FINAL ENVIRONMENTAL ASSESSMENT (EA)

FOR

PROPOSED 133-FOOT MONOPOLE TELECOMMUNICATIONS STRUCTURE

PREPARED BY:

Department of the Air Force
Joint Base Langley Eustis- Eustis, Virginia

October 27, 2020

Letters or other written comments provided may be published in the Final EA. As required by law, substantive comments will be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

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FINDING OF NO SIGNIFICANT IMPACT (FONSI)

AND

FINDING OF NO PRACTICABLE ALTERNATIVE (FONPA)

Proposed 133-Foot Monopole Telecommunications Structure

Joint Base Langley-Eustis-Eustis, Virginia

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) §1500-1508, and 32 CFR §989, Environmental Impact Analysis Process, the U.S. Air Force (Air Force) assessed the potential environmental consequences associated with the proposed 133-foot monopole telecommunications structure located at Joint Base Langley-Eustis (JBLE-Eustis), Fort Eustis, Virginia.

Purpose and Need

The *purpose* and *need* of the Proposed Action are to construct a telecommunications structure that would provide acceptable coverage for telecommunications services, as well as a supporting structure for mounting a beacon for the airfield on JBLE-Eustis, Virginia.

Proposed Action and Alternatives

The *purpose* of the Proposed Action is to construct a telecommunications structure that would provide acceptable coverage for telecommunications services, as well as a supporting structure for mounting a beacon for the airfield on JBLE-Eustis, Virginia. The *need* of the Proposed Action is to provide needed wireless telecommunications services below the cantonment area, as well as provide a supporting structure for mounting a beacon for the nearby Felker Army Airfield. Cellular coverage on Mulberry Island has long been weak and weaker further down Mulberry Island road where the ranges are located. Having the availability of being able to contact emergency services in remote areas of the ranges is a major safety asset. A number of requests have been fielded to build a telecommunications structure to alleviate the coverage issues with all carriers. Civilian and military airports are required to have a rotating beacon to enable pilots to identify the airport during darkness or adverse weather conditions. Felker Airfield currently has a rotating beacon on its air traffic controller tower, which was built in 1968. Since that time, standards have changed and is no longer authorized to be located on the air traffic controller tower. Unified Facilities Criteria (UFC) 3-535-01, Visual Air Navigation Facilities, 11 April 2017, Including Change 1, 7 March 2018, Chapter 10, Para 10-1.3.4 and 10-1.3.6, page 182, requires the beacon to be at least 750 feet from the control tower and the base of the beacon must not be less than 20 feet above the floor of the control towers cab. A Quality Assurance Evaluation (QAE) inspection team cited this discrepancy 10 years ago and received a temporary waiver NTE September 2021. Additionally, a beacon would provide modern aircraft to convert to digital flight publications not supported by military networks. Currently, the only way to download required updates to the publications is through the 4G cellular network, which is unavailable on Felker Airfield. The telecommunications structure would therefore solve the lack of cellular coverage and bring the current Felker Airfield beacon up to standards.

A decision to implement the Proposed Action will be made in compliance with NEPA. The intent of NEPA is to protect, restore or enhance the environment through well-informed decisions by the federal decision maker. The CEQ was established under NEPA, 42 USC 4342 et. Seq., to implement and oversee federal policy in this process. In 1978, the CEQ issued regulations implementing the NEPA process under 40 CFR Parts 1500-1508. The U.S. Air Force (USAF) Environmental Impact Analysis Process for meeting CEQ requirements is accomplished via procedures set forth in CEQ regulations and 32 CFR Part 989.

The Environmental Assessment (EA), incorporated by reference into this finding, analyzes the potential environmental consequences of activities associated with the proposed 133-foot monopole telecommunications structure, and provides environmental protection measures to avoid or reduce adverse environmental impacts.

Several required standards were evaluated for each of the Alternatives and are listed below:

- Standard 1: Proximity to built infrastructure (i.e. roads, electric, and communication infrastructure);

- Standard 2: Conformance with land use planning/zoning and airfield operations;
- Standard 3: Placement away from known environmental, natural and cultural resource sensitive areas;

- Standard 4: Maintain/improve the quality of life enjoyed by personnel and dependents on and nearby JBLE-Eustis; and

- Standard 5: Acceptable proximity to Felker Army Airfield for use of an airfield beacon.

ALTERNATIVE 1 (Preferred Alternative)

Alternative 1 would include a 133-foot monopole telecommunications structure within a 70-foot by 70-foot lease area that would be accessible via an approximate 471-foot long by 30-foot wide access/utility easement located off Condon Road adjacent to the Felker Army Airfield and a golf course on JBLE-Eustis, Virginia. The proposed lease area and portions of the access/utility easement would be located within a maintained grassed field, and the remaining portions of the access/utility easement would be located along an existing paved drive (Condon Road). Alternative 1 would adhere to Standards 1 through 5.

ALTERNATIVE 2

Alternative 2 would be located behind Building 2115 off Wilson Avenue on JBLE-Eustis near family housing. Although Alternative 2 currently has cellular coverage, it would not conform with future planning land use and would not be located in a suitable area for an airfield beacon. Therefore, Alternative 2 would not adhere to Standards 2, 4, and 5.

ALTERNATIVE 3

Alternative 3 would be located behind Building 3310 located off Meyer Road on JBLE-Eustis. Alternative 3 would not adhere to Standard 2 and Standard 3 due to existing methane monitoring activities and its location on an old landfill. Additionally, Alternative 3's location would not be acceptable for the use of an airfield beacon (Standard 5).

ALTERNATIVE 4

Alternative 4 would be located behind Building 1499 in a heavily wooded area and in close proximity to a wetland. Alternative 4 would not adhere to Standards 2 and 3 and would not be in a location suitable for Standard 5.

ALTERNATIVE 5

Alternative 5 would be located off Klingenhagen Road and met Standards 1 through 4. However, due to the distance from the Felker Army Airfield, Alternative 5's location was unacceptable for the use of an airfield beacon (Standard 5). Any airfield waivers that are required due to the height of the tower will be acceptable deviations due to the beacon being installed on the top.

As indicated above, Alternatives 2 through 4 would not conform with land use/zoning and airfield operations and would be located within or within the immediate vicinity of environmentally sensitive resources or potentially impact the quality of life in nearby residentially developed areas. Alternatives 1 and 5 meet Standards 1 through 4 required for the Proposed Action. However, Alternative 5 would not be located in an area suitable for the requirements of the beacon for the nearby Felker Army Airfield (Standard 5). Based on these considerations, the Alternative 1 located off Condon Road on JBLE-Eustis was selected as the Preferred Alternative.

NO-ACTION ALTERNATIVE

Under the No-Action Alternative, the Preferred Alternative would not occur and would not meet the needed wireless telecommunications services objectives or beacon lighting needs.

SUMMARY OF ENVIRONMENTAL IMPACTS

The EA evaluates the existing environmental conditions and potential environmental consequences of implementing the Proposed Action with regard to land use; noise; air quality; water resources; safety and occupational health; hazardous and toxic materials and wastes; biological resources; cultural resources; geology and soil; transportation and circulation; and aesthetics and visual resources. The Air Force has concluded that by implementing standing environmental protection measures and operational planning, the Air Force would be in compliance with all terms and conditions and reporting requirements.

LAND USE

The Proposed Action would be located in a maintained grassed area and paved driveway adjacent to Felker Army Airfield and Felker Airfield Fuel Farm. Additional land uses in the area include a railroad corridor along Mulberry Island Road, a golf course, and otherwise undeveloped

land. The development of a telecommunications facility would have no significant impacts on these existing land uses.

NOISE

The Proposed Action construction would result in a short-term increase in local noise during construction of the proposed facility. The amount and type of noise disturbance will vary depending on the type of machinery used, distance from the construction site and noise source, construction schedule and duration, and site and area specific conditions.

Proposed Action construction related noise will usually occur during normal working hours (7AM to 6PM local), when this noise would be better masked by ambient noise levels of the surrounding project area, caused by proximity to Felker Army Airfield, Mulberry Island Road, and the adjacent railroad. Noise levels after construction will likely return to pre-construction ambient noise levels.

Given the distance of the Proposed Action to the nearest residential development (Approximately 7,000 feet), it is unlikely that use of heavy machinery would result in significant impacts on residences located on JBLE-Eustis. Also, the Proposed Action operations and maintenance would not notably change noise levels. Therefore, no significant impacts due to noise are expected.

AIR QUALITY

Although construction activities would cause short-term negligible adverse impacts on air quality at and near the proposed project site, due to the construction activities' short duration, criteria air pollutants are not expected to increase above accepted levels. Since the Proposed Action would involve ground disturbance that would create particulate (mostly soil dust) emissions, BMPs would be used to reduce potential particulate emissions and air quality impacts. These BMPs include laying straw, mulching, minimizing exposed soil needed for each activity, wetting bare soil, and maintaining slow speeds of vehicles in areas of exposed soil. Additionally, since the footprint of the Proposed Action would be limited to approximately 0.4 acres, it is unlikely that ground disturbing activities related to the Proposed Action construction would result in an exceedance of emissions limits for criteria pollutants or HAPs. Therefore, the Proposed Action construction would not significantly impact air quality.

During the Proposed Action long-term operations and maintenance, ambient air quality at the project sites would return to their previous, normal levels. It is possible that an emergency generator may be installed as a backup power supply. In the event that operation of a generator would be required, the run time of the generator would be short-term, and ambient air quality at the site would again return to previous, normal levels after the generator shut off. The proposed facility would not require any other emissions-generating sources that would emit criteria pollutants or HAPs, so it would not notably alter the existing ambient air quality. Therefore, the Proposed Action's long-term operations and maintenance would not significantly impact air quality.

