of Rock Avenue and Leonard Wood Avenue.

Site Description: Building 4272 (non-SWMU 9) was used as a cold storage facility for the commissary from the early 1940s until 1994 and was a vacant warehouse at the time of the 1996 SWMU study. The building contained a Freon unit that was stored in a machine room. Freon 22 was used from 1981 to 1996; Freon 12 was used prior to 1981. All Freon had been drained from the refrigeration units. The 1996 SWMU study reported that any leaks of Freon or oils would have been contained within the building.

Building 4272 was not identified as an SWMU in the 1996 SWMU study. The SWMU study recommended NFA for this AOI.

Previous Studies: There have been no soil samples collected at this AOI over the course of previous studies.

As part of the PA/SI, one groundwater monitoring well was installed and sampled for Freon.

Current Use: Electrical substation

Current Status: The EPA approved this AOI for NFA on 18 April 2016.



Building 4272 - Vacant Warehouse
0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.40 FGGM-96 (OU-46) – WASH RACK AND OIL/WATER SEPARATOR SOUTHEAST OF FORMER BUILDING 8480

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

RFA 3rd Phase..... 1999

SI..... 2001

Data Gap Investigation..... 2002

PA/SI..... 2010–2015

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, in the southwestern portion of the installation, north of Dutt Road.

Site Description: This AOI included a former WR (SWMU 111) that discharged wash water to an OWS (SWMU 110), which in turn discharged to a sanitary sewer line south of the WR. The discharge water was treated at a wastewater treatment plant. This former WR and OWS was located southeast of former Building 8480.

Previous Studies: Over the course of previous investigations at this AOI, 14 surface soil samples and 20 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, MCPP elevates the risk numbers above the site-specific action levels.

The PA/SI included collecting one subsurface soil sample and analyzing it for herbicides.

Current Use: Parking lot and grass areas

Current Status: The EPA approved this AOI for NFA on 18 April 2016.



Building 8480 - Military Vehicle and Equipment Storage

0 25 50 100 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.41 FGGM-96 (OU-46) – FORMER MOTOR POOL AND WASH RACK, BUILDINGS 8549, 8550, AND 8551

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

Historical Aerial Photograph Study 1996

 RFA 3rd Phase 1999

SI 2001

Project Summary Report 2003

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, cyanide, and PCBs

Media of Concern: Soil and groundwater

Site Location: Grid F4, in the southwestern portion of the installation, near the intersection of O'Brien Road and Simonds Street

Site Description: Building 8549 was constructed in the mid-1950s, served as an MP (SWMU 122) until the mid-1990s, and as a biomedical maintenance area (SWMU 121) from 1994 to the late 1990s. Since then, it has been used as a practice hall and instrument storage for military musicians.

 Building 8550 was constructed in the mid-1950s and used as an MP (SWMU 126) until December of 1993, when the 85th General Hospital Maintenance (SWMU 125) moved in.

Building 8551 was used as a vehicle maintenance shop (SWMU 149). The WR (SWMU 128) and OWS (SWMU 127) were identified as SWMUs because of systematic discharge of wash water to the OWS (BCM 1996).

Previous Studies: Over the course of previous investigations at this AOI, three surface soil samples, 36 subsurface samples (plus one duplicate sample), and 29 groundwater samples (plus one duplicate sample) were collected and analyzed. Based on a risk analysis of the analytical results, benzo(a)pyrene, cadmium, lead, arsenic, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, three surface soil samples were collected and analyzed for VOCs, SVOCs, and metals, TPH-DRO, and TPH-GRO.



One subsurface soil sample was collected and analyzed for SVOCs. Six groundwater monitoring wells were installed, and groundwater samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, TPH-GRO, cyanide, and PCBs. Soil does not pose a risk at this AOI. The concentrations of arsenic, chloroform, chromium, cobalt, TPH-DRO, and TPH-GRO in groundwater cause excess risk at this AOI.

Current Use: Practice hall and instrument storage

Current Status: The SSI recommended NFA for this AOI. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.42 FGGM-96 (OU-46) – WASTEWATER TREATMENT PLANT, BUILDING 9581**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

RFA 3rd Phase 1999

PA/SI 2010–2015

SSI 2016–2018

Contaminants of Potential Concern: VOCs, metals, and pH**Media of Concern:** Soil and groundwater

Site Location: Grids E4 and E5, in the southwestern portion of the installation, approximately 600 feet southwest of the intersection of State Routes 32 and 198. SWMU 138 (Building 9581 – Wastewater Treatment Facility) and FGGM-19 (the Advanced Wastewater Treatment Facility) are collocated, and all investigation of this geographic area is being conducted under SWMU 138. AEDB-R FGGM-19 has been administratively closed, and all future work associated with FGGM-19 will be handled under SWMU 138.

Site Description: Building 9581 is a sewage treatment facility that was constructed in the late 1970s or early 1980s. Building 9581 contains a 4,000-gallon hydrochloric acid AST, a lime silo, and multiple open-top, below-ground wastewater treatment tanks. Building 9581 had two USTs that are now abandoned; a 4,000-gallon steel UST that contained heating abandoned in November 2000, and a 10,000-gallon steel UST that contained diesel fuel abandoned in 1990.

Previous Studies: Over the course of previous investigations at this AOI, one surface soil sample, 22 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, two groundwater monitoring wells were installed and sampled for VOCs, metals, and pH. Soil does not pose a risk at this AOI. The concentrations of arsenic, cobalt, chromium, manganese, and iron in groundwater cause excess risk at this AOI.



Building 9581 - Wastewater Treatment Plant
0 60 120 240
Feet

Current Use: Sewage treatment facility

Current Status: The SSI recommended NFA for this site under CERCLA and that this AOI be investigated by the operator of the wastewater treatment plant under the direction of the MDE Waste Management Administration Compliance Division. An NFA Consensus Letter was received from the EPA on 12 June 2018 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.43 FGGM-96 (OU-46) – POSSIBLE VEHICLE SERVICE AREA A – 1943**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the eastern portion of the installation, east of Ernie Pyle Street, west of Chisholm Avenue, south of 9th Street, and north of 8th Street.**Site Description:** A possible vehicle service and staging area was identified at this location in the 1943, 1947, and 1952 aerial photographs (EPA 1996). Staining was also noted in the 1943 aerial photograph. The circa 1952 land use map identifies 19 MPs on the installation, but it did not identify an MP at the location of Possible Vehicle Service Area A – 1943. According to the 1952 land use map, Buildings 2511 and 2517 were in the northern portion of this AOI, and Buildings 2504 and 2509 were in the southern portion of this AOI. There is ample evidence to suggest that this AOI was not used to service vehicles.**Previous Studies:** There were no previous samples collected at this AOI. The PA/SI included soil and groundwater sampling in the areas of past staining. Three subsurface soil samples were collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of chromium in groundwater cause excess risk at this AOI.

Possible Vehicle Service Area A -- 1943

0 35 70 140 Feet

Current Use: Grass field and parking lot**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.44 FGGM-96 (OU-46) – POSSIBLE VEHICLE SERVICE AREA B – 1943**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI.....2010–2015

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H3, in the eastern portion of the installation, north of Mapes Road and west of Ernie Pyle Street.

Site Description: A possible vehicle service and staging area was identified at this location in a 1943 aerial photograph (EPA 1996). The EPA (1996) study did not identify stained soils or stressed vegetation in this area in any of the historical aerial photographs. According to the 1952 land use map, Building 2722 was located on the eastern edge of this AOI, and Building 2720 was located in the southern portion of the AOI. By 1988, most of this AOI is covered with trees. There is little evidence to suggest that vehicles were serviced at this AOI; and was likely used as a parking lot.

Previous Studies: No previous sampling has been undertaken. The EPA (1996) study did not identify stained soils or stressed vegetation at this location.

The PA/SI included collecting three surface soil samples, installing one groundwater MW, and collecting a groundwater sample. The soil and groundwater samples were analyzed for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO.

Current Use: Trees and grass

Current Status: The Final PA/SI Report has been approved. The EPA approved NFA for this AOI on 18 April 2016.



Possible Vehicle Service Area B -- 1943
0 100 200 400 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.45 FGGM-96 (OU-46) – FORMER INCINERATOR SITE – REECE ROAD**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study..... 1996

Historical Records Review 2006

Subsurface Soil Investigation 2006

PA/SI 2010–2015

Contaminants of Potential Concern: Metals, dioxins, and furans**Media of Concern:** Soil**Site Location:** Grid G3, in the central part of the installation, north of Reece Road and west of the intersection of Reece Road and MacArthur Road.**Site Description:** This AOI was labeled “incinerator” on the 1922–1923 War Games Map (Anon. 1952) and is shown at the west end of Incinerator Road, west of the intersection of Portland Road and Jessup Road. On the 1922–1923 map, MacArthur Road is identified as Jessup Road; the part of Reece Road east of Jessup Road is identified as Portland Road, and the part west of Jessup Road is identified as Incinerator Road.In a 1942 map of FGGM (685th Engineer Company 1942), this site is identified as the “C.W. Gas Cham” and is shown at the same location. There is no legend identifying what “C.W.” stands for.

Map 4-6 of the Historical Records Review report (Malcolm Pirnie 2006) incorrectly locates the site northeast of Site M Parcel 9 at the end of Reece Road, west of Cooper Avenue. The EPA (1996) study of the installation did not identify this incinerator, nor stained soils or stressed vegetation, in this area in any of the historical aerial photographs.

Previous Studies: Over the course of previous investigations at this AOI, three surface soil and 12 subsurface soil samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, the risk numbers are below site-specific action levels.

The PA/SI included collecting 6 surface soil samples that were analyzed for dioxins, furans, and metals.



Former Incinerator Site

0 25 50 100 Feet

Current Use: Developed with housing, Larkin Road, and grass cover**Current Status:** The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.46 FGGM-96 (OU-46) – MOTOR REPAIR AND GARAGE, BUILDING 4587**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Historical Aerial Photograph Study 1996

RFA 3rd Phase 1999

SI 2001

PA/SI 2010–2015

Contaminants of Potential Concern: VOCs, metals, herbicides, and PCBs**Media of Concern:** Groundwater**Site Location:** Grid G4, in the southern portion of the installation approximately 150 feet southeast of the intersection of Leonard Wood Avenue and Simonds Street.

Site Description: Building 4587 (SWMU 101 and 102) was used as a personal vehicle repair shop and was formerly used as an MP. An oil crusher and parts washer are in Building 4587 for vehicle and equipment maintenance activities. The crushed filters were placed in 55-gallon drums, and used oil was stored in a double-walled 800-gallon AST located outside of the east wall of the building. When the 55-gallon drums became full, they were sent DRMO for disposal. The used oil and cleaner from the parts washer were also managed through the DRMO. An OWS was in the southern end of Building 4587. The OWS accepted runoff from the floor drains within the building. Five former USTs were located at Building 4587. All five USTs were 550-gallon tanks that stored No. 2 fuel oil for heating the building.

Previous Studies: Over the course of previous investigations at this AOI, 6 surface soil samples, 7 subsurface soil samples, and 11 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, MCPA, MCPP, iron, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, three groundwater monitoring wells were installed and sampled for VOCs, total and dissolved metals, herbicides, and PCBs. Soil does not pose a risk at this AOI. The concentrations of benzene in groundwater cause excess risk at this AOI.



Building 4587 - Equipment Storage and
AFFES Personnel Vehicle Repair Shop and Wash Rack

0 25 50 100
Feet

Current Use: Vehicle Maintenance / Leased to Firestone**Current Status:** The Final PA/SI Report has been approved. The EPA approved this AOI for NFA on 18 April 2016.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.47 FGGM-96 (OU-46) – FORMER MOTOR POOL 5, POSSIBLE VEHICLE STORAGE AREA – 1957

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

SSI2016–2019

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid G5, in the southern portion of the installation, approximately 50 feet northeast of the intersection of Taylor Avenue and Hodges Street.

Site Description: MP-5 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). This AOI was also identified in the EPA (1996) historical aerial photograph study of the installation as “Possible Vehicle Storage Area – 1957,” which shows a vehicle service and storage area at this location on the 1957, 1963, and 1975 aerial photographs. The outline of the AOI changed during those periods.

The 1963 aerial photograph summary identifies ground staining with a drainage pattern that flows east into an adjacent wooded area. The 1988 aerial photograph write-up states that there is a persistent drainage pattern leading from a small building to the adjacent woods, but no stains or stressed vegetation are noted. The 1995 aerial photograph summary specifically states “Former Vehicle Service and Storage Area” for this location.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two surface soil samples and two subsurface soil samples were collected plus two groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. The concentrations of chromium and iron in soil and arsenic, iron, naphthalene, and manganese in groundwater cause excess risk at this AOI.



Current Use: Grassy field and trees

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.48 FGGM-96 (OU-46) – FORMER MOTOR POOL 9**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2007

PA/SI 2010–2015

SSI 2016–2019

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the eastern portion of the installation, east of Chamberlain Avenue, west of State Route 175, halfway between 6th and 4th Streets, and near present Building 375.**Site Description:** The EPA (1996) historical aerial photograph study of the installation listed a vehicle service and storage area in this area on the 1943, 1947, 1952, 1957, 1963, 1970, and 1975 aerial photographs. This vehicle service and storage area was expanded after 1943; it covers more area in the 1947 aerial photograph and is larger yet on the 1952 aerial photograph, extending down to 4th Street. Stains appear in 1952, 1957, 1963, and 1970 aerial photographs (EPA 1996).**Previous Studies:** Over the course of previous investigations at this AOI, four subsurface soil samples and two groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, iron, vanadium, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, three surface soil samples and three subsurface soil samples were collected, and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, naphthalene, and thallium in groundwater cause excess risk at this AOI.

Current Use: Administrative and a grass field**Current Status:** The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.49 FGGM-96 (OU-46) – MEDICAL LAB, BUILDING 2490**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study..... 1996

Sampling Visit..... 1999

PA/SI..... 2010–2015

SSI..... 2016–2019

Contaminants of Potential Concern: Metals TPH-DRO, and TPH-GRO**Media of Concern:** Soils and groundwater**Site Location:** Grid H4, in the southeastern portion of the installation, approximately 500 feet south of the intersection of Wilson Street and Llewellyn Avenue.

Site Description: Building 2490 (SWMU 074) has been used as a medical laboratory since its construction in the late 1950s. Chemicals used in the lab include methanol, acid dichromate, 2-propanol, hexanes, and 2,2,4-trimethyl pentane. Chemicals used in the lab are kept in the refrigerated room or in flammable cabinets, as appropriate. The basement was used as a radioactive section of a clinical laboratory from 1960 to 1994. Chemicals used in the radioactive section included buffer solutions, alcohol, and WD-40. The radioactive materials were stored in a refrigerated room.

Previous Studies: Over the course of previous investigations at this site, 9 surface soil samples, 21 subsurface soil samples, and 9 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, mercury, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, one subsurface soil sample was collected and analyzed for SVOCs, metals TPH-DRO, TPH-GRO, dioxins, and furans; three groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals TPH-DRO, TPH-GRO. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, manganese, iron, copper, and mercury in groundwater cause excess risk at this AOI.



Building 2490 - Forensic Toxicology and Drug Testing Lab

0 25 50 100 Feet

Current Use: Administrative

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.50 FGGM-96 (OU-46) – OUTDOOR RECREATION EQUIPMENT RENTALS AND WASH RACK, BUILDING 2724

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study 1996

 RFA 3rd Phase 1999

Sampling Visits 1999 and 2001

SI 2001

PA/SI 2010–2015

SSI 2016–2019

Contaminants of Potential Concern: VOCs, metals, TPH-DRO, TPH-GRO, herbicides, and pesticides

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, 700 feet north of the intersection of Mapes Road and Ernie Pyle Street.

Site Description: Building 2724 (SWMUs 080, 081, 082, 083, 084, 085, and 086) was constructed in the 1950s and used by the Directorate of Personnel & Community Activities for outdoor recreation equipment rental.

Four WRs and two associated OWSs were located approximately 100 feet to the west-southwest of Building 2724. The WRs consisted of concrete basins that discharged into the two OWSs. The OWSs discharged into the hazardous waste storage shed in the parking lot. The WRs and OWSs were removed and paved over with concrete in 1999/2000.

Previously, larger quantities of hazardous chemicals and petroleum products were used and stored within and outside the building, including motor and lubricating oil, antifreeze, used oil, degreasers, and batteries.

Previous Studies: Over the course of previous investigations at this site, 4 surface soil, 18 subsurface soil, and 19 groundwater samples were collected and submitted for analysis. Based on a risk analysis of the analytical results, MCPA, iron, aluminum, mercury, cobalt, manganese, arsenic, copper, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, four subsurface soil samples were collected and analyzed for VOCs and four groundwater monitoring wells were installed and sampled for VOCs, herbicides, pesticides, TPH-DRO, and metals.



Building 2724 - Directorate of Personnel and Community Activities Outdoor Recreation Equipment Rentals, Wash Rack

0 40 80 160 Feet

Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, TCE, PCE, manganese, MCPA, and cobalt in groundwater cause excess risk at this AOI.

Current Use: Outdoor recreation equipment storage

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.51 FGGM-96 (OU-46) – LAB AND BARRACKS, FORMER BUILDINGS 2810, 2811, AND 2832

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study 1996

SWMU Study 1996

PA/SI 2010–2015

SSI 2016–2019

Contaminants of Potential Concern: Metals

Media of Concern: Soil and groundwater

Site Location: Grid H3, in the eastern portion of the installation, northeast of the intersection of Ernie Pyle and 14th Streets.

Site Description: Former Building 2810 – Lab and 1941 Dayroom (Non-SWMU 6) was constructed in the early 1940s and has only been used for administrative purposes. A library moved here in the 1990s.

Former Building 2811 – Lab and 1941 Barracks (Non-SWMU 7) was constructed in the early 1940s. It was used as a barracks in the 1970s. The Army Dental Research Detachment moved into the building in the 1980s; the first floor was used as a dental research laboratory, and the second floor was administrative. All chemicals were used entirely, and the building did not generate waste.

Former Building 2832 – Administrative and 1941 Unknown (Non-SWMU 8) has been used solely for administration since its construction in the early 1940s and did not generate waste. The Army Dental Research Detachment moved into this building in the 1980s and used it for administrative purposes.

All the buildings were demolished in 1999 or 2000.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for metals. Soil does not pose a risk at this AOI. The concentrations of cobalt and manganese in groundwater cause excess risk at this AOI.

Current Use: Grassy field

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.



Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.52 FGGM-96 (OU-46) – SERVICE STATION AND PAST VEHICLE REPAIR SHOP, BUILDING 4680

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study..... 1996

Historical Aerial Photograph Study..... 1996

 RFA 3rd Phase..... 1999

SI..... 2001

PA/SI..... 2010–2015

SSI..... 2016–2019

Contaminants of Potential Concern: VOCs, SVOCs, metals, and PCBs

Media of Concern: Soil and groundwater

Site Location: Grid G4, in the southern portion of the installation, approximately 150 feet northeast of the intersection of Leonard Wood Avenue and Simonds Street.

Site Description: Building 4680 (SWMU 103) was used as an auto-detailing shop and gas station, with paved parking, gas pump islands, and an AST enclosure. The AST enclosure was a membrane-lined concrete structure that provided fuel to dispenser islands throughout the AOI. At the time of the SWMU study, the AOI contained a 500-gallon used oil tank, an OWS, and a non-operable oil filter crusher. There were 12 active gasoline pumps associated with the gasoline service station. Since 1985, the USTs were removed and replaced with ASTs. Personnel at Building 4680 at the time of the SWMU study thought that several USTs that were removed had been leaking fuel oil.

Previous Studies: Over the course of previous investigations at this AOI, 4 surface soil samples, 23 subsurface soil samples, and 25 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, chromium, naphthalene, arsenic, acrolein, benzene, and 1,2,4-trimethylbenzene elevate the risk numbers above the site-specific action levels.

During the PA/SI, five groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals, and PCBs. Soil does not pose a risk at this AOI.



Building 4680 - Gas Station and Detailing Shop

0 25 50 100 Feet

The concentrations of benzene, naphthalene, ethylbenzene, arsenic, 1,2,4-trimethylbenzene, xylenes, toluene, and some metals in groundwater cause excess risk at this AOI.

Current Use: Automotive detailing shop

Current Status: The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 15 February 2019 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.53 FGGM-96 (OU-46) – FORMER MOTOR POOL 10**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study1996

PA/SI2010–2015

SSI2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, and metals**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the southeastern portion of the installation, north of 5th Street, south of Llewellyn Avenue, east of Wilson Street, and west of Ernie Pyle Street.**Site Description:** MP-10 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). This AOI was also identified in the EPA (1996) review of historical aerial photographs, which shows a vehicle service and storage area at this location on the 1938 aerial photograph. Part of this AOI is currently covered by KACC (previously referred to as Kimbrough Army Hospital and identified as FGGM-37) and the boiler plant for the hospital (identified as SWMU 72). The 1952 land use map (Anon. 1952) locates MP-10 in a small portion of the middle of this AOI. The 1943 historical aerial photograph (EPA 1996) outlines a larger area.

The SSI report combined this AOI with Building 2480 and Building 2482 due to the proximity of the two AOIs.

Previous Studies: Staining is observed in the 1943, 1947, and 1957 aerial photographs. By 1963, this former vehicle service and storage area had been converted into the Kimbrough Army Community Hospital. As part of the investigations of Buildings 2480 and 2482, soil and groundwater samples were collected from within the outline of MP-10. Previous samples are discussed under Buildings 2480 (Section 2.5.9) and 2482 (Section 2.5.15.61).

As part of the PA/SI, two surface soil samples were collected, and two groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, and metals. Soil does not pose a risk at this AOI. The concentrations of cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.

**Current Use:** KACC medical clinic, parking lots, and grass areas**Current Status:** The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.54 FGGM-96 (OU-46) – FORMER MOTOR POOL 11/WASH RACK 7**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

SSI2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H3, in the eastern portion of the installation, east of Ernie Pyle Street, west of State Route 175, north of Mapes Road, and south of 13th Street.

Site Description: MP-11/WR-7 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). This AOI is also identified in the EPA (1996) study, which shows a vehicle service and storage area at this location in the 1947 and 1952 aerial photographs. Ground staining is visible at three locations, and standing liquid is noted at one location on the 1947 aerial photograph (EPA 1996). The standing liquid was not discolored or stained. No staining is visible in the 1952 aerial photograph. A smaller area at this location is shown as a vehicle service and storage area in the 1963, 1970, and 1975 aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, four surface soil samples were collected, and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, benzo(a)pyrene, and cobalt in groundwater cause excess risk at this AOI.

Current Use: Open field

Current Status: The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.



MP-11 and WR-7
0 40 80 160
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.55 FGGM-96 (OU-46) – FORMER MOTOR POOL 12/WASH RACK 8**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H3, in the eastern portion of the installation, east of Chisholm Avenue, south of Reece Road, and west of State Route 175.

Site Description: MP-12/WR-8 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The AOI is also identified in the EPA (1996) study, which shows a vehicle service and storage area at this location on the 1957, 1963, 1970, and 1975 aerial photographs. Staining is visible in the southeastern portion of this AOI in the 1957 and 1963 aerial photographs, and standing liquid is noted in the same area on the 1963 aerial photograph (EPA 1996). The standing liquid was not discolored or stained. The write-up for the 1988 aerial photograph specifically states, “Vehicle Service and Storage Area No Longer Present.”

The SSI report combined this AOI with Former MP 13/Wash Rack 9 due to the proximity of the two AOIs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, two subsurface soil samples were collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of chromium, benzo(a)pyrene, cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.

Current Use: Administrative and a grass area

Current Status: The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.



MP-12 and WR-8
0 40 80 160
Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.56 FGGM-96 (OU-46) – FORMER MOTOR POOL 13/WASH RACK 9**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study.....1996

PA/SI2010–2015

SSI2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid H2, in the northeastern portion of the installation, north of Reece Road, east of Chisholm Avenue, and west of State Route 175.**Site Description:** MP-13/WR-9 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). This AOI is also identified in the EPA 1996 historical aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, 1970, and 1988 aerial photographs. Staining is visible in the northwestern portion of this AOI in the 1963 and 1970 aerial photographs (EPA 1996).

The SSI report combined this AOI with Former MP 13/Wash Rack 9 due to the proximity of the two AOIs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, one subsurface soil sample was collected, and one groundwater monitoring well was installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of PAHs (dibenz(a,h)anthracene and benzo(a)pyrene) and cobalt in groundwater cause excess risk at this AOI.**Current Use:** Parking lot**Current Status:** The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.57 FGGM-96 (OU-46) – FORMER MOTOR POOL 18/WASH RACK 12**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soil and groundwater**Site Location:** Grid G2, in the northern portion of the installation, south of Ernie Pyle Street, at Fryar Loop.**Site Description:** MP-18/WR-12 was identified as an AOI because it was listed as an MP on the circa 1952 land use map (Anon. 1952). The AOI is also identified in the EPA (1996) historical aerial photograph study of the installation, which shows a vehicle service and storage area at this location on the 1943, 1947, 1957, 1963, and 1970 aerial photographs.

Stressed vegetation is noted in the 1952 aerial photograph. Also, a runoff pattern was noted in the 1957 aerial photograph. The runoff pattern and stressed vegetation in the area were not present in subsequent historical aerial photographs.

Previous Studies: There were no previous samples collected at this AOI. As part of the PA/SI, four subsurface soil samples were collected, and four groundwater monitoring wells were installed and sampled. All samples were analyzed for VOCs, SVOCs, TPH-DRO, TPH-GRO, and metals. Soil does not pose a risk at this AOI. The concentrations of PAHs (benzo(a)pyrene and dibenz(a,h)anthracene), cobalt, and manganese in groundwater cause excess risk at this AOI.**Current Use:** Residential, recreation, and parking areas**Current Status:** The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.58 FGGM-96 (OU-46) – ARMY RESERVE MOTOR POOL, VEHICLE MAINTENANCE, MOTOR REPAIR SHOP, OIL/WATER SEPARATOR, AND WASH RACK, MOTOR POOL 15/WASH RACK 10, BUILDING 1007

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study.....1996

SWMU Study1996

Sampling Visits1999

Draft Delineation Reports2000

PA/SI2010–2015

SSI2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-GRO, and TPH-DRO

Media of Concern: Soil and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, northwest of the intersection of 20th Street and State Route 175/Annapolis Road.

Site Description: This AOI comprises former Building 1007 (SWMUs 14 and 15), an OWS (SWMU 16), a vehicle WR (SWMU 17), and a pump station (SWMU 18). Since its construction in 1941, Building 1007 has had a variety of uses, including equipment and vehicle storage, motor repair, and shipping of equipment. The shop used petroleum products, solvents, paints, and cleaning materials, and the U.S. Army Reserve stored military vehicles here.

The vehicle WR, OWS, and pump station were used to wash vehicles, collect the discharge water into the OWS, and then pump it into the sanitary sewer. The vehicle WR, OWS, and pump station were demolished and removed from service in 1999/2000. Building 1007 is also demolished.

Previous Studies: During previous sampling at this AOI, 1 surface soil sample (plus 1 duplicate surface soil sample), 17 subsurface soil samples (plus 1 duplicate subsurface soil sample), and 5 groundwater samples were collected and analyzed. Based on a risk analysis of the analytical results, arsenic, naphthalene, 1,2,4-trimethylbenzene, 1,1,2,2-tetrachloroethane, and chromium elevate the risk numbers above the site-specific action levels. Benzene and lead were detected above their MCLs.

As part of the PA/SI, two subsurface soil samples were collected and analyzed for VOCs and two groundwater


 Building 1007 - Army Reserves Motor Pool
 0 50 100 200 Feet

monitoring wells were installed and sampled for VOCs, SVOCs, total metals, TPH-DRO, and TPH-GRO. The concentrations of arsenic and chromium in soil and chromium, arsenic, cobalt, and thallium in groundwater cause excess risk at this AOI.

Current Use: Trees, asphalt, and construction area for Annapolis Road expansion.

Current Status: The Final PA/SI and SSI Reports have been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.59 FGGM-96 (OU-46) – VEHICLE STORAGE AND MAINTENANCE, WASH RACK, AND OIL/WATER SEPARATOR, BUILDING 2120C

Regulatory Driver: CERCLA

Environmental Investigations:

SWMU Study.....1996

Sampling Visits.....1999

SI.....2001

Project Summary Report.....2003

PA/SI.....2010-2015

SSI.....2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soils and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, in the southeast quadrant of the intersection of 21½ Street and Annapolis Road.

Site Description: Building 2120c Vehicle Storage and Maintenance was identified as Equipment Concentration Station 86 in the SWMU study (BCM 1996). Building 2120c was identified as SWMU 25 because it had been used to maintain and repair motor vehicles (BCM 1996). Hazardous chemicals and petroleum products used and stored in the building included motor and lubricating oil, sulfuric acid, antifreeze, used oil, degreasers, and batteries.

The OWS south of Building 2120c (SWMU 26), and the truck wash pit (SWMU 27) and associated OWS (SWMU 28) south of SWMU 26, were identified as SWMUs because of systematic discharge of wash water into the OWS from the building and truck wash pit (BCM 1996).

The SSI report combined this AOI with Building 2128 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this AOI, 2 surface soil samples (plus 1 duplicate surface soil sample), 22 subsurface soil samples (plus 2 duplicates), and 5 groundwater samples (plus 2 duplicates) were collected and submitted for chemical analysis. Based on a risk analysis of the analytical results, arsenic, cadmium, mercury, naphthalene, copper, beryllium, and chromium elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, three groundwater monitoring wells were installed and sampled VOCs, SVOCs, TPH-DRO, TPH-GRO, and total metals. Soil does not pose a risk at this AOI. The concentrations of arsenic, chromium, cobalt,



manganese, and 1,2,4-trimethylbenzene in groundwater cause excess risk at this AOI.

Current Use: Administrative and vehicle storage

Current Status: The Final PA/SI Report has been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.60 FGGM-96 (OU-46) – VEHICLE MAINTENANCE, MOTOR POOL 16/WASH RACK 11, FORMER BUILDING 2128

Regulatory Driver: CERCLA

Environmental Investigations:

Historical Aerial Photograph Study..... 1996

SWMU Study 1996

Sampling Visits 1999

Initial Delineation 2000

Data Gap Investigation 2003

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO

Media of Concern: Soil and groundwater

Site Location: Grid H2, in the northeastern portion of the installation, approximately 600 feet east of the intersection of Annapolis Road and 21½ Street.

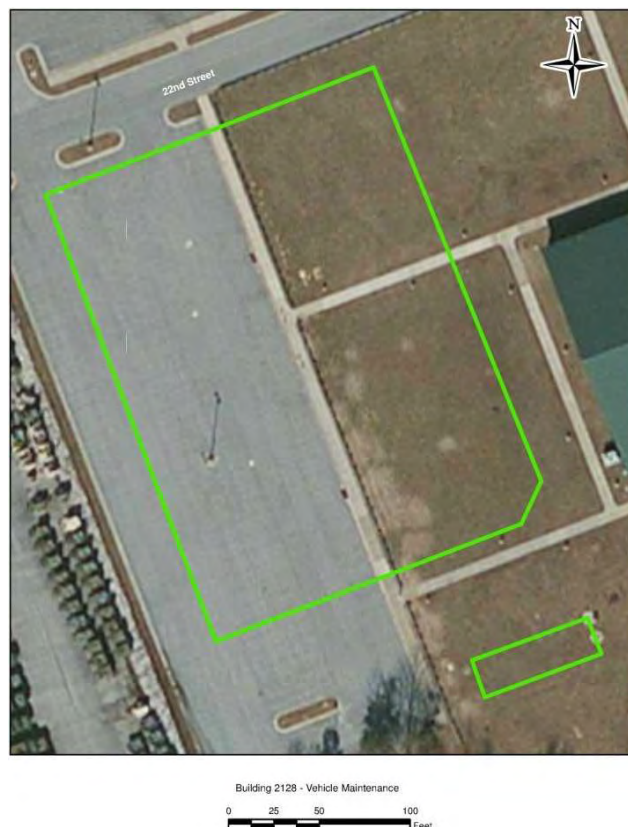
Site Description: Building 2128 (SWMUs 35 and 36) was a former heavy equipment and generator maintenance shop constructed in 1941. It was used for maintenance of vehicles, generators, and forklifts. A parts cleaner, serviced by Safety Kleen, was used in the building. Wastes generated by routine oil changes and vehicle maintenance were taken to Building 2120c, located approximately 300 feet to the west, pending proper disposal.

A circa 1952 land use map (Anon 1952) shows former MP-16 located at this AOI and former WR-11 immediately south of this AOI.

The SSI report combined this AOI with Building 2120 due to the proximity of the two AOIs.

Previous Studies: During previous investigations at Building 2128, 4 surface soil samples (plus 1 duplicate), 22 subsurface soil samples (plus 2 duplicates), and 6 groundwater samples (plus 2 duplicates) were collected. Based on a risk analysis of the analytical results, arsenic, lead, mercury, copper, benzo(a)pyrene, and chromium elevate the risk numbers above the site-specific action levels.

As part of the 2013 PA/SI, six surface soil samples were collected and analyzed for VOCs and SVOCs; six subsurface soil samples were collected and analyzed for VOCs, SVOCs, and metals; six groundwater monitoring wells were installed and sampled for VOCs, SVOCs, metals, TPH-DRO, and TPH-GRO. Soil does not pose a risk at this AOI.



The concentrations of PAHs (dibenz(a,h)anthracene, benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene), chromium, cobalt, manganese, and thallium in groundwater cause excess risk at this AOI.

Current Use: Parking lot

Current Status: The Final PA/SI and SSI Reports have been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.5.15.61 FGGM-96 (OU-46) – BOILER PLANT, BUILDING 2482**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study 1996

Sampling Visit 2000

SI 2001

Data Gap Investigation 2002

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: SVOCs, metals, PCBs, and dioxin**Media of Concern:** Soil and groundwater**Site Location:** Grid H4, in the southeastern portion of the installation, south of KACC (previously referred to as Kimbrough Army Community Hospital) on 5th Street, approximately 500 feet west of the intersection with Ernie Pyle Street.**Site Description:** Building 2482 (SWMU 072) was formerly used as a boiler plant to provide steam to Kimbrough Army Community Hospital. The plant contained three oil-fired boilers. A 400-gallon AST in the parking lot on the north side of the building stored used oil collected throughout the installation for recycling. Chemicals for boiler water treatment, including neutralizing solutions, phenolphthalein, hardness solution, iodine, sodium sulfate, phosphates, and caustic soda, were stored in the boiler room. Two 20,000-gallon fuel oil steel USTs were removed from the south side of the building in January 2001. An 8,000-gallon fiberglass-reinforced plastic fuel oil UST was abandoned in place on the northeastern corner of the building.

The SSI report combined this AOI with Building 2480 and MP 10 due to the proximity of the two AOIs.

Previous Studies: Over the course of previous investigations at this site, 10 surface soil samples, 14 subsurface soil samples, and 13 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, benzo(a)pyrene, benzo(a)anthracene, iron, naphthalene, cobalt, aluminum, and manganese elevate the risk numbers above the site-specific action levels.

As part of the PA/SI, four surface soil samples were collected and analyzed for PCBs and dioxins; one subsurface soil sample was collected and analyzed for SVOCs; and one groundwater monitoring well was installed and sampled for metals and SVOCs.



Building 2482 - Used Oil Recycling Tank at Hospital Boiler Plant

0 30 60 120 Feet

The concentrations of benzo(a)pyrene and thallium in soil and chromium, arsenic, benzo(a)pyrene, naphthalene, and dibenzo(a,h)anthracene, cobalt, arsenic, naphthalene, iron, manganese, chromium, 2-methylnaphthalene, thallium, and vanadium in groundwater cause excess risk at this AOI.

Current Use: Administrative**Current Status:** The Final PA/SI and SSI Reports have been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.62 FGGM-96 (OU-46) – FORMER HOSPITAL, BUILDING 4411**Regulatory Driver:** CERCLA**Environmental Investigations:**

SWMU Study.....1996

Sampling Visit.....1999

Data Gap Investigation.....2002

PA/SI.....2010–2015

SSI.....2016–2020

Contaminants of Potential Concern: SVOCs, metals, TPH-DRO, and TPH-GRO**Media of Concern:** Soils and groundwater**Site Location:** Grid G4, in the southeastern portion of the installation, approximately 100 feet southwest of the intersection of McKay Street and Llewellyn Avenue.**Site Description:** Building 4411 (SWMU 099) was formerly used as a hospital from 1926 to 1974. A 1,000-gallon heating oil UST is located beneath the porch on the southern side of the building. Exactly how waste from the hospital was managed is unknown.**Previous Studies:** Over the course of previous investigations at this AOI, 16 direct-push borings were advanced around Building 4411; 5 surface soil, 13 subsurface soil, and 10 groundwater samples were collected and submitted for laboratory analysis. Based on a risk analysis of the analytical results, arsenic, mercury, and chromium elevate the risk numbers above the site-specific action levels.