WETLANDS

No construction work in or placement of fill material in the adjacent wetlands will occur during construction or when the cell tower is operational. Based on a site inspection, the installation wetland delineation data, and soil information within the Proposed Action impact area, the Proposed Action would not be in or within the immediate vicinity of wetlands. Please refer to the wetland map located in Appendix D. Therefore, the Proposed Action would have no impact on wetlands or waters under the jurisdiction of the U.S.

FLOODPLAIN

A portion of the Proposed Action impact area would be located within a Special Hazard Flood Area of the 100-year floodplain, Zone AE. The Base Floodplain Elevation for the Proposed Action impact area is 7 feet Above Mean Sea Level. While the proposed tower structure and infrastructure related to the access drive would be at ground level, associated ground-level equipment would be elevated at or above the BFE. Therefore, there would be no significant impacts to the 100-year floodplain.

SAFETY AND OCCUPATIONAL HEALTH

The Proposed Action construction would require an area of approximately 0.4 acres. Construction work areas would be fenced, and appropriate signs posted to further reduce safety risks. Worker safety rules, per Occupational Safety and Health Administration (OSHA) safety and health standards, establish a uniform set of safety practices and procedures to protect workers, and would be implemented. The proposed tower compound would be fenced and access for operations and maintenance would be restricted to authorized personnel to reduce health and safety risks. Therefore, the Proposed Action construction and maintenance would not significantly impact human health or safety.

Based on the height of the proposed telecommunications tower and subsequent height(s) of any antennas located on the structure and because the tower site would be located within a relatively restricted area, radio frequency emissions are not expected to threaten human health or safety. FCC RF emissions regulations would be adhered to. Therefore, the Proposed Action operations would not significantly impact human health or safety.

HAZARDOUS AND TOXIC MATERIALS AND WASTES

Two petroleum releases were previously reported in 1992 and 2010 in connection with the Felker Airfield Fuel Farm located approximately 120 feet northeast of the Proposed Action area. Although impacts to soil and groundwater at the facility have been previously documented, a review of the most recent records related to this facility from the Virginia Department of Environmental Quality (VDEQ) indicated no detectable concentrations of hazardous and toxic materials and/or wastes in groundwater at the Proposed Action area as of 2011 (Appendix E). No other evidence of hazardous and toxic materials and/or wastes have been discovered within the immediate vicinity of the Proposed Action impact area. Additional sampling activities occurred in 2008. Metals and petroleum products were still detected in the soil and groundwater at that time. However, the Human Health Risk Assessment indicated a "No Risk" finding. Land use controls were not implemented for the tract. Therefore, the Proposed Action would not result in a significant impact relative to hazard and toxic materials or wastes.

BIOLOGICAL RESOURCES

A. Wildlife and other fauna.

(1) Federally-listed species. The project footprint resides in a mowed area that is devoid of trees or other habitat resources typically needed by either the Northern long-eared bat or Indiana bat. Additionally the finished and operational structure does not pose any impacts to mobility or foraging. Consequently, no impact on federally listed species is expected.

(2) Bald eagles. Bald eagles are commonly observed on the installation and at least 14 active nests exist. However, based on the 2018 eagle nest map (Appendix F), none of the nests exist in proximity to the project footprint. Consequently, this project does not require the removal of nests or potential nest trees. The type of structure and small ground footprint will not impede bald eagle mobility or foraging.

(3) Other wildlife. The two state-listed bat species would not be at risk for the same reasons for the federally listed bats discussed above. The spotted turtle has been observed at several locations on the installation but definitive areas are not yet mapped. It may occur in the wetlands adjacent to the project site; however, no work would occur in these wetlands. The grassy area may be used as nesting sites; however, the overall footprint is small and would pose as an impact to any turtle species nesting activities. The project footprint contains mowed grass and is devoid of milkweed plant species. Furthermore, only limited herbicide use around the completed footprint and therefore the construction work and finished project would not involve any increased use of insecticides. Consequently, no impact on monarch butterflies is expected. Whitetail deer and wild turkey are important game species occurring on the installation that contribute to recreational activities as well as biodiversity. The mowed grass habitat and small project footprint would not reduce habitat or food requirements or impede recreational activities related to these two species.

B. Habitats. This project does not require the removal of any trees. Consequently, there is no net loss of forestry products or forest habitat. No construction will occur on shoreline habitats. Consequently, no impacts to habitats is expected.

C. Invasive species. The small project footprint in a routinely mowed area is not expected to increase an expansion of certain invasive vegetation particularly kudzu, common reed, tree of heaven, Chinese privet, Japanese honeysuckle, lespedeza, Japanese stiltgrass or autumn olive. No articles will be brought from external sources that would increase risks of red imported fire ants, gypsy moth or spotted lanternfly.

CULTURAL RESOURCES

The Proposed Action would construct a 133-foot tall telecommunications tower within a 70-foot by 70-foot lease area that would be accessible via 471-foot long by 30-foot wide access/utility easement. Section 106 of the NHPA (National Historic Preservation Act) and its implementing regulations, 36 CFR Part 800, requires the lead federal agency, in this case the USAF, to assess the potential effects of an undertaking on historic properties that are within the proposed project's Area of Potential Effect (APE).

The identification of historic properties (NRHP eligible) process includes historical, architectural, and archaeological studies, as well as the inclusion of local residents and Indian tribes with special knowledge of a property's historic and cultural significance. According to VA Cultural Resource Information System (V-CRIS), there is one NRHP-eligible historic property (Battle of Yorktown) within a ½-mile visual APE and within the direct APE of the Proposed Action.

An Archaeological Assessment was conducted within the Proposed Action impact area (Appendix B). During the database research, 44 archaeological sites were reported within a 1-mile radius, but outside the APE for direct effects. Additionally, no cultural artifacts were discovered during a Phase I Archaeological Survey in the Proposed Action impact area (Appendix G).

The VADHR, in response to the October 23, 2019 consultation letter received from the USAF, concurred with the determination that no Historic Properties would be affected by the Proposed Action. A copy of the correspondence is provided in Appendix B. Based on these findings the Proposed Action is not expected to significantly impact cultural resources.

GEOLOGY AND SOILS

Considering the location of the Proposed Action, soils in this area have likely been previously disturbed during the construction of Felker Army Airfield. Construction of the Proposed Action would involve excavation of soil within the proposed lease area and minor grading activities along the proposed access/utility easement. Although minor soil erosion and runoff may result from proposed project construction activities, BMPs (which would include wetting soils to reduce erosion and dust, installation of silt and sediment control fencing and seeding and wheat straw mulching of exposed soil) would limit the potential impacts. The Proposed Action impact area does not contain prime farmland soil. Based on these findings, the Proposed Action would not impact existing geological and soil conditions.

TRANSPORTATION AND CIRCULATION

During project implementation, limited vehicles would be used for construction. However, vehicle use would be temporary, therefore there would be no significant impacts to the circulation of normal traffic.

AESTHETICS AND VISUAL RESOURCES

The telecommunications tower would be 133 feet tall and a monopole would have a long-term impact on the viewshed from areas within the immediate vicinity of the Proposed Action. However, Felker Army Airfield, Felker Airfield Fuel Farm, and other modern structures, such as plane hangars, are located within the viewshed. Therefore, the Proposed Action would not significantly impact aesthetics and visual resources.

CUMULATIVE IMAPCTS

Cumulative impacts are the impacts on the environment from the Proposed Action, in addition to the environmental impacts from the incremental impact of the other past, present, and reasonably foreseeable future (i.e. 20 years) actions. Cumulative impacts can result from individually insignificant but collectively significant actions taking place over a period of time for a particular resource type or area of concern.

Past Actions in the proposed project area include construction of Felker Army Airfield located to the south, Felker Airfield Fuel Farm located to the northeast, and the construction of the railroad

located to the east of the Proposed Action location. The cumulative impacts of these past actions as related to the Proposed Action construction, operation, and maintenance should be minor as no significant impacts are expected on any resources discussed in Section 4 of this Final EA.

Future Actions in the proposed project area include demolition and subsequent replacement of the Felker Airfield Fuel Farm located to the northeast, which is slated for construction in 2020. The cumulative impacts of these future actions as related to the Proposed Action construction, operation, and maintenance should be minor as no significant impacts are expected on any resources discussed in Section 4 of this Final EA.

PUBLIC REVIEW

An early public notice was published in the local newspaper, *The Daily Press*, on April 3, 2020, detailing that the Proposed Action would take place in a floodplain and/or wetland, and seeking advance public comment. No comments were received.

The Draft EA and Draft FONSI/FONPA were made available for public review and comment for 30 days following publication of a Notice of Availability in the *Daily Press* on September 18, 2020. A copy of the Draft EA and Draft FONSI/FONPA were made available for public review on-line at: https://www.jble.af.mil/Units/Army/Eustis-Environmental/. No public comments were received.

INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING

Agency and Native American consultation letters were sent out in October 2019, March 2020, and April 2020. One agency and three tribes have responded to date. Responses have been considered and incorporated in the EA, as appropriate. Appendix B of the EA includes records of agency and tribal correspondence.

FINDINGS

Finding of No Significant Impact (FONSI)

The Air Force has concluded that no significant effects would result to environmental, natural or cultural resources as a result of the Preferred Alternative: No significant adverse cumulative impacts would result from activities associated with Alternative 1 (Preferred Alternative) when considered with past, present, or reasonably foreseeable future projects.

Based upon my review of the facts and analyses contained in the attached EA, conducted in accordance with the provisions of NEPA, CEQ Regulations, and 32 CFR §989, I conclude that the Preferred Alternative would not have significant environmental impact, either by itself or cumulatively with other ongoing operations and projects at JBLE-Eustis; would not involve an element of high risk or uncertainty on the human environment; and that its effects on the quality of the human environment would not be highly controversial.

element of high risk or uncertainty on the human environment; and that its effects on the quality of the human environment would not be highly controversial.

Finding of No Practicable Alternative

Similarly, EO 11988, Floodplain Management (May 24, 1977), requires Federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. If it is found that there is no practicable alternative, the agency must minimize potential harm to the floodplain and circulate a notice explaining why the action is to be located in the floodplain prior to taking action. Finally, new construction in a floodplain must apply accepted flood proofing and flood protection to include elevating structures above the base flood level rather than filling in land. In accordance with EO 11988, a FONPA must accompany the FONSI stating why there are no practicable alternatives to development within or affecting floodplains.

The proposed telecommunications structure and airfield beacon would not be located within an identified wetlands. It will be located in a floodplain, but because there is not practicable alternative to locating the project in a floodplain. As noted in the attached EA, there are no practicable alternatives to the Proposed Action that would avoid all impacts or further minimize impacts to floodplains because the objectives sought by this project precludes the selection of any practicable alternatives due to mission requirements, installation layout constraints, and the nature of the proposed project. In addition to the Preferred Alternative, multiple project sites throughout the base were evaluated using the selection standards identified in the EA. Four additional sites were considered and determined to not meet the required selection standards of the proposed action. Therefore, taking all the environmental, economic, and other pertinent factors into account, pursuant to EO 11988, the authority delegated by Secretary of the Air Force Order 791.1, and taking into consideration the submitted information, I find that there is no practicable alternative to this action and the proposed action includes all practical measures to minimize harm to the environment. The signing of this Finding of No Significant Impact and Finding of No Practicable Alternative completes the environmental impact analysis process.

KATZER.DEE.J.1153738854 Digitally signed by KATZER.DEE.J.1153738854 Date: 2020.12.11 16:19:40 -05'00'

11 Dec 2020

DEE JAY KATZER, Colonel, USAF

Date

Chief, Civil Engineer Division

HQ Air Combat Command (ACC/A4C)

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

LIST OF APPENDICES

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

AF	Air Force
AFB	Air Force Base
AMSL	Above Mean Sea Level
APE	Area of Potential Effects
AQI	Air Quality Index
AST	Above Ground Storage Tank
BFE	Base Flood Elevation
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONPA	Finding of No Practicable Alternative
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutants
JBLE-Eustis	Joint Base Langley-Eustis - Eustis
MAJCOM	Major Command
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NRHP	National Register of Historic Places
OSHA	Occupational Safety and Health Administration
RF	Radio Frequency
ROI	Region of Influence
SHPO	State Historic Preservation Officer
THPO	Tribal Historic Preservation Officer
USAF	United States Air Force
USDA	United States Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V-CRIS	Virginia Cultural Resource Information System
VDEQ	Virginia Department of Environmental Quality
VADHR	Virginia Department of Historic Resources

1.0 PURPOSE OF AND NEED FOR ACTION

The *purpose* of the Proposed Action is to construct a telecommunications structure that would provide acceptable coverage for telecommunications services, as well as a supporting structure for mounting a beacon for the airfield on JBLE-Eustis, Virginia. The *need* of the Proposed Action is to provide needed wireless telecommunications services below the cantonment area, as well as provide a supporting structure for mounting a beacon for the nearby Felker Army Airfield. Cellular coverage on Mulberry Island has long been weak and weaker further down Mulberry Island road where the ranges are located. Having the availability of being able to contact emergency services in remote areas of the ranges is a major safety asset. A number of requests have been fielded to build a telecommunications structure to alleviate the coverage issues with all carriers. Civilian and military airports are required to have a rotating beacon to enable pilots to identify the airport during darkness or adverse weather conditions. Felker Airfield currently has a rotating beacon on its air traffic controller tower, which was built in 1968. Since that time, standards have changed and is no longer authorized to be located on the air traffic controller tower. Unified Facilities Criteria (UFC) 3-535-01, Visual Air Navigation Facilities, 11 April 2017, Including Change 1, 7 March 2018, Chapter 10, Para 10-1.3.4 and 10-1.3.6, page 182, requires the beacon to be at least 750 feet from the control tower and the base of the beacon must not be less than 20 feet above the floor of the control towers cab. A Quality Assurance Evaluation (QAE) inspection team cited this discrepancy 10 years ago and received a temporary waiver NTE September 2021. Additionally, a beacon would provide modern aircraft to convert to digital flight publications not supported by military networks. Currently, the only way to download required updates to the publications is through the 4G cellular network, which is unavailable on Felker Airfield. The telecommunications structure would therefore solve the lack of cellular coverage and bring the current Felker Airfield beacon up to standards.

1.1 LOCATION AND BACKGROUND

The JBLE-Eustis is approximately 130 miles south-southeast of Washington, D.C., 60 miles southeast of Richmond, 10 miles southeast of Williamsburg, and 30 miles northwest of Norfolk. The JBLE-Eustis is located in southeast Virginia on the southwest side of the Virginia Peninsula, bordered by the James River and Warwick River. The Proposed Action location is on Joint Base Langley Eustis – Eustis (JBLE – Eustis) and is located on the eastern shoreline of the James River, approximately 20 miles upstream of its confluence with the Chesapeake Bay.

Fort Eustis is a joint base installation that was recognized as JBLE-Eustis with Langley Air Force Base in 2010 in accordance with the Base Realignment and Closure of 2005. Most of JBLE-Eustis is used primarily for military training purposes.

Mulberry Island (approximately 5,400 acres) is an adjacent peninsula separated from the main installation by Milstead Island Creek and Butlers Gut from James River to Warwick River. Much of this area includes forested riparian and wetland habitat, tidal wetlands, non-tidal wetlands, and upland forested and early successional habitat. Numerous tidal creeks are also present. The island is otherwise primarily used for military field training purposes includes Felker Army Airfield and the Pines golf course.

1.2 PURPOSE OF THE ACTION

The *purpose* and *need* of the Proposed Action are to construct a telecommunications structure that would provide acceptable coverage for telecommunications services, as well as a supporting structure for mounting a beacon for the airfield on JBLE-Eustis, Virginia.

1.3 NEED FOR THE ACTION

The *need* of the Proposed Action is to provide needed wireless telecommunications services below the cantonment area, as well as provide a supporting structure for mounting a beacon for the nearby Felker Army Airfield. Cellular coverage on Mulberry Island has long been weak and weaker further down Mulberry Island road where the ranges are located. Having the availability of being able to contact emergency services in remote areas of the ranges is a major safety asset. A number of requests have been fielded to build a telecommunications structure to alleviate the coverage issues with all carriers. Civilian and military airports are required to have a rotating beacon to enable pilots to identify the airport during darkness or adverse weather conditions. Felker Airfield currently has a rotating beacon on its air traffic controller tower, which was built in 1968. Since that time, standards have changed and is no longer authorized to be located on the air traffic controller tower. Unified Facilities Criteria (UFC) 3-535-01, Visual Air Navigation Facilities, 11 April 2017, Including Change 1, 7 March 2018, Chapter 10, Para 10-1.3.4 and 10-1.3.6, page 182, requires the beacon to be at least 750 feet from the control tower and the base of the beacon must not be less than 20 feet above the floor of the control towers cab. A Quality Assurance Evaluation (QAE) inspection team cited this discrepancy 10 years ago and received a temporary waiver NTE September 2021. Additionally, a beacon would provide modern aircraft to convert to digital flight publications not supported by military networks. Currently, the only way to download required updates to the publications is through the 4G cellular network, which is unavailable on Felker Airfield. The telecommunications structure would therefore solve the lack of cellular coverage and bring the current Felker Airfield beacon up to standards.