During the PA/SI, four groundwater monitoring wells were installed and sampled for SVOCs, TPH-DRO, TPH-GRO, and total metals. Soil does not pose a risk at this AOI. The concentrations of chromium, arsenic, cobalt, and thallium in groundwater cause excess risk at this AOI.

Current Use: Administrative**Current Status:** The Final PA/SI and SSI Reports have been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.5.15.63 FGGM-96 (OU-46) – FORMER INCINERATOR BUILDING – 1943; 21½ STREET**Regulatory Driver:** CERCLA**Environmental Investigations:**

Historical Aerial Photograph Study 1996

EBS 1998

CSA 1999

PA/SI 2010–2015

SSI 2016–2020

Contaminants of Potential Concern: metals and dioxins**Media of Concern:** Soil and groundwater**Site Location:** Grids H1 and H2, in the northeastern portion of the installation, 1,000 feet east of the intersection of 21½ Street and State Route 175 (Annapolis Road).**Site Description:** Former Incinerator Building – 1943 was identified as an AOI in a 1998 EBS. The incinerator was present from 1947 to 1975 (Versar 1999b). The EPA (1996) study of the installation did not identify this incinerator, stained soils, or stressed vegetation in this area in any of the historical aerial photographs, although the outline of a building is visible in the 1943 through 1977 historical aerial photographs (EPA 1996).**Previous Studies:** Over the course of previous investigations at this site, nine subsurface soil samples were collected. A review of historical aerial photographs suggests that the former incinerator may have been west of the location sampled in the CSA.

The PA/SI included collecting five surface and six subsurface soil samples that were analyzed for metals and dioxins. In addition, three groundwater monitoring wells were installed, and groundwater samples were collected and analyzed for metals. Soil does not pose a risk at this AOI. The concentrations of chromium, cobalt, and manganese in groundwater cause excess risk at this AOI.

Current Use: None/vacant**Current Status:** The Final PA/SI and SSI Reports have been approved. The Final SSI recommended NFA for this site. An NFA Consensus Letter was received from the EPA on 18 March 2021 approving NFA for this AOI.

Former Incinerator -- 1943

0 30 60 120 Feet

Cleanup/Exit Strategy: Not applicable; this AOI has been approved for NFA.

2.6 AREAS OF INTEREST DESIGNATED FOR NO FURTHER ACTION

2.6.1 FGGM-004-R-01 (OU-41) – GRENADE AND BAYONET RANGE A

Regulatory Driver: CERCLA

Environmental Investigations:

PA..... 2002–2003

Historical Records Review..... 2006

SI..... 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid F5, in the southwestern portion of the installation, bounded to the west by Grant Road, to the north by Building 8478, to the east by Building 8452, and to the south by Dutt Road.

Site Description: This AOI comprises the former Grenade and Bayonet Range A, which is believed to have been used from 1924 until the late 1930s. It is assumed that hand grenades were used on site and could have included fragmentation and practice hand grenades. Most of the 16-acre range has been developed and is currently occupied with various buildings and associated parking lots. The buildings currently located on the MRS were constructed by 1954. They include Buildings 8474, 8452, 8451, 8465, and 8479. Parking lots and driveways surround these buildings.

Previous Studies: Over the course of previous investigations at this site, five soil samples were collected as part of the SI and submitted for laboratory analysis. None of the five soil samples had metal detections above the regulatory limits, and no explosives were detected. There is no physical evidence of MEC or MD on the MRS.

Current Use: Administrative and recreational

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.



FGGM-004-R-01 - Grenade & Bayonet Range A

0 100 200 400 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.6.2 FGGM-008-R-01 (OU-44) – GRENADE AND BAYONET RANGE B

Regulatory Driver: CERCLA

Environmental Investigations:

PA 2002–2003

Historical Records Review 2006

SI 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, in the northeastern portion of the installation.

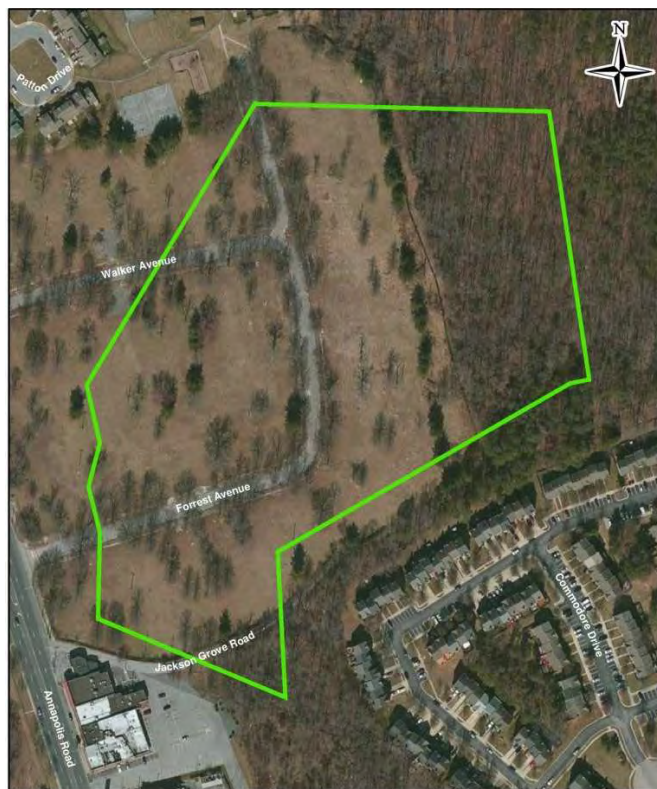
Site Description: This AOI consists of the former Grenade and Bayonet Range B, which is believed to have been used in 1943. It is assumed that hand grenades were used on site and could have included fragmentation and practice hand grenades.

No MEC or MD was observed over this 19-acre parcel during a magnetometer-assisted site walk, and no further MMRP action was recommended in the SI (Malcolm Pirnie 2007).

Previous Studies: Over the course of previous investigations at this site, five soil samples were collected as part of the SI and submitted for metals and explosives laboratory analysis.

Except for arsenic, no metals were detected above the regulatory limits, and no explosives were detected. There is no physical evidence of MEC or MD on the MRS.

Current Use: Vacant land

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.


FGGM-008-R-01 - Grenade & Bayonet Range B

0 100 200 400 Feet

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.6.3 FGGM-005-R-01 (OU-42) – PISTOL RANGE A

Regulatory Driver: CERCLA

Environmental Investigations:

PA..... 2002–2003

Historical Records Review..... 2006

SI..... 2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid H3, on the east side of FGGM. The 4-acre site is located south of Reece Road and directly west of Route 175. Chisholm Avenue runs north/south through the former range.

Site Description: This AOI used to have several structures on site, including buildings 2821–2826 and 899. The range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Based on the operation dates of other ranges found on the War Game Map, it is assumed that the pistol range was used from 1924 until the early 1940s. It is also assumed that only small arms were used on site, but there is no specific information regarding this.

Information on the frequency of use and types of munitions used was unavailable, but .45-cal ammunition is assumed to have been used because it was the most common pistol ammunition in the 1920s. There is no information on any MEC responses conducted on site.

Previous Studies: Over the course of previous investigations at this site, five composite surface soil samples were collected as part of the SI and submitted for lead analysis. Lead was detected in soil samples taken at this site at levels below regulatory limits (Malcolm Pirnie 2007).

Current Use: All structures have been demolished. The undeveloped area is flat with grass vegetation with few scattered trees and shrubs.



FGGM-005-R-01 - Pistol Range A
0 40 80 160 Feet

Current Status: No further MMRP action was required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.6.4 FGGM-006-R-01 (OU-43) – PISTOL RANGE B

Regulatory Driver: CERCLA

Environmental Investigations:

PA.....2002–2003

Historical Records Review.....2006

SI.....2007

Contaminants of Potential Concern: None identified

Media of Concern: None identified

Site Location: Grid E4, in the southwestern portion of the installation, bounded to the west by Brown Road and Building 9705, to the north by Building 9841 and parking lots, to the east by undeveloped property, and to the south by parking lots and undeveloped property. O'Brien Road runs through the middle of the site.

Site Description: The range was identified on a 1924 War Game Map issued by the War Department for Camp Meade. Based on the operation dates of other ranges found on the War Game Map, it is assumed that the pistol range was used from 1924 until the early 1940s. It is also assumed that only small arms were used on site, but there is no specific information regarding this. Information on the frequency of use and types of munitions used was unavailable, but .45-cal ammunition is assumed to have been used because it was the most common pistol ammunition in the 1920s. There is no information on any MEC responses conducted on site.

East of O'Brien Road, the AOI is undeveloped with a walking/jogging trail traversing the site. West of O'Brien Road, the range is within what is now NSA property and is mostly developed with buildings and parking areas. The undeveloped area is forested with heavy shrub growth in some areas.

Previous Studies: Over the course of previous investigations at this site, five composite surface soil samples were collected as part of the SI and submitted for lead analysis. Lead was detected in soil samples taken at this site at levels below regulatory limits (Malcolm Pirnie 2007).



Current Use: This AOI is within NSA property and is mostly developed with buildings and parking areas.

Current Status: No further MMRP action is required based on the findings of the 2007 SI. EPA approved NFA on 13 June 2007.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA

2.7 BASE REALIGNMENT AND CLOSURE AREAS OF INTEREST DESIGNATED FOR NO FURTHER ACTION

2.7.1 FGGM-21 (OU-16) – MEDICAL WASTE SITE

Regulatory Driver: CERCLA

Environmental Investigations:

SI..... 1994

Removal Action Report..... 1999

PA..... 2012

Contaminants of Potential Concern: Arsenic

Media of Concern: Soil

Site Location: Grid A7, at the Walter Reed Medical Center farm in the BRAC parcel off Switch Board Road, adjoining and east of the Baltimore-Washington Parkway, approximately two miles southwest of State Route 198. The Medical Waste site is approximately 1 acre.

Site Description: The former farm property was transferred from FGGM to the DOI under the BRAC program in 1991 and is currently part of the PRR-NT. Prior to the transfer, the property was operated as an animal farm from about 1967 to 1987. A medical/farming waste area was located near the southwest corner of the former farm, about 750 feet southwest of a retention pond and adjacent to a marshy area extending south to the Patuxent River. The facility was never a secure facility and was not a site where biological agents would have been used in research (FGGM 1999). Based on the history of the AOI, biological agents would not have been used in research at this location, and likewise, would not be disposed of in the Medical Waste site. A scan of both the general work area and specific medical waste debris with a Radiation Survey Meter reported no elevated radiological readings.

Previous Studies: Over the course of previous investigations at this AOI, 12 surface soil samples were collected and submitted for laboratory analysis.

Current Use: Inactive

Current Status: On 23 February 2012, EPA concurred that analytical results indicate that no CERCLA release has occurred at this AOI. This AOI is closed with respect to CERCLA. Any risk associated with munitions will be addressed under the MMRP and the LUCRD for the HEI



FGGM 21 - Medical Waste Site
0 250 500 1,000 Feet

Area (FGGM-002-R-01).

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.7.2 FGGM-72 (OU-27) – PETROLEUM, OIL, AND LUBRICANTS STORAGE TANKS

Regulatory Driver: CERCLA

Environmental Investigations:

Investigation, CAP, and Initial Site

Characterization 1989

Soil Gas Survey 1992

PA 2012

LUCRD June 2015

Contaminants of Potential Concern: Heating oil

Media of Concern: Soil and groundwater

Site Location: Grid F5, in the northern portion of the TAP.

Site Description: FGGM-72 consists of Building/Hangar 80 and Building/Hangar 85, which are both located along Airfield Service Road. A steel 4,000-gallon heating oil tank is located at Building 80, and a steel 5,000-gallon heating oil tank is located at Building 85 (Argonne 1989). The 4,000-gallon UST at Building 80 was installed in June 1988. This tank replaced a steel-constructed 4,000-gallon UST that failed a leak test in May 1988 and was removed by order of MDE. Contaminated soils excavated during the tank removal were disposed of at the sanitary landfill. The MDE case was closed on 21 June 1988 (EA 1992a). The present UST is on the north side of Building 80 and is surrounded by three MWs.

The 5,000-gallon UST at Building 85 was installed in November 1975 (EA 1992a). The tank passed a leak test in May 1988.

These USTs stored heating oil for use in the adjacent buildings 80 and 85, respectively. This was confirmed in the 1991 transfer assembly document and the 1998 de-registration report.

Previous Studies: Over the course of previous investigations at this site, 26 soil vapor samples were obtained.

Current Use: The Army has transferred this property, and MDE records indicate the USTs were closed in 1998.



FGGM 72 (OU-27) - POL Storage Tanks, P-080 and P-085

 0 100 200 400
Feet

Current Status: EPA approved NFA for this AOI on 23 February 2012. Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM-85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process.

Cleanup/Exit Strategy: Not applicable. The Army plans to administratively close AEDB-R number FGGM-72 because EPA has approved NFA and MEC is addressed under FGGM-85.

2.7.3 FGGM-73 (OU-28) – MAINTENANCE SHOPS, BUILDINGS 85 AND 90

Regulatory Driver: CERCLA

Environmental Investigations:

PA..... 1990

SI..... 1992

PA..... 2011

LUCRD..... June 2015

Contaminants of Potential Concern: Not determined

Media of Concern: Not determined

Site Location: Grid E5, in the north-central portion of the TAP.

Site Description: This AOI is for the USTs at Buildings 85 and 90. The 5,000-gallon UST at Building 85 was installed in November 1975. The tank passed a leak test in May 1988.

Building 90 was constructed in the early 1980s and used for the maintenance and storage of helicopters. In addition to fuels such as aviation and diesel fuel, hydraulic and lubricating oils, detergents, and solvents were also used, handled, or stored. Hangar 90 was cleared and taken out of service when it was decommissioned in early 1996.

Maintenance Shop Building 85 is also part of FGGM-72 – POL Storage Tanks because Building 85 includes USTs. Maintenance Shop Building 90 is also part of FGGM-80 – Helicopter Hangar 90 because Building 90 is the Helicopter Hangar building.

Previous Studies: Over the course of previous investigations at these AOI, 12 soil vapor samples were obtained around the UST at Building 85. Low-level hydrocarbon contamination (e.g., maximum encountered toluene concentration was 1.6 parts per million) was detected at 4 of the 12 vapor sampling locations (EA 1992b).

Current Use: Part of TAP

Current Status: The PA includes a letter saying the Army will administratively close AEDB-R number “FGGM-73.” Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM-85) that was submitted in June 2015 to better implement, maintain, and


FGGM 73 (OU-28) - Maintenance Shops, Buildings 85 and 90

 0 300 600 1,200
Feet

and enforce the MEC LUCs and incorporate them into the CERCLA process.

Cleanup/Exit Strategy: FGGM-73 will be administratively closed because this AOI is addressed under FGGM-72, FGGM-80, and FGGM- 85.

2.7.4 FGGM-80 (OU-32) – HELICOPTER HANGAR 90 (PART OF TIPTON ARMY AIRFIELD)

Regulatory Driver: CERCLA

Environmental Investigations:

PA 1989

SI 1992

RI 1998

Removal Action Report 1999

LTMP 2001, 2012

LTM 2004–2014

ESD 2014

LUCRD June 2015

5-Year Review 2017

Contaminants of Potential Concern: Metals, fuels, and oils.

Media of Concern: Soil and groundwater

Site Location: Grid E5, in the northwest corner of the TAP, and includes Building 90 (the Helicopter Hangar) and adjacent areas.

Site Description: HHA Building 90 and associated structures were constructed in the early 1980s. Hangar 90 was used to store and maintain helicopters. Typical activities included washing, disassembly, repair, and painting of aircraft. Aviation and diesel fuel, hydraulic and lubricating oils, detergents, and solvents were used, handled, or stored here. Hangar 90 was cleared and taken out of service when it was decommissioned in early 1996.

Previous Studies: Previous studies and reports that included the BRAC parcels were an Enhanced PA (1989), a study by the Maryland Department of Natural Resources, a Draft SI Addendum (which included an EIS and a Wetland Identification Study) (1991), an SI (1992), an RI (1998), an OE Removal Action (1997), and a Removal Action Report (1999).

Current Use: Part of TAP

Current Status: Conducting 5-Year Reviews to evaluate the frequency and need for continued LTGM; the last one was conducted in 2011. This ensures the remedy continues to provide adequate protection of human health and the environment. Any risk associated with munitions will be addressed under the MMRP and the TAP LUCRD (FGGM-85) that was submitted in June 2015 to better implement, maintain, and enforce the MEC LUCs and incorporate them into the CERCLA process.



FGGM 80 - Helicopter Hangar 90
0 30 60 120 Feet

Cleanup/Exit Strategy: FGGM-80 will be administratively closed because 1) the ROD presents the final remedy for soils as NFA, 2) groundwater is currently being monitored under FGGM-10 and FGGM-31 for all of TAP, and 3) MEC is addressed under FGGM-85.

2.7.5 FGGM-82 (OU-34) – UNEXPLODED ORDNANCE REMOVAL

Regulatory Driver: CERCLA

Environmental Investigations:

Enhanced PA	1989
PA	1990
Ordnance Survey and Removals	1992, 1993
RA(C)	1997
Engineering Evaluation	2001
NTCRA Memorandum	2001
LTM	2001
NTCRAs	2003–2004
OE Removal Action	2006
5-Year Review Report	2008

Contaminants of Potential Concern: MEC

Media of Concern: Soil

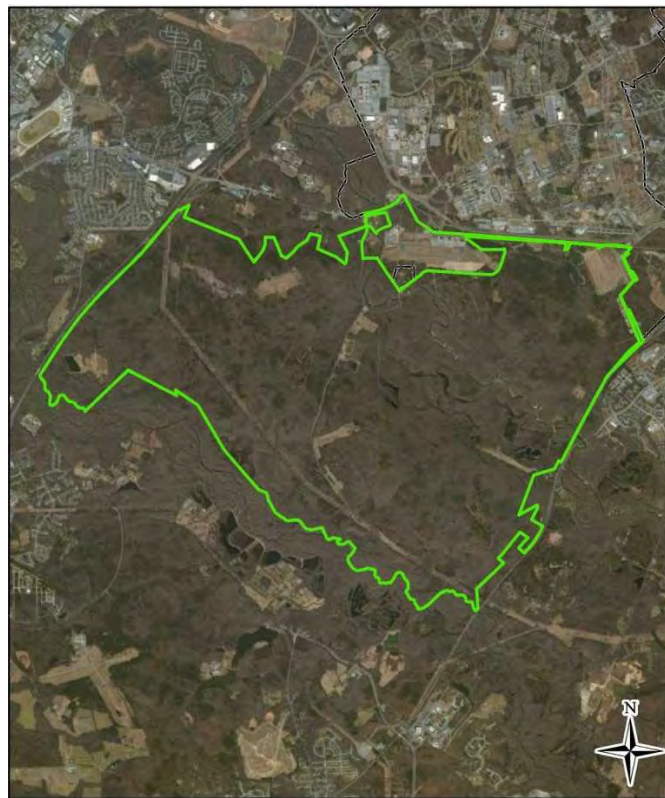
Site Location: Grids A5 through F10, FGGM-82 covers the entire PRR-NT.

Site Description: FGGM-82 is the IRP designation for UXO removal in the PRR-NT. FGGM-002-R-01 is the MMRP designation for MEC work at the PRR-NT.

Previous Studies: Several sweeps of the PRR-NT occurred in the past, and in 2001, an Action Memo recommended LUCs with surface and subsurface clearance to depth in selected areas. An NTCRA was completed for 24 areas within the PRR-NT identified by the USFWS as high traffic areas. LUCs include educating workers and recreational users on potential residual OE hazards that may be associated with the property and proper notification procedures if any OE is encountered.

Current Use: PRR.

Current Status: The PA includes a letter saying the Army will administratively close AEDB-R number "FGGM-82.



FGGM 82 (OU-34) -- Unexploded Ordnance Removal
0 2,500 5,000 10,000
Feet

Cleanup/Exit Strategy: Funding for work on the PRR-NT was moved from the IRP to the MMRP, and FGGM-82 is recommended for administrative closure. Future work will fall under the designation HEI Area FGGM-002-R-01. Continuing site work (including MEC issues and LUCs) will still be addressed under FGGM-002-R-01 after FGGM-82 is administratively closed.

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2.8 UNASSIGNED – AOI DESIGNATED FOR NRA

2.8.1 GRANT STREET AT BUILDING 8484 – SPILL NOTIFICATION

Regulatory Driver: CERCLA

Environmental Investigations:

Reportable Spill Notification..... 2009

Spill Notification Response 2010

Contaminants of Potential Concern: Not determined

Media of Concern: Soil

Site Location: Grid F5, in the southwestern portion of the installation along Grant Street at Building 8484.

Site Description: A small metal box containing unlabeled paint containers was found in a duct bank trench being excavated along Grant Street at Building 8484. ED personnel observed solidified paints, as well as a minor amount of liquid coming from the paint storage box.

Previous Studies: During previous investigations at this site, a maximum PID reading of 224 units was observed, and a grab sample was collected from the bottom of the trench.

Current Use: Roadway shoulder

Current Status: On 7 June 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.



Grant Street at Building 8484
(Spill Notification, September 2009)

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.8.2 20TH STREET AT ROUTE 175 NEAR BUILDING 1978 – SPILL NOTIFICATION**Regulatory Driver:** CERCLA**Environmental Investigations:**

Reportable Spill Notification.....2009

Spill Notification Response.....2010

Contaminants of Potential Concern: Not determined**Media of Concern:** Soil**Site Location:** Grid H2, in the northeastern portion of the installation along Route 175 and 20th Street near Building 1978.**Site Description:** Discolored soil was discovered in a duct bank trench excavated along Route 175 and 20th Street, beginning approximately two feet below ground surface, and extending below the depth of the trench.**Previous Studies:** Over the course of previous investigations at this site, the maximum PID level was 130 units, and a grab sample was collected from the bottom of the trench for analysis.**Current Use:** Grass field**Current Status:** On 7 June 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.**Cleanup/Exit Strategy:** Not applicable, and this AOI has been approved for NFA.

2.8.3 1ST STREET IN FRONT OF BUILDING 195 – SPILL NOTIFICATION

Regulatory Driver: CERCLA

Environmental Investigations:

Reportable Spill Notification..... 2009

Spill Notification Response..... 2010

Contaminants of Potential Concern: Not determined

Media of Concern: Soil

Site Location: Grid H5, in the southeastern portion of the installation on 1st Street in front of Building 195.

Site Description: Discolored soil in a two-foot-deep duct bank trench being excavated along 1st Street between Chisholm Avenue and Saxton Road was discovered beginning approximately 6 inches below ground surface and extending approximately 10 inches below ground surface on both sides of the trench. The discoloration appeared to be associated with existing asphalt paving and sub-base materials.

Previous Studies: Over the course of previous investigations at this site, one grab sample was collected from the bottom of the trench for analysis.

Current Use: Roadway shoulder

Current Status: On 7 June 2010, EPA concurred that analytical results indicate that no CERCLA release has occurred at the subject site. This site is closed with respect to CERCLA.

Cleanup/Exit Strategy: Not applicable, and this AOI has been approved for NFA.

2.8.4 6-ACRE LITTLE PATUXENT RIVER SITE

Regulatory Driver: CERCLA

Environmental Investigations:

Environmental Condition of

Property Final 2011

Contaminants of Potential Concern: None

Media of Concern: None

Site Location: Grids G8 and H8, adjacent to the southeast corner of the PRR-NT, separated by railroad tracks.

Site Description: This AOI is undeveloped land. The Patuxent Road traverses the site. There is no indication that the site has ever been used as an operational range and, considering its location, it probably has not.

Previous Studies: There has been no sampling by previous studies.

Current Use: Inactive.

Current Status: A Final Environmental Condition of Property was completed in FY11 and approved by regulatory agencies. A Record of Environmental Consideration, Finding of Suitability for Transfer, and Disposal Report was completed in FY14. The Army submitted a quitclaim deed that transferred the property to Anne Arundel County in 2015 under a conservation conveyance.


6-acre Little Patuxent River Site
0 100 200 400 Feet

Cleanup/Exit Strategy: This property was transferred to Anne Arundel County in 2015.

3 SITE MANAGEMENT SCHEDULES

This section describes the proposed future work and schedules for the FGGM AOI that require further action. Schedules depicting the major project activities for each AOI are provided. These schedules are tentative, based on funding allocation, completion of removal actions, and government comments received for the reports.

3.1 SITE MANAGEMENT PLAN SCHEDULE DEVELOPMENT

The SMP schedules were developed as generic guidelines for duration of tasks. The durations are generic because the level of effort for an AOI is unknown until it is further investigated. Where site-specific schedules were available, the durations are not generic. As discussed in Section 2, some FGGM AOI are ongoing.

3.2 DETAILED SITE MANAGEMENT PLAN SCHEDULES

Table 3-1 on the following pages includes detailed project schedules for open AOI at FGGM. Additionally, Table 3-1 is a summary of the PA/SI AOI grouped by geographic areas to assist the reader in determining the correct schedule for a specific PA/SI AOI. Milestones (due dates) for some AOI presented in Table 3-1 of this document has changed from the milestones presented in the Final 2021 SMP.

Whenever “EPA reviews” appears in the project schedules, it means review by EPA and appropriate signatories of the FGGM FFA. What constitutes “appropriate” is determined by ownership and/or proximity to the AOI; e.g., the USAOC will review all documents pertaining to the USAOC Campus (concurrent with the EPA) and determine whether there are known or suspected impacts to the USAOC Campus from an adjacent cleanup site, e.g., OU-4 or OU-5 (DRMO site). These AOI reviews will also be done concurrent with EPA’s review. Neither AOI is owned by USAOC, but both AOI have contaminated groundwater that has been observed on the USAOC Campus. The CSL, OU-12, is very close to the Campus; however, the AOI is hydraulically down- and cross-gradient from the USAOC Campus. With no data to suggest the CSL can affect the USAOC Campus, the Army would not provide documents about the CSL to USAOC unless specifically requested by USAOC.

Table 3-1 shows the schedules available for open AOIs at FGGM from December 2020 to September 2026. Table 3-1 was compiled from available Microsoft Project schedules provided by the contractors performing environmental work at FGGM and is broken down by projects as follows.

Table 3-1: Project Schedules for Open Sites at Fort Meade

Project Schedules for Open Sites	Page
RI/FS FGGM-96 Buildings 2227, 2224, STSO, 2501, Chisolm & 6 th Avenue, and MP-7/WR6	3-1
IAL-4 ROD	3-2
IAL-4 RA	3-2
IAL-4 RIP/RC	3-2
CSL and Cell 3 (FGGM097) Technical Memo HHRA Update	3-3
CSL and Cell 3 (FGGM-97) PP/ROD	3-3
CSL and Cell 3 (FGGM-97) RIP/RC	3-4
FGGM-97 Cell 3 Landfill Cap Stabilization	3-4
OU-4 PP/ROD	3-4
OU-4 RIP/RC	3-4
OU-4 LTM and O&M	3-5
OU-10 (FGGM-13) Former Pesticide Shop Building 6621 LTM and O&M	3-10
Manor View Dump Site (FGGM 93)	3-11
CSL (FGGM-17) LTM and O&M	3-14
Phoenix Military Reservation Sampling	3-18
Former Mortar Range (FGGM-003-R)	3-21
IAL-2 (FGGM-007-R) LUC Inspections	3-22
IAL-4 In-Situ Chemical Oxidation	3-26
FGGM-83/OU-1 Former Skeet Range (FGGM-87)	3-30
OU-3 Former NIKE Site RI/FS	3-31
DRMO & Plume RI/FS	3-35
IAL-1 and IAL-3 Inspections	3-40
Range 17 Five Year Review	3-41
PFAS RI/FS at TAP	3-42

Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule Fort Meade Multi-Site CERCLA Phases for FGGM 96, IAL4-CSL, FGGM 97 Cell 3, and OU-4 Fort George G. Meade, Maryland					
ID	Task Name	Duration	Start	Finish	
1	Notice to Proceed	0 days	9/28/2022	9/28/2022	
2	Period of Performance (09/30/27)	0 days	9/27/2027	9/27/2027	
3	CLIN0001/Task 1 - Project Management Plan (PMP), Uniform Federal Policy - Quality Assurance Project Plan (UFP-QAPP), Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP) and TPP Meeting Minutes	393 days	9/28/2022	10/25/2023	
4	Kick-off Meeting	15 days	10/20/2022	11/3/2022	
5	Kick-off Meeting (Post Award Conference)	1 day	10/20/2022	10/20/2022	
6	Prepare and Submit Draft Meeting Notes	7 days	10/26/2022	11/1/2022	
7	USACE and FGGM Review and provide comments on Draft Meeting Notes	2 days	11/2/2022	11/3/2022	
8	Prepare and Submit Final Meeting Notes includes RTCs	0 days	11/3/2022	11/3/2022	
9	Milestone: USACE and FGGM Approval of Final Meeting Notes	0 days	11/3/2022	11/3/2022	
10	Project Management Plan (PMP)	69 days	9/28/2022	12/5/2022	
11	Prepare and Submit Draft PMP	28 days	9/28/2022	10/25/2022	
12	USACE and FGGM Review of Draft PMP	37 days	10/26/2022	12/1/2022	
13	Prepare and Submit Final PMP includes RTCs	2 days	12/2/2022	12/3/2022	
14	USACE and FGGM Review of Final PMP	2 days	12/4/2022	12/5/2022	
15	Milestone: USACE and FGGM Approval of Final PMP	0 days	12/5/2022	12/5/2022	
16	Uniform Federal Policy (UFP) - Quality Assurance Project Plan (QAPP) with Accident Prevention Plan (APP) and Safety and Health Plan (SSHP)	393 days	9/28/2022	10/25/2023	
17	Prepare and Submit Internal Draft UFP-QAPP with APP and SSHP	160 days	9/28/2022	3/6/2023	
18	USACE and FGGM Review of Internal Draft UFP-QAPP with APP and SSHP	86 days	3/7/2023	5/31/2023	
19	Prepare and Submit Draft UFP-QAPP with APP and SSHP includes RTCs	6 days	6/1/2023	6/6/2023	
20	USACE and FGGM Review of Draft UFP-QAPP with APP and SSHP	14 days	6/7/2023	6/20/2023	
21	Milestone: USACE and FGGM Approval of Draft UFP-QAPP with APP and SSHP	0 days	6/20/2023	6/20/2023	
22	Hold Technical Project Planning (TPP) Meeting	1 day	7/5/2023	7/5/2023	
23	Prepare and Submit TPP Meeting Minutes	5 days	7/6/2023	7/10/2023	
24	USACE and FGGM Review and Approval of TPP Meeting Minutes	1 day	7/11/2023	7/11/2023	
25	Regulatory Agency Review of Submitted UFP-QAPP with APP and SSHP	60 days	6/21/2023	8/19/2023	
26	Prepare and Submit Draft Final UFP-QAPP with APP and SSHP includes RTCs	15 days	8/20/2023	9/3/2023	
27	Regulatory Agency Review of Draft Final UFP-QAPP with APP and SSHP	30 days	9/4/2023	10/3/2023	
28	Prepare and Submit Final UFP-QAPP with APP and SSHP to USACE and FGGM/Regulators	15 days	10/4/2023	10/18/2023	
29	USACE and FGGM/Regulatory Approval/Concurrence of Final UFP-QAPP	7 days	10/19/2023	10/25/2023	
30	Milestone: USACE and FGGM Approval of Final UFP-QAPP with APP and SSHP	0 days	10/25/2023	10/25/2023	
31	Project Management Plan Updates	1169 days	9/28/2023	12/9/2026	
56	Monthly Progress Reports	1766 days	11/7/2022	9/7/2027	
116	Restoration Advisory Board Meeting	1772 days	11/14/2022	9/20/2027	
147	Contractor Manpower Reporting FY15 thru FY20	1461 days	9/28/2023	9/27/2027	
154	Complete iWatch Training within 30 days	31 days	9/28/2022	10/28/2022	
155	Report results of iWatch Training 5 days after training	5 days	10/29/2022	11/2/2022	
156	OPSEC and Anti-Terrorism (AT) Level 1 Training	1496 days	9/28/2022	11/1/2026	
169	FGGM 96 - B2227, B2224, STSO, B2501, Chis&6th, and MP7/WR6	747 days	11/15/2023	11/30/2025	
170	CLIN 0002: Task 2 - Achieve Final RI for B2227, B2224, STSO, B2501, Chis&6th, and MP7/WR6	531 days	11/15/2023	4/28/2025	
171	FGGM-96 RI Field Work	280 days	11/15/2023	8/20/2024	
172	Base Coordination / USEPA Notification (per FFA)	10 days	11/15/2023	11/24/2023	
173	Collect grab groundwater samples	20 days	11/25/2023	12/14/2023	
174	Milestone: Complete collection of grab groundwater samples	0 days	12/14/2023	12/14/2023	
175	Laboratory Analysis	28 days	12/15/2023	1/11/2024	
Page 1					

Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule Fort Meade Multi-Site CERCLA Phases for FGGM 96, IAL4-CSL, FGGM 97 Cell 3, and OU-4 Fort George G. Meade, Maryland				
ID	Task Name	Duration	Start	Finish
176	Evaluate groundwater conditions and make suggestion for installation of permanent wells	14 days	1/12/2024	1/25/2024
177	Install permanent wells	20 days	1/26/2024	2/14/2024
178	Milestone: Complete installation of permanent wells	0 days	2/14/2024	2/14/2024
179	Collect groundwater samples from new and existing wells - Round 1	21 days	2/15/2024	3/6/2024
180	Milestone: Complete sampling of monitoring wells	0 days	3/6/2024	3/6/2024
181	Laboratory Analysis	28 days	3/7/2024	4/3/2024
182	Collect groundwater samples from new and existing wells - Round 2	21 days	7/3/2024	7/23/2024
183	Milestone: Complete sampling of monitoring wells	0 days	7/23/2024	7/23/2024
184	Laboratory Analysis	28 days	7/24/2024	8/20/2024
185	FGGM-96 RI Report (includes Risk Assessments)	216 days	9/25/2024	4/28/2025
186	Prepare Internal Draft RI Report	30 days	9/25/2024	10/24/2024
187	Army Review of Internal Draft RI Report	30 days	10/25/2024	11/23/2024
188	Prepare Response to Army Comments and Draft RI Report	14 days	11/24/2024	12/7/2024
189	Army Review of Response to Comments and Draft RI Report	14 days	12/8/2024	12/21/2024
190	Army Approval of Draft RI Report	7 days	12/22/2024	12/28/2024
191	Milestone: Submit Draft RI Report	7 days	12/29/2024	1/4/2025
192	Technical Project Planning (TPP) Meeting	1 day	1/20/2025	1/20/2025
193	Regulatory Review of Draft RI Report	60 days	1/5/2025	3/5/2025
194	Prepare Response to Regulatory Comments and Draft Final RI Report	0 days	3/5/2025	3/5/2025
195	Regulatory Review of Responses to Comments	14 days	3/6/2025	3/19/2025
196	Submit Draft Final RI Report	0 days	3/19/2025	3/19/2025
197	Regulatory Review of Draft Final RI Report	30 days	3/20/2025	4/18/2025
198	Prepare Responses to Comments and Final RI Report	5 days	4/19/2025	4/23/2025
199	Regulatory Review of Response to Comments	5 days	4/24/2025	4/28/2025
200	Submit Final RI Report	0 days	4/28/2025	4/28/2025
201	Regulatory Approval of Final RI Report	0 days	4/28/2025	4/28/2025
202	CLIN 0006, Optional Task 4: FGGM-96 Feasibility Study (FS)	216 days	4/29/2025	11/30/2025
219	Inactive Landfill number 4 (IAL4)	1622 days	11/4/2022	4/13/2027
220	CLIN 0003, Task 3.1: IAL4 Record of Decision (ROD)	361 days	11/4/2022	10/30/2023
221	Prepare Internal Draft ROD Report	40 days	11/4/2022	12/13/2022
222	Army Review of Internal Draft ROD Report	52 days	12/13/2022	2/2/2023
223	Prepare Response to Army Comments and Draft ROD Report	2 days	2/2/2023	2/3/2023
224	Army Review of Response to Comments and Draft ROD Report	13 days	2/3/2023	2/15/2023
225	Army Approval of Draft ROD Report	1 day	2/15/2023	2/15/2023
226	Milestone: Submit Draft ROD Report	0 days	2/15/2023	2/15/2023
227	Technical Project Planning (TPP) Meeting	1 day	2/15/2023	2/15/2023
228	Regulatory Review of Draft ROD Report	130 days	2/15/2023	6/24/2023
229	Prepare Response to Regulatory Comments and Draft Final ROD Report	14 days	6/25/2023	7/8/2023
230	Regulatory Review of Responses to Comments	28 days	7/9/2023	8/5/2023
231	Submit Draft Final ROD Report	0 days	8/5/2023	8/5/2023
232	Regulatory Review of Draft Final ROD Report	30 days	8/6/2023	9/4/2023
233	Prepare Responses to Comments and Final ROD Report	14 days	9/5/2023	9/18/2023
234	Regulatory Review of Response to Comments	28 days	9/19/2023	10/16/2023
235	Milestone: Submit Final ROD Report	0 days	10/16/2023	10/16/2023
236	Regulatory Approval of Final ROD Report	14 days	10/17/2023	10/30/2023
237	CLIN 0009, Optional Task 7: Remedial Design (RD)/Remedial Action (RA) for IAL4	440 days	10/31/2023	1/12/2025
295	CLIN 0010, Optional Task 8: RIP/RC for IAL4	821 days	1/13/2025	4/13/2027
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Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule Fort Meade Multi-Site CERCLA Phases for FGGM 96, IAL4-CSL, FGGM 97 Cell 3, and OU-4 Fort George G. Meade, Maryland					
ID	Task Name	Duration	Start	Finish	
340	Closed Sanitary Landfill (CSL) and Cell 3 (FGGM-97)	1688 days	12/17/2022	7/31/2027	
341	CLIN 0004 (BASE): Task 3.2 – Final Proposed Plan (PP) / ROD for Closed Sanitary Landfill (CSL)	1042 days	12/17/2022	10/23/2025	
342	Technical Memorandum for FGGM-17 (includes HHRA update)	348 days	12/17/2022	11/29/2023	
343	Internal Draft Technical Memorandum	91 days	12/17/2022	3/17/2023	
344	USACE and FGGM review and provide comments	48 days	3/18/2023	5/4/2023	
345	Prepare response to comments	6 days	5/4/2023	5/9/2023	
346	USACE and FGGM acceptance of response to comments	8 days	5/9/2023	5/16/2023	
347	Draft Technical Memorandum submitted to EPA and MDE for review	0 days	5/16/2023	5/16/2023	
348	Regulators review and provide comments	60 days	5/16/2023	7/14/2023	
349	Prepare response to comments	21 days	7/15/2023	8/4/2023	
350	USACE and FGGM acceptance of response to comments	7 days	8/5/2023	8/11/2023	
351	Regulators acceptance of response to comments	30 days	8/12/2023	9/10/2023	
352	Draft Final Technical Memorandum submitted to EPA and MDE for review	7 days	9/14/2023	9/20/2023	
353	Regulators review and provide comments	21 days	9/21/2023	10/11/2023	
354	Prepare response to comments	21 days	10/12/2023	11/1/2023	
355	USACE and FGGM acceptance of response to comments	7 days	11/2/2023	11/8/2023	
356	Regulators acceptance of response to comments	21 days	11/9/2023	11/29/2023	
357	Final Technical Memorandum	0 days	11/29/2023	11/29/2023	
358	Proposed Plan (CSL)	397 days	11/30/2023	12/30/2024	
359	Internal Draft Proposed Plan	90 days	11/30/2023	2/27/2024	
360	USACE and FGGM review and provide comments	30 days	2/28/2024	3/28/2024	
361	Prepare response to comments	21 days	3/29/2024	4/18/2024	
362	USACE and FGGM acceptance of response to comments	5 days	4/19/2024	4/23/2024	
363	Draft Proposed Plan submitted to EPA and MDE for review	0 days	4/26/2024	4/26/2024	
364	Regulators review and provide comments	60 days	4/27/2024	6/25/2024	
365	Prepare response to comments	21 days	6/26/2024	7/16/2024	
366	USACE and FGGM acceptance of response to comments	7 days	7/17/2024	7/23/2024	
367	Regulators acceptance of response to comments	30 days	7/24/2024	8/22/2024	
368	Draft Final Proposed Plan submitted to EPA and MDE for review	7 days	8/26/2024	9/1/2024	
369	Regulators review and provide comments	21 days	9/2/2024	9/22/2024	
370	Prepare response to comments	21 days	9/23/2024	10/13/2024	
371	USACE and FGGM acceptance of response to comments	7 days	10/14/2024	10/20/2024	
372	Regulators acceptance of response to comments	21 days	10/21/2024	11/10/2024	
373	Final Proposed Plan	0 days	11/10/2024	11/10/2024	
374	Proposed Plan Meeting	1 day	11/25/2024	11/25/2024	
375	Public Comment Period	30 days	12/1/2024	12/30/2024	
376	Record of Decision	347 days	11/11/2024	10/23/2025	
377	Internal Draft Record of Decision	90 days	11/11/2024	2/8/2025	
378	USACE and FGGM review and provide comments	30 days	2/9/2025	3/10/2025	
379	Prepare response to comments	21 days	3/11/2025	3/31/2025	
380	USACE and FGGM acceptance of response to comments	5 days	4/1/2025	4/5/2025	
381	Draft Record of Decision submitted to EPA and MDE for review	0 days	4/8/2025	4/8/2025	
382	Regulators review and provide comments	60 days	4/9/2025	6/7/2025	
383	Prepare response to comments	21 days	6/8/2025	6/28/2025	
384	USACE and FGGM acceptance of response to comments	7 days	6/29/2025	7/5/2025	
385	Regulators acceptance of response to comments	30 days	7/6/2025	8/4/2025	
386	Draft Final Record of Decision submitted to EPA and MDE for review	7 days	8/8/2025	8/14/2025	
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Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule Fort Meade Multi-Site CERCLA Phases for FGGM 96, IAL4-CSL, FGGM 97 Cell 3, and OU-4 Fort George G. Meade, Maryland					
ID	Task Name	Duration	Start	Finish	
387	Regulators review and provide comments	21 days	8/15/2025	9/4/2025	
388	Prepare response to comments	21 days	9/5/2025	9/25/2025	
389	USACE and FGGM acceptance of response to comments	7 days	9/26/2025	10/2/2025	
390	Regulators acceptance of response to comments	21 days	10/3/2025	10/23/2025	
391	Final Record of Decision	0 days	10/23/2025	10/23/2025	
392	CLIN 0008: OPTIONAL Task 6 - Remedy-in-Place (RIP)/Response Complete (RC) for FGGM-97 Cell 3 Landfill and CSL	646 days	10/24/2025	7/31/2027	
427	CLIN 0007AA - OPTION Task 5 - FGGM-97, Cell 3 Landfill Cap Stabilization: Topsoil Importation, Grading, and Seeding (up to 250 SY with	32 days	11/27/2022	12/28/2022	
432	CLIN 0007AB - OPTION Task 5 - FGGM-97, Cell 3 Landfill Cap Stabilization: Remove Erosion Control Structures or Convert to Permanent Structures	4 days	12/29/2022	1/1/2023	
436	CLIN 0012 - OPTION Task 10 - Annual Operation and Maintenance (O&M) for CSL Methane Extraction System. Perform annual O&M for the methane extraction system for the duration of the period of performance. 1 week prep, paid upon receipt, add milestone	1826 days	10/1/2022	10/1/2027	
447	Operable Unit 4 (OU-4)	1533 days	12/17/2022	2/26/2027	
448	CLIN 0005 (BASE): Task 3.3 – Final Proposed Plan (PP) / ROD for OU-4	612 days	12/17/2022	8/19/2024	
449	Proposed Plan	325 days	12/17/2022	11/6/2023	
450	Prepare response to comments	82 days	12/17/2022	3/8/2023	
451	USACE and FGGM acceptance of response to comments	90 days	3/9/2023	6/6/2023	
452	Draft Final Proposed Plan submitted to EPA and MDE for review	14 days	6/7/2023	6/20/2023	
453	Regulators review and provide comments	60 days	6/21/2023	8/19/2023	
454	Prepare response to comments	21 days	8/20/2023	9/9/2023	
455	USACE and FGGM acceptance of response to comments	7 days	9/10/2023	9/16/2023	
456	Regulators acceptance of response to comments	21 days	9/17/2023	10/7/2023	
457	Final Proposed Plan	0 days	10/7/2023	10/7/2023	
458	Proposed Plan Meeting	30 days	10/8/2023	11/6/2023	
459	Proposed Plan Meeting	1 day	10/22/2023	10/22/2023	
460	Public Comment Period	30 days	10/8/2023	11/6/2023	
461	Record of Decision	317 days	10/8/2023	8/19/2024	
462	Internal Draft Record of Decision	60 days	10/8/2023	12/6/2023	
463	USACE and FGGM review and provide comments	30 days	12/7/2023	1/5/2024	
464	Prepare response to comments	21 days	1/6/2024	1/26/2024	
465	USACE and FGGM acceptance of response to comments	5 days	1/27/2024	1/31/2024	
466	Draft Record of Decision submitted to EPA and MDE for review	0 days	2/3/2024	2/3/2024	
467	Regulators review and provide comments	60 days	2/4/2024	4/3/2024	
468	Prepare response to comments	21 days	4/4/2024	4/24/2024	
469	USACE and FGGM acceptance of response to comments	7 days	4/25/2024	5/1/2024	
470	Regulators acceptance of response to comments	30 days	5/2/2024	5/31/2024	
471	Draft Final Record of Decision submitted to EPA and MDE for review	7 days	6/4/2024	6/10/2024	
472	Regulators review and provide comments	21 days	6/11/2024	7/1/2024	
473	Prepare response to comments	21 days	7/2/2024	7/22/2024	
474	USACE and FGGM acceptance of response to comments	7 days	7/23/2024	7/29/2024	
475	Regulators acceptance of response to comments	21 days	7/30/2024	8/19/2024	
476	Final Record of Decision	0 days	8/19/2024	8/19/2024	
477	CLIN 0011: OPTIONAL Task 9 - Remedy-in-Place (RIP)/Response Complete (RC) for OU-4	921 days	8/20/2024	2/26/2027	
Page 4					