Figure 1-1. Existing Cellular Coverage

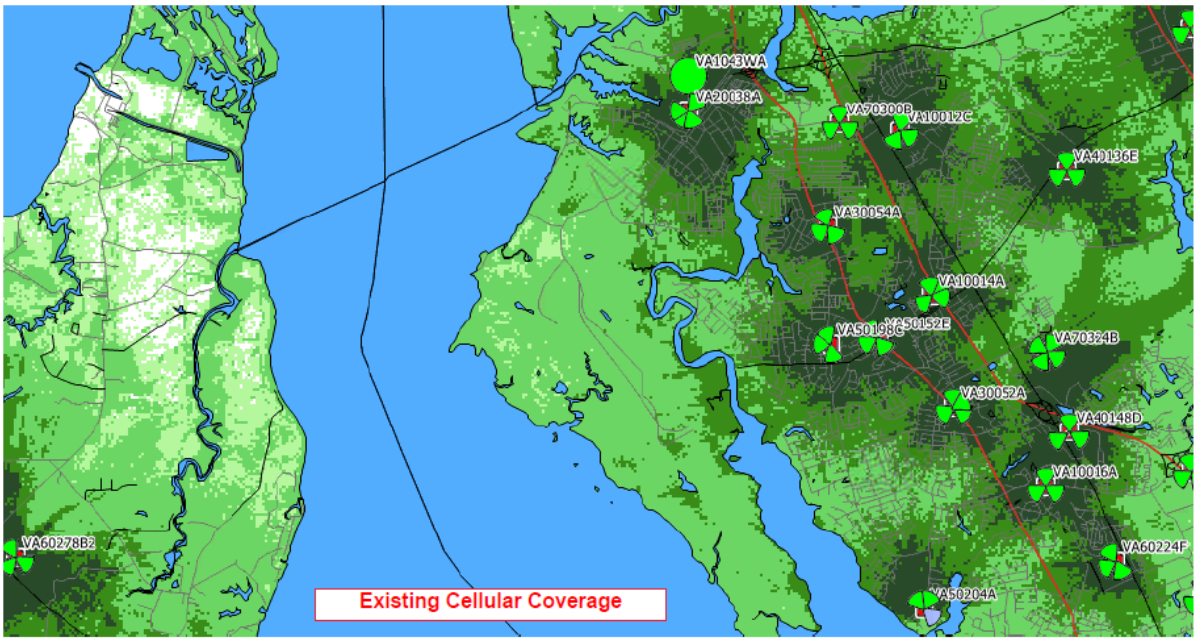
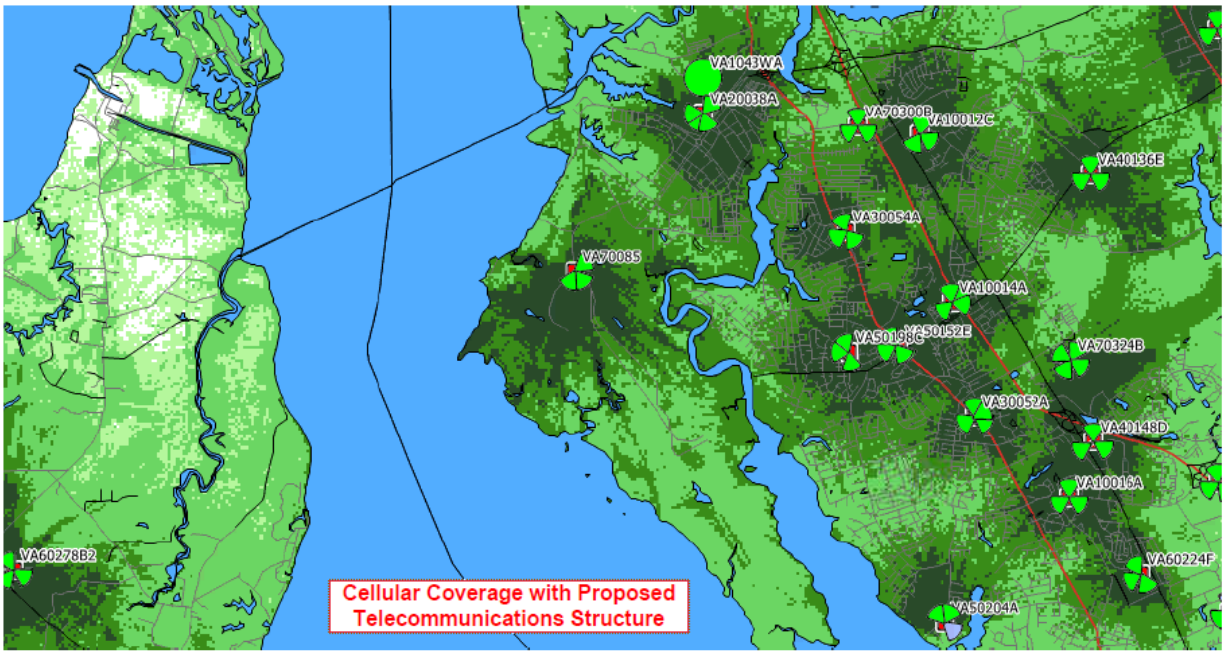


Figure 1-2. Coverage with Proposed Telecommunications Structure



1.4 DECISION TO BE MADE

The decision to be made is the selection of an alternative for 733 Mission Support Group to support the proposed 133-foot monopole telecommunications structure. The decision options are:

1) To continue with current operations (the No Action Alternative);
2) Selecting an alternative and preparing a FONSI and FONPA; or
3) Preparing an Environmental Impact Statement (EIS) if the alternatives would result in significant environmental impacts.

1.5 COOPERATING AGENCY AND INTERGOVERNMENTAL COORDINATION/ CONSULTATIONS

1.5.1 Interagency and Intergovernmental Coordination and Consultations

Federal, state, and local agencies with jurisdiction that could be affected by the alternative actions were notified and consulted during the development of this EA. Appendix B contains the list of agencies consulted during this analysis and copies of correspondence.

1.5.2 Government to Government Consultations

EO 13175, Consultation and Coordination with Indian Tribal Governments (6 November 2000), directs Federal agencies to coordinate and consult with Native American tribal governments whose interests might be directly and substantially affected by activities on federally administered lands. To comply with legal mandates, federally recognized tribes that are affiliated historically with the Joint Base Langley-Eustis geographic region will be invited to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. The tribal coordination process is distinct from NEPA consultation or the IICEP processes and requires separate notification of all relevant tribes. The timelines for tribal consultation are also distinct from those of intergovernmental consultations. The Joint Base Langley-Eustis point-of-contact for Native American tribes is the Installation Tribal Liaison Officer. The Joint Base Langley-Eustis point-of-contact for consultation with the Tribal Historic Preservation Officer (THPO) and the Advisory Council on Historic Preservation is the Cultural Resources Manager.

The Native American tribal governments that will be coordinated with regarding this action are listed in Appendix B.

1.6 PUBLIC AND AGENCY REVIEW OF EA

Pursuant to EO 11988, *Floodplain Management* and the authority delegated by the Secretary of the Air Force Order 791.1, there is no practicable alternative to the construction of a 133-foot tall telecommunications structure associated with the Proposed Action, and that any effective solution would require activities within floodplains. A FONPA is required due to the Proposed Action's location within a floodplain.

The ECA, prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations, and Air Force instructions implementing NEPA; evaluates potential impacts of the alternative actions on the environment including the No-action Alternative. Based on this analysis, the Air Force has prepared a proposed Finding of No Significant Impact (FONSI).

A Notice of Availability (NOA) of the Draft EA and FONSI/FONPA was published in the newspapers of record (listed below), announcing the availability of the EA for review on April 5, 2020. The NOA invited the public to review and comment on the Draft EA. The public and agency review period ended on May 6, 2020. Public and agency comments are provided in Appendix B.

After making edits to the Draft EA and Draft FONSI/FONPA, a second Notice of Availability was published announcing the availability of the Draft EA and Draft FONSI/FONPA for review on September 18, 2020 in the *Daily Press*. A copy of the Draft EA and Draft FONSI/FONPA were made available for public review on-line at: https://www.jble.af.mil/Units/Army/Eustis-Enviromental/. This public review period ended on October 19,2020. No public comments were received.

The NOA was published in the following newspapers: The Daily Press, Newport News, VA

Copies of the Draft EA and FONSI were also made available for review at the following locations:

Groninger Library	1313 Washington Boulevard Fort Eustis, VA 23604	(757) 878-5017
Grissom Library	366 Deshazor Drive Newport News, VA 23608	(757) 369-3190

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action would include a 133-foot monopole telecommunications structure within an approximate 70-foot by 70-foot lease area that would be accessible via an approximate 471-foot long by 30-foot wide access/utility easement located off Condon Road adjacent to the Felker Army Air Field on Joint Base Langley-Eustis, Virginia. The proposed lease area would be located in a maintained grassed area. The proposed access/utility easement would traverse in a southwesterly direction from Mulberry Island Road along an existing paved road (Condon Road) before traversing in a southeasterly direction through the maintained grassed area towards the proposed lease area.

2.2 SELECTION STANDARDS

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ) regulations mandate the consideration of reasonable alternatives for the proposed action. “Reasonable alternatives” are those that also could be utilized to meet the purpose of and need for the proposed action. Per the requirements of 32 Code of Federal Regulations (CFR) §989, the USAF Environmental Impact Analysis Process (EIAP) regulations, selection standards are used to identify alternatives for meeting the purpose and need for the USAF action.

The proposed action alternatives must meet the following selection standards:

- Standard 1: Proximity to built infrastructure (i.e. roads, electric, and communication infrastructure);
- Standard 2: Conformance with land use planning/zoning and airfield operations;
- Standard 3: Placement away from known environmental, natural and cultural resource sensitive areas; and
- Standard 4: Maintain/improve the quality of life enjoyed by personnel and dependents on and nearby JBLE-Eustis by providing needed cellular coverage
- Standard 5: Suitability for airfield beacon

2.3 SCREENING OF ALTERNATIVES

The following alternatives were screened for compatibility with the selection standards:

1) Alternative 1 (Preferred Alternative) – The construction of a 133-foot monopole telecommunications structure within a 70-foot by 70-foot lease area that would be accessible by a 471-foot long by 30-foot wide access/utility easement. The telecommunications structure would be located off Condon Road, adjacent to Felker Army Airfield on Joint Base Langley-Eustis.

2) Alternative 2 – The telecommunications structure would be located off Wilson Avenue behind Building 2115.

3) Alternative 3 – The telecommunications structure would be located off Meyer Road behind Building 3310.

4) Alternative 4 – The telecommunications structure would be located in a heavily wooded area behind Building 1499.
5) Alternative 5 – The telecommunications structure would be located off Klingenhagen Road.
6) No Action Alternative – Under the No-Action Alternative, the Preferred Alternative would not occur and would not meet the needed wireless services objectives.

The selection standards described in Section 2.2 were applied to these alternatives to determine which alternative(s) could meet the wireless services objectives and would fulfill the purpose and need for the action.

Table 2-1. List of Alternatives and Selection Standards

Alternative Descriptions	Selection Standards				
	Proximity to built infrastructure	Conformance with land use planning/zoning and airfield operations	Placement away from known environmental, natural and cultural resource sensitive areas	Maintain/improve the quality of life enjoyed by personnel and dependents on and nearby JBLE-Eustis	Suitability for Airfield Beacon
	(1)	(2)	(3)	(4)	(5)
Alternative 1	Yes	Yes	Yes	Yes	Yes
Alternative 2	Yes	No	Yes	No	No
Alternative 3	Yes	No	No	Yes	Np
Alternative 4	Yes	No	No	Yes	No
Alternative 5	Yes	Yes	Yes	Yes	No

2.4 DETAILED DESCRIPTION OF THE ALTERNATIVE(S)

Five alternatives, Alternative 1 (Preferred Alternative), Alternative 2, Alternative 3, Alternative 4, Alternative 5, and "No-Action" are analyzed in the detailed description of the alternatives.

2.4.1 No-Action Alternative

Under the No-Action Alternative, the Preferred Alternative would not occur and would not meet the needed cellular coverage south of the golf course and airfield areas. Additionally, the existing airfield beacon would not meet the safety criteria and would not clear the UFC criteria waiver.

2.4.2 Alternative 1 (Preferred Alternative)

Alternative 1 would include a 133-foot monopole telecommunications structure within an approximate 70-foot by 70-foot lease area that would be accessible via an approximate 471-foot long by 30-foot wide access/utility easement that would be located off Condon Road adjacent to the Felker Army Airfield and a golf course on JBLE-Eustis, Virginia. The proposed lease area and portions of the access/utility easement would be located within a maintained grassed field, and the remaining portions of the access/utility easement would be located along an existing paved drive. Alternative 1 would be located near existing infrastructure, would conform with land use/zoning and airfield operations, would not significantly impact known environmental, natural and cultural resource sensitive areas, and would have no impact on the quality of life for personnel and /or dependents on JBLE-Eustis, thus adhering to Standards 1 through 5. Alternative 1 would also provide cellular coverage to portions south of the golf course and airfield, as well as meet the safety criteria and UFC criteria waiver.

2.4.3 Alternative 2

Alternative 2 would be located behind Building 2115 off Wilson Avenue on JBLE-Eustis. Alternative 2 would be located near family housing and would not adhere to Standard 2 and Standards 4 and 5. Alternative 2 would provide cellular coverage to family housing, however the location of Alternative 2 would not be suitable for an airfield beacon.

2.4.4 Alternative 3

Alternative 3 would be located behind Building 3310 located off Meyer Road on JBLE-Eustis. Alternative 3 would not adhere to Standard 2 and Standard 3 due to existing methane monitoring activities and its location on an old landfill. In addition, the landfill cap would not be at the required depth for the base of the telecommunications structure. Further, Alternative 3's location would not be suitable for an airfield beacon.

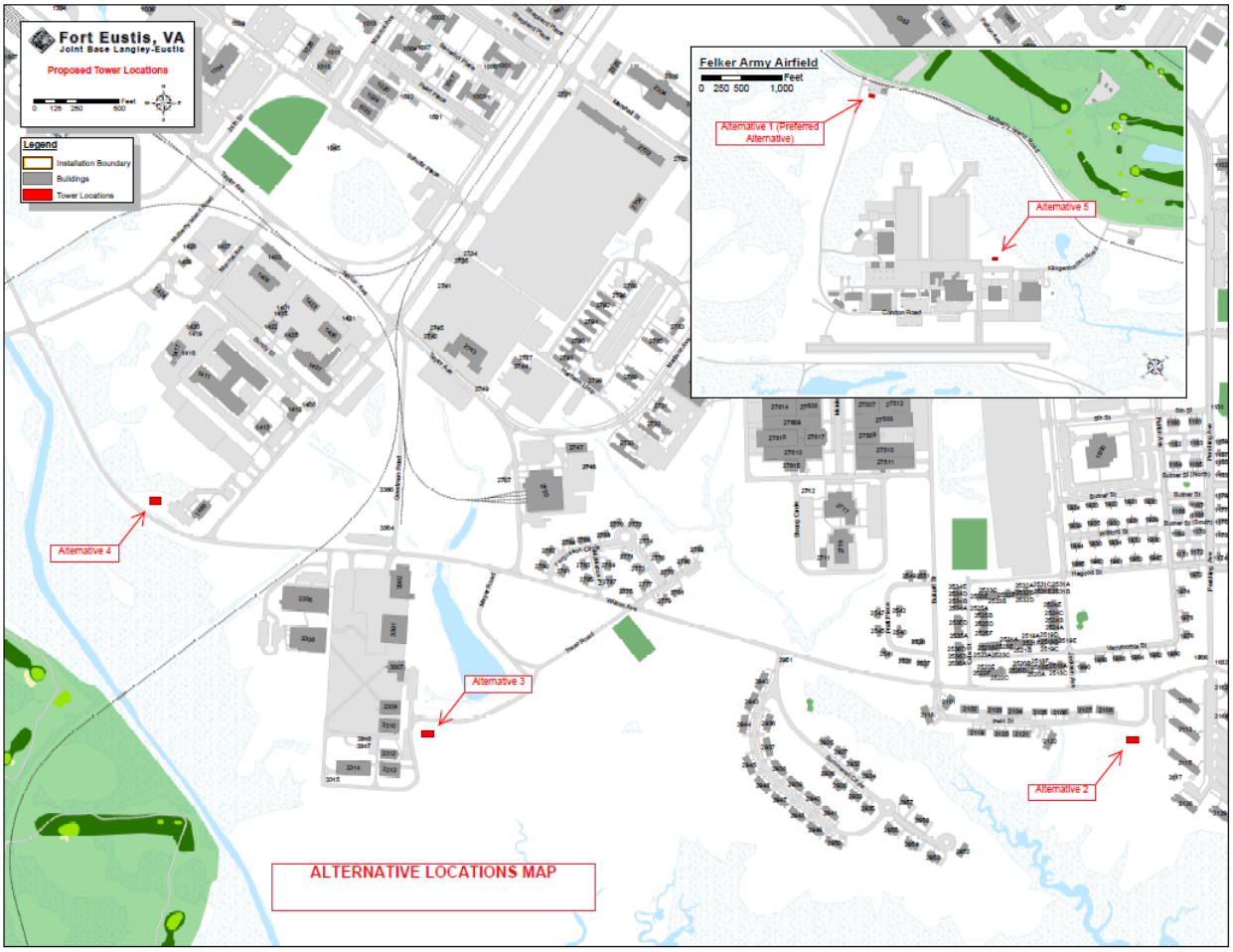
2.4.5 Alternative 4

Alternative 4 would be located behind Building 1499 in a heavily wooded area and in close proximity to a wetland. Alternative 4 would not adhere to Standard 2 and Standard 3 and would not provide a suitable location for Standard 5.

2.4.6 Alternative 5

Alternative 5 would be located off Klingenhagen Road and met Standards 1 through 4. However, due to the distance from the Felker Army Airfield, Alternative 5's location was unacceptable for an airfield beacon (Standard 5).

Figure 2-1. Alternative Locations Map



2.5 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Alternatives 2, 3, 4, and 5 did not meet the selection standards stated in Section 2.2; therefore were eliminated for consideration because they were not practicable alternatives, and were not carried forward for analysis in this EA.

3.0 AFFECTED ENVIRONMENT

The ROI for the Proposed Action is the 70-foot by 70-foot lease area and the 471-foot long by 30-foot wide access/utility easement, unless otherwise specified below for a particular resource area where a resource would have a different ROI.

3.1 SCOPE OF THE ANALYSIS

The EA evaluates potential environmental impacts to the following resources that would likely be affected by the decision to implement the Proposed Action or its alternatives:

- ***Land Use***
- ***Noise***
- ***Air Quality***
- ***Water Resources***
- ***Safety and Occupational Health***
- ***Hazardous and Toxic Materials and Wastes***
- ***Biological Resources***
- ***Cultural Resources***
- ***Geology and Soils***
- ***Transportation and Circulation***
- ***Aesthetics and Visual Resources***

3.2 Land Use

Existing Conditions

JBLE-Eustis is primarily used for military field training purposes. The Proposed Action would be located adjacent to Felker Army Airfield, the Felker Airfield Fuel Farm, and a railroad. Other areas surrounding the Proposed Action consist of undeveloped wooded land and marshland and a golf course.

3.3 Noise

Existing Conditions

Existing noise sources within the vicinity of the Proposed Action include Felker Army Airfield to the south, and Mulberry Island Road and a railroad to the east. Existing noise. The nearest residences to the Proposed Action impact area and noise source are approximately 7,000 feet to the northeast. This area is separated from the Proposed Action area by a golf course, wooded land, and Butlers Gut.

3.4 Air Quality

Existing Conditions

The Quality Index (AQI) is a numeric score from 1 to 100, based on Environmental Protection Agency (EPA) annual reports. Higher AQI score (which is based upon the higher concentrations of particulates, carbon monoxide, sulfur dioxide, lead and volatile organic chemicals in the air) indicates lower air quality. According to the USEPA, the 90th percentiles scores for 2019 daily AQI values of Norfolk, VA (the nearest city identified on the EPA's AQI) was 36 (Appendix C).