Table 3-1 Project Schedules for Open Sites at Fort Meade

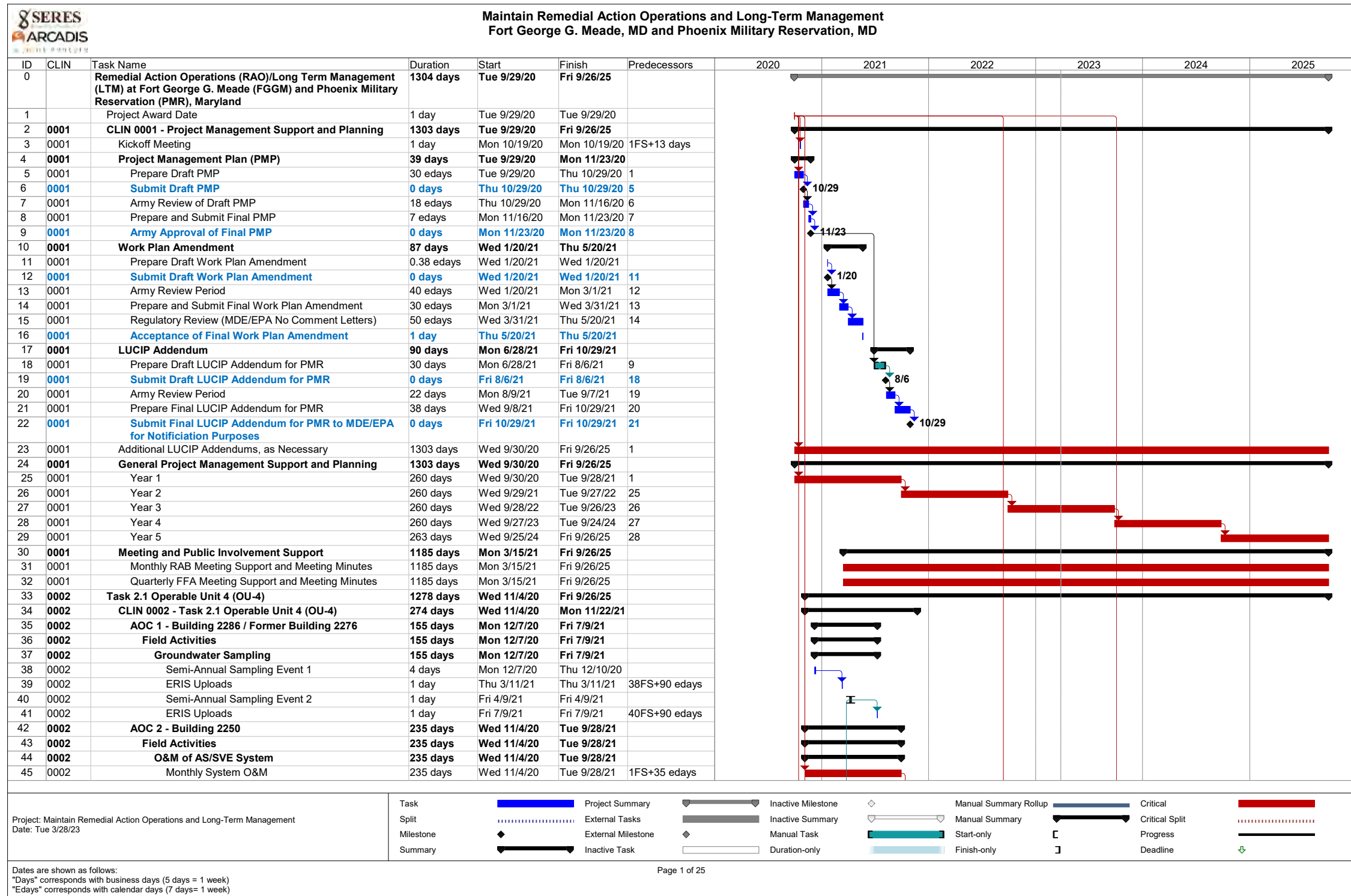


Table 3-1 Project Schedules for Open Sites at Fort Meade

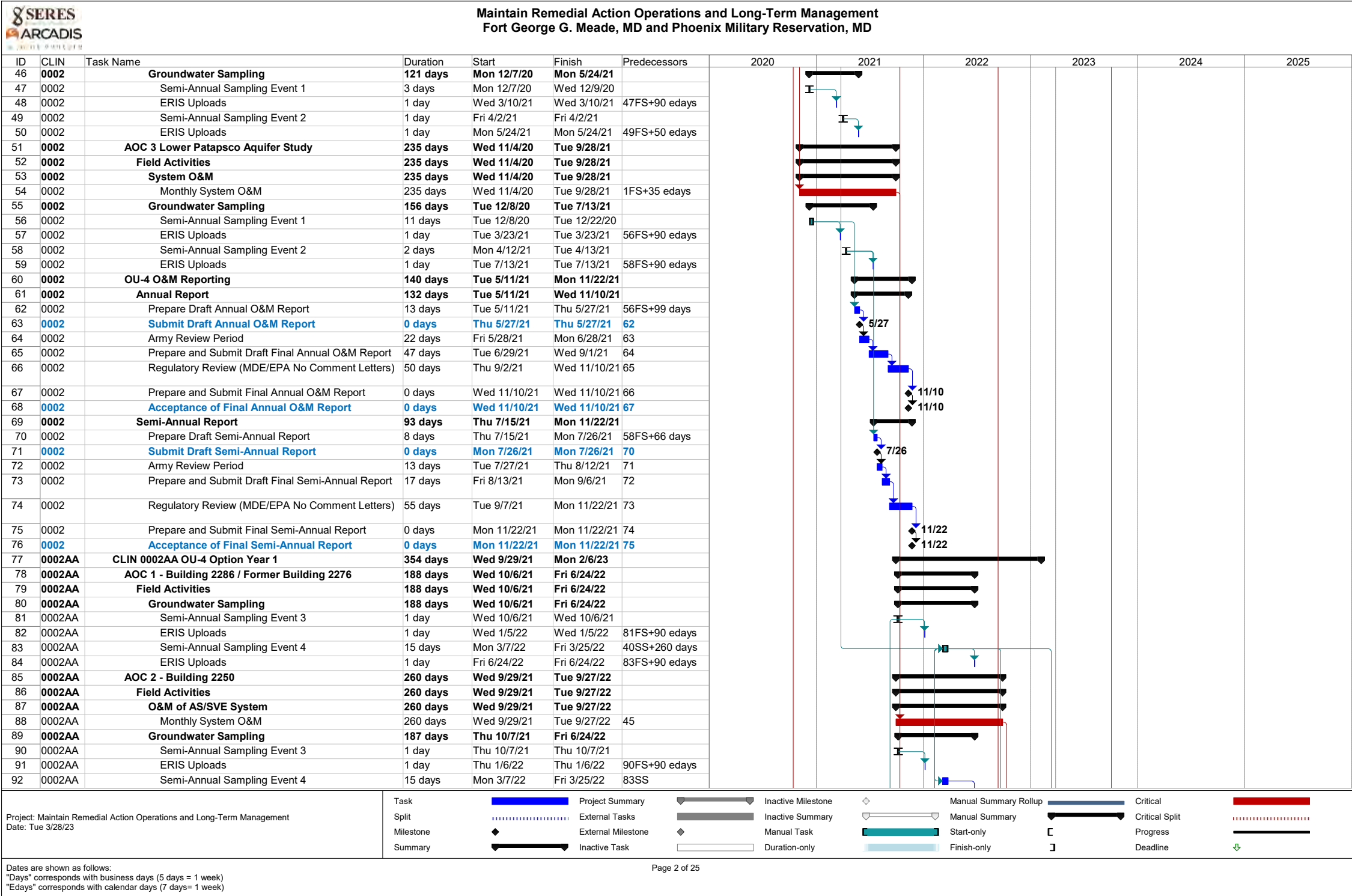


Table 3-1 Project Schedules for Open Sites at Fort Meade

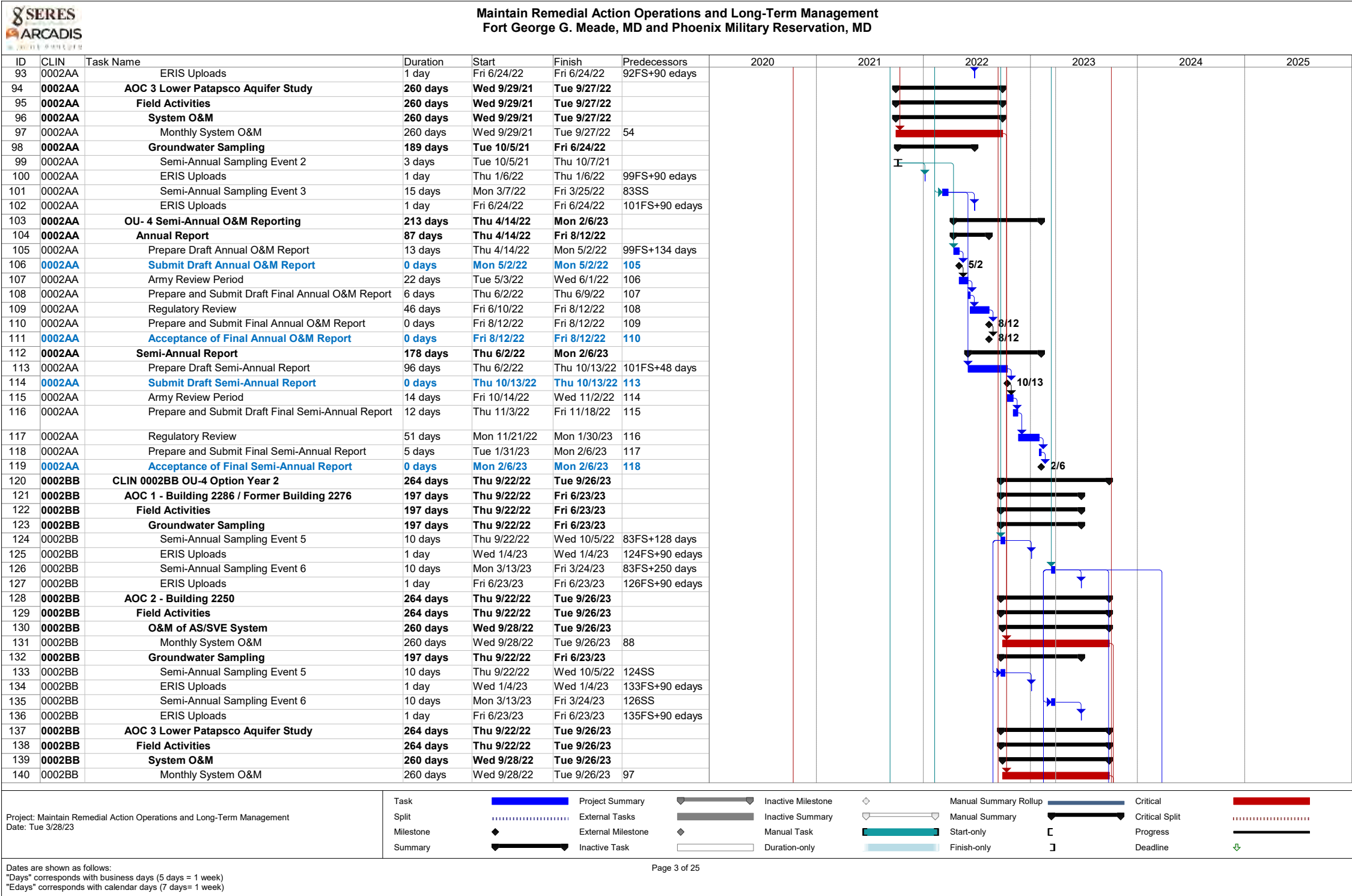


Table 3-1 Project Schedules for Open Sites at Fort Meade

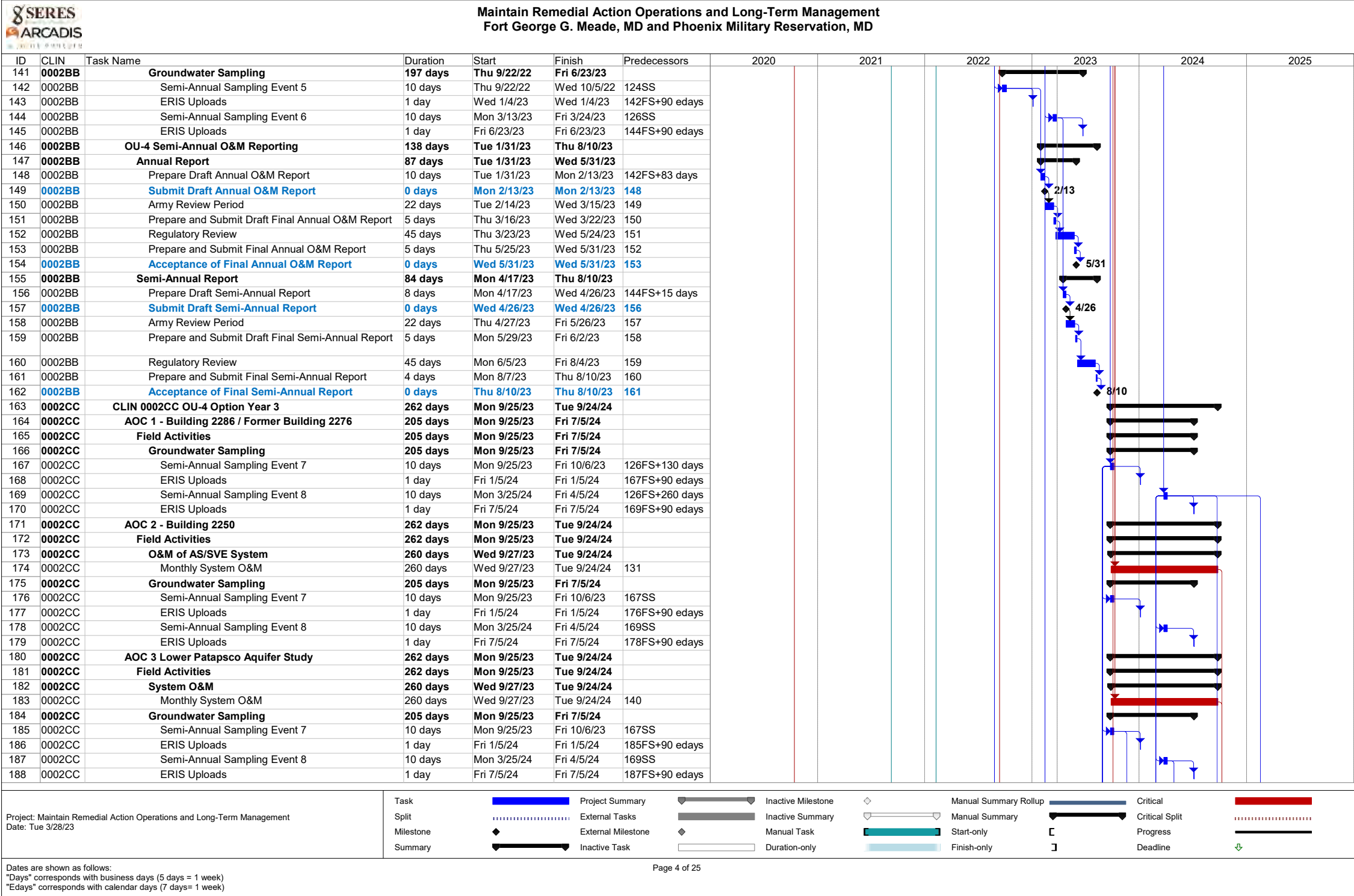


Table 3-1 Project Schedules for Open Sites at Fort Meade

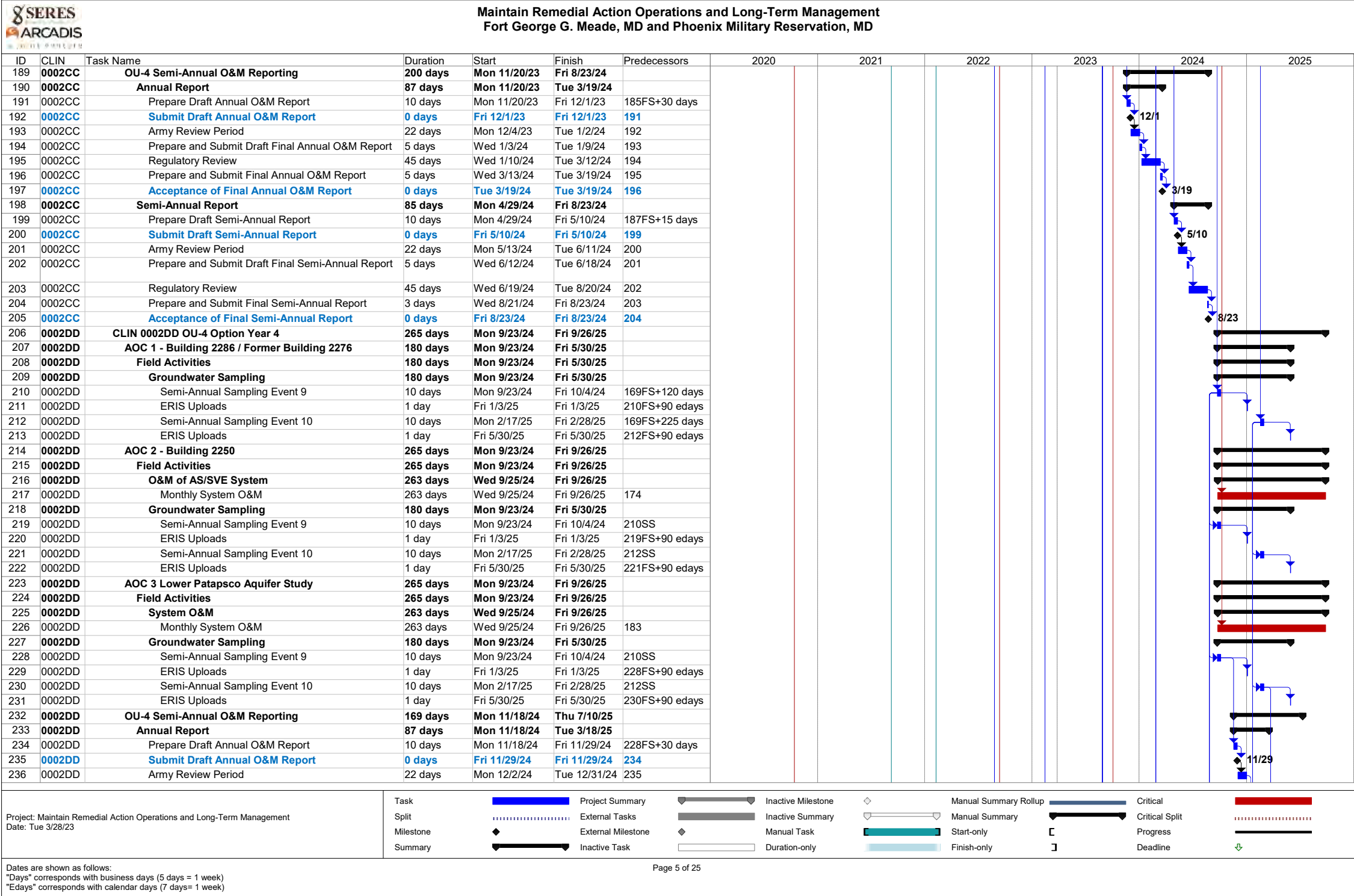


Table 3-1 Project Schedules for Open Sites at Fort Meade

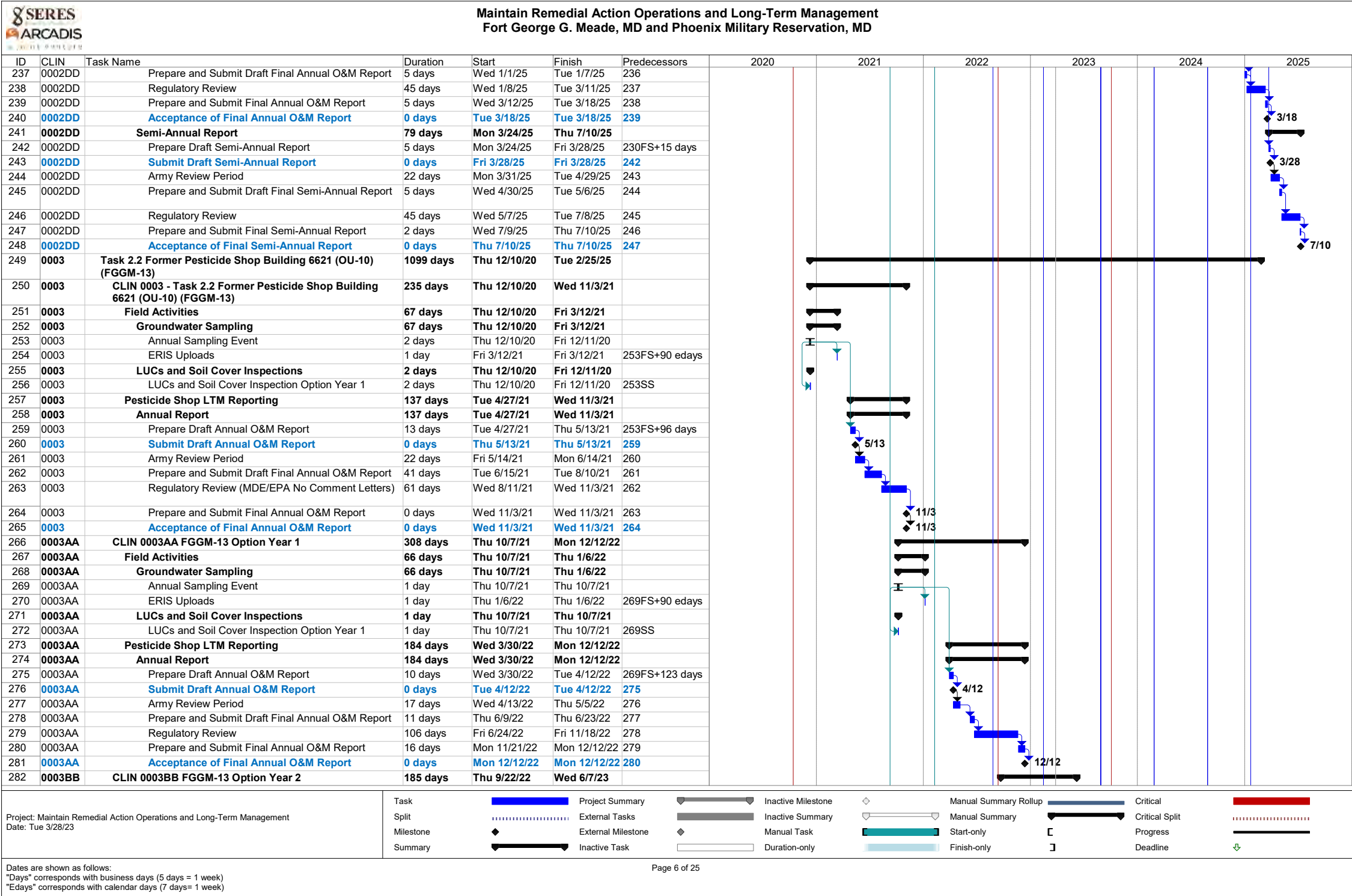


Table 3-1 Project Schedules for Open Sites at Fort Meade

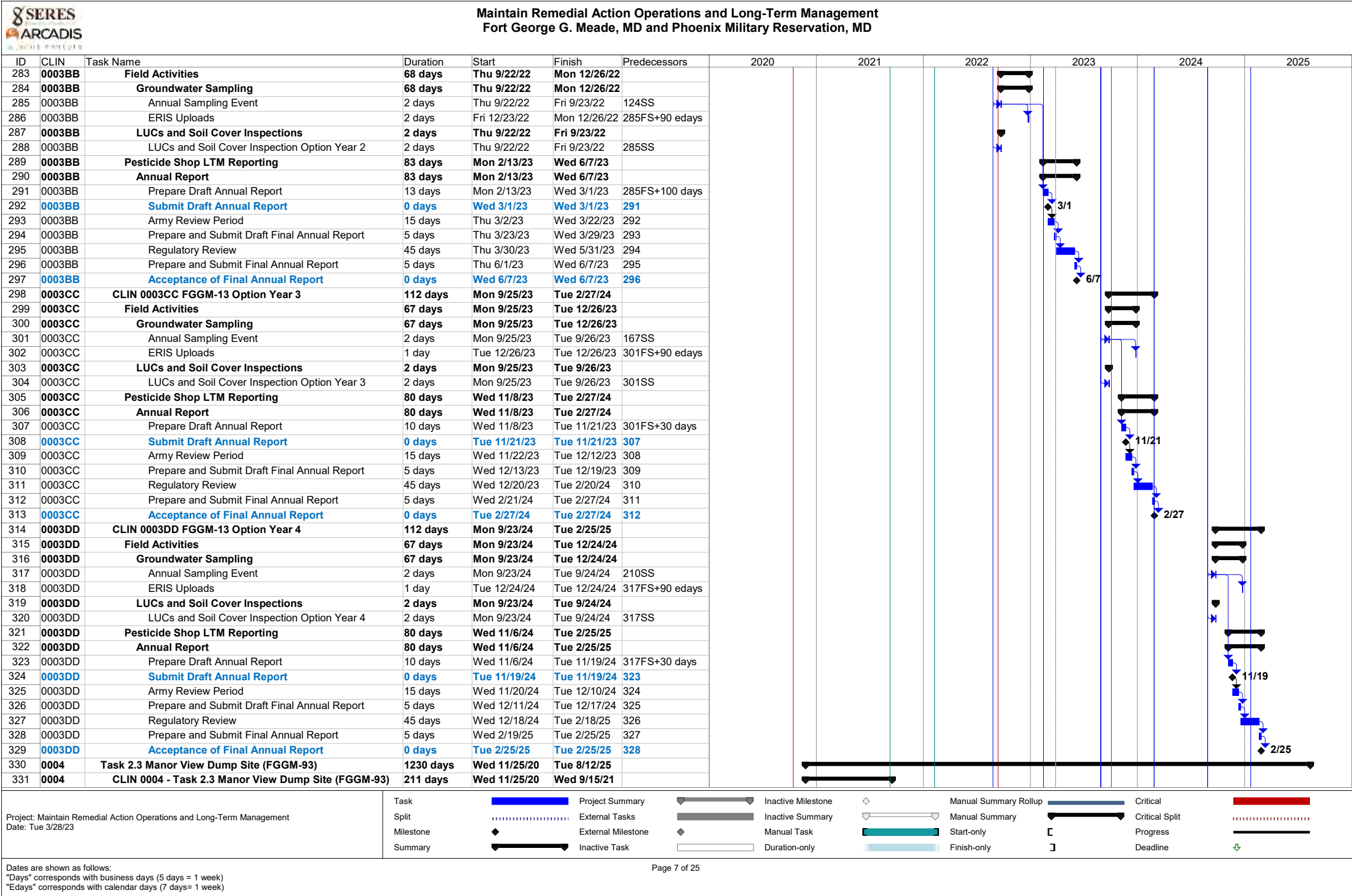


Table 3-1 Project Schedules for Open Sites at Fort Meade

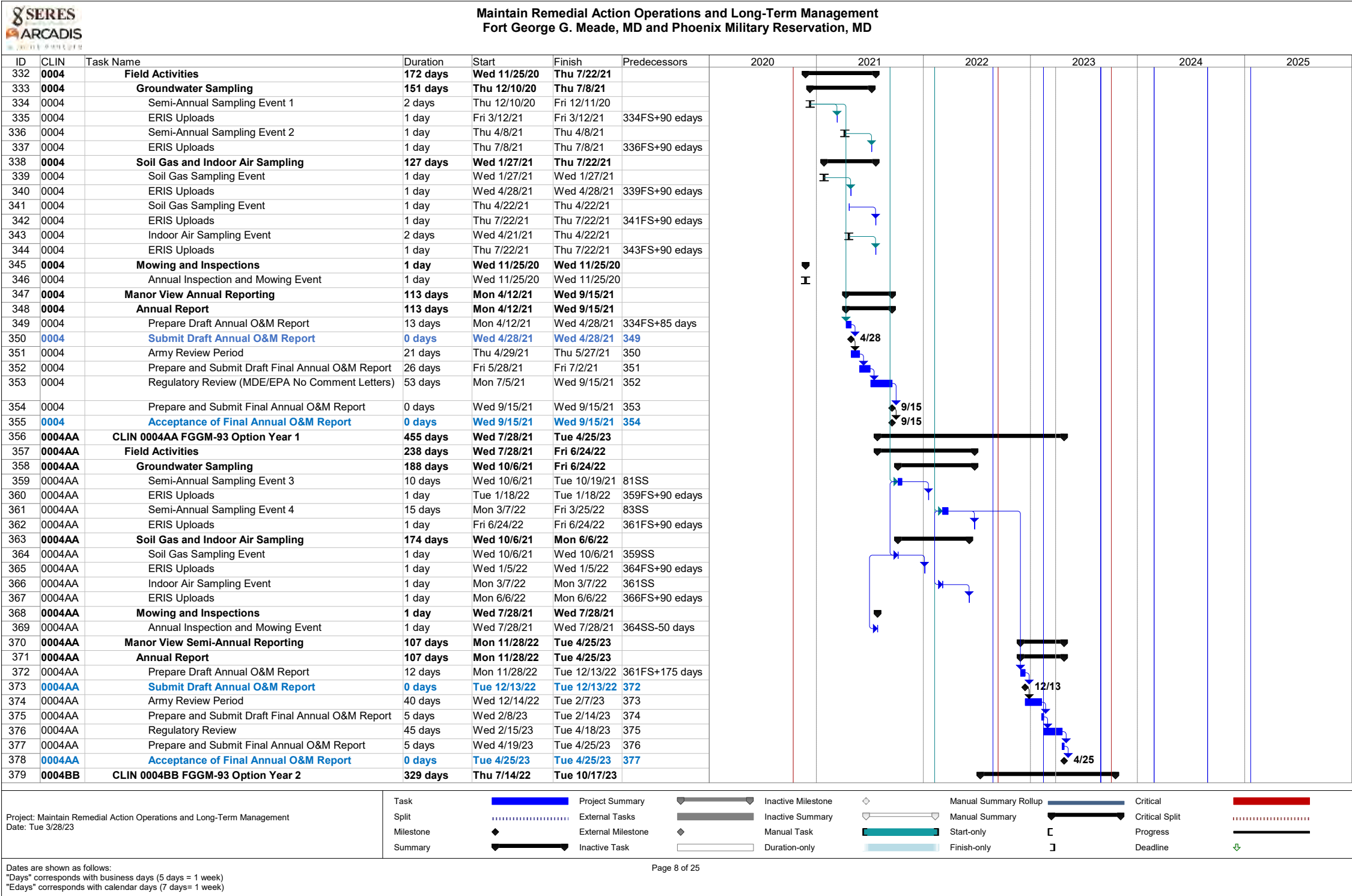


Table 3-1 Project Schedules for Open Sites at Fort Meade

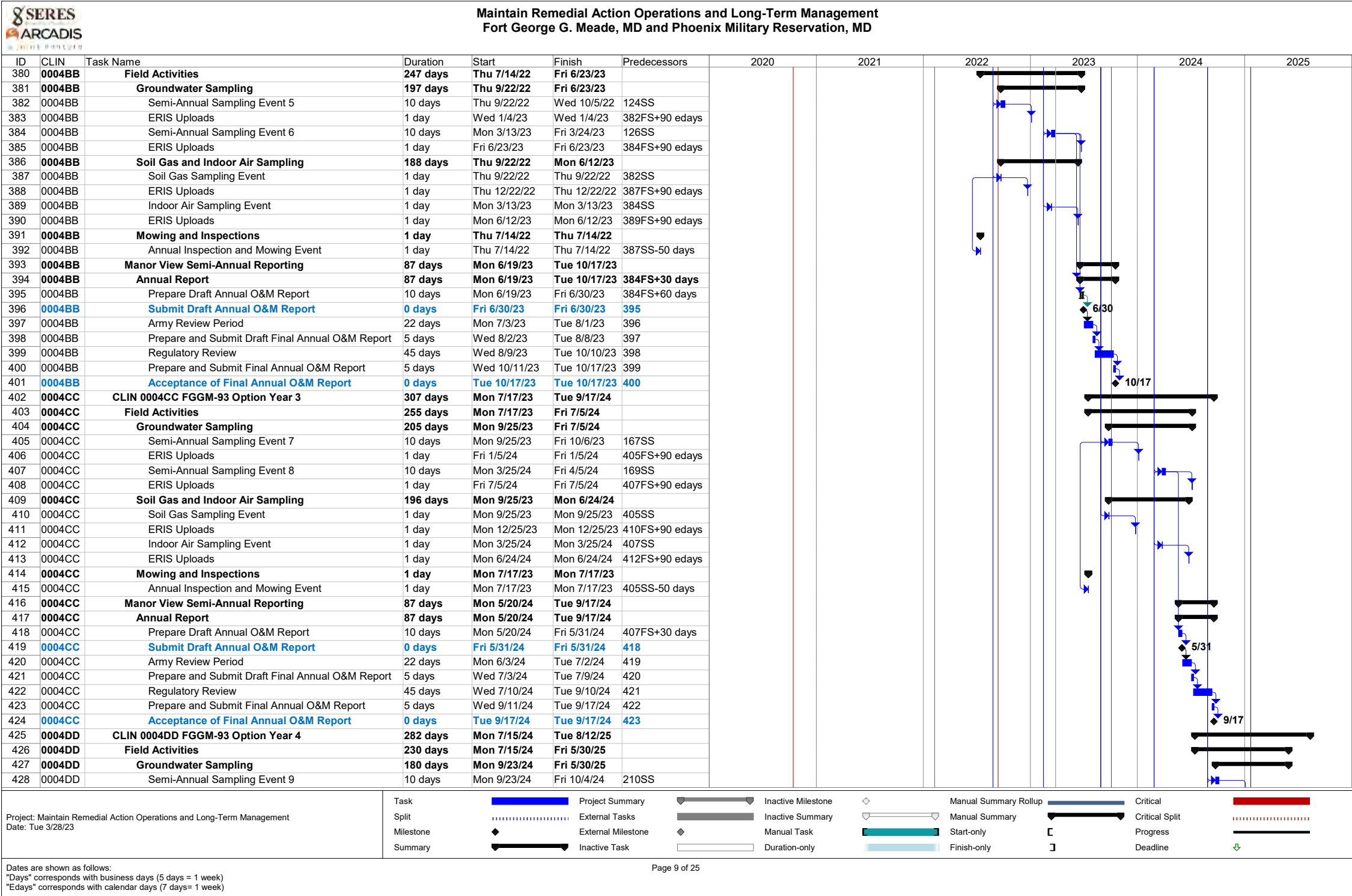


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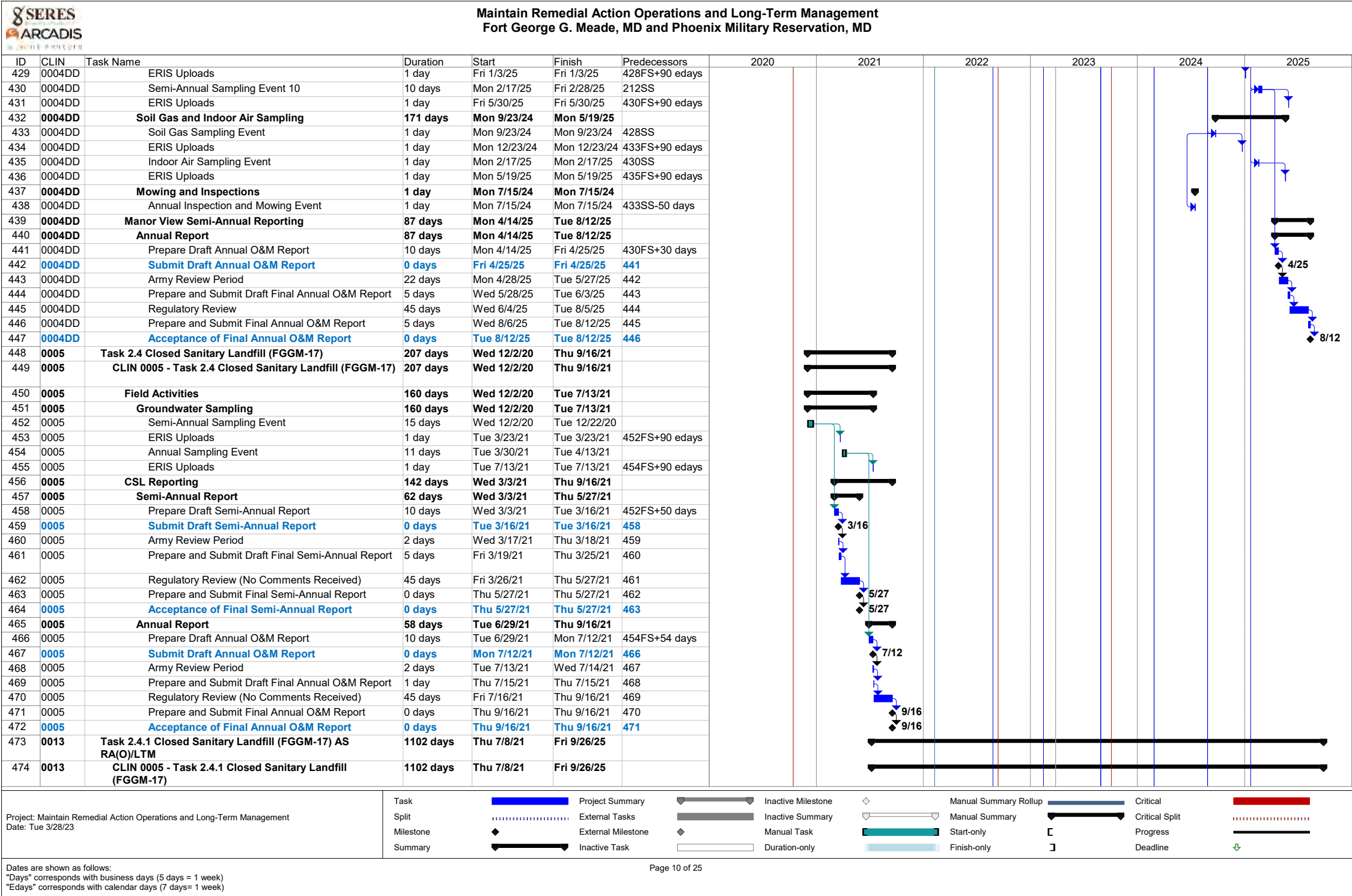


Table 3-1 Project Schedules for Open Sites at Fort Meade

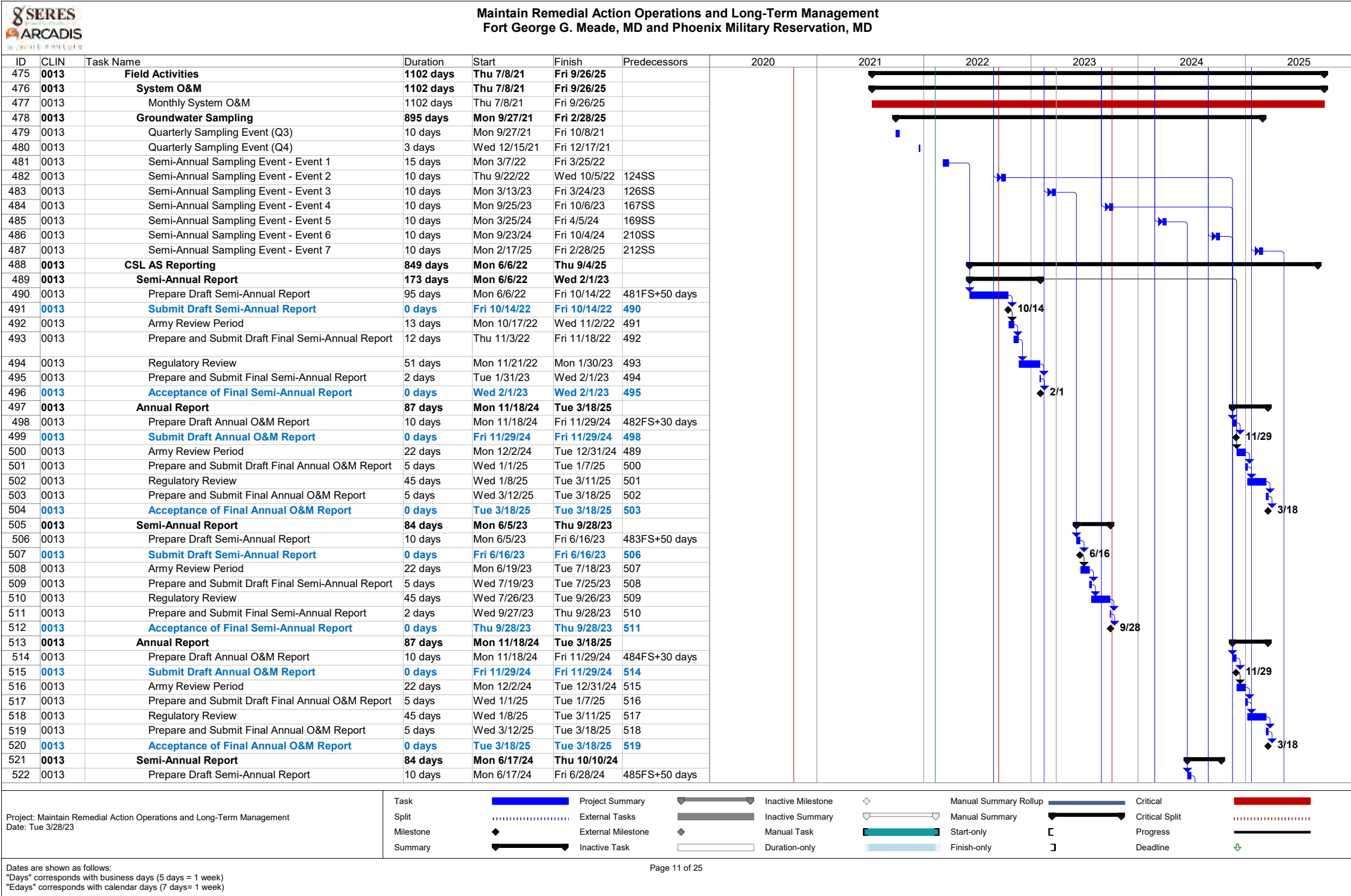


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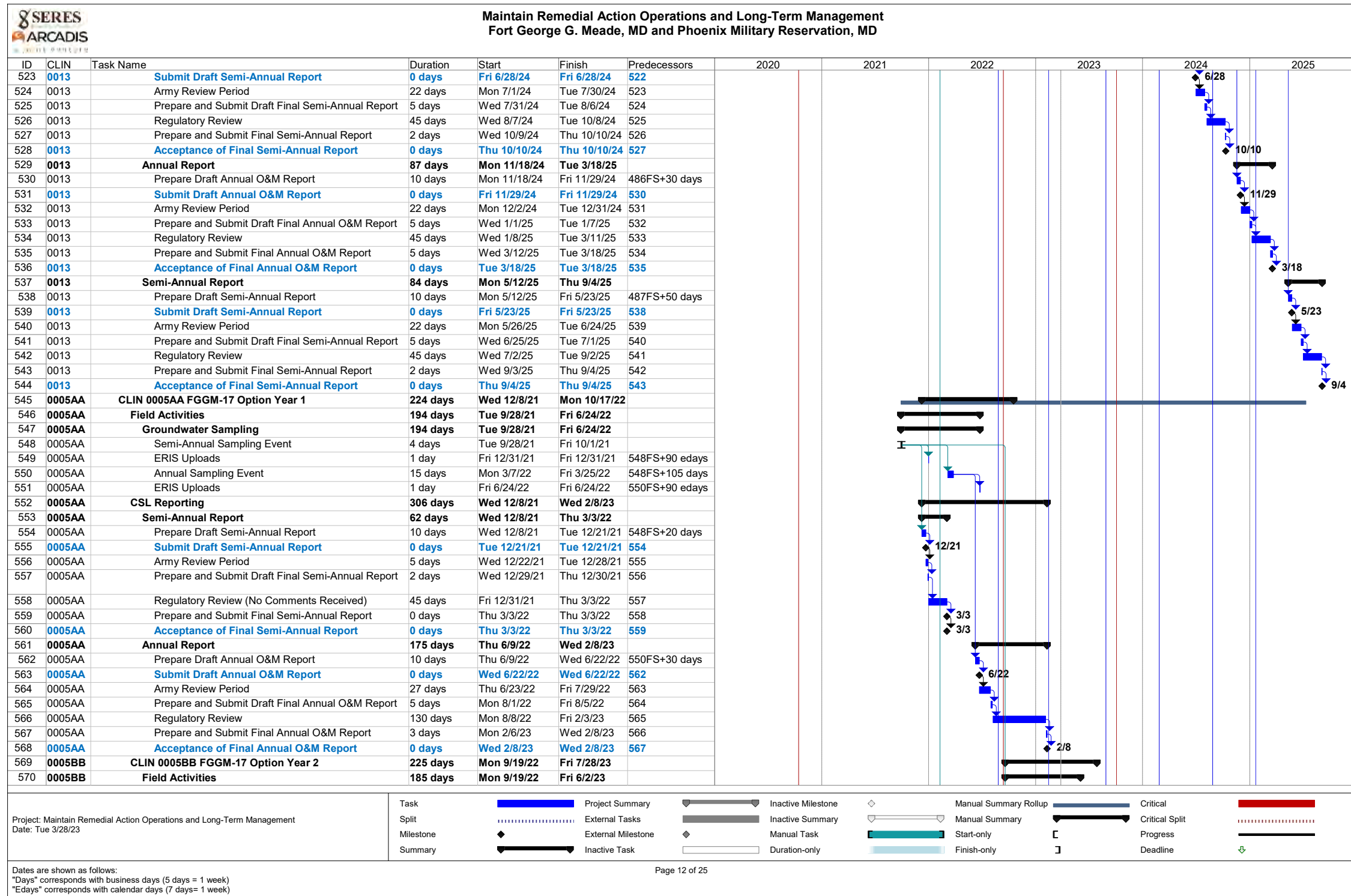


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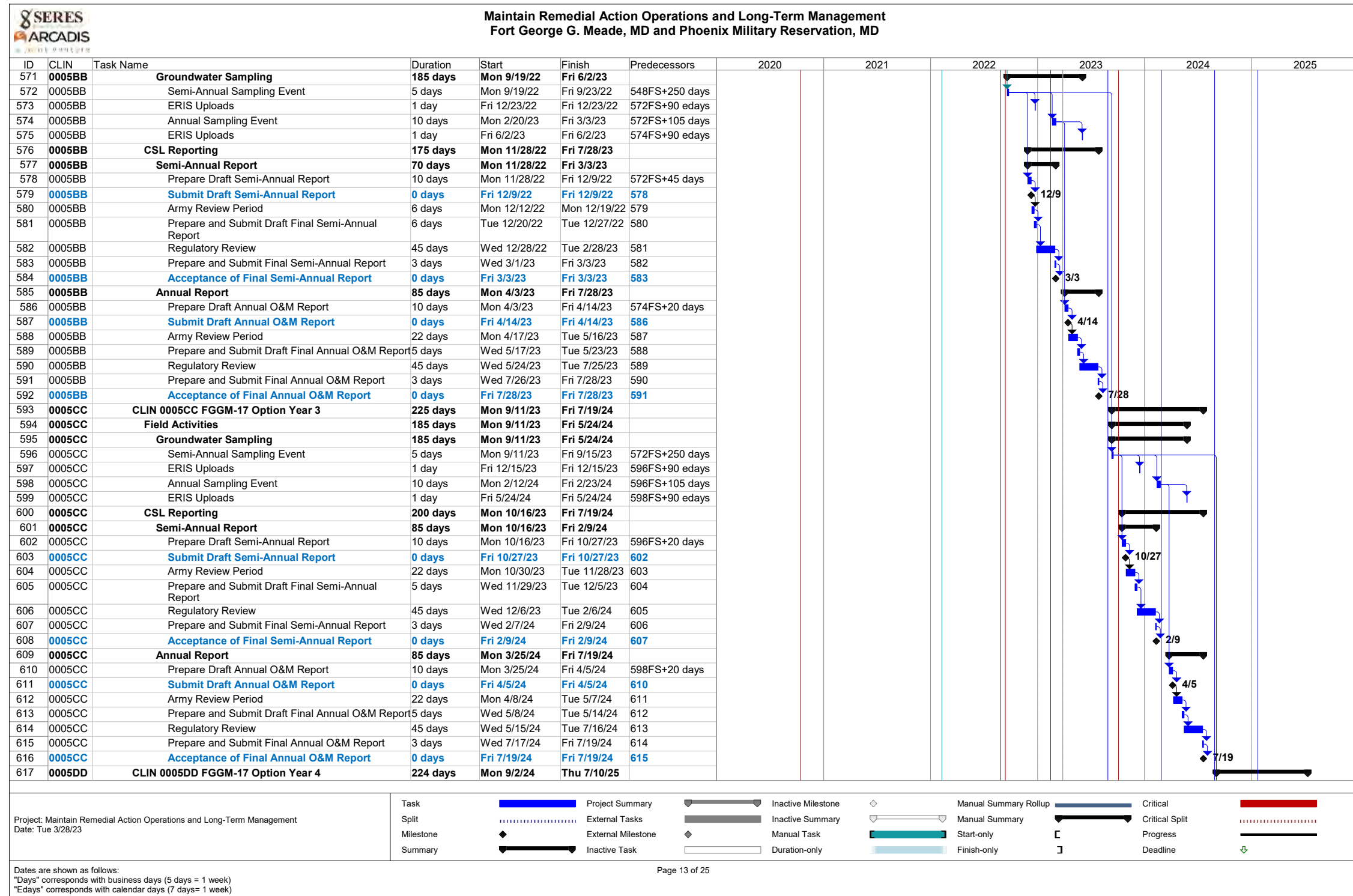


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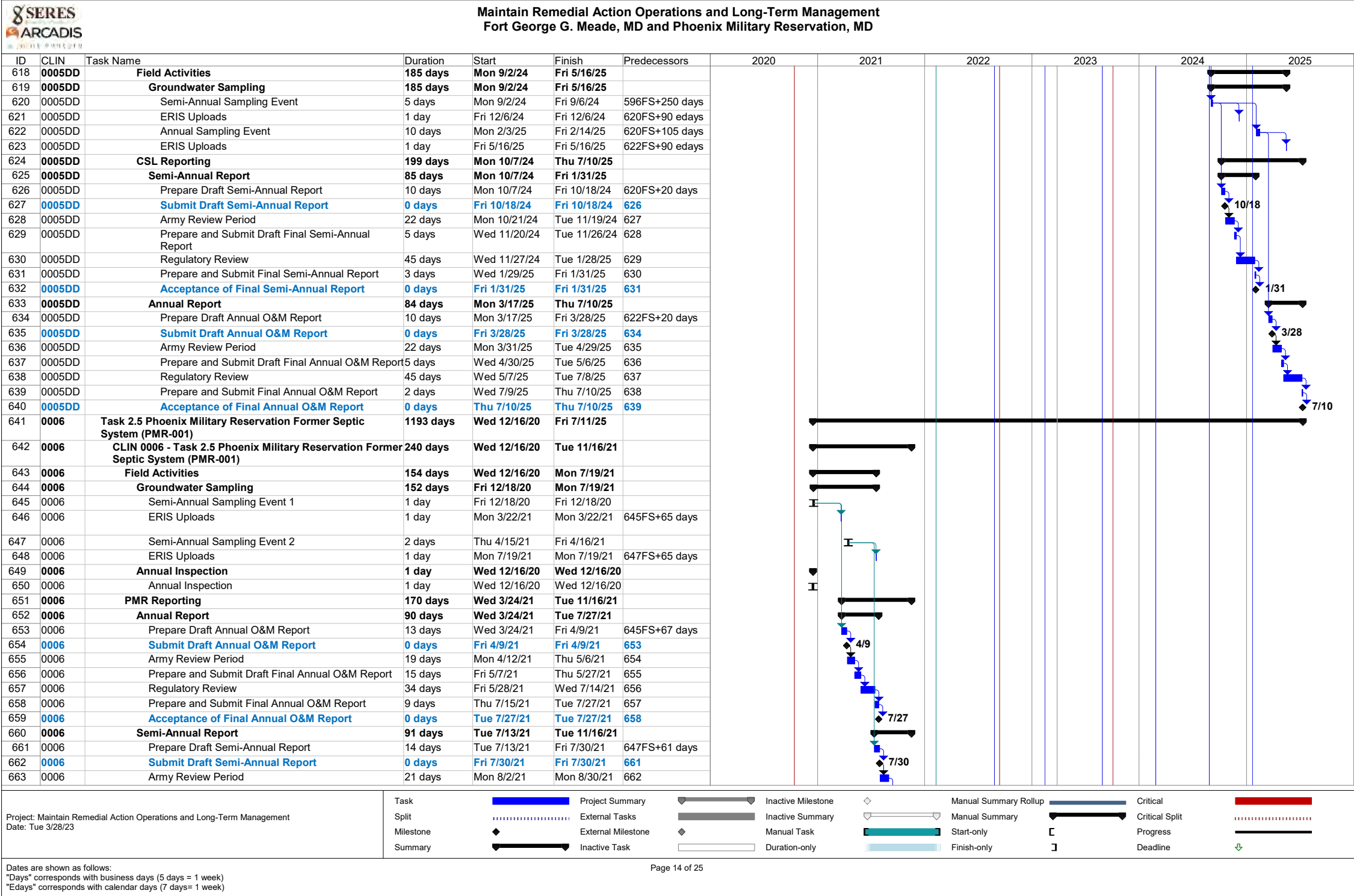


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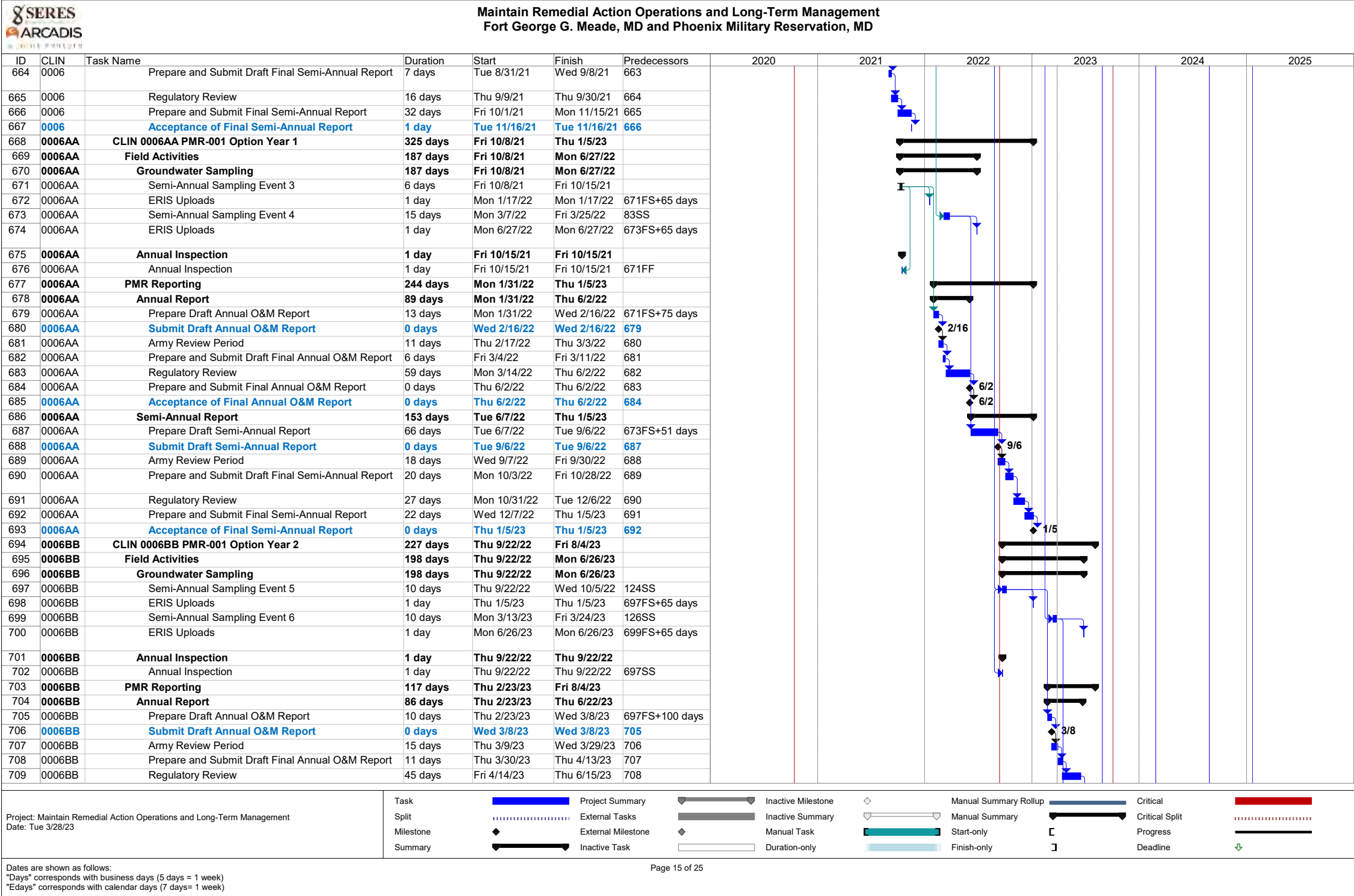


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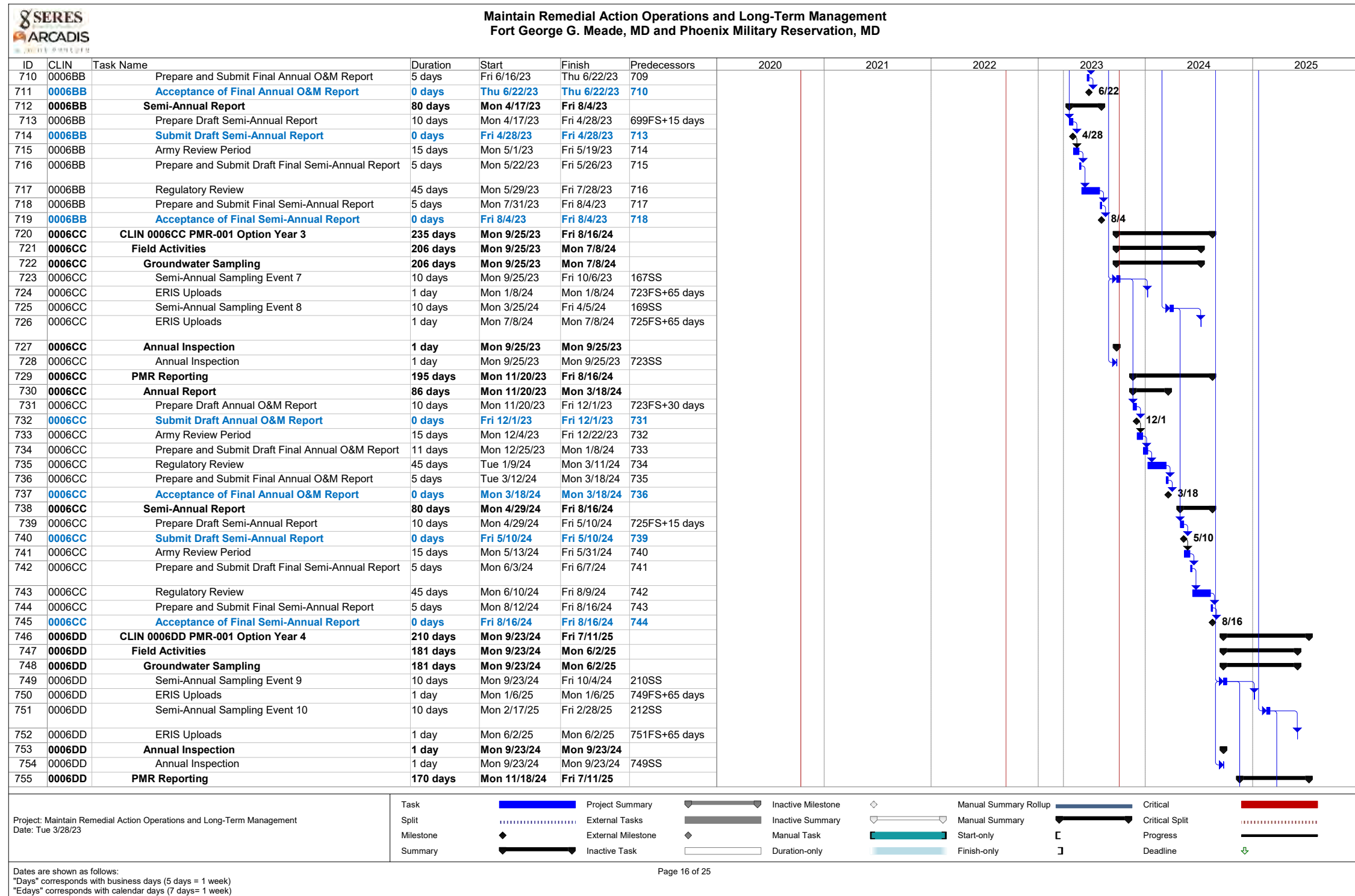


Table 3-1 Project Schedules for Open Sites at Fort Meade

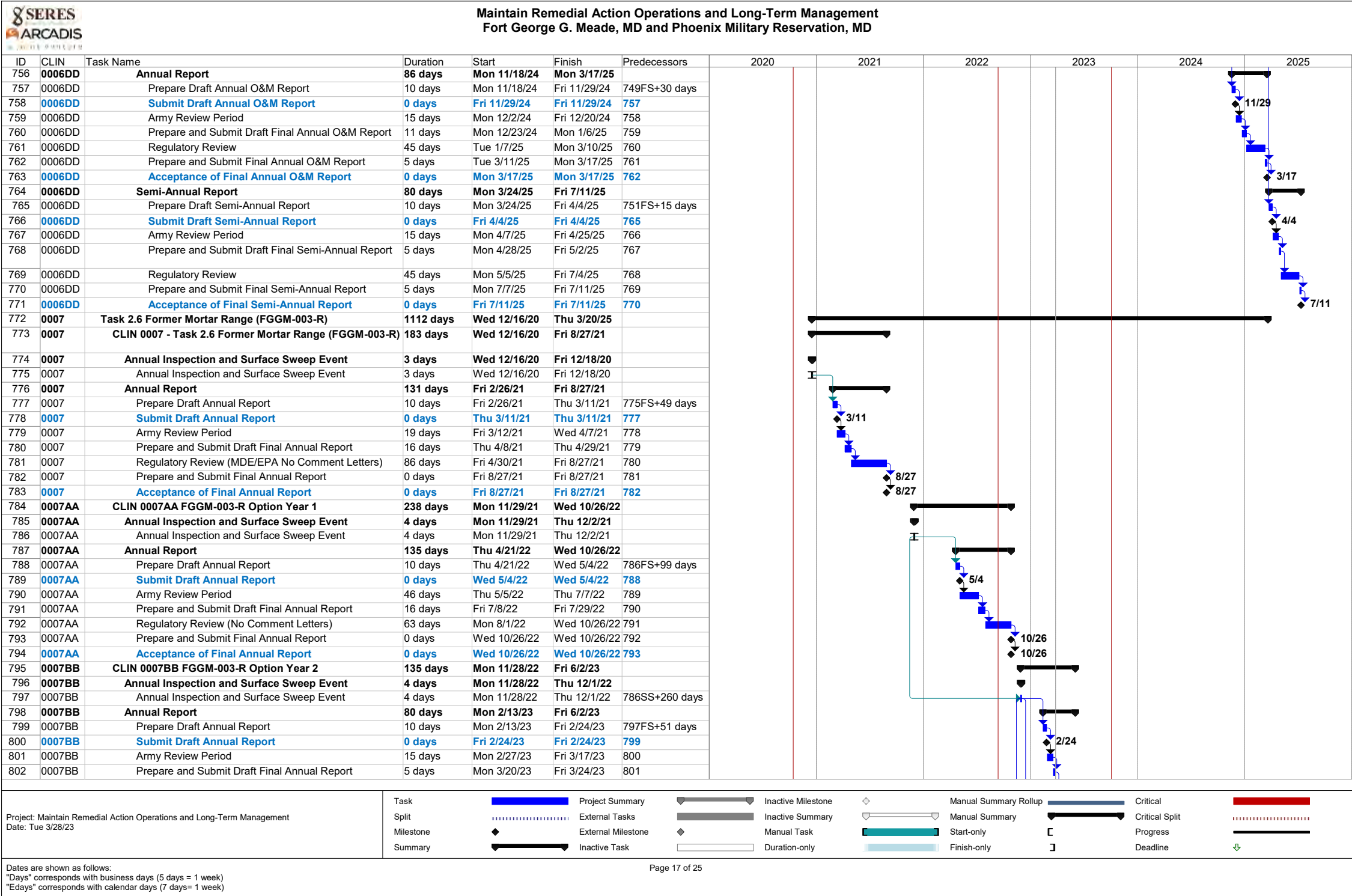


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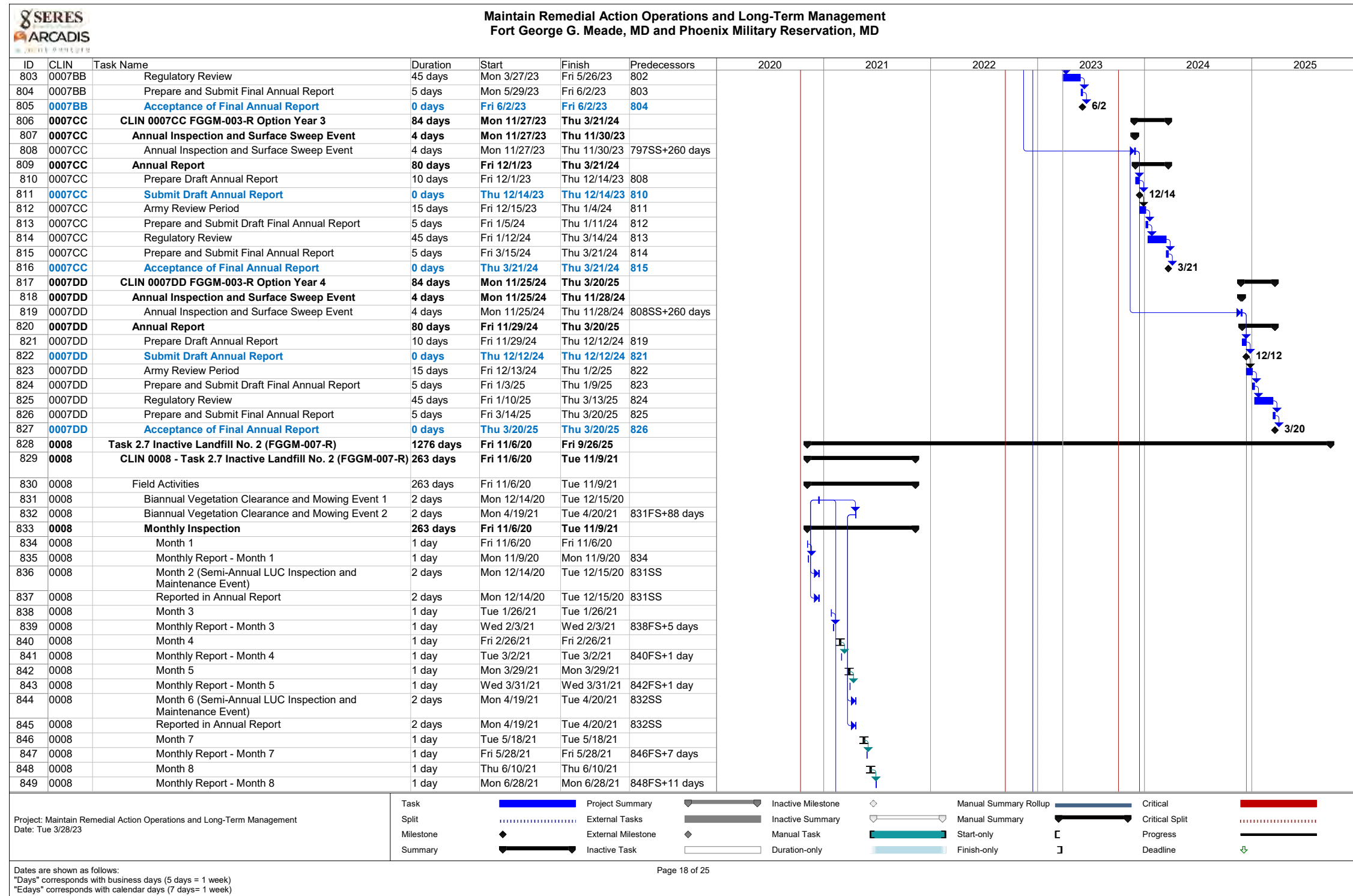


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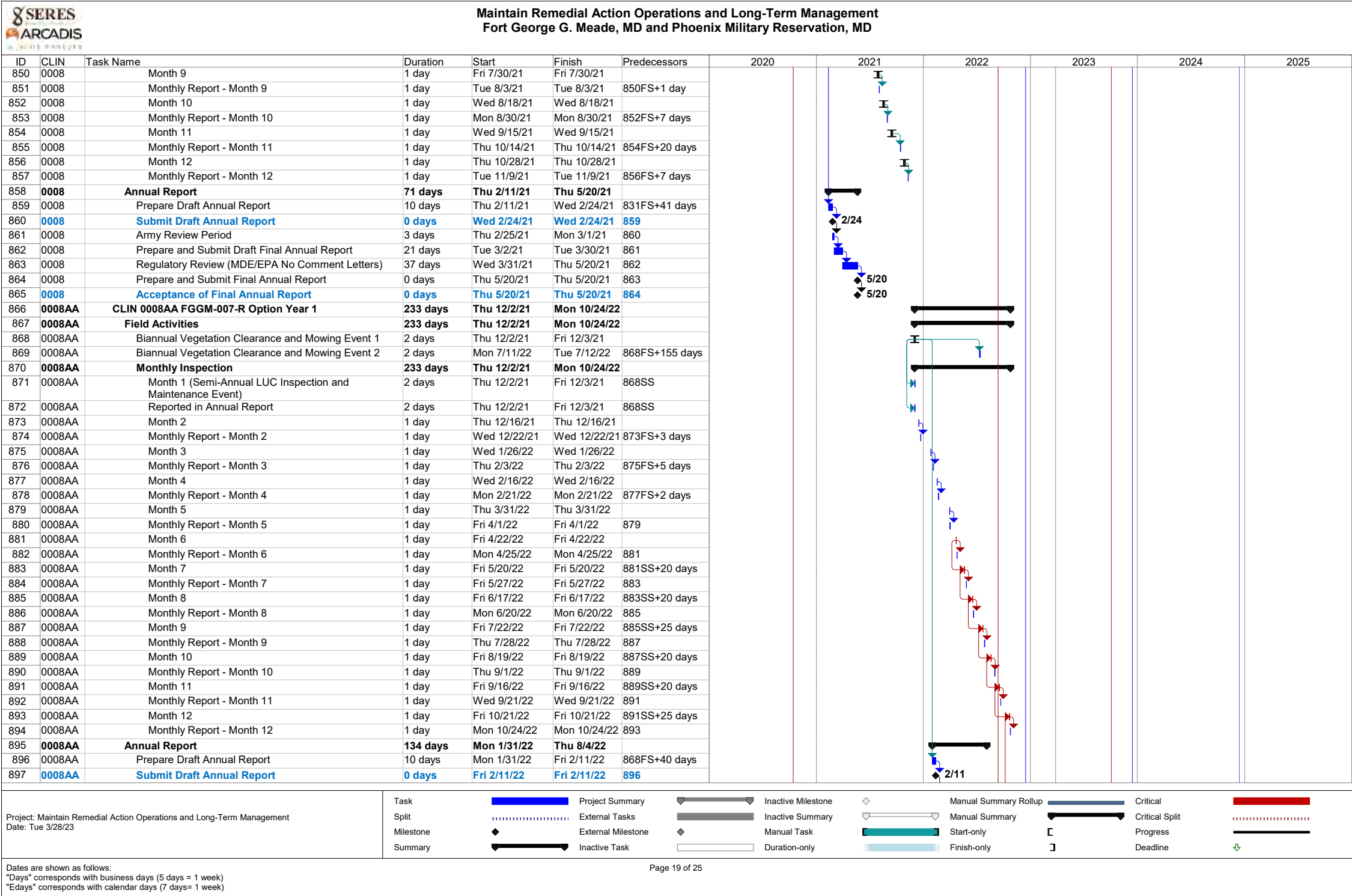


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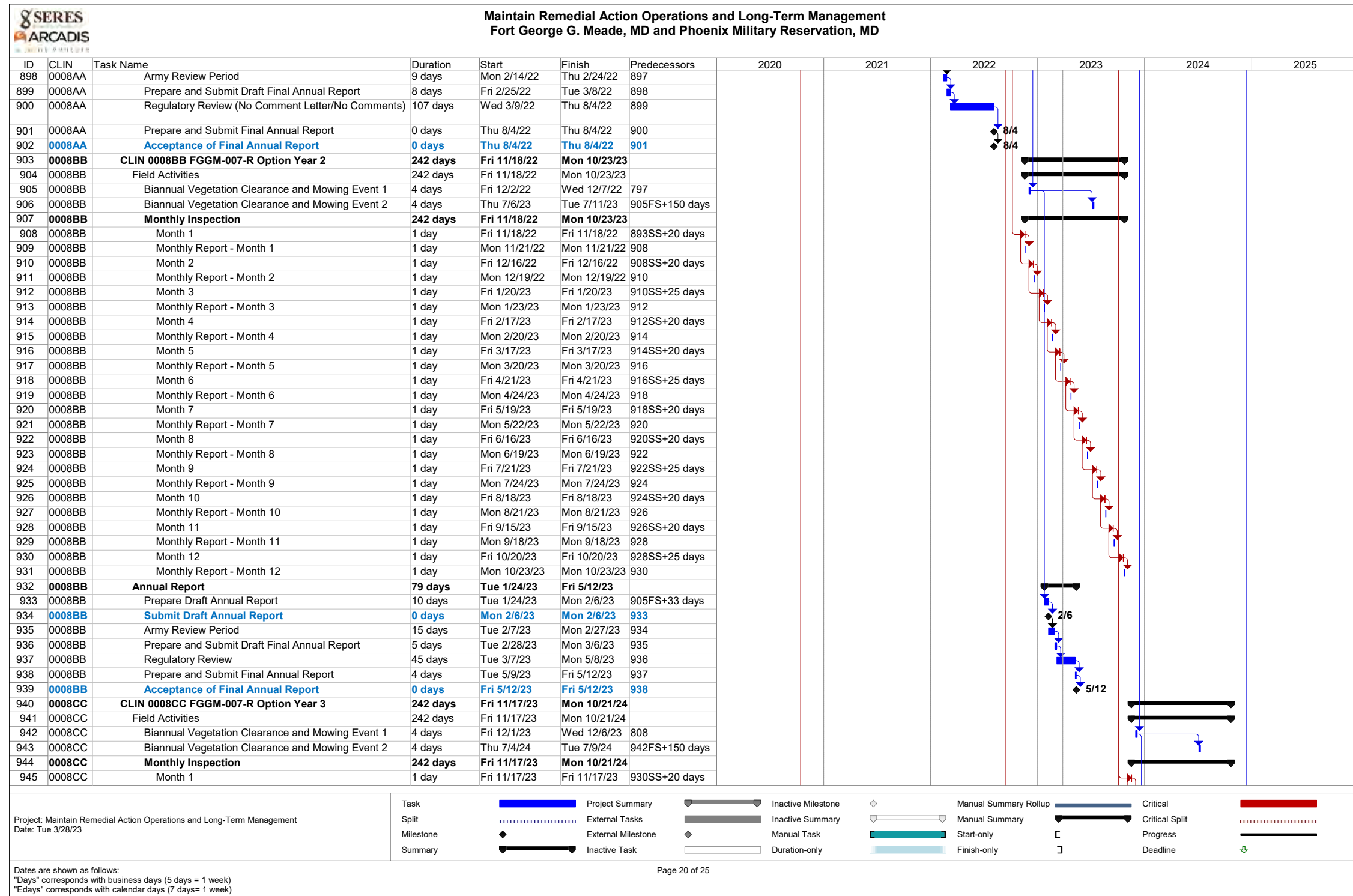


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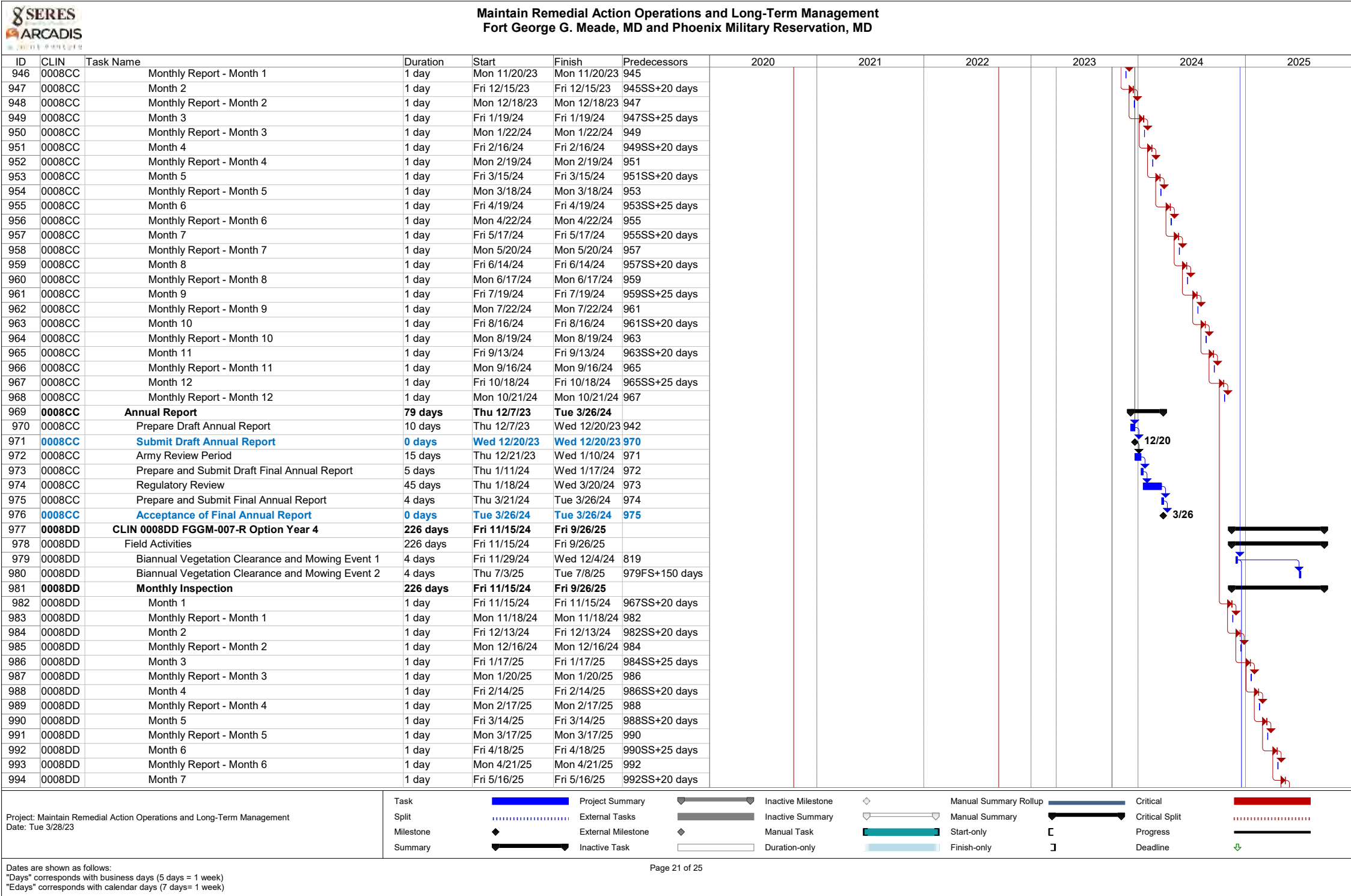


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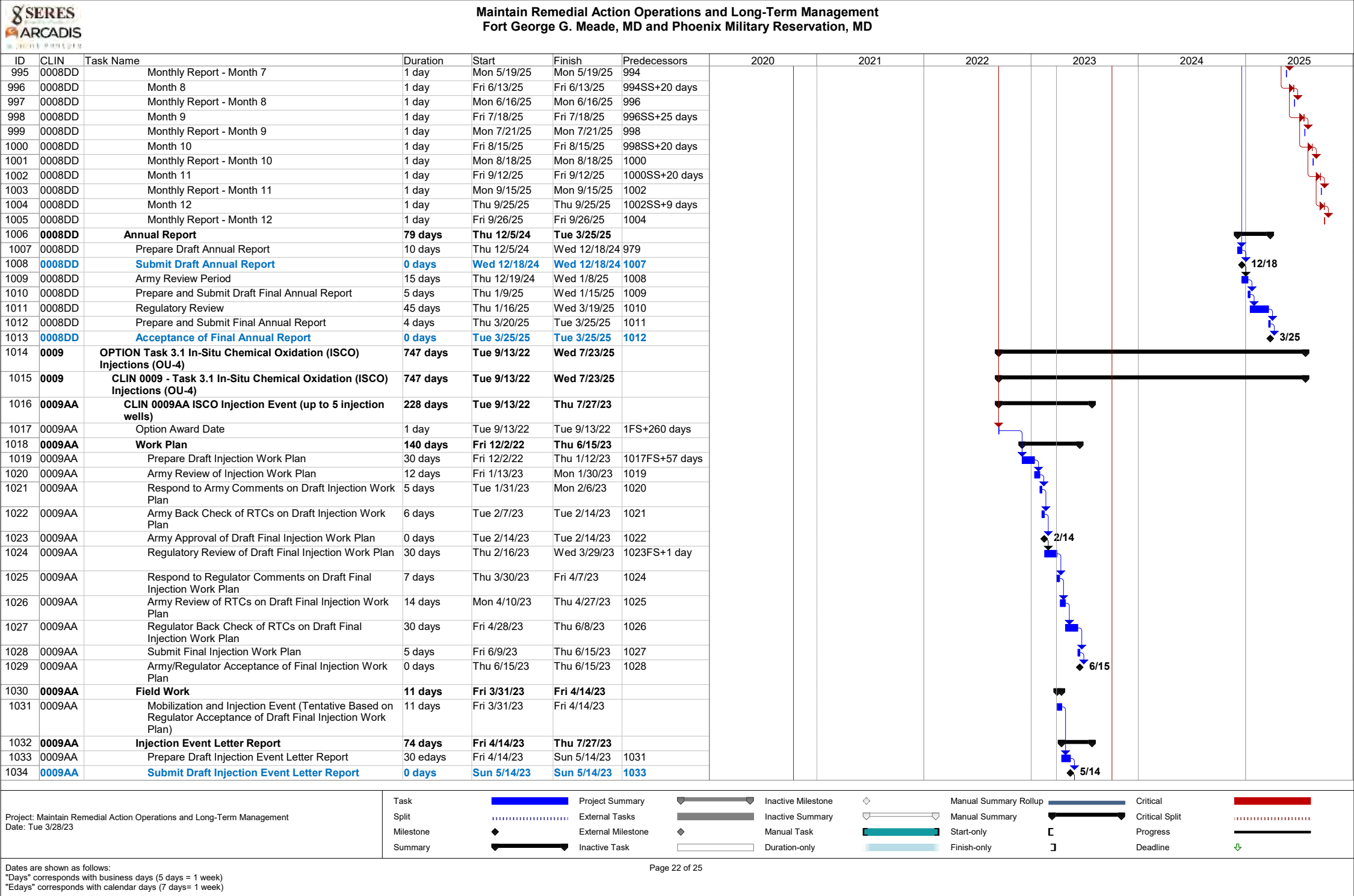


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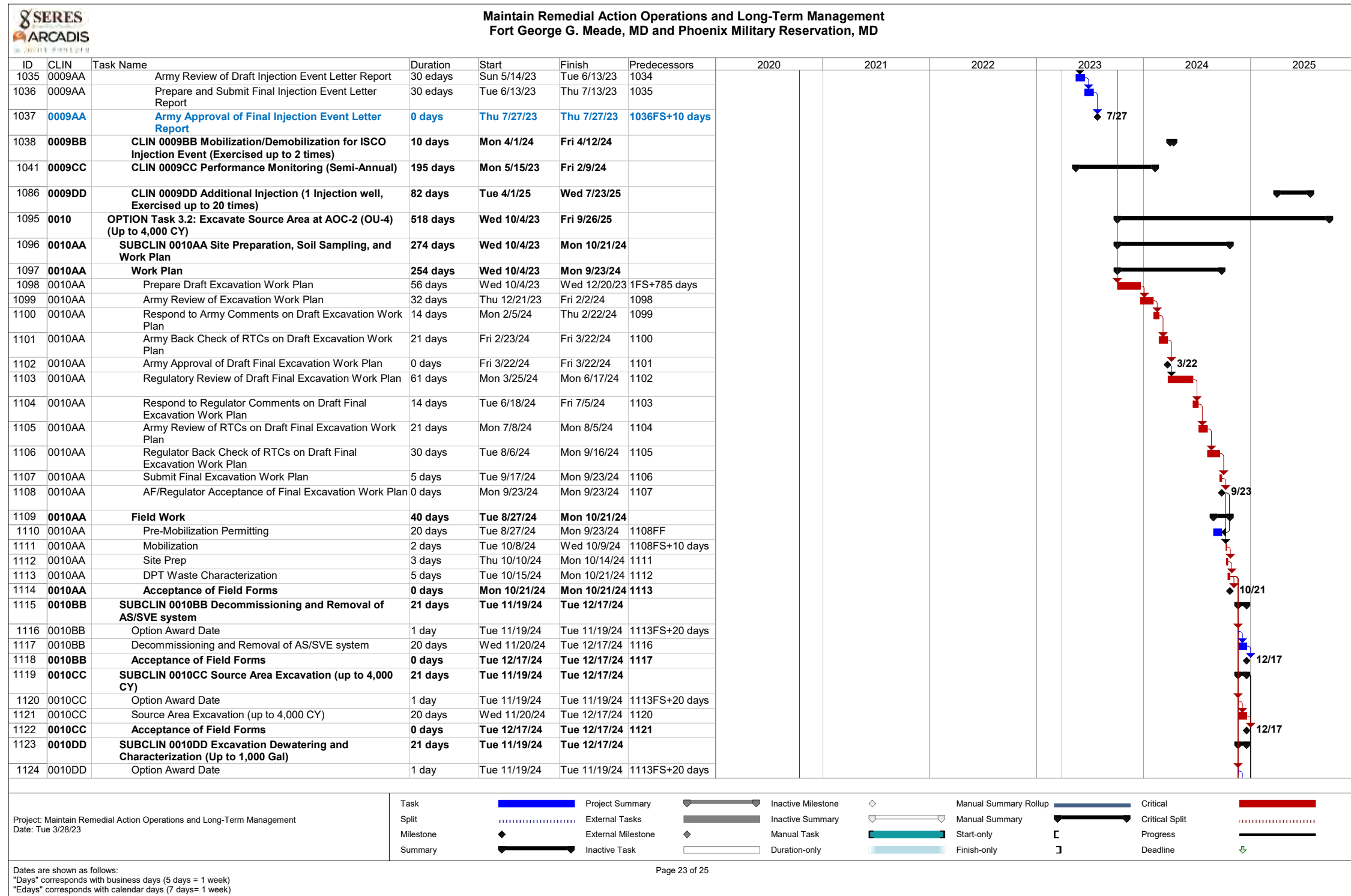


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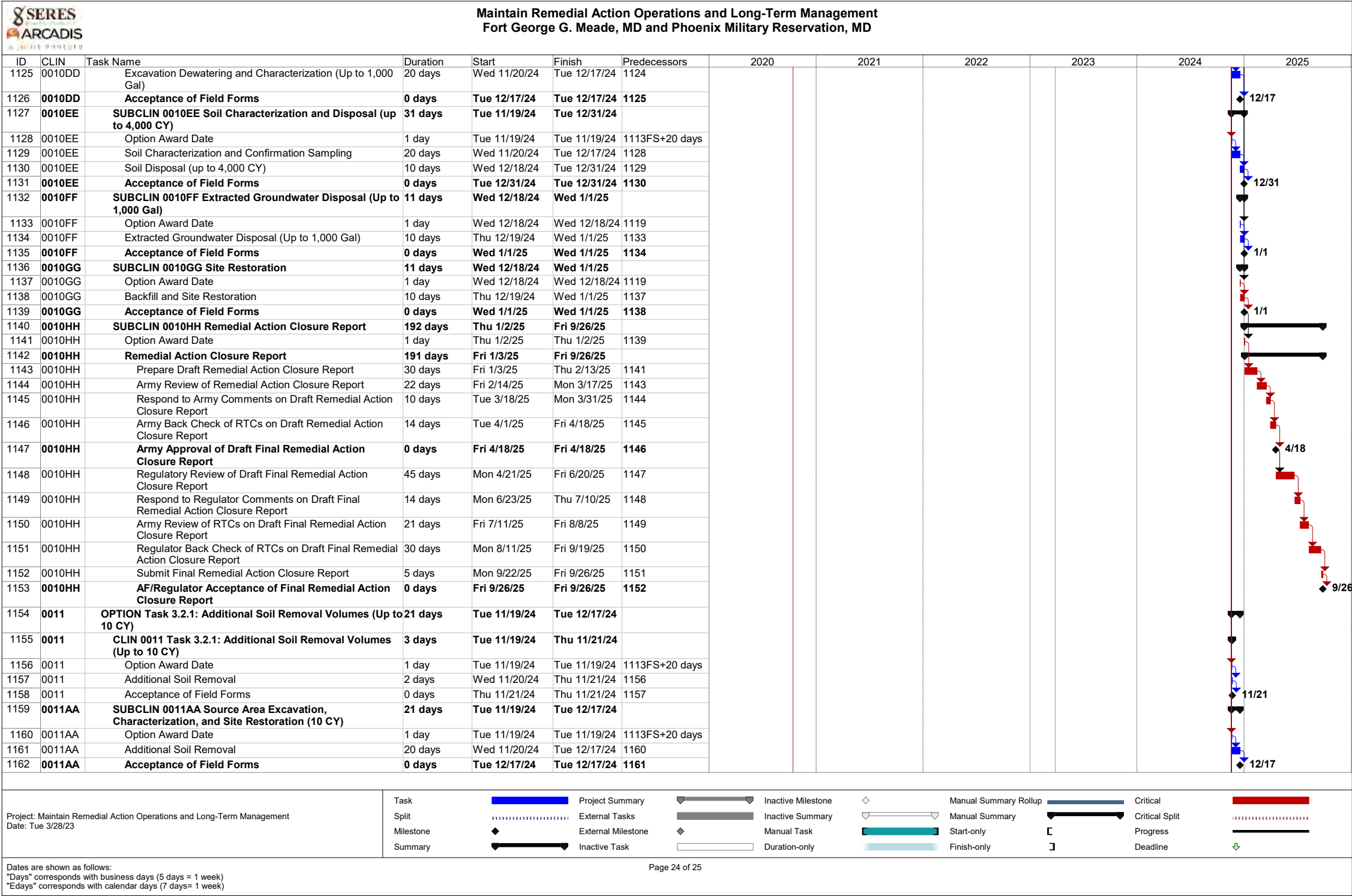


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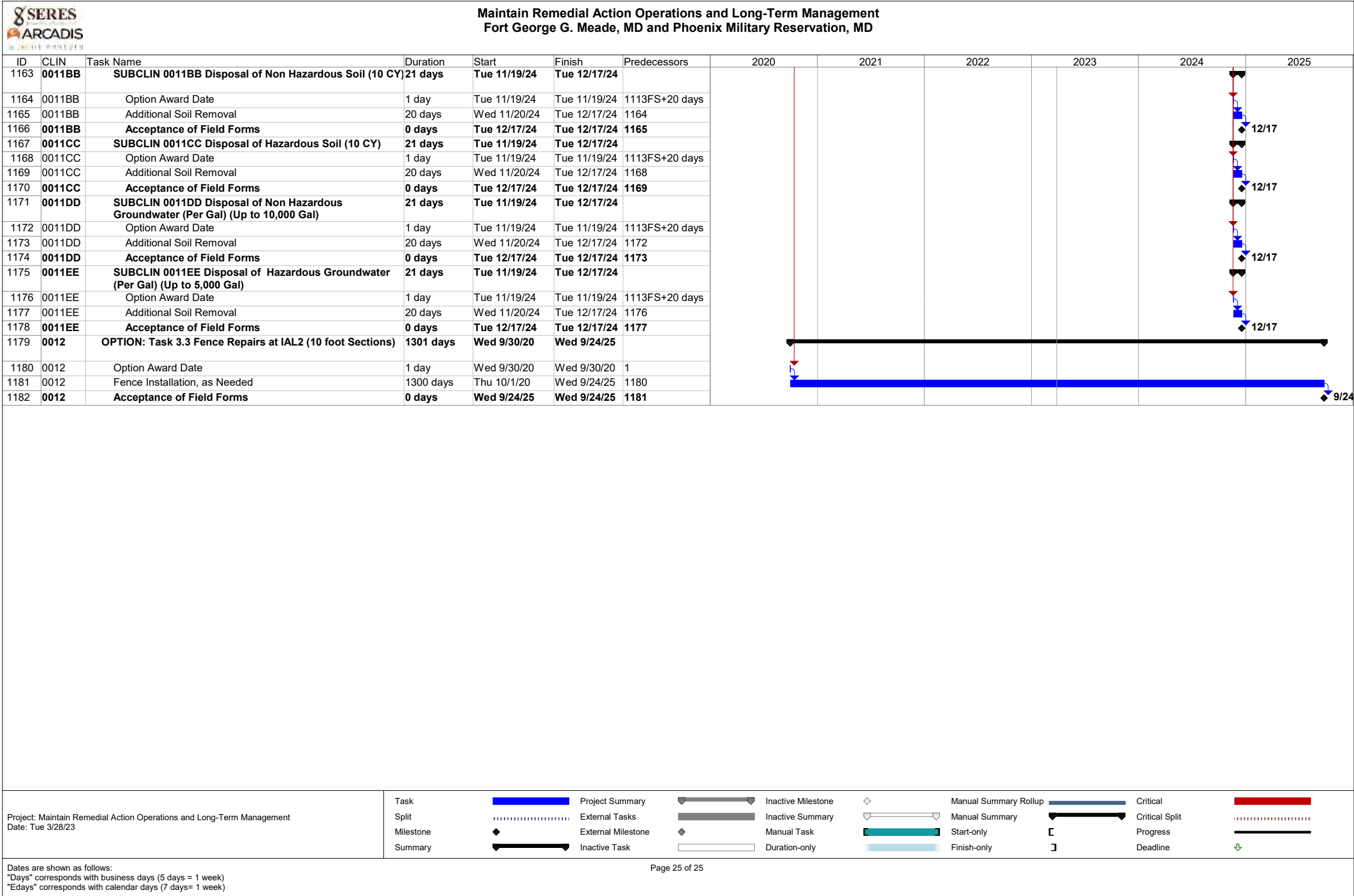


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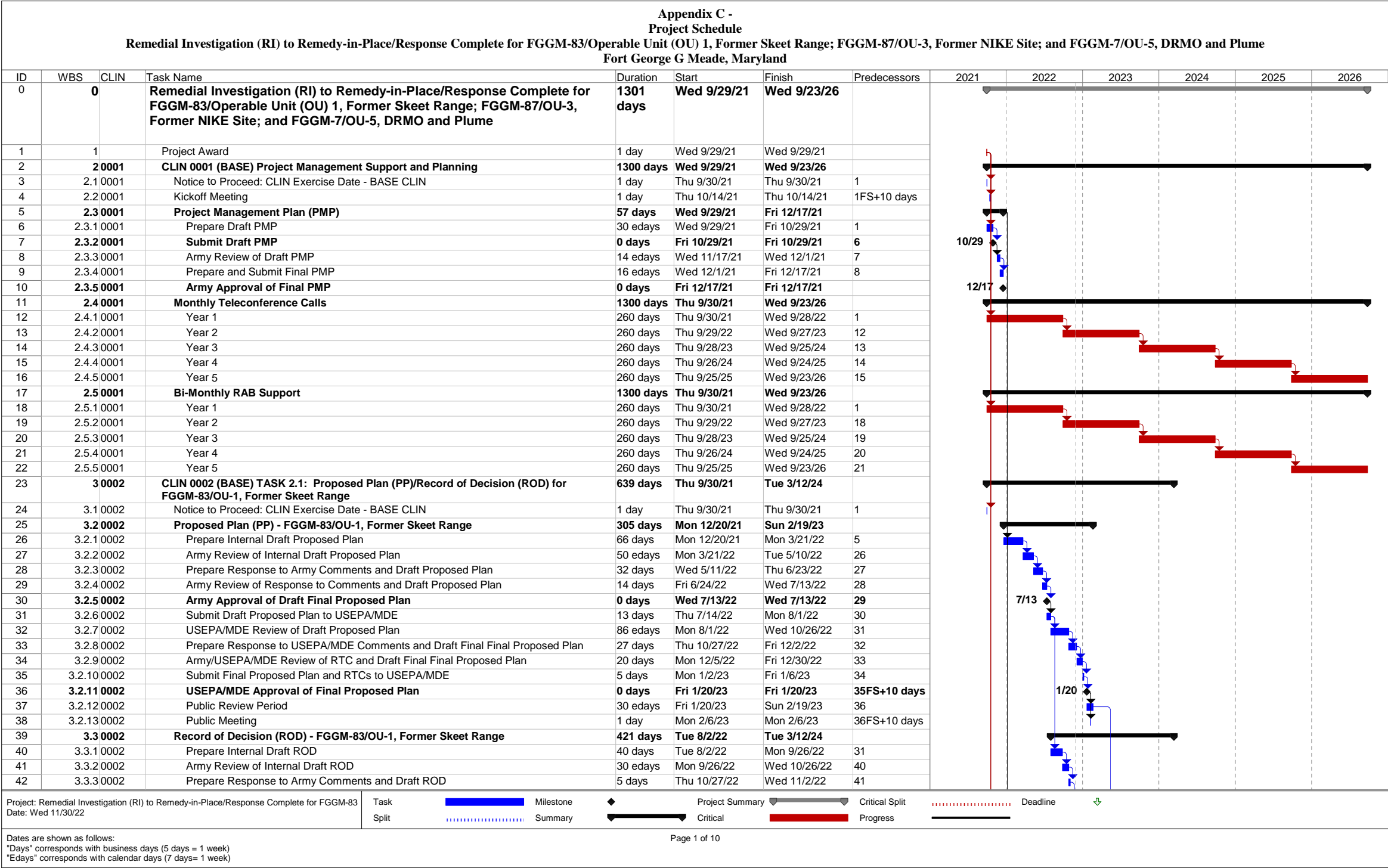