3.5 Water Resources

3.5.1 Wetlands

Existing Conditions

Review of the Fort Eustis Integrated Natural Resources Management Plan and consultation with the installation natural resources manager indicates approximately 3,600 acres of wetlands exists on the installation. According to a site inspection, USGS Yorktown, VA 7.5 Minute Topographic Quadrangle Map, and the installation wetland delineation map (Appendix D), the Proposed Action impact area is not located within a wetland. Additionally, mapped soils in the Proposed Action impact area are identified as being Urban Land, which consists of soils that have been extensively cut or filled as a result of human development activities, and subsurface soils encountered during an archaeological investigation did not indicate evidence of wetland conditions.

3.5.2 Floodplain

Existing Conditions

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 5101030038D, dated December 9, 2014, indicates that portions of the Proposed Action would be located within a Special Hazard Flood Area of the 100-year floodplain, Zone AE (Appendix D). Zone AE are areas within the 100-year floodplain where the BFE has been previously determined. The BFE for Zone AE in the project area is 7 feet AMSL.

3.6 Safety and Occupation Health

Existing Conditions

The Proposed Action impact area is located within a cleared grassed area and along a graded railroad right-of-way. The Proposed Action would involve the construction of an unmanned telecommunications facility, requiring periodic maintenance activities related to telecommunications antennas and associated equipment and the beacon light that would be atop the structure.

3.7 Hazardous and Toxic Materials and Waste

Existing Conditions

The Proposed Action impact area is located within a maintained grassed area and along a paved driveway. The Proposed Action impact area would be located adjacent to the Felker Airfield Fuel Farm. The Felker Airfield Fuel Farm, located approximately 120 feet northeast of the tower center, reported petroleum releases from two 30,000-gallon ASTs containing jet fuel in 1992 and 2010. A 2016 Final Revised Technical Memorandum for Felker Airfield Fuel Farm Installation Restoration Program Report from VADEQ records indicated that a release of petroleum products had been suspected in conjunction with the piping system of the ASTs in 1992, and that soil cleanup efforts took place in 1993 and 1994. In 1996, groundwater sampling indicated a BTEX (benzene, toluene, ethylbenzene, and xylenes) plume in the areas surrounding the ASTs. However, due to the limited migration and insignificant current risk to human and ecological receptors, the release received a case closure status. Additional sampling activities occurred in 2008. Metals and petroleum products were still detected in the soil and groundwater at that time. However, the Human Health Risk Assessment indicated a "No Risk" finding. Land use controls were not implemented for the tract.

In September of 2010 a second petroleum spill occurred but was immediately addressed and closed out in December of 2010 following removal of the contaminated soil.

In 2011 the EPA and VADEQ requested additional groundwater sampling activities at the fuel farm. One of the groundwater sampling wells was installed within or immediately adjacent to the lease area. Concentrations of all of the analyzed constituents (including VOCs, SVOCs, and metals) were non-detect, with the exception of iron, which was suspected to "reflect natural heterogeneity not captured in the Fort Eustis ambient range dataset".

Although impacts to soil and groundwater at the facility have been previously documented, a review of the most recent records related to this facility from the VADEQ indicated no evidence of contamination in groundwater at the Proposed Action area as of 2011 (Appendix E).

3.8 Biological Resources

Existing Conditions

A. Wildlife and other fauna.

(1) Federally-listed species. The project was assessed through the US Fish and Wildlife Service Information, Planning, and Consultation System (IPAC). The IPAC indicated the Northern long-eared bat on the installation. However, this review and consultation also suggests the possibility of the federally endangered Indiana bat (*Myotis sodalis*). The Indiana bat was documented via acoustic survey work in 2016. Subsequent surveys in 2017 and 2019 have not identified this species.

(2) Bald eagle ((*Haliaeetus leucocephalus*). A review of the Fort Eustis Integrated Natural Resources Management Plan (5 June 2019) and consultation with the JBLE-E natural

resources manager confirms this species has been documented on the installation. As of 2018, fourteen active nests were documented (see FIGURE 1 in Appendix F).

(3) Other wildlife. Various other vertebrate and invertebrate fauna occur on the installation. Two state-listed species, the tricolored bat (*Perimyotis subflavus*) and little brown bat (*Myotis lucifugus*) also occur on the installation. These two species are potential candidates for federal listing as are the spotted turtle (*Clemmys guttata*) and. monarch butterfly (*Danaus plexippus*). Whitetail deer (*Odocoileus virginianus*) and wild turkey (*Meleagris gallopavo*) are important game species occurring on the installation that contribute to recreational activities as well as biodiversity.

B. Habitats. The installation contains several natural habitats types. These include approximately 3,600 acres of wetlands, 2,700 acres of forested land, several ponds, approximately 22 miles of shoreline and early successional habitat. These habitats are critical to meet various military training and other mission requirements.

C. Invasive species. Several invasive species occur on the installation. Currently, this includes approximately 22 plant species, coyotes and several invertebrate species. Several species create impacts to mission requirements. Alteration of landscape or habitats or other factors can contribute to the expansion or introduction of invasive organisms to the installation.

The Proposed Action project area consists solely of a maintained (routinely mowed) grass area adjacent and a paved driveway. This impact area is not located within designated critical habitat.

3.9 Cultural Resources

Existing Conditions

Resources listed in or eligible for listing in the National Register of Historic Places (NRHP) and located within a ½-mile radius of the Visual APE are listed below:

Resource Name	NRHP Eligibility Status	Distance Relative to Proposed Action
Battle of Yorktown	Eligible	Within Direct APE

Additionally, 44 previously recorded archaeological sites were identified within a 1-mile radius surrounding the Proposed Action impact area, but outside the APE for direct effects (Appendix G).

3.10 Geology and Soils

Existing Conditions

Geologically, the Proposed Action impact area is located in the Coastal Plain Physiographic Region (Figure 5). Coastal Plain soils developed from ancient marine sediments that were later

uplifted and now tilt seaward forming the Atlantic Continental Shelf. Coastal Plain deposits overlap older, more distorted Paleozoic and Precambrian rocks to the north and west (USGS, 2000).

According to the USDA Web Soil Survey, soils mapped in the Proposed Action impact area consist of Urban land. Urban land consists of soils that have been extensively cut or filled as a result of human development activities (Figure 4). Urban land is not considered “Prime Farmland” soil.

3.11 Transportation and Circulation

Existing Conditions

The ROI for Transportation and Circulation includes the network of roads used to access the JBLE-Eustis and any roads or access points in and around the limits of the Proposed Action. This consists of the local road and street network and military training routes/roads at the JBLE-Eustis. Major roads near the project area that could be used to access the JBLE-Eustis include Mulberry Island Road and Condon Road.

3.12 Aesthetics and Visual Resources

Existing Conditions

The local aesthetics in the ROI and the area around Felker Army Airfield consist of a relatively undeveloped natural landscape that contains open water areas, wetlands and upland habitats. The remainder of the landscape consists of the airfield, the Felker Airfield Fuel Farm, a golf course, a railroad, and supporting infrastructure including access roads.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This chapter describes the potential environmental consequences that are likely to occur as a result of implementation of all Alternatives that are being considered and analyzed. Impacts described in this chapter are evaluated in terms of type (positive/beneficial or adverse), context (setting or location), intensity (none, negligible, minor, moderate, severe), and duration (short-term/temporary or long-term/permanent). The type, context, and intensity of an impact on a resource are explained under each resource area. Unless otherwise noted, short-term impacts are those that would result from the activities associated with a project's construction and/or demolition phase, and that would end upon the completion of those phases. Long-term impacts are generally those resulting from the operation of a proposed project.

Preparing an Environmental Assessment (EA) involves determining the significance or importance of environmental impacts associated with a Proposed Action. The Council on Environmental Quality (CEQ) regulations (40 CFR §§ 1500-1508), direct that this be done by considering two variables: "context" and "intensity." Example information describing the significance criteria that can be applied to each resource analyzed in the EA are included in the "Instruction Document for EA Template." However, the significance criteria are to be used as a guide only, as significance must take into consideration the context and intensity of the Proposed Action.

4.2 Land Use

Impacts

The Proposed Action would be located in a maintained grassed area and paved driveway adjacent to Felker Army Airfield and Felker Airfield Fuel Farm. Additional land uses in the area include a railroad corridor along Mulberry Island Road, a golf course, and otherwise undeveloped land. The development of a telecommunications facility would have no significant impacts on these existing land uses.

4.3 Noise

Impacts

The Proposed Action construction would result in a short-term increase in local noise during construction of the proposed facility. The amount and type of noise disturbance will vary depending on the type of machinery used, distance from the construction site and noise source, construction schedule and duration, and site and area specific conditions.

Proposed Action construction related noise will usually occur during normal working hours (7AM to 6PM local), when this noise would be better masked by ambient noise levels of the surrounding project area, caused by proximity to Felker Army Airfield, Mulberry Island Road, and the adjacent railroad. Noise levels after construction will likely return to pre-construction ambient noise levels.

Given the distance of the Proposed Action to the nearest residential development (Approximately 7,000 feet), it is unlikely that use of heavy machinery would result in significant impacts on residences located on JBLE-Eustis. Also, the Proposed Action operations and maintenance would not notably change noise levels. Therefore, no significant impacts due to noise are expected.