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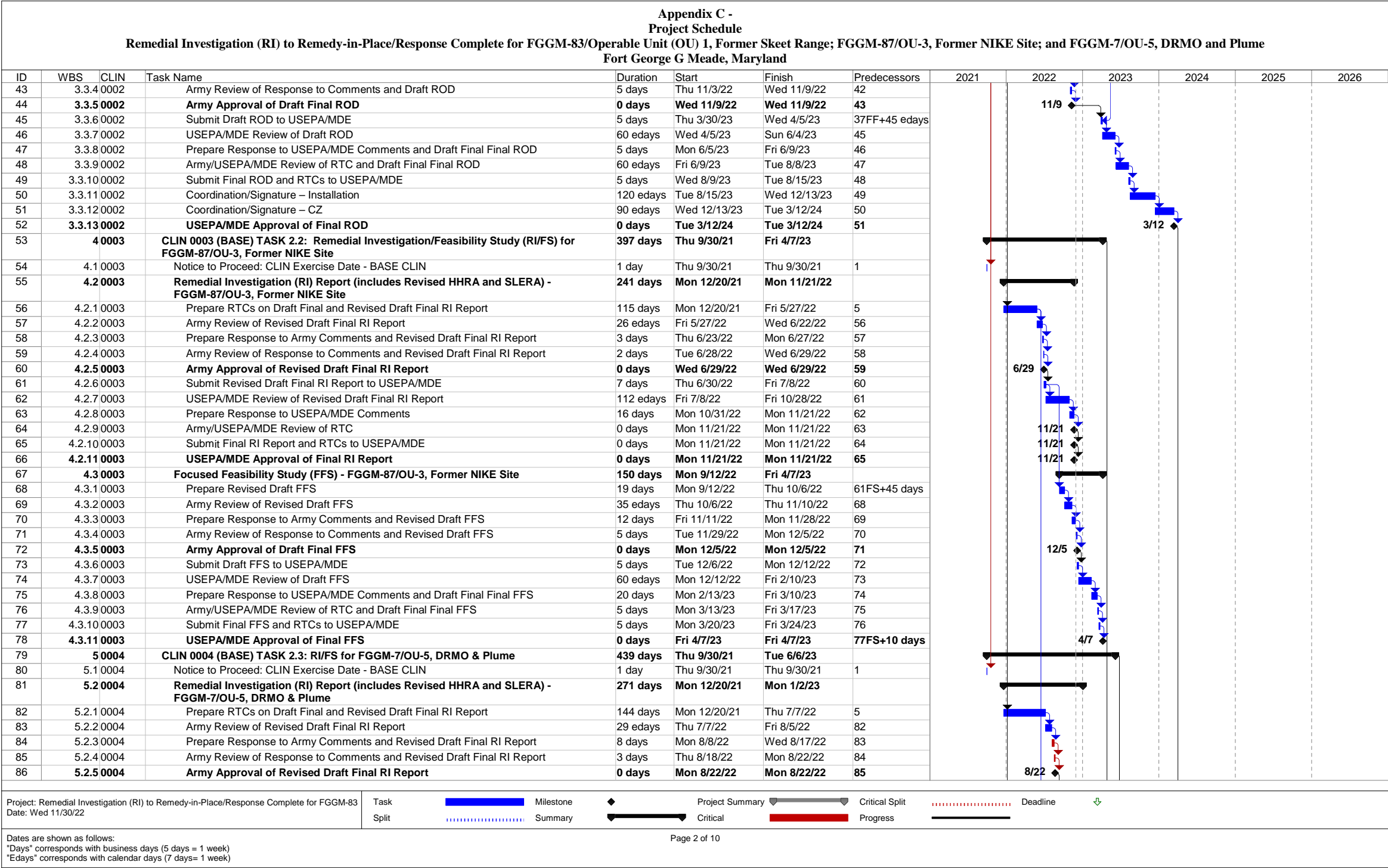


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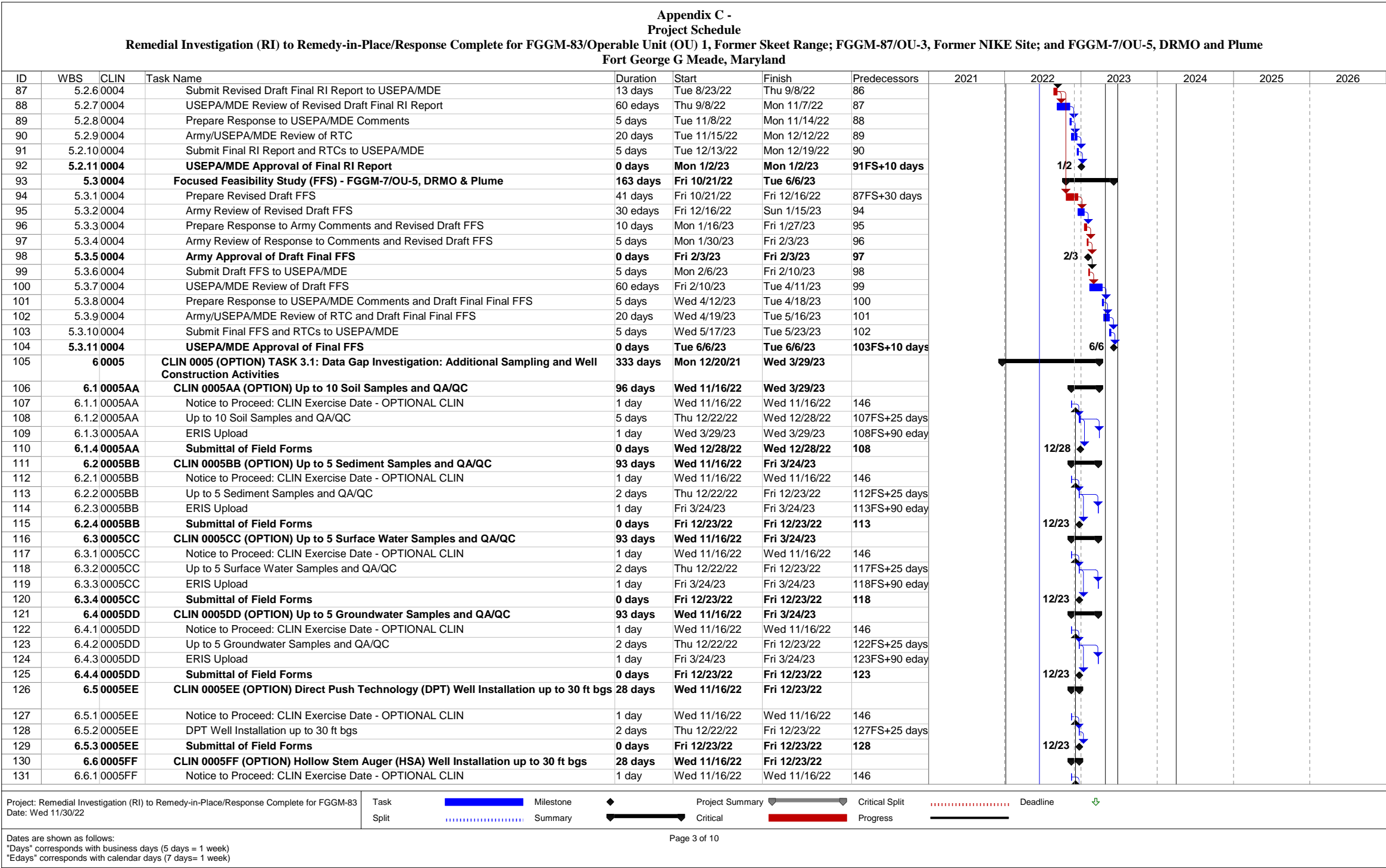


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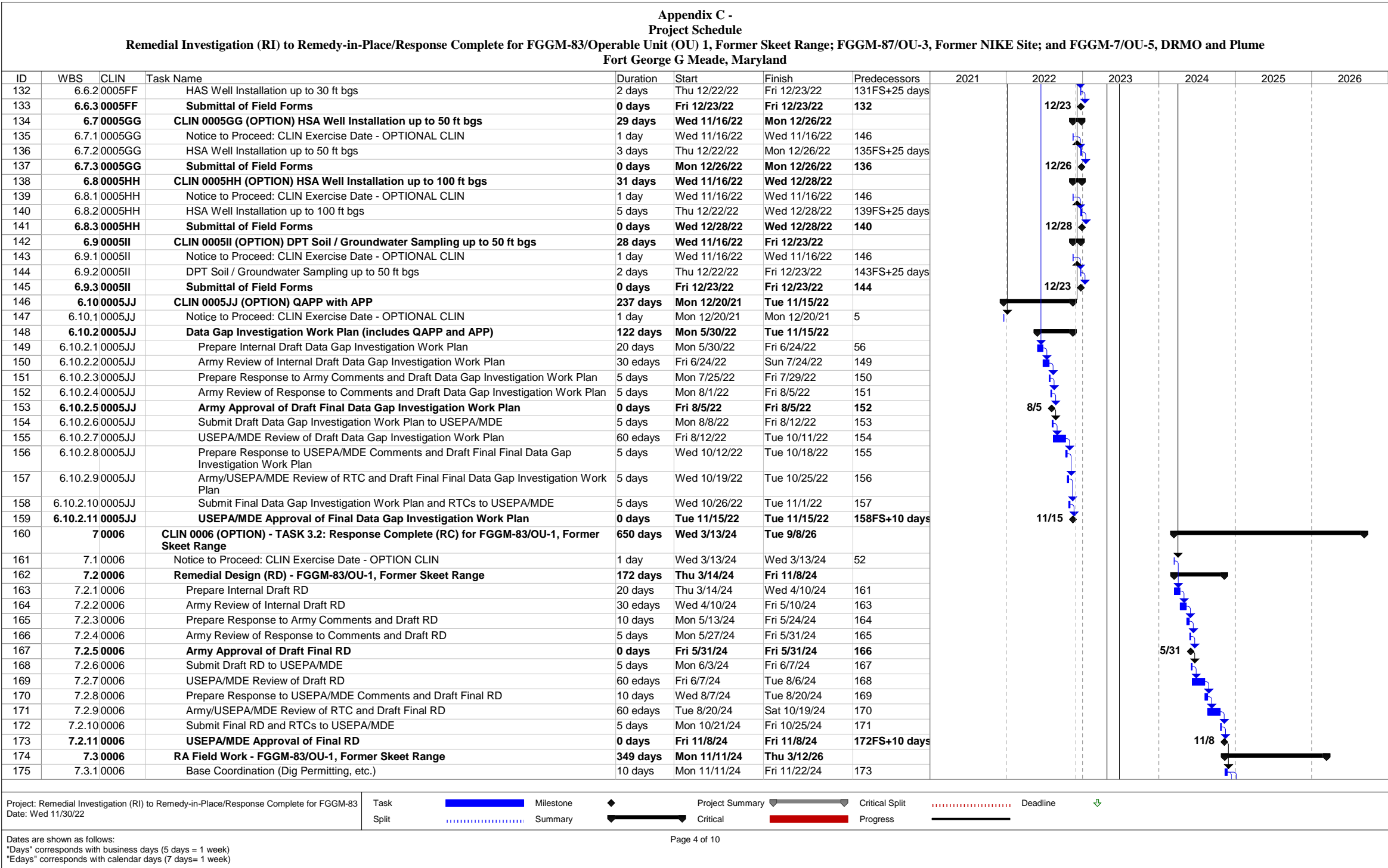


Table 3-1 Project Schedules for Open Sites at Fort Meade

Appendix C - Project Schedule													
Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83/Operable Unit (OU) 1, Former Skeet Range; FGGM-87/OU-3, Former NIKE Site; and FGGM-7/OU-5, DRMO and Plume Fort George G Meade, Maryland													
ID	WBS	CLIN	Task Name	Duration	Start	Finish	Predecessors	2021	2022	2023	2024	2025	2026
176	7.3.2	0006	Pre-Excavation Site Characterization	30 days	Mon 11/25/24	Fri 1/3/25							
177	7.3.2.1	0006	Site Survey / Wetland and Floodplain Delineation	5 days	Mon 11/25/24	Fri 11/29/24	175						
178	7.3.2.2	0006	Grid Set-Up / Lead Delineation	5 days	Mon 11/25/24	Fri 11/29/24	177SS						
179	7.3.2.3	0006	XRF and Off-Site Lab Analysis (includes TCLP Sampling for Waste Characterization)	5 days	Mon 12/2/24	Fri 12/6/24	178						
180	7.3.2.4	0006	Treatability Study	20 days	Mon 12/9/24	Fri 1/3/25	179						
181	7.3.3	0006	Excavation	100 days	Mon 1/6/25	Fri 5/23/25							
182	7.3.3.1	0006	Mobilization and Site Prep	5 days	Mon 1/6/25	Fri 1/10/25	175FS+30 days						
183	7.3.3.2	0006	Erosion and Sediment Control Implementation	5 days	Mon 1/6/25	Fri 1/10/25	182SS						
184	7.3.3.3	0006	Site Layout and Implement Traffic Control Plan	5 days	Mon 1/6/25	Fri 1/10/25	183SS						
185	7.3.3.4	0006	Tree Clearing and Stump Grinding	5 days	Mon 1/13/25	Fri 1/17/25	184						
186	7.3.3.5	0006	Vegetation Clearing and Grubbing	5 days	Mon 1/20/25	Fri 1/24/25	185						
187	7.3.3.6	0006	Excavation and Soil Stabilization	15 days	Mon 1/27/25	Fri 2/14/25	186						
188	7.3.3.7	0006	Post-Excavation Confirmation Sampling	5 days	Mon 2/17/25	Fri 2/21/25	187						
189	7.3.3.8	0006	Backfill, Site Restoration, and Reforestation	10 days	Mon 3/3/25	Fri 3/14/25	188FS+5 days						
190	7.3.3.9	0006	Land Use Control Implementation / Sign Installation	2 days	Thu 3/13/25	Fri 3/14/25	189FF						
191	7.3.3.10	0006	ERIS Upload	1 day	Fri 5/23/25	Fri 5/23/25	188FS+90 eday						
192	7.3.3.11	0006	Demobilization	2 days	Mon 3/17/25	Tue 3/18/25	190						
193	7.3.4		Annual LUC Inspection	1 day	Thu 3/12/26	Thu 3/12/26							
194	7.3.4.1		Annual LUC Inspection	1 day	Thu 3/12/26	Thu 3/12/26	190SS+260 day						
195	7.3.5	0006	Army Acceptance of Fieldwork Completion Memo	0 days	Tue 3/18/25	Tue 3/18/25	192						
196	7.4	0006	Remedial Action Completion Report - FGGM-83/OU-1, Former Skeet Range	158 days	Mon 2/17/25	Wed 9/24/25							
197	7.4.1	0006	Prepare Internal Draft Remedial Action Completion Report	20 days	Mon 2/17/25	Fri 3/14/25	187						
198	7.4.2	0006	Army Review of Internal Draft Remedial Action Completion Report	30 edays	Fri 3/14/25	Sun 4/13/25	197						
199	7.4.3	0006	Prepare Response to Army Comments and Draft Remedial Action Completion Report	20 days	Mon 4/14/25	Fri 5/9/25	198						
200	7.4.4	0006	Army Review of Response to Comments and Draft Remedial Action Completion Report	5 days	Mon 5/12/25	Fri 5/16/25	199						
201	7.4.5	0006	Army Approval of Draft Final Remedial Action Completion Report	0 days	Fri 5/16/25	Fri 5/16/25	200						
202	7.4.6	0006	Submit Draft Remedial Action Completion Report to USEPA/MDE	5 days	Mon 5/19/25	Fri 5/23/25	201						
203	7.4.7	0006	USEPA/MDE Review of Draft Remedial Action Completion Report	75 edays	Fri 5/23/25	Wed 8/6/25	202						
204	7.4.8	0006	Prepare Response to USEPA/MDE Comments and Draft Final Remedial Action Completion Report	10 days	Thu 8/7/25	Wed 8/20/25	203						
205	7.4.9	0006	Army/USEPA/MDE Review of RTC and Draft Final Remedial Action Completion Report	10 days	Thu 8/21/25	Wed 9/3/25	204						
206	7.4.10	0006	Submit Final Remedial Action Completion Report and RTCs to USEPA/MDE	5 days	Thu 9/4/25	Wed 9/10/25	205						
207	7.4.11	0006	USEPA/MDE Approval of Final Remedial Action Completion Report	0 days	Wed 9/24/25	Wed 9/24/25	206FS+10 days						
208	7.5	0006	Land Use Inspection Report - FGGM-83/OU-1, Former Skeet Range	128 days	Fri 3/13/26	Tue 9/8/26							
209	7.5.1	0006	Prepare Internal Draft Land Use Inspection Report	15 days	Fri 3/13/26	Thu 4/2/26	194						
210	7.5.2	0006	Army Review of Internal Draft Land Use Inspection Report	30 edays	Thu 4/2/26	Sat 5/2/26	209						
211	7.5.3	0006	Prepare Response to Army Comments and Draft Land Use Inspection Report	10 days	Mon 5/4/26	Fri 5/15/26	210						
212	7.5.4	0006	Army Review of Response to Comments and Draft Land Use Inspection Report	5 days	Mon 5/18/26	Fri 5/22/26	211						
213	7.5.5	0006	Army Approval of Draft Final Land Use Inspection Report	0 days	Fri 5/22/26	Fri 5/22/26	212						
214	7.5.6	0006	Submit Draft Land Use Inspection Report to USEPA/MDE	5 days	Mon 5/25/26	Fri 5/29/26	213						
215	7.5.7	0006	USEPA/MDE Review of Draft Land Use Inspection Report	60 edays	Fri 5/29/26	Tue 7/28/26	214						
216	7.5.8	0006	Prepare Response to USEPA/MDE Comments and Draft Final Land Use Inspection Report	5 days	Wed 7/29/26	Tue 8/4/26	215						
217	7.5.9	0006	Army/USEPA/MDE Review of RTC and Draft Final Land Use Inspection Report	10 days	Wed 8/5/26	Tue 8/18/26	216						
Project: Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83 Date: Wed 11/30/22													
Task			Milestone		Project Summary		Critical Split		Deadline				
Split			Summary		Critical		Progress						
Dates are shown as follows: "Days" corresponds with business days (5 days = 1 week) "Edays" corresponds with calendar days (7 days= 1 week)													
Page 5 of 10													

Table 3-1 Project Schedules for Open Sites at Fort Meade

Appendix C - Project Schedule													
Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83/Operable Unit (OU) 1, Former Skeet Range; FGGM-87/OU-3, Former NIKE Site; and FGGM-7/OU-5, DRMO and Plume Fort George G Meade, Maryland													
ID	WBS	CLIN	Task Name	Duration	Start	Finish	Predecessors	2021	2022	2023	2024	2025	2026
218	7.5.10	0006	Submit Final Land Use Inspection Report and RTCs to USEPA/MDE	5 days	Wed 8/19/26	Tue 8/25/26	217						
219	7.5.11	0006	USEPA/MDE Approval of Final Land Use Inspection Report	0 days	Tue 9/8/26	Tue 9/8/26	218FS+10 days						9/8
220	8	0006AA	CLIN 0006AA (OPTION) - Task 3.2.1: Additional Soil Volumes: Unit Cost (per 10 CY)	4 days	Mon 2/17/25	Thu 2/20/25							
221	8.1	0006AA	CLIN 0006AA (OPTION) - Source Area Excavation, Characterization, and Site Restoration (10 CY)	4 days	Mon 2/17/25	Thu 2/20/25							
222	8.1.1	0006AA	Notice to Proceed: CLIN Exercise Date - OPTION CLIN	1 day	Mon 2/17/25	Mon 2/17/25	187						
223	8.1.2	0006AA	Source Area Excavation, Characterization, and Site Restoration (10 CY)	3 days	Tue 2/18/25	Thu 2/20/25	222						
224	8.1.3	0006AA	Army Acceptance of Fieldwork Completion Memo	0 days	Thu 2/20/25	Thu 2/20/25	223				2/20		
225	8.2	0006BB	CLIN 0006BB (OPTION) - Disposal of Non Hazardous Soil (10 CY)	4 days	Mon 2/17/25	Thu 2/20/25							
226	8.2.1	0006BB	Notice to Proceed: CLIN Exercise Date - OPTION CLIN	1 day	Mon 2/17/25	Mon 2/17/25	187						
227	8.2.2	0006BB	Disposal of Non Hazardous Soil (10 CY)	3 days	Tue 2/18/25	Thu 2/20/25	226						
228	8.2.3	0006BB	Army Acceptance of Fieldwork Completion Memo	0 days	Thu 2/20/25	Thu 2/20/25	227				2/20		
229	9	0007	CLIN 0007 (OPTION) TASK 3.3: PP/ROD for FGGM-87/OU-3, Former NIKE Site	337 days	Mon 4/10/23	Tue 7/23/24							
230	9.1	0007	Notice to Proceed: CLIN Exercise Date - OPTION CLIN	1 day	Mon 4/10/23	Mon 4/10/23	53						
231	9.2	0007	Proposed Plan (PP) - FGGM-87/OU-3, Former NIKE Site	159 days	Tue 4/11/23	Sun 11/19/23							
232	9.2.1	0007	Prepare Internal Draft Proposed Plan	20 days	Tue 4/11/23	Mon 5/8/23	230						
233	9.2.2	0007	Army Review of Internal Draft Proposed Plan	30 edays	Mon 5/8/23	Wed 6/7/23	232						
234	9.2.3	0007	Prepare Response to Army Comments and Draft Proposed Plan	5 days	Thu 6/8/23	Wed 6/14/23	233						
235	9.2.4	0007	Army Review of Response to Comments and Draft Proposed Plan	5 days	Thu 6/15/23	Wed 6/21/23	234						
236	9.2.5	0007	Army Approval of Draft Final Proposed Plan	0 days	Wed 6/21/23	Wed 6/21/23	235						
237	9.2.6	0007	Submit Draft Proposed Plan to USEPA/MDE	5 days	Thu 6/22/23	Wed 6/28/23	236			6/21			
238	9.2.7	0007	USEPA/MDE Review of Draft Proposed Plan	60 edays	Wed 6/28/23	Sun 8/27/23	237						
239	9.2.8	0007	Prepare Response to USEPA/MDE Comments and Draft Final Final Proposed Plan	5 days	Mon 8/28/23	Fri 9/1/23	238						
240	9.2.9	0007	Army/USEPA/MDE Review of RTC and Draft Final Final Proposed Plan	5 days	Mon 9/4/23	Fri 9/8/23	239						
241	9.2.10	0007	Submit Final Proposed Plan and RTCs to USEPA/MDE	20 days	Mon 9/11/23	Fri 10/6/23	240						
242	9.2.11	0007	USEPA/MDE Approval of Final Proposed Plan	0 days	Fri 10/20/23	Fri 10/20/23	241FS+10 days			10/20			
243	9.2.12	0007	Public Review Period	30 edays	Fri 10/20/23	Sun 11/19/23	242						
244	9.2.13	0007	Public Meeting	1 day	Mon 11/6/23	Mon 11/6/23	242FS+10 days						
245	9.3	0007	Record of Decision (ROD) - FGGM-87/OU-3, Former NIKE Site	279 days	Thu 6/29/23	Tue 7/23/24							
246	9.3.1	0007	Prepare Internal Draft ROD	20 days	Thu 6/29/23	Wed 7/26/23	237						
247	9.3.2	0007	Army Review of Internal Draft ROD	30 edays	Wed 7/26/23	Fri 8/25/23	246						
248	9.3.3	0007	Prepare Response to Army Comments and Draft ROD	5 days	Mon 8/28/23	Fri 9/1/23	247						
249	9.3.4	0007	Army Review of Response to Comments and Draft ROD	5 days	Mon 9/4/23	Fri 9/8/23	248						
250	9.3.5	0007	Army Approval of Draft Final ROD	0 days	Fri 9/8/23	Fri 9/8/23	249			9/8			
251	9.3.6	0007	Submit Draft ROD to USEPA/MDE	5 days	Mon 9/11/23	Fri 9/15/23	250						
252	9.3.7	0007	USEPA/MDE Review of Draft ROD	60 edays	Fri 9/15/23	Tue 11/14/23	251						
253	9.3.8	0007	Prepare Response to USEPA/MDE Comments and Draft Final Final ROD	5 days	Wed 11/15/23	Tue 11/21/23	252						
254	9.3.9	0007	Army/USEPA/MDE Review of RTC and Draft Final Final ROD	20 days	Wed 11/22/23	Tue 12/19/23	253						
255	9.3.10	0007	Submit Final ROD and RTCs to USEPA/MDE	5 days	Wed 12/20/23	Tue 12/26/23	254						
256	9.3.11	0007	Coordination/Signature – Installation	120 edays	Tue 12/26/23	Wed 4/24/24	255						
257	9.3.12	0007	Coordination/Signature – CZ	90 edays	Wed 4/24/24	Tue 7/23/24	256						
258	9.3.13	0007	USEPA/MDE Approval of Final ROD	0 days	Tue 7/23/24	Tue 7/23/24	257				7/23		
259	10	0008	CLIN 0008 (OPTION) TASK 3.4: PP/ROD for FGGM-7/OU-5, DRMO & Plume	335 days	Wed 6/7/23	Tue 9/17/24							
260	10.1	0008	Notice to Proceed: CLIN Exercise Date - OPTION CLIN	1 day	Wed 6/7/23	Wed 6/7/23	79						
261	10.2	0008	Proposed Plan (PP) - FGGM-7/OU-5, DRMO & Plume	161 days	Thu 6/8/23	Thu 1/18/24							
262	10.2.1	0008	Prepare Internal Draft Proposed Plan	20 days	Thu 6/8/23	Wed 7/5/23	260						
263	10.2.2	0008	Army Review of Internal Draft Proposed Plan	30 edays	Wed 7/5/23	Fri 8/4/23	262						
Project: Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83 Date: Wed 11/30/22			Task		Milestone	◆	Project Summary	▬	Critical Split	▬	Deadline	↓	
			Split		Summary	▬	Critical	▬	Progress	▬			
Dates are shown as follows: "Days" corresponds with business days (5 days = 1 week) "Edays" corresponds with calendar days (7 days= 1 week)													
Page 6 of 10													

Table 3-1 Project Schedules for Open Sites at Fort Meade

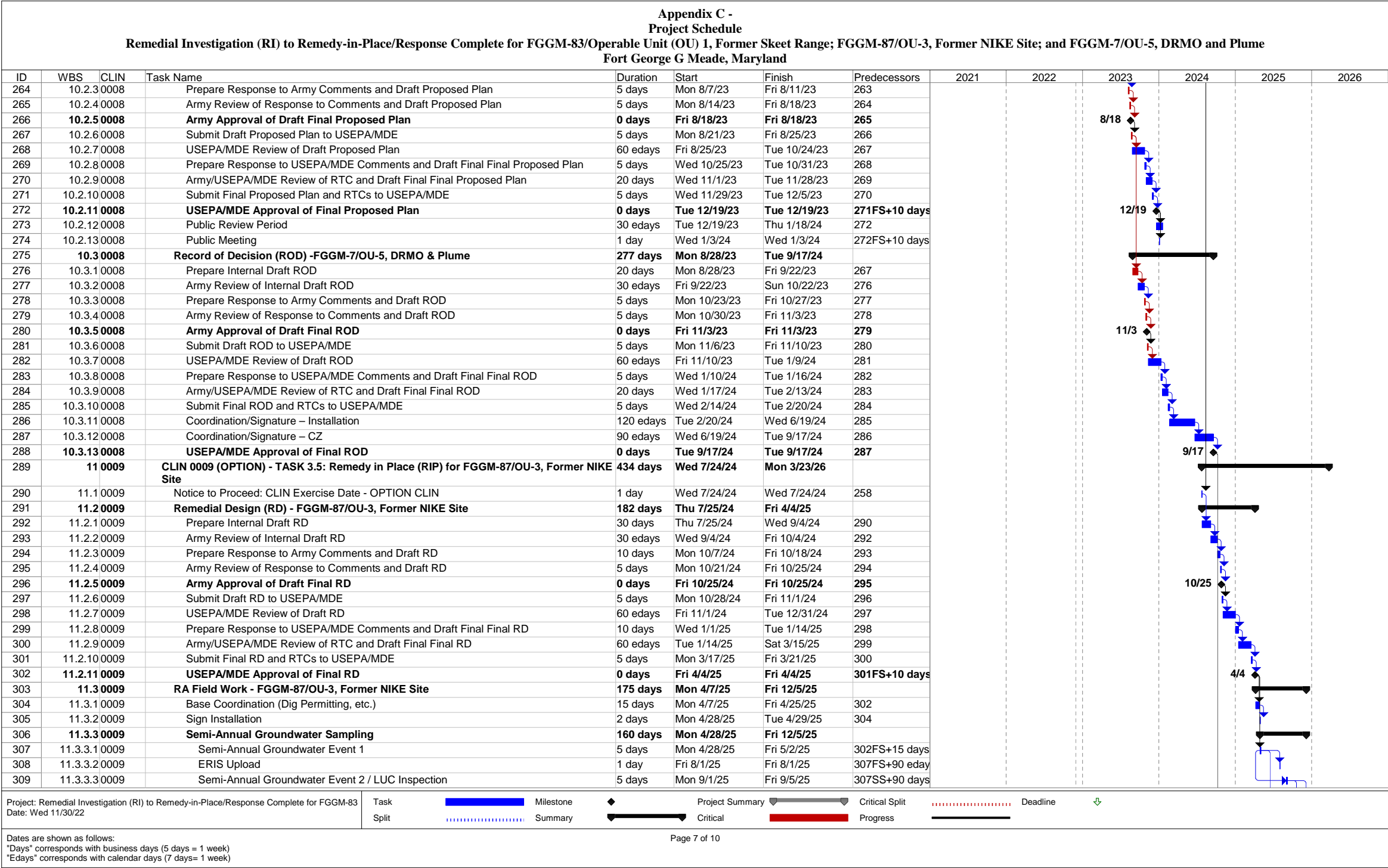


Table 3-1 Project Schedules for Open Sites at Fort Meade

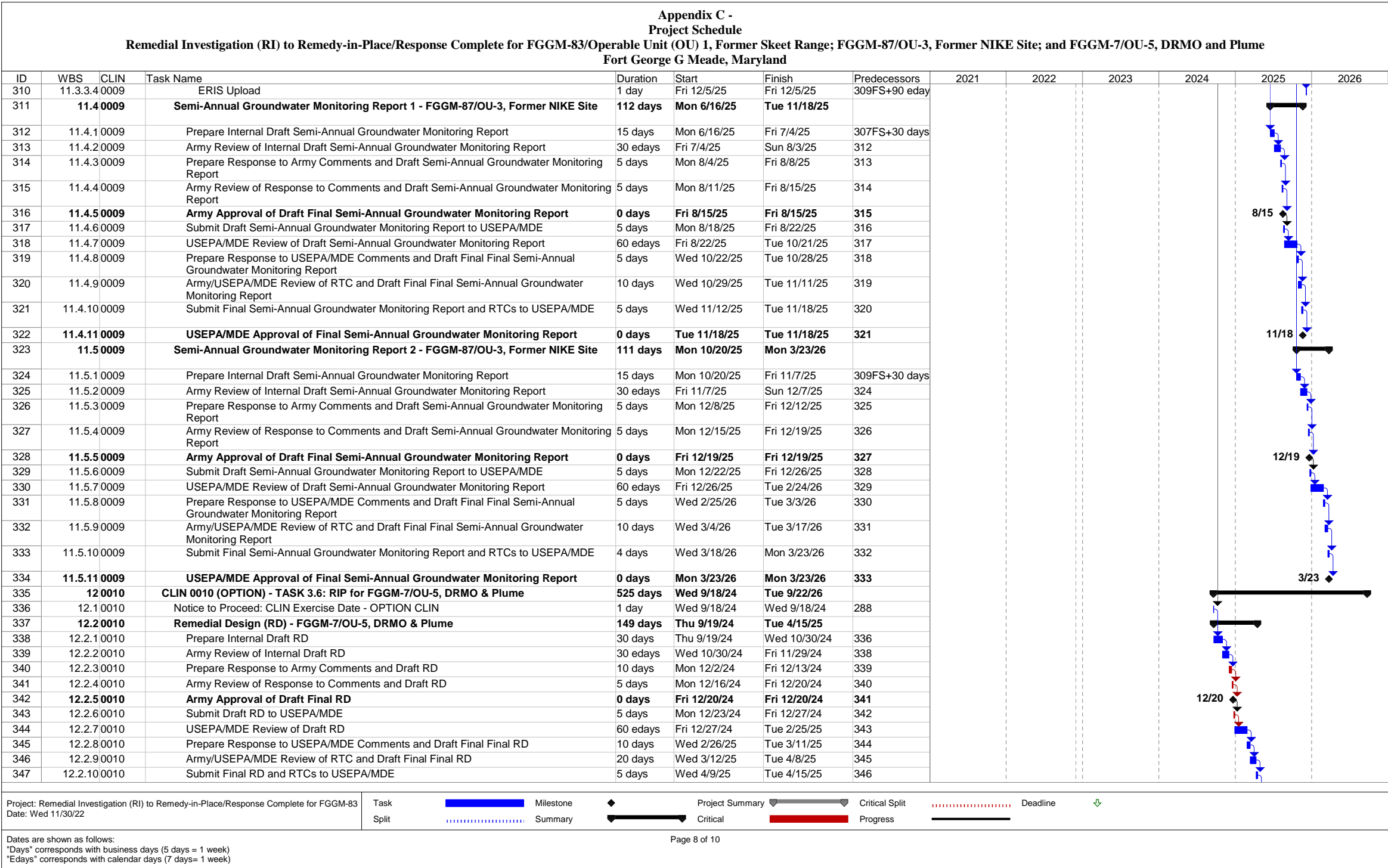


Table 3-1 Project Schedules for Open Sites at Fort Meade

Appendix C - Project Schedule													
Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83/Operable Unit (OU) 1, Former Skeet Range; FGGM-87/OU-3, Former NIKE Site; and FGGM-7/OU-5, DRMO and Plume Fort George G Meade, Maryland													
ID	WBS	CLIN	Task Name	Duration	Start	Finish	Predecessors	2021	2022	2023	2024	2025	2026
348	12.2.11	0010	USEPA/MDE Approval of Final RD	0 days	Tue 4/15/25	Tue 4/15/25	347					4/15	
349	12.3	0010	RA Field Work - FGGM-7/OU-5, DRMO & Plume	375 days	Wed 4/16/25	Tue 9/22/26							
350	12.3.1	0010	Base Coordination (Dig Permitting, etc.)	15 days	Wed 4/16/25	Tue 5/6/25	348						
351	12.3.2	0010	Mobilization	2 days	Wed 5/7/25	Thu 5/8/25	350						
352	12.3.3	0010	Tree Clearing and Site Prep	5 days	Fri 5/9/25	Thu 5/15/25	351						
353	12.3.4	0010	Extraction / Injection Well Installation and Development	20 days	Fri 5/16/25	Thu 6/12/25	352						
354	12.3.5	0010	Directional Drilling for Conveyance Piping	20 days	Fri 6/13/25	Thu 7/10/25	353						
355	12.3.6	0010	System Construction, Power Drop, and Land Use Control Sign Installation	20 days	Fri 7/11/25	Thu 8/7/25	354						
356	12.3.7	0010	Site Restoration	4 days	Fri 8/8/25	Wed 8/13/25	355						
357	12.3.8	0010	Startup / Shakedown	5 days	Thu 8/14/25	Wed 8/20/25	356						
358	12.3.9	0010	System O&M (Monthly Visits for Duration of POP)	284 days	Thu 8/21/25	Tue 9/22/26	357						
359	12.3.10	0010	Semi-Annual Groundwater Sampling	186 days	Wed 5/7/25	Wed 1/21/26							
360	12.3.10.1	0010	Semi-Annual Groundwater Event 1	5 days	Wed 5/7/25	Tue 5/13/25	348FS+15 days						
361	12.3.10.2	0010	ERIS Upload	1 day	Wed 9/17/25	Wed 9/17/25	360FS+90 days						
362	12.3.10.3	0010	Semi-Annual Groundwater Event 2 / LUC Inspection	5 days	Wed 9/10/25	Tue 9/16/25	360SS+90 days						
363	12.3.10.4	0010	ERIS Upload	1 day	Wed 1/21/26	Wed 1/21/26	362FS+90 days						
364	12.4	0010	Semi-Annual Groundwater Monitoring Report 1 - FGGM-7/OU-5, DRMO & Plume	114 days	Wed 6/25/25	Mon 12/1/25							
365	12.4.1	0010	Prepare Internal Draft Semi-Annual Groundwater Monitoring Report	15 days	Wed 6/25/25	Tue 7/15/25	360FS+30 days						
366	12.4.2	0010	Army Review of Internal Draft Semi-Annual Groundwater Monitoring Report	30 edays	Tue 7/15/25	Thu 8/14/25	365						
367	12.4.3	0010	Prepare Response to Army Comments and Draft Semi-Annual Groundwater Monitoring Report	5 days	Fri 8/15/25	Thu 8/21/25	366						
368	12.4.4	0010	Army Review of Response to Comments and Draft Semi-Annual Groundwater Monitoring Report	5 days	Fri 8/22/25	Thu 8/28/25	367						
369	12.4.5	0010	Army Approval of Draft Final Semi-Annual Groundwater Monitoring Report	0 days	Thu 8/28/25	Thu 8/28/25	368						
370	12.4.6	0010	Submit Draft Semi-Annual Groundwater Monitoring Report to USEPA/MDE	5 days	Fri 8/29/25	Thu 9/4/25	369						
371	12.4.7	0010	USEPA/MDE Review of Draft Semi-Annual Groundwater Monitoring Report	60 edays	Thu 9/4/25	Mon 11/3/25	370						
372	12.4.8	0010	Prepare Response to USEPA/MDE Comments and Draft Final Final Semi-Annual Groundwater Monitoring Report	5 days	Tue 11/4/25	Mon 11/10/25	371						
373	12.4.9	0010	Army/USEPA/MDE Review of RTC and Draft Final Final Semi-Annual Groundwater Monitoring Report	10 days	Tue 11/11/25	Mon 11/24/25	372						
374	12.4.10	0010	Submit Final Semi-Annual Groundwater Monitoring Report and RTCs to USEPA/MDE	5 days	Tue 11/25/25	Mon 12/1/25	373						
375	12.4.11	0010	USEPA/MDE Approval of Final Semi-Annual Groundwater Monitoring Report	0 days	Mon 12/1/25	Mon 12/1/25	374						
376	12.5	0010	Semi-Annual Groundwater Monitoring Report 2 - FGGM-7/OU-5, DRMO & Plume	114 days	Wed 10/29/25	Mon 4/6/26							
377	12.5.1	0010	Prepare Internal Draft Semi-Annual Groundwater Monitoring Report	15 days	Wed 10/29/25	Tue 11/18/25	362FS+30 days						
378	12.5.2	0010	Army Review of Internal Draft Semi-Annual Groundwater Monitoring Report	30 edays	Tue 11/18/25	Thu 12/18/25	377						
379	12.5.3	0010	Prepare Response to Army Comments and Draft Semi-Annual Groundwater Monitoring Report	5 days	Fri 12/19/25	Thu 12/25/25	378						
380	12.5.4	0010	Army Review of Response to Comments and Draft Semi-Annual Groundwater Monitoring Report	5 days	Fri 12/26/25	Thu 1/1/26	379						
381	12.5.5	0010	Army Approval of Draft Final Semi-Annual Groundwater Monitoring Report	0 days	Thu 1/1/26	Thu 1/1/26	380						
382	12.5.6	0010	Submit Draft Semi-Annual Groundwater Monitoring Report to USEPA/MDE	5 days	Fri 1/2/26	Thu 1/8/26	381						
383	12.5.7	0010	USEPA/MDE Review of Draft Semi-Annual Groundwater Monitoring Report	60 edays	Thu 1/8/26	Mon 3/9/26	382						
384	12.5.8	0010	Prepare Response to USEPA/MDE Comments and Draft Final Final Semi-Annual Groundwater Monitoring Report	5 days	Tue 3/10/26	Mon 3/16/26	383						
385	12.5.9	0010	Army/USEPA/MDE Review of RTC and Draft Final Final Semi-Annual Groundwater Monitoring Report	10 days	Tue 3/17/26	Mon 3/30/26	384						
386	12.5.10	0010	Submit Final Semi-Annual Groundwater Monitoring Report and RTCs to USEPA/MDE	5 days	Tue 3/31/26	Mon 4/6/26	385						
387	12.5.11	0010	USEPA/MDE Approval of Final Semi-Annual Groundwater Monitoring Report	0 days	Mon 4/6/26	Mon 4/6/26	386						
Project: Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83 Date: Wed 11/30/22			Task		Milestone	◆	Project Summary	▬	Critical Split	Deadline	↓	
			Split	Summary	▬	Critical	█	Progress	▬			
Dates are shown as follows: "Days" corresponds with business days (5 days = 1 week) "Edays" corresponds with calendar days (7 days= 1 week)			Page 9 of 10										

Table 3-1 Project Schedules for Open Sites at Fort Meade

Appendix C - Project Schedule Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83/Operable Unit (OU) 1, Former Skeet Range; FGGM-87/OU-3, Former NIKE Site; and FGGM-7/OU-5, DRMO and Plume Fort George G Meade, Maryland													
ID	WBS	CLIN	Task Name	Duration	Start	Finish	Predecessors	2021	2022	2023	2024	2025	2026
388	12.6	0010	Remedial Action Completion Report - FGGM-7/OU-5, DRMO & Plume	144 days	Thu 8/21/25	Tue 3/10/26							
389	12.6.1	0010	Prepare Internal Draft Remedial Action Completion Report	20 days	Thu 8/21/25	Wed 9/17/25	357						
390	12.6.2	0010	Army Review of Internal Draft Remedial Action Completion Report	30 edays	Wed 9/17/25	Fri 10/17/25	389						
391	12.6.3	0010	Prepare Response to Army Comments and Draft Remedial Action Completion Report	10 days	Mon 10/20/25	Fri 10/31/25	390						
392	12.6.4	0010	Army Review of Response to Comments and Draft Remedial Action Completion Report	5 days	Mon 11/3/25	Fri 11/7/25	391						
393	12.6.5	0010	Army Approval of Draft Final Remedial Action Completion Report	0 days	Fri 11/7/25	Fri 11/7/25	392						
394	12.6.6	0010	Submit Draft Remedial Action Completion Report to USEPA/MDE	5 days	Mon 11/10/25	Fri 11/14/25	393						
395	12.6.7	0010	USEPA/MDE Review of Draft Remedial Action Completion Report	60 edays	Fri 11/14/25	Tue 1/13/26	394						
396	12.6.8	0010	Prepare Response to USEPA/MDE Comments and Draft Final Final Remedial Action Completion Report	5 days	Wed 1/14/26	Tue 1/20/26	395						
397	12.6.9	0010	Army/USEPA/MDE Review of RTC and Draft Final Final Remedial Action Completion Report	20 days	Wed 1/21/26	Tue 2/17/26	396						
398	12.6.10	0010	Submit Final Remedial Action Completion Report and RTCs to USEPA/MDE	5 days	Wed 2/18/26	Tue 2/24/26	397						
399	12.6.11	0010	USEPA/MDE Approval of Final Remedial Action Completion Report	0 days	Tue 3/10/26	Tue 3/10/26	398FS+10 days						

Project: Remedial Investigation (RI) to Remedy-in-Place/Response Complete for FGGM-83
Date: Wed 11/30/22

Task

Split

Milestone

Summary

Project Summary

Critical

Critical Split

Progress

Deadline

Dates are shown as follows:
"Days" corresponds with business days (5 days = 1 week)
"Edays" corresponds with calendar days (7 days= 1 week)

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Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule for the Fort George G. Meade LTM Program
Fort Meade, Maryland

ID	Task Name	Duration	Start	Finish
1	Notice to Proceed	1 day	Tue 8/27/19	Tue 8/27/19
2	EA Receipt of Task Order Award	1 day	Wed 8/28/19	Wed 8/28/19
3	Period of Performance	1262 days	Tue 8/27/19	Fri 8/23/24
4	CLIN 0001: Perform Tipton Aifield Authority Groundwater LTM Program	865 days	Wed 8/28/19	Tue 1/31/23
49	CLIN 0002: Perform Tipton Airfield Authority UXO LTM Program	1193 days	Wed 8/28/19	Fri 5/17/24
123	CLIN 0003: Perform Clean Fill Dump Groundwater LTM Program	865 days	Wed 8/28/19	Tue 1/31/23
167	CLIN 0004: Perform Ordnance Demolition Area LTM Program	1489 days	Fri 7/26/19	Thu 6/19/25
168	Project Management Plan (PMP)	17 days	Wed 8/28/19	Sun 9/22/19
173	Work Plan (WP) and Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP)	50 days	Wed 8/28/19	Thu 11/7/19
174	Ammend WP and APP/SSHP	17 days	Wed 8/28/19	Fri 9/20/19
175	USACE Review of WP and APP/SSHP	23 days	Mon 9/23/19	Thu 10/24/19
176	Respond to Comments	10 days	Fri 10/25/19	Thu 11/7/19
177	Submit Draft Final WP and APP/SSHP to Regulators	0 days	Thu 11/7/19	Thu 11/7/19
178	Regulatory Review of WP and APP/SSHP	0 days	Thu 11/7/19	Thu 11/7/19
179	Response to Comments and Prepare Final WP and APP/SSHP	0 days	Thu 11/7/19	Thu 11/7/19
180	Submit Final WP and APP/SSHP	0 days	Thu 11/7/19	Thu 11/7/19
181	ODA Groundwater Sampling	1289 days	Fri 7/26/19	Fri 8/30/24
182	Stakeholder Notification for Field Work	1 day	Fri 11/8/19	Fri 11/8/19
183	2019 ODA Groundwater Sampling	1 day	Thu 11/14/19	Thu 11/14/19
184	Lab Analysis	15 days	Fri 11/15/19	Fri 12/6/19
185	Data Validation	20 days	Mon 12/9/19	Tue 1/7/20
186	2019 ODA Groundwater Report	209 days	Wed 1/8/20	Mon 11/2/20
200	2020 ODA Groundwater Report	221 days	Wed 12/2/20	Thu 10/14/21
211	Stakeholder Notification for Field Work	1 day	Mon 10/25/21	Mon 10/25/21
212	2021 ODA Groundwater Sampling	1 day	Tue 11/16/21	Tue 11/16/21
213	Lab Analysis	10 days	Wed 11/17/21	Wed 12/1/21
214	Data Validation	10 days	Thu 12/2/21	Wed 12/15/21
215	2021 ODA Groundwater Report	806 days	Fri 7/26/19	Mon 10/3/22
224	Stakeholder Notification for Field Work	1 day	Wed 11/30/22	Wed 11/30/22
225	2022 ODA Groundwater Sampling	1 day	Fri 12/16/22	Fri 12/16/22
226	Lab Analysis	10 days	Thu 12/29/22	Wed 1/11/23
227	Data Validation	10 days	Thu 1/12/23	Thu 1/26/23
228	2022 ODA Groundwater Report	217 days	Wed 3/8/23	Tue 1/16/24
229	Internal Draft 2022 ODA Groundwater Report	1 day	Wed 3/8/23	Wed 3/8/23
230	USACE Review/Comments on Internal Draft 2022 ODA Groundwater Report	15 days	Wed 3/29/23	Tue 4/18/23
231	Resolve Comments and Issue Draft	8 days	Wed 4/19/23	Fri 4/28/23
232	Submit Draft 2022 ODA Groundwater Report	0 days	Fri 4/28/23	Fri 4/28/23
233	Stakeholder Review/Comments on Draft 2022 ODA Groundwater Report	44 days	Mon 5/1/23	Fri 6/30/23
234	Resolve Stakeholder Comments and Issue Draft Final 2022 ODA Groundwater	15 days	Mon 7/3/23	Mon 7/24/23
235	Stakeholder Review/Comments on Draft Final 2022 ODA Groundwater Report	22 days	Tue 7/25/23	Wed 8/23/23
236	Resolve Stakeholder Comments and Issue Final 2022 ODA Groundwater Rep	10 days	Thu 8/24/23	Thu 9/7/23
237	Submit Final 2022 ODA Groundwater Report	0 days	Thu 9/7/23	Thu 9/7/23
238	Stakeholder Concurrence of Final 2022 ODA Groundwater Report	22 days	Fri 9/8/23	Tue 10/10/23
239	Stakeholder Notification for Field Work	1 day	Wed 11/29/23	Wed 11/29/23
240	2023 ODA Groundwater Sampling	1 day	Thu 12/14/23	Thu 12/14/23
241	Lab Analysis	10 days	Fri 12/15/23	Fri 12/29/23
242	Data Validation	10 days	Tue 1/2/24	Tue 1/16/24
243	2023 ODA Groundwater Report	160 days	Wed 1/17/24	Fri 8/30/24
254	Five Year Review Site Visit	2 days	Fri 1/22/21	Mon 1/25/21
255	Five Year Review Interviews	3 days	Tue 1/26/21	Thu 1/28/21
256	Five Year Review Report	529 days	Wed 12/30/20	Tue 1/31/23
269	IAL1 and IAL3 Inspections	824 days	Fri 9/11/20	Thu 12/14/23
270	IAL3 MEC Sweep	1 day	Fri 9/11/20	Fri 9/11/20
271	2020 IAL1 and IAL3 Inspection	1 day	Fri 12/11/20	Fri 12/11/20
272	2020 IAL1 and IAL3 Inspection Report	197 days	Thu 12/31/20	Thu 10/7/21
283	2021 IAL3 Inspection	197 days	Fri 12/10/21	Mon 9/19/22
293	2022 IAL1 and IAL3 Inspection	1 day	Thu 12/14/23	Thu 12/14/23
294	CLIN 0009: 2022 IAL1 and IAL3 Inspection Report	508 days	Wed 12/14/22	Tue 12/17/24
295	Internal Draft 2022 IAL1 and IAL3 Inspection Report	29 days	Wed 12/14/22	Tue 1/24/23
296	USACE Review/Comments on Internal Draft 2022 IAL1 and IAL3 Inspection Report	23 days	Wed 1/25/23	Mon 2/27/23
297	Resolve Comments and Issue Draft	5 days	Tue 2/28/23	Mon 3/6/23
298	Submit Draft 2022 IAL1 and IAL3 Inspection Report (Option Year)	0 days	Fri 3/24/23	Fri 3/24/23

Project: Fort Meade
Date: Fri 6/2/23

Task  Split  Milestone  Summary 

Gray shading indicates completed task/activity

Table 3-1 Project Schedules for Open Sites at Fort Meade

Project Schedule for the Fort George G. Meade LTM Program Fort Meade, Maryland					
ID	Task Name	Duration	Start	Finish	
299	Stakeholder Review/Comments on Draft 2022 IAL1 and IAL3 Inspection Report	43 days	Fri 3/24/23	Tue 5/23/23	
300	Resolve Stakeholder Comments and Issue Draft Final 2022 IAL1 and IAL3 Inspection Report	5 days	Wed 5/24/23	Wed 5/31/23	
301	Stakeholder Review/Comments on Draft Final 2022 IAL1 and IAL3 Inspection Report	22 days	Thu 6/1/23	Fri 6/30/23	
302	Resolve Stakeholder Comments and Issue Final 2022 IAL1 and IAL3 Inspection Report	5 days	Mon 7/3/23	Mon 7/10/23	
303	Submit Final 2022 IAL1 and IAL3 Inspection Report (Option Year)	0 days	Mon 7/10/23	Mon 7/10/23	
304	Stakeholder Concurrence of Final 2022 IAL1 and IAL3 Inspection Report	22 days	Tue 7/11/23	Wed 8/9/23	
305	2023 IAL1 and IAL3 Inspection (Option Year)	1 day	Tue 12/17/24	Tue 12/17/24	
306	2023 IAL1 and IAL3 Inspection Report (Option Year)	127 days	Wed 12/18/24	Thu 6/19/25	
317	CLIN 0011: Perform Range 17 Five-Year Review	381 days	Wed 12/30/20	Wed 6/29/22	
318	Five Year Review Report	381 days	Wed 12/30/20	Wed 6/29/22	
331	CLIN 0013: Perform High Explosive Impact Area and Disposal Operable Unit Five-Year Review	486 days	Mon 9/26/22	Tue 8/27/24	
332	Work Plan (WP) and Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP)	158 days	Thu 11/3/22	Mon 6/19/23	
333	Ammend WP and APP/SSHP	1 day	Thu 11/3/22	Thu 11/3/22	
334	USACE Review of WP and APP/SSHP	65 days	Thu 11/3/22	Mon 2/6/23	
335	Respond to Comments	14 days	Tue 2/7/23	Mon 2/27/23	
336	Submit Draft WP and APP/SSHP	1 day	Tue 3/21/23	Tue 3/21/23	
337	Stakeholder Review/Comments on Draft WP and APP/SSHP	60 days	Tue 3/21/23	Tue 6/13/23	
338	Resolve Stakeholder Comments and Issue Final	7 days	Fri 6/9/23	Mon 6/19/23	
339	Submit Final WP and APP/SSHP	1 day	Mon 6/19/23	Mon 6/19/23	
340	MEC Survey	208 days	Thu 5/11/23	Fri 3/8/24	
341	Stakeholder Notification for Field Work	1 day	Mon 6/19/23	Mon 6/19/23	
342	MEC Survey Field Work	20 days	Mon 6/19/23	Mon 7/17/23	
343	MEC Survey Completion Technical Memorandum	1 day	Fri 6/16/23	Fri 6/16/23	
344	Five Year Review Report	295 days	Fri 3/3/23	Wed 5/1/24	
345	Public Announcement/Advertisement for Five Year Review	1 day	Fri 3/3/23	Fri 3/3/23	
346	Internal Draft Five Year Review Report	44 days	Fri 7/7/23	Thu 9/7/23	
347	USACE Review/Comments on Internal Draft Five Year Review Report	15 days	Fri 9/8/23	Thu 9/28/23	
348	Resolve Comments and Issue Draft	22 days	Fri 9/29/23	Tue 10/31/23	
349	Submit Draft Five Year Review Report	0 days	Tue 10/31/23	Tue 10/31/23	
350	Stakeholder Review/Comments on Draft Five Year Review Report	44 days	Wed 11/1/23	Thu 1/4/24	
351	Resolve Stakeholder Comments and Issue Draft Final Five Year Review Report	15 days	Fri 1/5/24	Fri 1/26/24	
352	Stakeholder Review/Comments on Draft Final Five Year Review Report	22 days	Mon 1/29/24	Wed 2/28/24	
353	Resolve Stakeholder Comments and Issue Final Five Year Review Report	22 days	Thu 2/29/24	Fri 3/29/24	
354	Submit Final Five Year Review Report	0 days	Fri 3/29/24	Fri 3/29/24	
355	Stakeholder Concurrence of Final Five Year Review Report	22 days	Mon 4/1/24	Tue 4/30/24	
356	Public Notice/Advertisement for Final Five Year Review	1 day	Wed 5/1/24	Wed 5/1/24	
<div> <div>Project: Fort Meade Date: Fri 6/2/23</div> <div> <div>Task</div> <div></div> <div>Split</div> <div></div> <div>Milestone</div> <div>◆</div> <div>Summary</div> <div></div> </div> </div>					
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Table 3-1 Project Schedules for Open Sites at Fort Meade