4.4 Air Quality

Impacts

Although construction activities would cause short-term negligible adverse impacts on air quality at and near the proposed project site, due to the construction activities' short duration, criteria air pollutants are not expected to increase above accepted levels. Since the Proposed Action would involve ground disturbance that would create particulate (mostly soil dust) emissions, BMPs would be used to reduce potential particulate emissions and air quality impacts. These BMPs include laying straw, mulching, minimizing exposed soil needed for each activity, wetting bare soil, and maintaining slow speeds of vehicles in areas of exposed soil. Additionally, since the footprint of the Proposed Action would be limited to approximately 0.4 acres, it is unlikely that ground disturbing activities related to the Proposed Action construction would result in an exceedance of emissions limits for criteria pollutants or HAPs. Therefore, the Proposed Action construction would not significantly impact air quality.

During the Proposed Action long-term operations and maintenance, ambient air quality at the project sites would return to their previous, normal levels. It is possible that an emergency generator may be installed as a backup power supply. In the event that operation of a generator would be required, the run time of the generator would be short-term, and ambient air quality at the site would again return to previous, normal levels after the generator shut off. The proposed facility would not require any other emissions-generating sources that would emit criteria pollutants or HAPs, so it would not notably alter the existing ambient air quality. Therefore, the Proposed Action's long-term operations and maintenance would not significantly impact air quality.

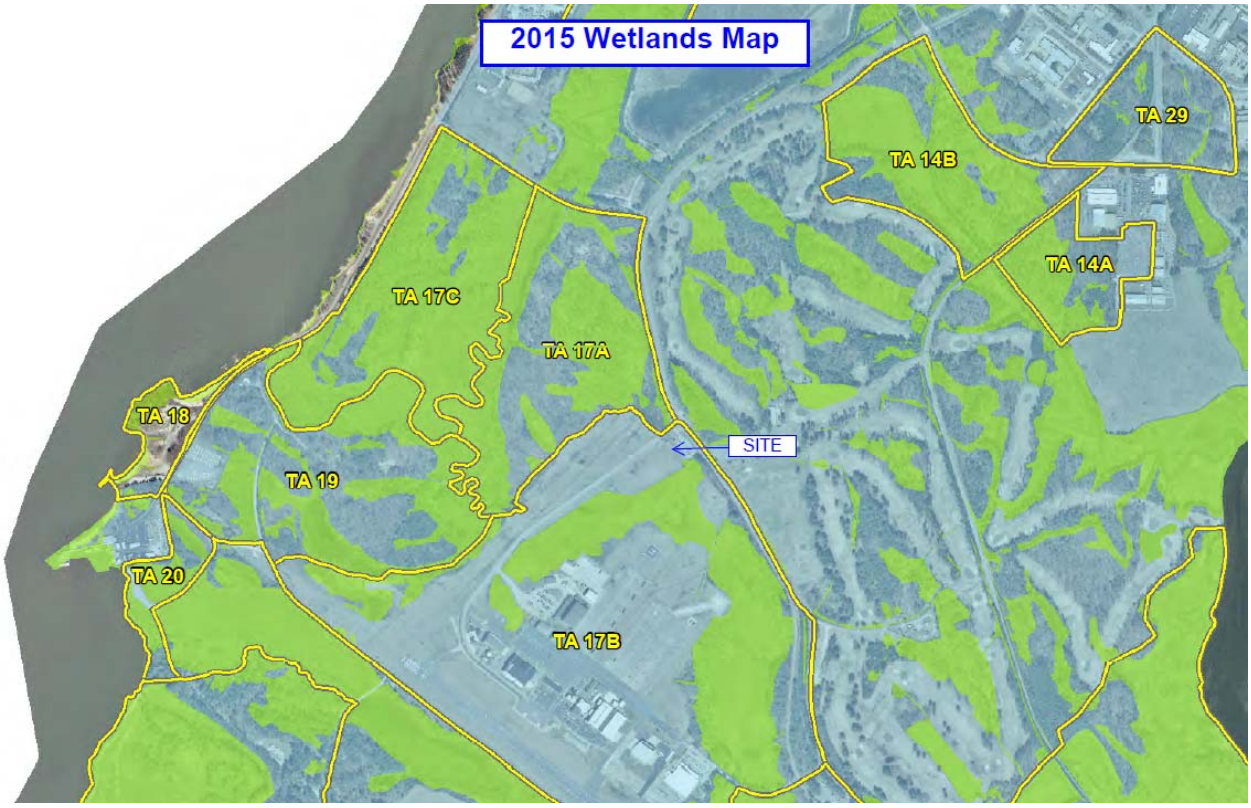
4.5 Water Resources

4.5.1 Wetlands

Impacts

No construction work in or placement of fill material in the adjacent wetlands will occur during construction or when the cell tower is operational. Based on a site inspection, the installation wetland delineation data, and soil information within the Proposed Action impact area, the Proposed Action would not be in or within the immediate vicinity of wetlands. Please refer to the wetland map located below. Therefore, the Proposed Action would have no impact on wetlands or waters under the jurisdiction of the U.S.

Figure 4-1. 2015 Wetlands Map

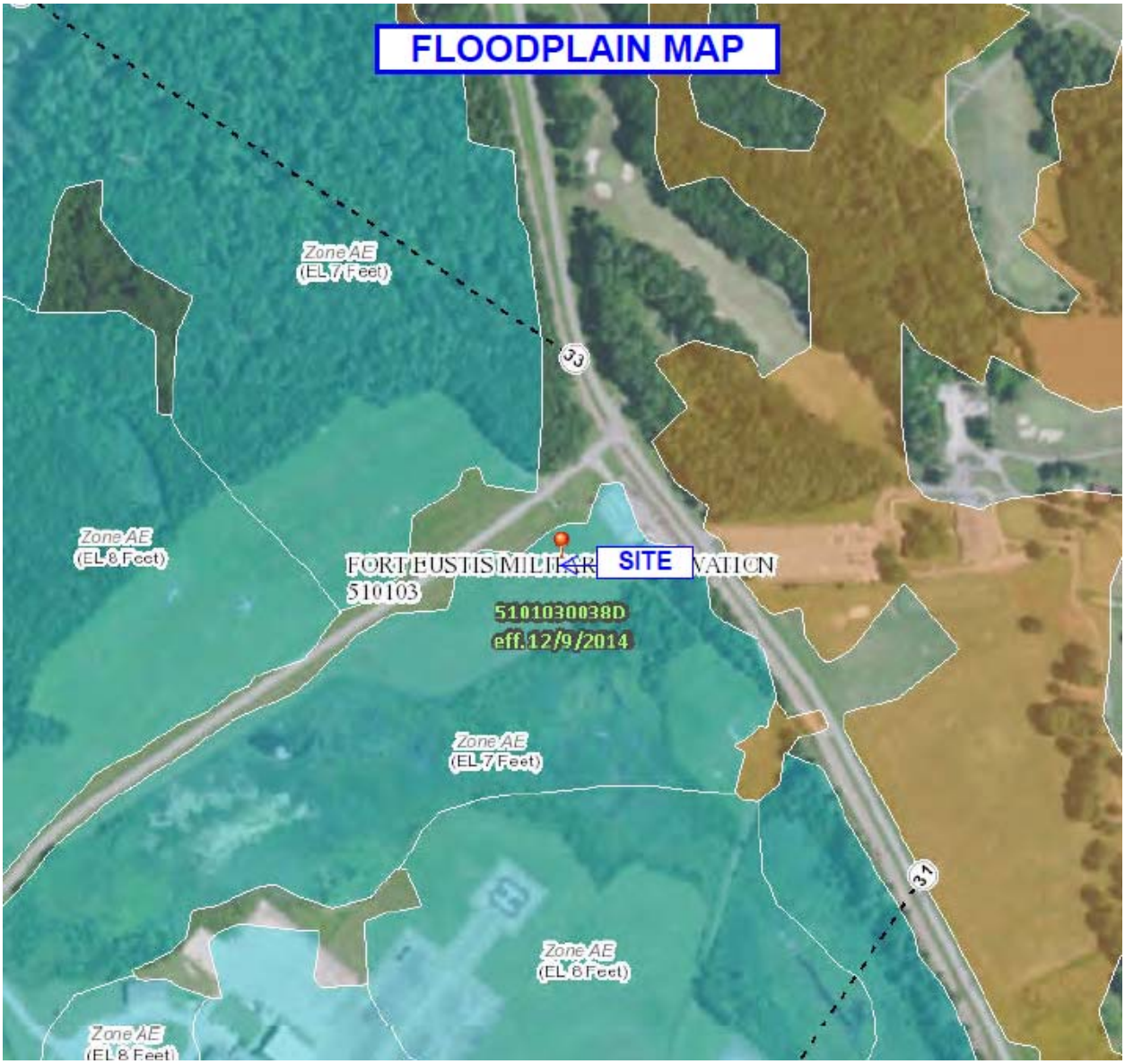


4.5.2 Floodplain

Impacts

A portion of the Proposed Action impact area would be located within a Special Hazard Flood Area of the 100-year floodplain, Zone AE. The BFE for the Proposed Action impact area is 7 feet AMSL. While the proposed tower structure and infrastructure related to the access drive would be at ground level, associated ground-level equipment would be elevated at or above the BFE. Please refer to the floodplain map below. Therefore, there would be no significant impacts to the 100-year floodplain.

Figure 4-2. Floodplain Map



4.6 Safety and Occupational Health

Impacts

The Proposed Action construction would require an area of approximately 0.4 acres. Construction work areas would be fenced, and appropriate signs posted to further reduce safety risks. Worker safety rules, per Occupational Safety and Health Administration (OSHA) safety and health standards, establish a uniform set of safety practices and procedures to protect workers, and would be implemented. The proposed tower compound would be fenced and access for operations and maintenance would be restricted to authorized personnel to reduce health and safety risks. Therefore, the Proposed Action construction and maintenance would not significantly impact human health or safety.

Based on the height of the proposed telecommunications tower and subsequent height(s) of any antennas located on the structure and because the tower site would be located within a relatively restricted area, radio frequency emissions are not expected to threaten human health or safety. FCC RF emissions regulations would be adhered to. Therefore, the Proposed Action operations would not significantly impact human health or safety.

4.7 Hazardous and Toxic Materials and Wastes

Impacts

Two petroleum releases were previously reported in 1992 and 2010 in connection with the Felker Airfield Fuel Farm located approximately 120 feet northeast of the Proposed Action area. Although impacts to soil and groundwater at the facility have been previously documented, a review of the most recent records related to this facility from the Virginia Department of Environmental Quality (VDEQ) indicated no detectable concentrations of hazardous and toxic materials and/or wastes in groundwater at the Proposed Action area as of 2011 (Appendix E). No other evidence of hazardous and toxic materials and/or wastes have been discovered within the immediate vicinity of the Proposed Action impact area. Additional sampling activities occurred in 2008. Metals and petroleum products were still detected in the soil and groundwater at that time. However, the Human Health Risk Assessment indicated a "No Risk" finding. Land use controls were not implemented for the tract. Therefore, the Proposed Action would not result in a significant impact relative to hazard and toxic materials or wastes.

4.8 Biological Resources

Impacts

A. Wildlife and other fauna.

(1) Federally-listed species. The project footprint resides in a mowed area that is devoid of trees or other habitat resources typically needed by either the Northern long-eared bat or Indiana bat. Additionally the finished and operational structure does not pose any impacts to mobility or foraging. Consequently, no impact on federally listed species is expected.

(2) Bald eagles. Bald eagles are commonly observed on the installation and at least 14 active nests exist. However, based on the 2018 eagle nest map (Appendix F), none of the nests exist in proximity to the project footprint. Consequently, this project does not require the removal of nests or potential nest trees. The type of structure and small ground footprint will not impede bald eagle mobility or foraging.

(3) Other wildlife. The two state-listed bat species would not be at risk for the same reasons for the federally listed bats discussed above. The spotted turtle has been observed at several locations on the installation but definitive areas are not yet mapped. It may occur in the wetlands adjacent to the project site; however, no work would occur in these wetlands. The grassy area may be used as nesting sites; however, the overall footprint is small and would pose as an impact to any turtle species nesting activities. The project footprint contains mowed grass and is devoid of milkweed plant species. Furthermore, only limited herbicide use around the completed footprint and therefore the construction work and finished project would not involve any increased use of insecticides. Consequently, no impact on monarch butterflies is expected. Whitetail deer and wild turkey are important game species occurring on the installation that contribute to recreational

activities as well as biodiversity. The mowed grass habitat and small project footprint would not reduce habitat or food requirements or impede recreational activities related to these two species.

B. Habitats. This project does not require the removal of any trees. Consequently, there is no net loss of forestry products or forest habitat. No construction will occur on shoreline habitats. Consequently, no impacts to habitats is expected.

C. Invasive species. The small project footprint in a routinely mowed area is not expected to increase an expansion of certain invasive vegetation particularly kudzu, common reed, tree of heaven, Chinese privet, Japanese honeysuckle, lespedeza, Japanese stiltgrass or autumn olive. No articles will be brought from external sources that would increase risks of red imported fire ants, gypsy moth or spotted lanternfly.

4.9 Cultural Resources

Impacts

The Proposed Action would construct a 133-foot tall telecommunications tower within a 70-foot by 70-foot lease area that would be accessible via 471-foot long by 30-foot wide access/utility easement. Section 106 of the NHPA (National Historic Preservation Act) and its implementing regulations, 36 CFR Part 800, requires the lead federal agency, in this case the USACE, to assess the potential effects of an undertaking on historic properties that are within the proposed project's Area of Potential Effect (APE).

The identification of historic properties (NRHP eligible) process includes historical, architectural, and archaeological studies, as well as the inclusion of local residents and Indian tribes with special knowledge of a property's historic and cultural significance. According to VA Cultural Resource Information System (V-CRIS), there is one NRHP-eligible historic property (Battle of Yorktown) within a ½-mile visual APE and within the direct APE of the Proposed Action.

An Archaeological Assessment was conducted within the Proposed Action impact area (Appendix B). During the database research, 44 archaeological sites were reported within a 1-mile radius, but outside the APE for direct effects. Additionally, no cultural artifacts were discovered during a Phase I Archaeological Survey in the Proposed Action impact area (Appendix G).

The VADHR, in response to the October 23, 2019 consultation letter received from the USAF, concurred with the determination that no Historic Properties would be affected by the Proposed Action. A copy of the correspondence is provided in Appendix B. Based on these findings the Proposed Action is not expected to significantly impact cultural resources.

4.10 Geology and Soils

Impacts

Considering the location of the Proposed Action, soils in this area have likely been previously disturbed during the construction of Felker Army Airfield. Construction of the Proposed Action would involve excavation of soil within the proposed lease area and minor grading activities along

the proposed access/utility easement. Although minor soil erosion and runoff may result from proposed project construction activities, BMPs (which would include wetting soils to reduce erosion and dust, installation of silt and sediment control fencing and seeding and wheat straw mulching of exposed soil) would limit the potential impacts. The Proposed Action impact area does not contain prime farmland soil. Based on these findings, the Proposed Action would not impact existing geological and soil conditions.

4.11 Transportation and Circulation

Impacts

During project implementation, limited vehicles would be used for construction. However, vehicle use would be temporary, therefore there would be no significant impacts to the circulation of normal traffic.

4.12 Aesthetics and Visual Resources

Impacts

The telecommunications tower would 133 feet tall and a monopole would have a long-term impact on the viewshed from areas within the immediate vicinity of the Proposed Action. However, Felker Army Airfield, Felker Airfield Fuel Farm, and other modern structures, such as plane hangars, are located within the viewshed. Therefore, the Proposed Action would not significantly impact aesthetics and visual resources.

4.13 Cumulative Impacts

Cumulative impacts are the impacts on the environment from the Proposed Action, in addition to the environmental impacts from the incremental impact of the other past, present, and reasonably foreseeable future (i.e. 20 years) actions. Cumulative impacts can result from individually insignificant but collectively significant actions taking place over a period of time for a particular resource type or area of concern.

Past Actions in the proposed project area include construction of Felker Army Airfield located to the south, Felker Airfield Fuel Farm located to the northeast, and the construction of the railroad located to the east of the Proposed Action location. The cumulative impacts of these past actions as related to the Proposed Action construction, operation, and maintenance should be minor as no significant impacts are expected on any resources discussed in Section 4 of this Final EA.

Future Actions in the proposed project area include demolition and subsequent replacement of the Felker Airfield Fuel Farm located to the northeast, which is slated for construction in 2020. The cumulative impacts of these future actions as related to the Proposed Action construction, operation, and maintenance should be minor as no significant impacts are expected on any resources discussed in Section 4 of this Final EA.

5.0 LIST OF PREPARERS

This EA has been prepared by Environmental Corporation of America for and under the direction of the USAF, JBLE-Eustis. The individuals that contributed to the preparation of this EA are listed in Table 5-1 and preparers consulted with members of the 733 CED/CEIE listed in Table 5-2.

Table 5-1. List of Preparers

Name/Organization	Education	Resource Area	Years of Experience
Conchita Jones, Environmental Corporation of America	Bachelors of Art	History	2
Eric Johnson, Environmental Corporation of America	Bachelors of Science	Environmental Studies	10

Table 5-2. List of AF Staff Consulted

Name/Organization	Resource Area
Joanna Bateman	Pollution Prevention/Planning Branch Chief
Tracey Sugg	NEPA Program Manager
Tim Christensen	Natural Resources Branch Chief
Christopher McDaid	Cultural Resources Manager

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6.0 PERSONS AND AGENCIES CONSULTED/COORDINATED

The following Persons and Agencies were contacted in the preparation of this EA

Table 6-1. Persons and Agencies Consulted/Coordinated

Federal Agencies	
U.S. Fish and Wildlife Service Virginia Ecological Services Field Office 6699 Short Lane Gloucester, VA 23061	
State Agencies	
Mr. Chris Novelli Virginia Department of Historic Resources 2801 Kensington Avenue Richmond, VA 23221	
Tribal Agencies	
Chickahominy Indian Tribe 8200 Lott Cary Road Providence Forge, VA 23140	Chief Stephen R. Adkins 7240 Adkins Road Charles City, VA 23030
1st Assistant Chief Wayne Adkins 8836 Sedburgh Drive New Kent, VA 23124	2nd Assist Chief Glenn Canaday 8763 Lott Cary Road Providence Forge, VA 23140
Chickahominy Tribe Eastern Division 2895 Mount Pleasant Road Providence Forge, VA 23140	Chief Gerald A. Stewart 11911 Indian Hill Lane Providence Forge, VA 23140
Assistant Chief Matthew C. Adkins 3100 Mount Pleasant Road Providence Forge, VA 23140	Monocan Indian Nation, Inc. P.O. Box 1136 Madison Heights, VA 24572
Chief Dean Branham 104 Walnut Place Lynchburg, VA	Assistant Chief Pam Thompson 187 Cedar Gate Road Monroe, VA 24572
Nansemond Tribe Nansemond Indian Tribal Association 1001 Pembroke Lane Suffolk, VA 23434	Chief Lee Lockamy 5005 Mosby Road Virginia Beach, VA 23455
Assistant Chief Samuel M. Bass 3903 Manning Road