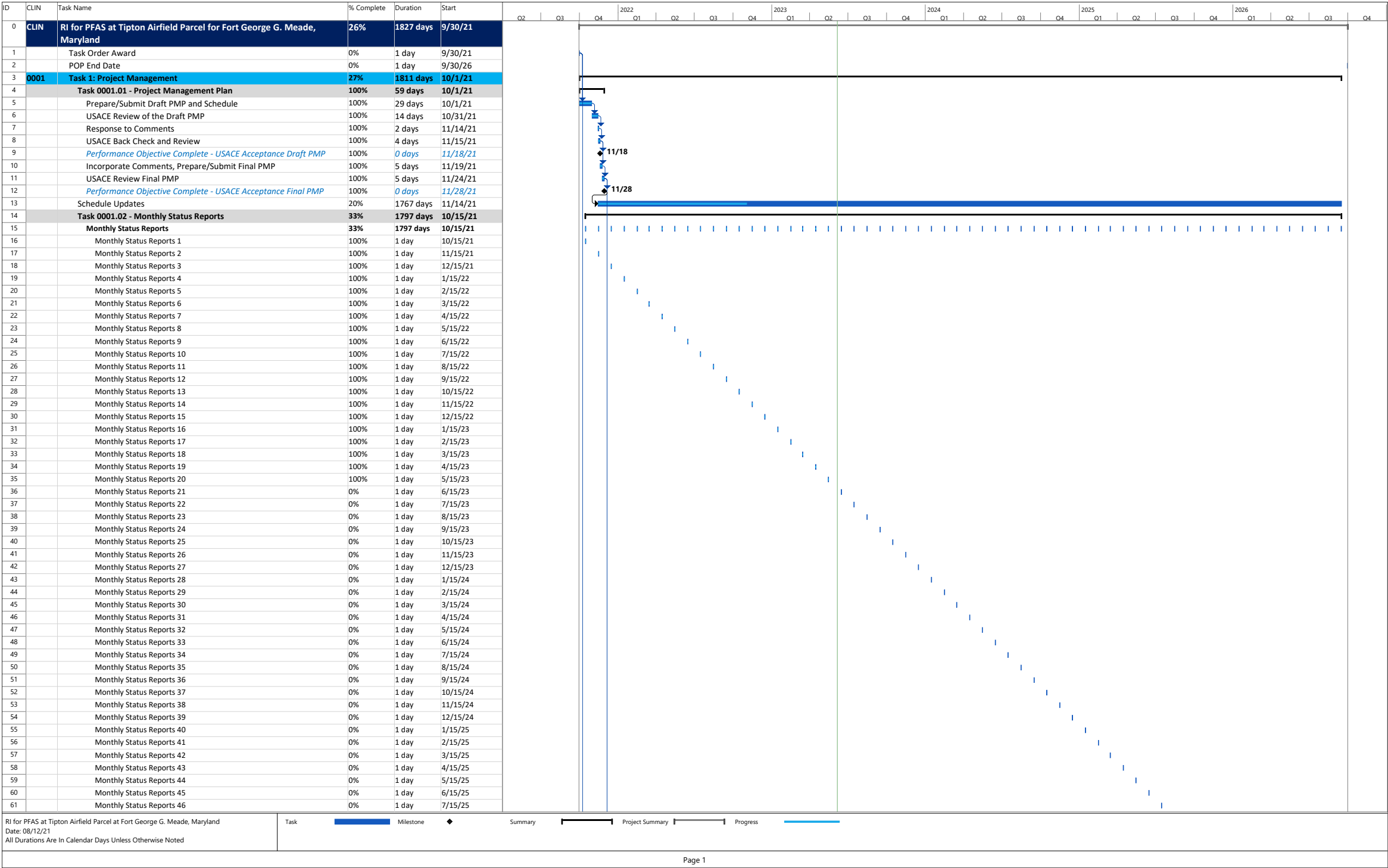


Table 3-1 Project Schedules for Open Sites at Fort Meade

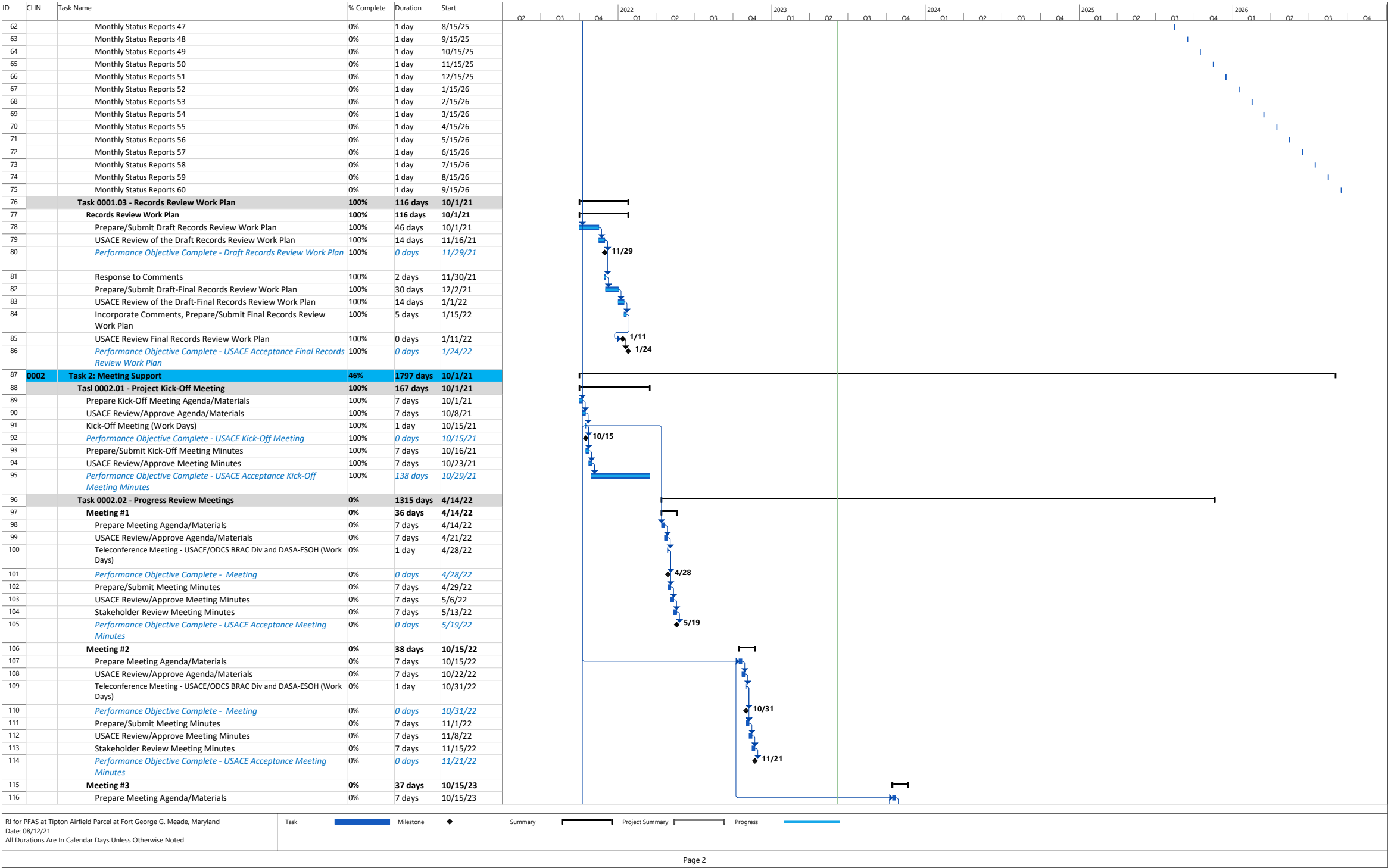


Table 3-1 Project Schedules for Open Sites at Fort Meade

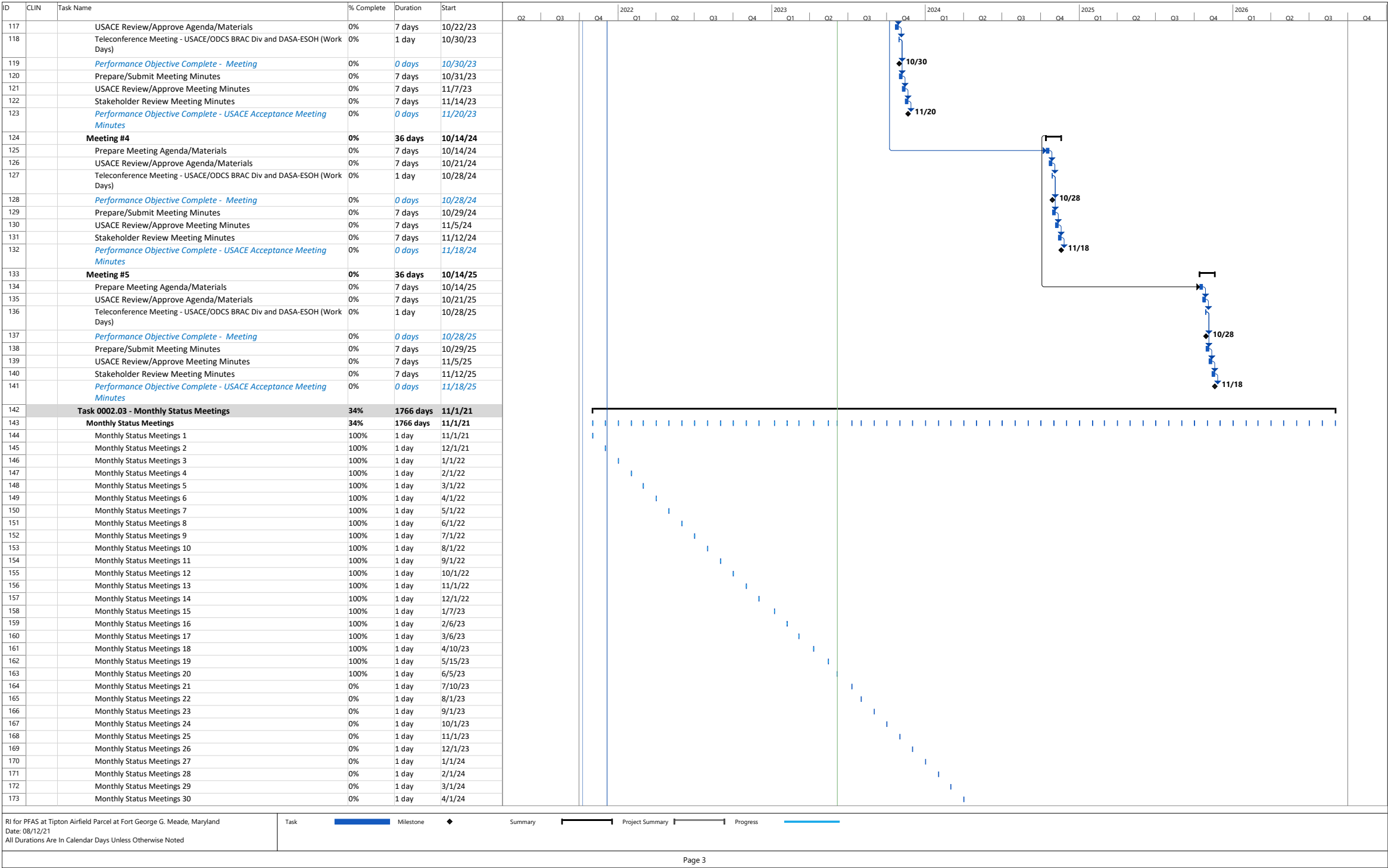


Table 3-1 Project Schedules for Open Sites at Fort Meade

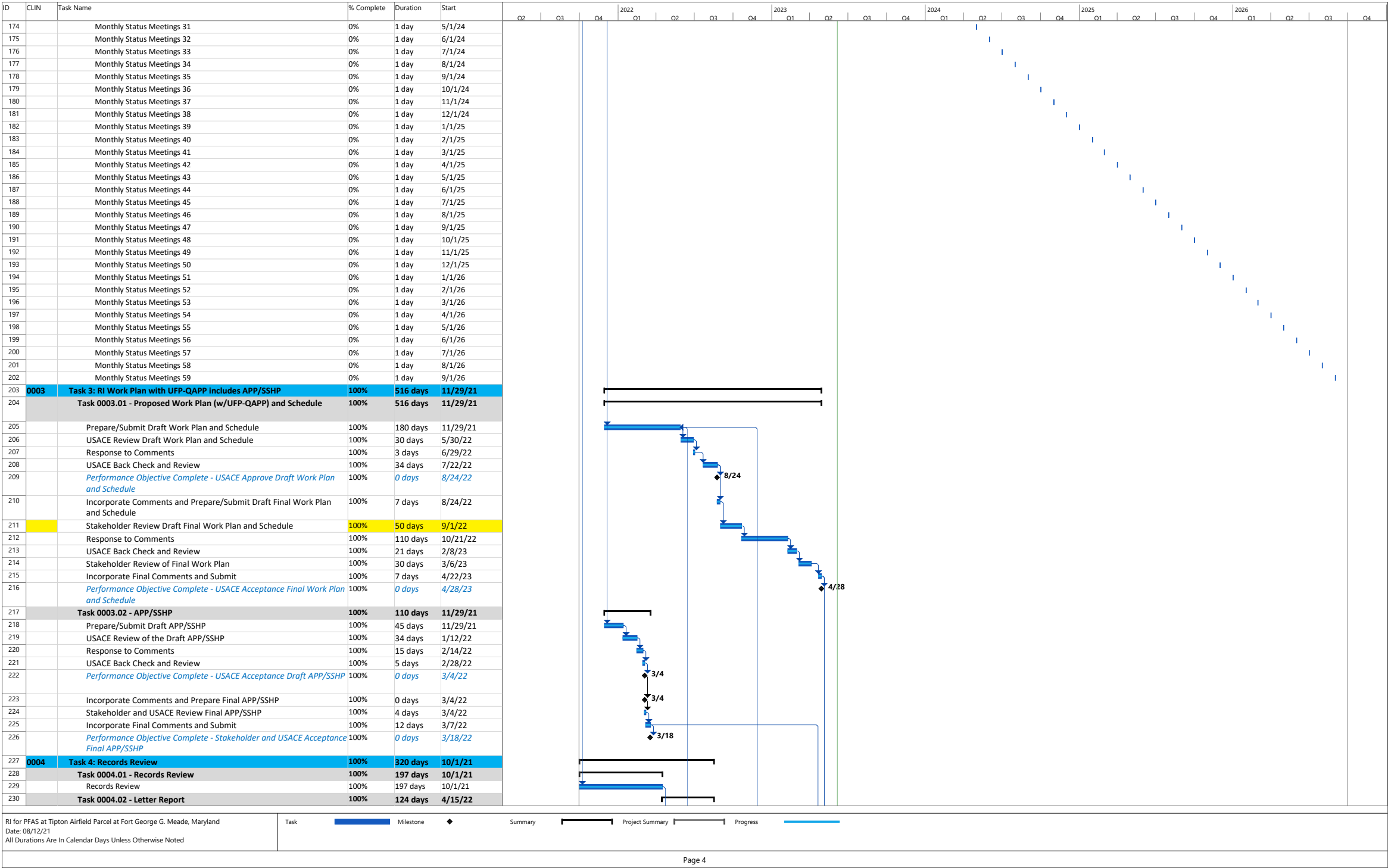


Table 3-1 Project Schedules for Open Sites at Fort Meade

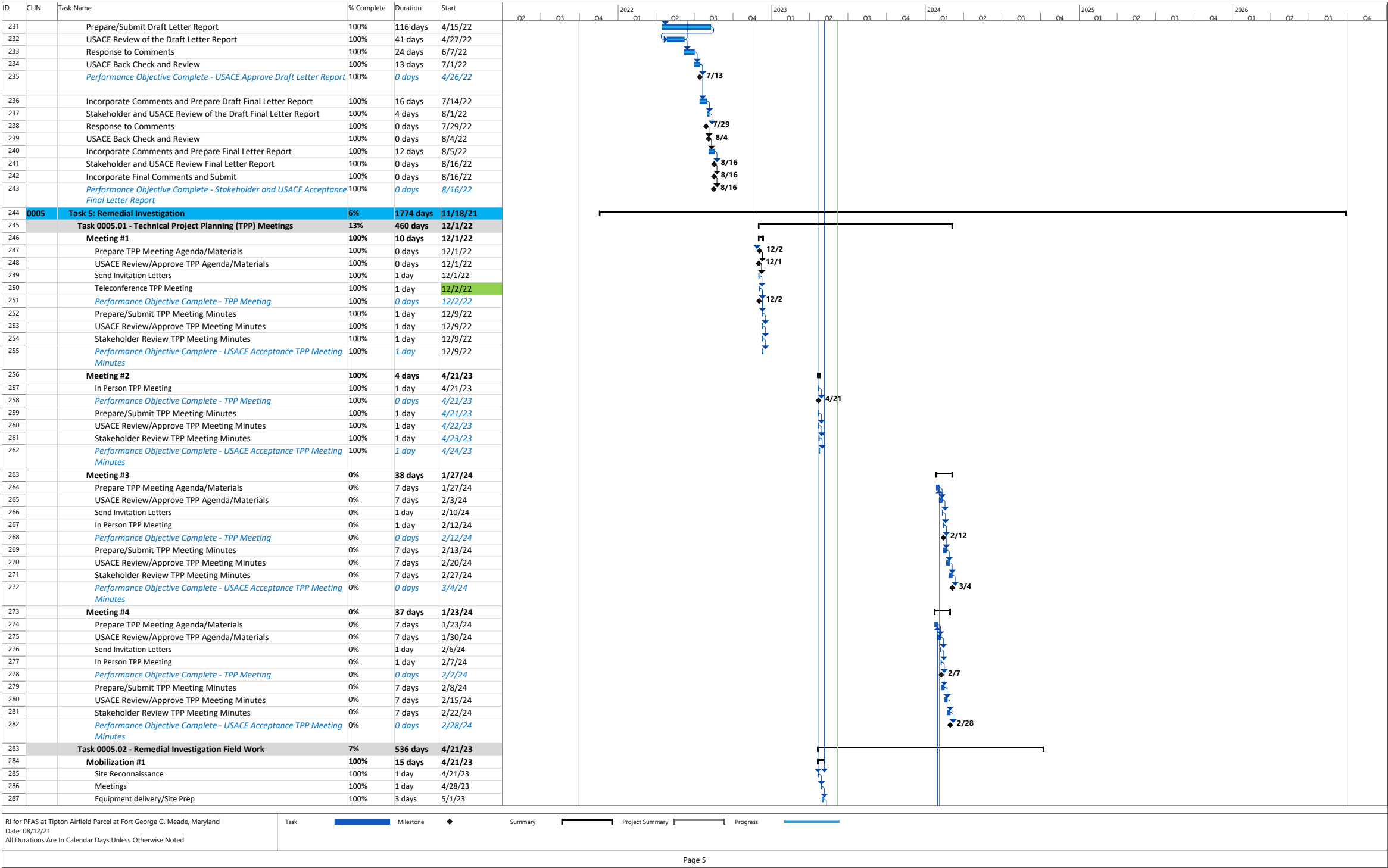


Table 3-1 Project Schedules for Open Sites at Fort Meade

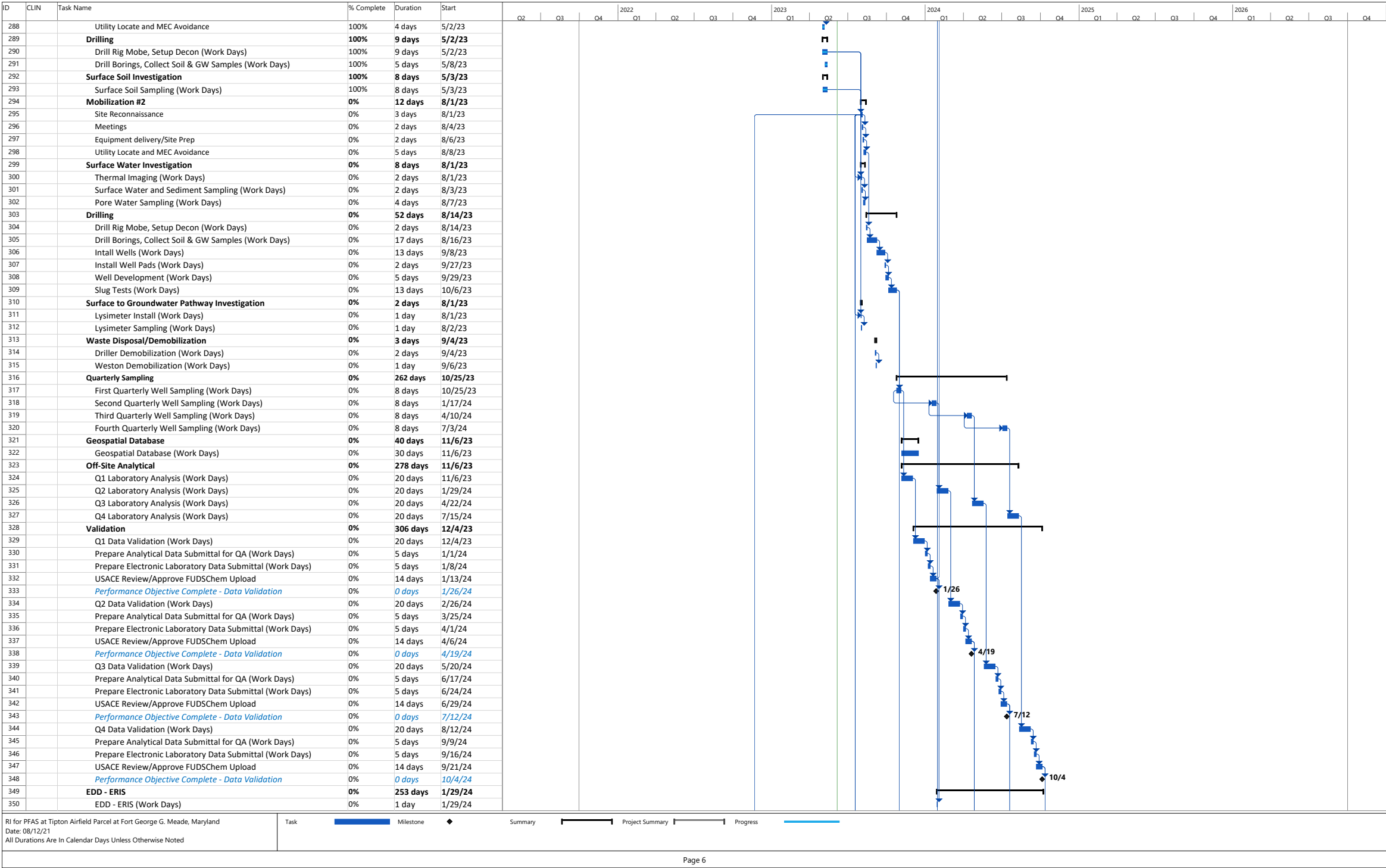


Table 3-1 Project Schedules for Open Sites at Fort Meade

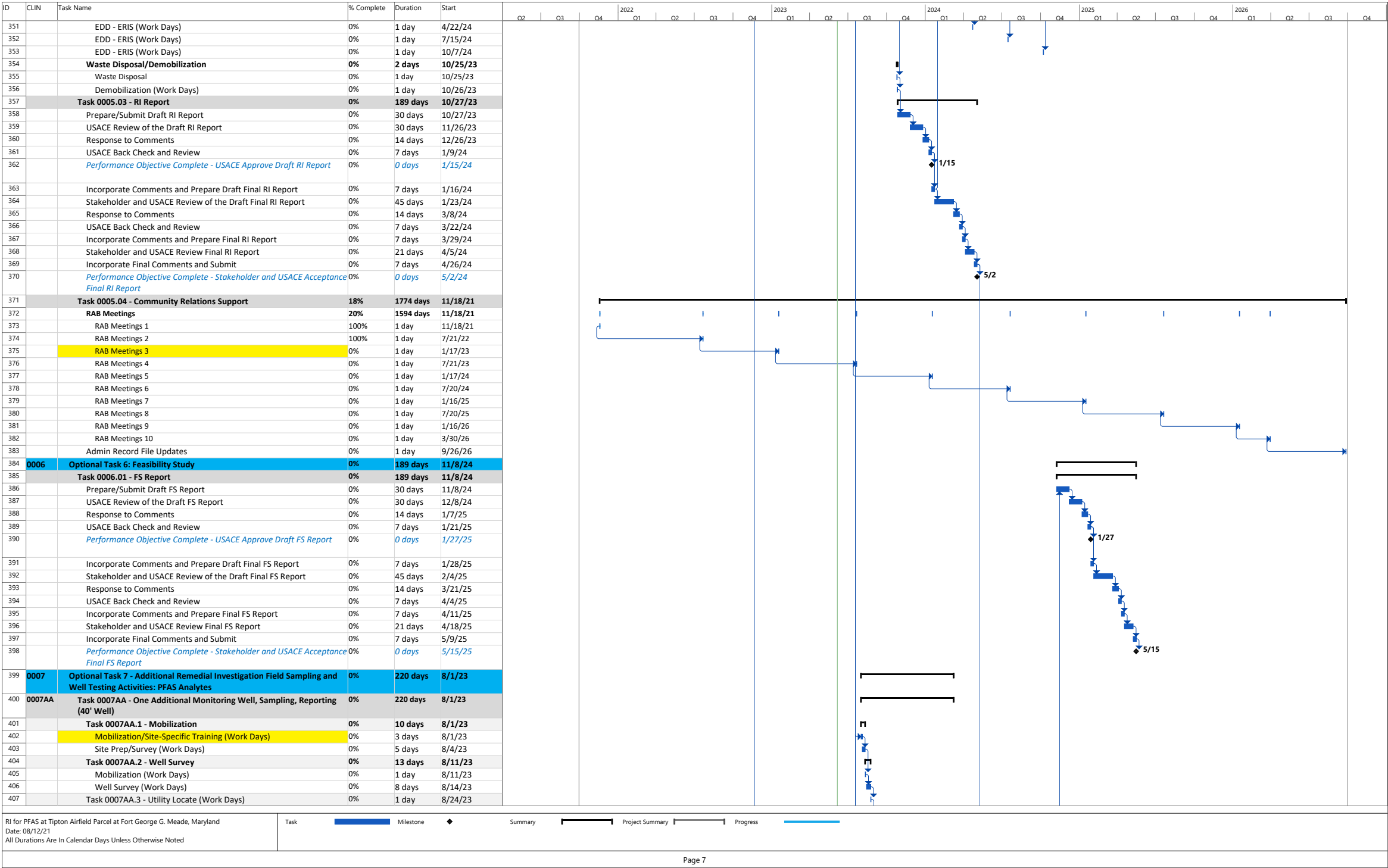


Table 3-1 Project Schedules for Open Sites at Fort Meade

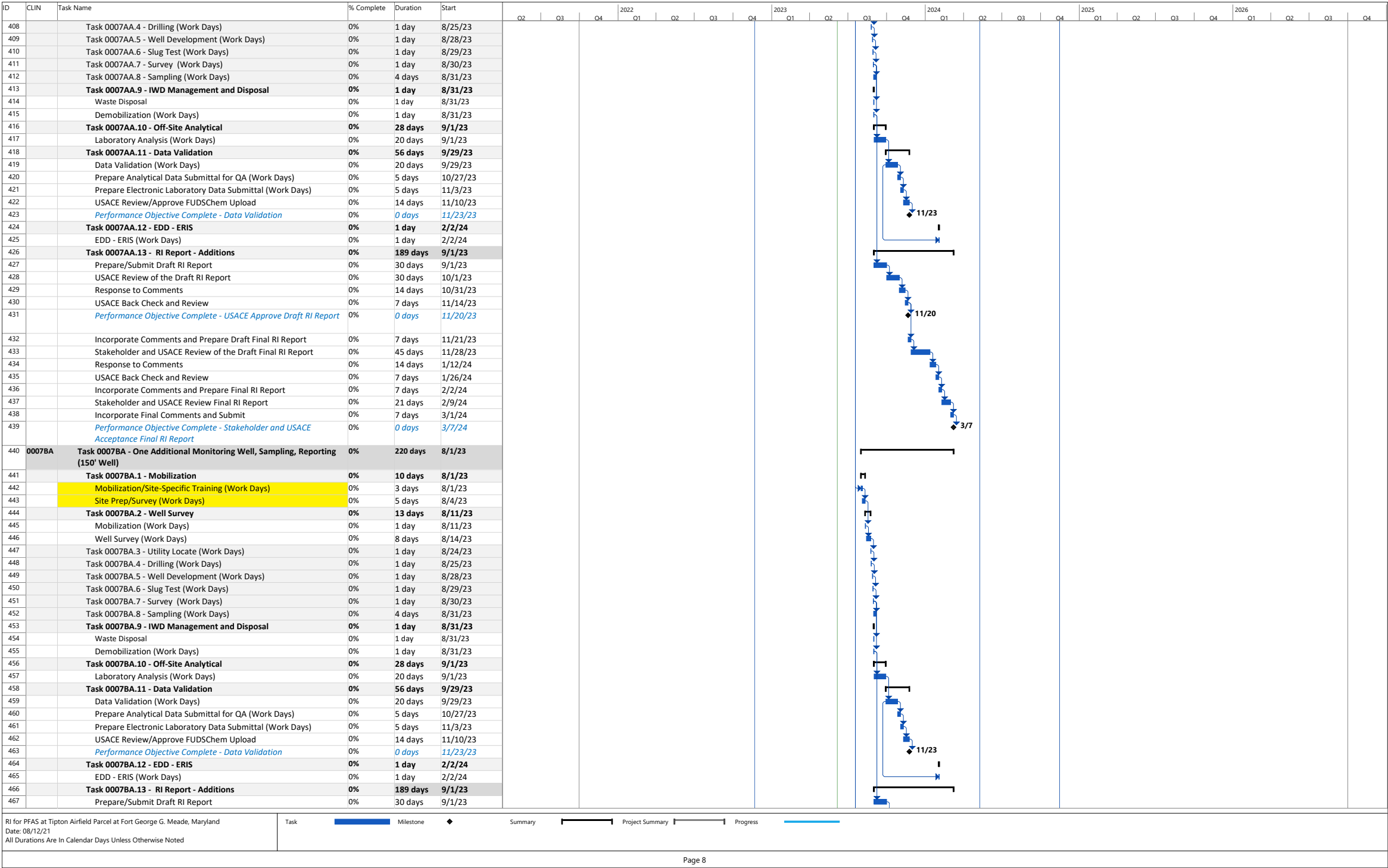


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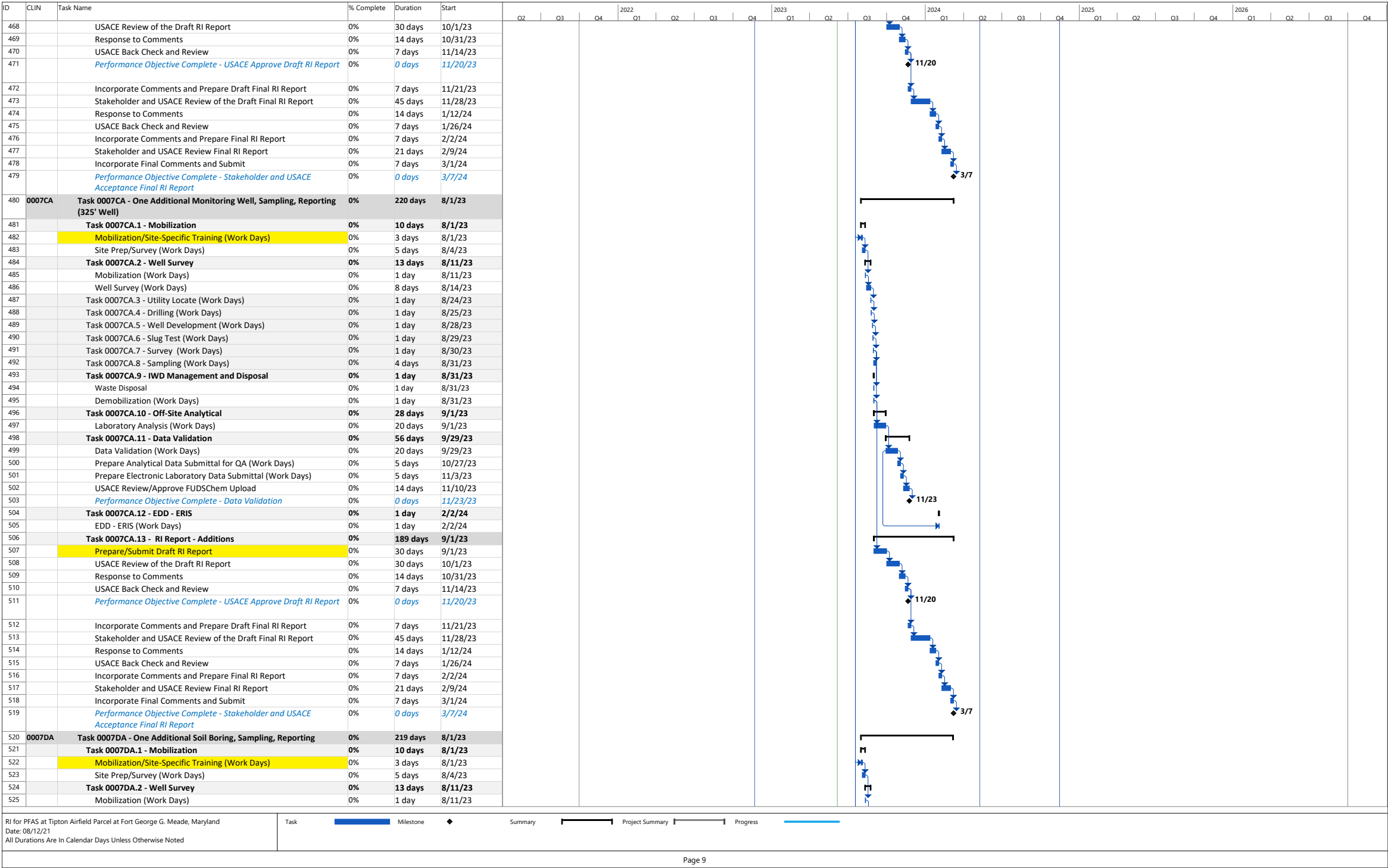


Table 3-1 Project Schedules for Open Sites at Fort Meade

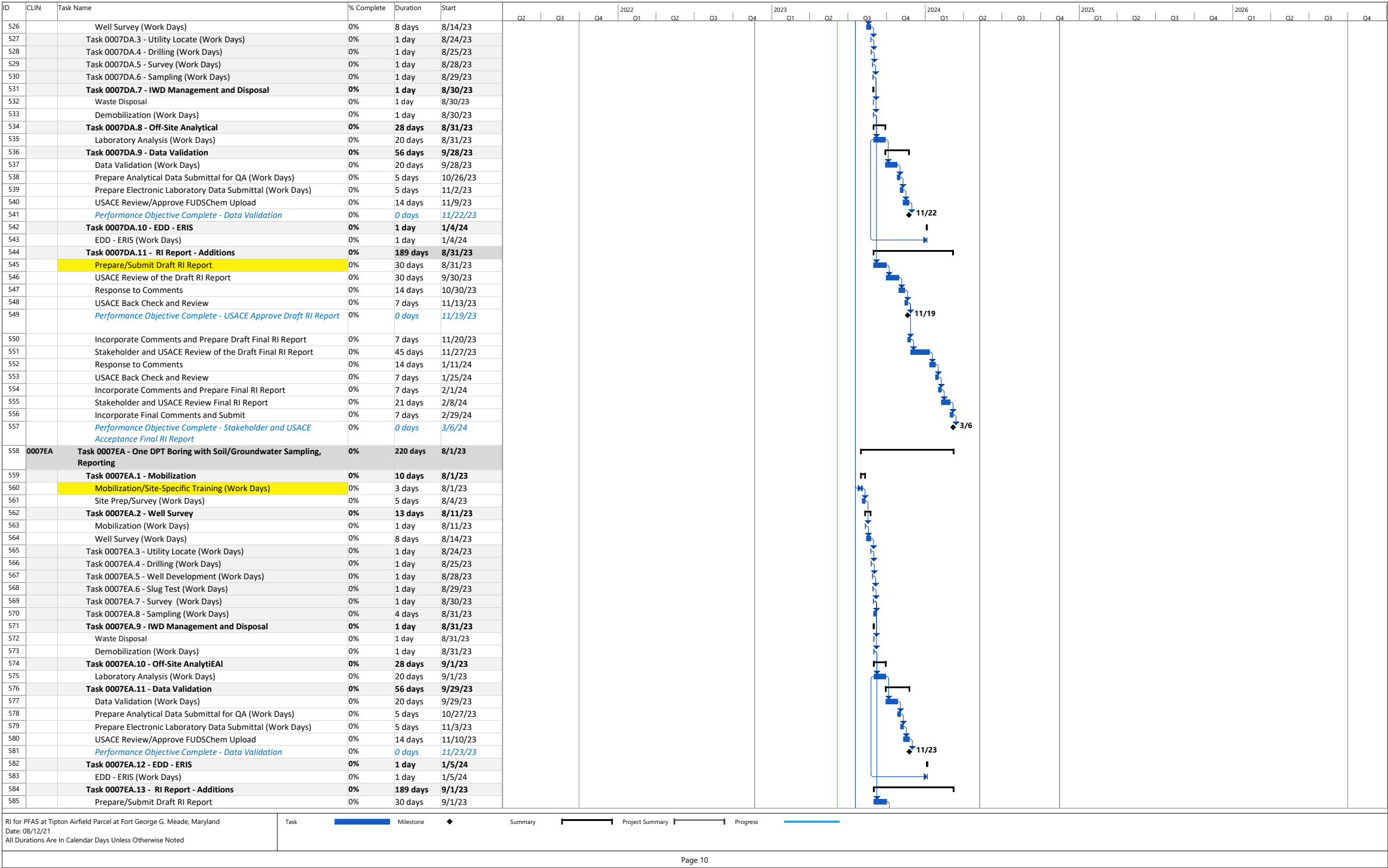


Table 3-1 Project Schedules for Open Sites at Fort Meade

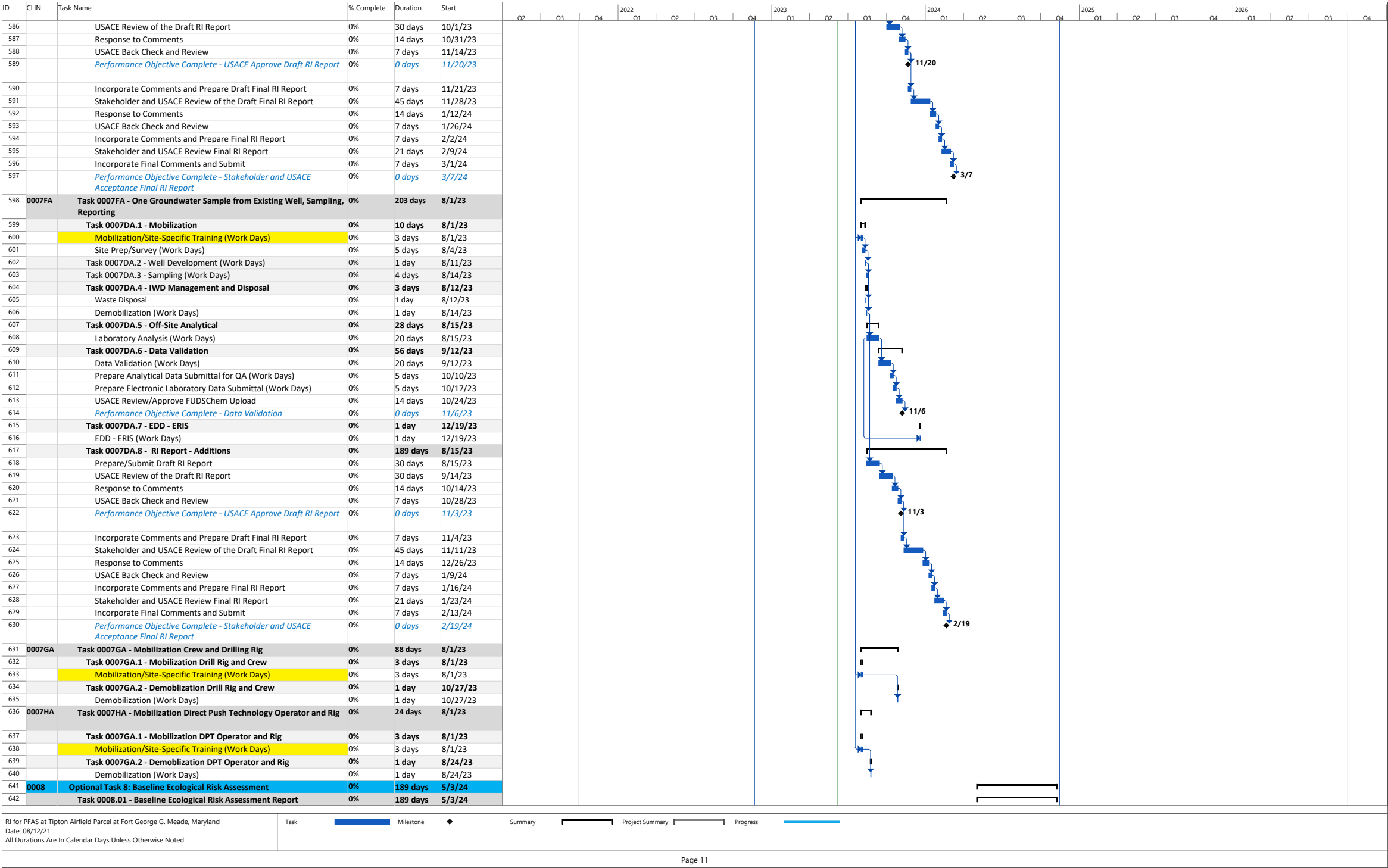


Table 3-1 Project Schedules for Open Sites at Fort Meade

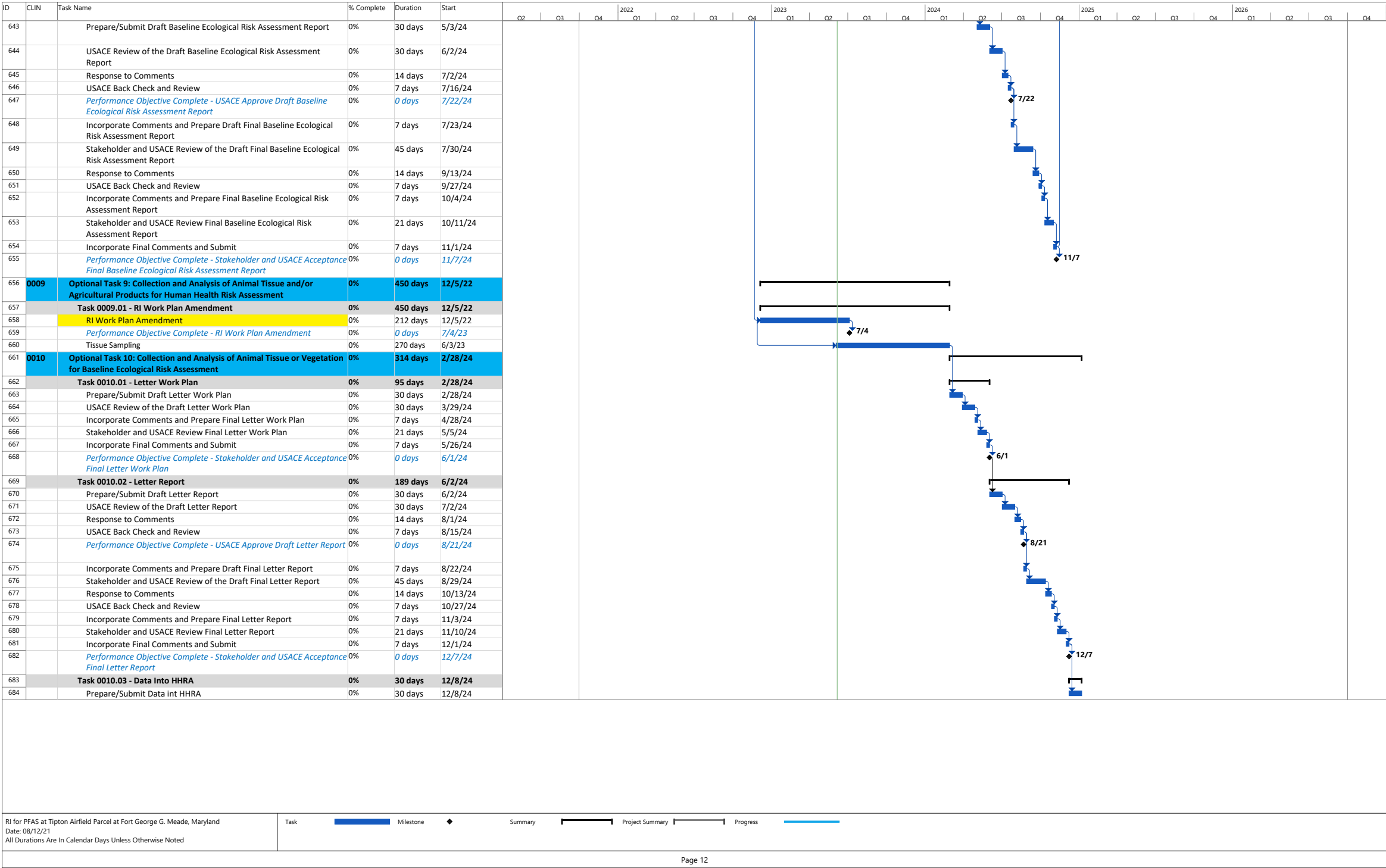


Table 3-2: PA/SI AOI Summary by Geographic Area**North**

Building 940 – MP WR, and OWS (SWMUs 12, 13, 146)

Building 1007 – Army Reserves MP, Vehicle Maintenance, Motor Repair Shop, OWS, and WR

Building 2120c – Vehicle Storage and Maintenance, WR, and OWS (SWMUs 25–28)

Former Building 2128– Vehicle Maintenance MP-16/WR-11 (SWMUs 35, 36)

Building 2804 (SWMU 94)

Building 2805 (SWMU 95)

Building 3000 (SWMU 98)

Former Incinerator Building – 1943 (21½ Street) MP-13/WR-9

MP-14

MP-17

MP-18/WR-12 MP-19/WR-13

Former Incinerator Site – Reece Road

Possible Dump Site A – 1957 – Former Compliance Cleanup Site

Possible Dump Site B – 1957

Possible Dump Site E – 1957

Possible Dump Sites – 1970

Small Pit – 1952

Golf Course

Site M Parcel 3

Site M Parcel 8

South of 32

Building 73 - Gas Training Building

ASP No. 2

Possible Dump Site G – 1957

Southeast

Building 546 (SWMU 11)

Buildings 2227 and 2234 (SWMUs 43, 44, 147)

Building 2480 - (SWMU 71)

Building 2482 – (SWMU 73)

Building 2490 (SWMU 74)

Building 2501 (SWMUs 75, 76)

Building 2630 (SWMUs 77, 78, 79)

Building 2724 (SWMUs 80–86)

Southeast Continued

Building 2728 (SWMUs 87–92, 148)

Building 2802 (SWMU 93)

Buildings 2810, 2811, 2832 (non-SWMUs 6, 7, 8)

Building 4272 (non-SWMU 9)

Building 4411 (SWMU 99)

Former MP-2

Former MP-6

Former MP-7/WR-6

Former MP-8

Former MP-9

Former MP-10

Former MP-11/WR-7

Former MP-12/WR-8

Possible Vehicle Service Area A – 1943 Possible Vehicle Service Area B – 1943 6th Street and Chisholm Ave.

Stained Soils along 3rd Street

Waste Storage/Disposal Area – 1938

Southwest

Building 4587 (SWMUs 101, 102)

Building 4680 (SWMU 103)

Building 6513 (SWMU 150)

Former Building 6522 (SWMU 151, 152)

Building 6530 (SWMUs 105-108)

Building 8480 (SWMUS 110, 111)

Building 8485 (SWMUS 115, 116, 116A)

Building 8486 (SWMUs 117 and 118)

Buildings 8549, 8550, and 8551 (SWMUs 121-128, 149)

Building 9581 (SWMU 138)

Advanced Wastewater Treatment Plant

Former MP-1/WR-4

Former MP-3/WR-2

Former MP-4

Former MP-5

Former WR-3

IAL4

Fill – 1988

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APPENDIX A

EPA Acceptance Letters of the SMP for Submittal Years 2009 – 2022

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

May 4, 2010

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2009 SMP

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional comments on the 2009 SMP and it is EPA's opinion that the document is ready for inclusion in the Administrative Record.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

A handwritten signature in black ink, appearing to read "John Burchette", is positioned above the typed name.

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 15th, 2010

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2010 Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the 2010 SMP for Fort George G. Meade.

EPA has reviewed the subject document and has no additional comments. It is EPA's opinion that the document is ready for inclusion in the administrative record.

If you have any questions, please contact me at 215-814-3378.

Sincerely,

A handwritten signature in black ink, appearing to read "John Burchette", is positioned above the printed name.

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 29, 2011

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2011 Draft Final Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional comments on the Draft Final SMP. Please submit the Final version of the document when you get the opportunity.

Sincerely,

A handwritten signature in black ink, appearing to read "John Burchette", is positioned above the typed name.

John Burchette
Remedial Project Manager

cc: Mr. Kurt Scarbro



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 6, 2012

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2012 Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional comments on the Site Management Plan. It is EPA's opinion that the document is ready for inclusion in the Administrative Record for the Site.

Sincerely,

A handwritten signature in black ink, appearing to read "John Burchette".

John Burchette
Remedial Project Manager

cc: Dr. Elisabeth Green



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 26, 2013

Paul V. Fluck, P.G., REP
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
239 Chisholm Avenue
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: 2013 Site Management Plan

Mr. Fluck:

Thank you for the opportunity to review the subject document. EPA has no additional Comments on the SMP. It is the opinion of EPA that the document is ready for inclusion in the administrative record for the site.

Sincerely,

A handwritten signature in black ink, which appears to read "John Burchette", is positioned above the typed name.

John Burchette
Remedial Project Manager

cc: Dr. Elisabeth Green



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

July 24, 2014

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4215 Roberts Ave.
Room 320
Fort George G. Meade, MD. 20755-7068

Subject: 2014 Site Management Plan

Mr. Knight:

Thank you for the opportunity to review the subject document. EPA has no additional Comments on the SMP. It is the opinion of EPA that the document is ready for inclusion in the administrative record for the site (if applicable).

Sincerely,

A handwritten signature in black ink, appearing to read "J. Burchette", is positioned above the printed name.

John Burchette
Remedial Project Manager

cc: Dr. Elisabeth Green



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

February 19, 2016

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Final Site Management Plan 2015 Annual Update, dated December 2015

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment. No comments will be submitted and if no changes are made the final version can be included in the administrative record for the site.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

A handwritten signature in black ink, which appears to read "Robert W. Stroud", is positioned above the printed name.

Robert W. Stroud, RPM

cc: Dr. Elisabeth Green



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

July 21, 2016

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Site Management Plan, dated June 2016

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment. No comments will be submitted and the final version of the document is ready for inclusion in the administrative record for the site.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

A handwritten signature in black ink, which appears to read "Robert W. Stroud", is written over a light blue circular stamp.

Robert W. Stroud, RPM

cc: Dr. Elisabeth Green



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

January 8, 2018

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Site Management Plan Annual Update, dated September 2017

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment. No comments will be submitted and the final version can be included in the administrative record for the site.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

A handwritten signature in black ink, which appears to read "Robert W. Stroud", is written over a horizontal line.

Robert W. Stroud, RPM

cc: Dr. Elisabeth Green, MDE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 20, 2018

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Site Management Plan 2018 Annual Update dated August 2018

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment at this time. No comments will be submitted and the final version of this document can be included in the administrative record file for the site.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

Robert W. Stroud, RPM

cc: Elisabeth Green, Ph.D. (MDE)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

August 26, 2019

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Site Management Plan, 2019 Annual Update dated July 2019

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment at this time. No additional comments will be submitted and the final version of the document can be placed in the administrative record.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert W. Stroud".

Robert W. Stroud, RPM

cc: Elisabeth Green, Ph.D, MDE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

September 11, 2020

George Knight
Installation Restoration Manager
Department of the Army DPW - Environmental Division
4216 Roberts Ave., Suite 5115
Fort George G. Meade, MD 20755

Re: Draft Site Management Plan, dated June 2020

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment. EPA looks forward to the submittal of the final version of the document.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance.

If you have any questions, or need any additional information please contact me at 410-305-2748.

Sincerely,

A handwritten signature in black ink, which appears to read "Robert W. Stroud", is positioned above the printed name and title.

Robert W. Stroud, RPM
Federal Facilities Section
Superfund Emergency Management
Division

cc: Elisabeth Green, Ph.D. MDE



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

February 16, 2022

George Knight
Installation Restoration Manager
Department of the Army DPW - Environmental Division
4216 Roberts Ave., Suite 5115
Fort George G. Meade, MD 20755

Re: 2021 Site Management Plan Annual update, dated December 2021

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment. If there are no changes the document can be placed in the administrative record for the site.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance.

If you have any questions, or need any additional information please contact me at stroud.robert@epa.gov or 410-305-2748.

Sincerely,

A handwritten signature in black ink, which appears to read "Robert W. Stroud", is positioned above the typed name.

Robert W. Stroud, RPM
Federal Facilities Section
Superfund Emergency Management
Division

cc: Elisabeth Green, Ph.D. MDE



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
4 Penn Center
1600 JFK Blvd.
Philadelphia, Pennsylvania 19103-2029**

October 24, 2022

George Knight
Installation Restoration Manager
Dept. of Army DPW - Environmental Division
4216 Roberts Ave,
Suite 5115
Fort George G. Meade, MD. 20755-7068

Subject: Draft Site Management Plan Annual Update dated June 2022

Dear Mr. Knight:

EPA has reviewed the above referenced document and has no comment at this time. No additional comments will be submitted, and the final version of the document can be placed in the administrative record.

EPA reserves all rights and authorities relating to information not contained or referenced in this document whether or not such information was known when this document was issued or discovered after such issuance. If you have any questions, or need any additional information please contact me at stroud.robert@epa.gov or 410-305-2748.












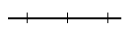


Sincerely,

Robert W. Stroud

Robert W. Stroud, RPM

cc: Elisabeth Green, Ph.D, MDE

Legend

-  Base Realignment and Closure - Open Site
-  Base Realignment and Closure - No Further Action (Closed)
-  Base Realignment and Closure Open/Closed Sites Patuxent Research Refuge North Tract
-  Installation Restoration Program - Open Site
-  Installation Restoration Program/Military Munitions Response Program - No Further Action (Closed)
-  Monitoring Wells
-  Installation Boundary
-  Military Munitions Response Program
-  Building/Structure
-  Railroad
-  Roads
-  Surface Waterbody
-  Vehicle Parking
-  Inactive Railroad

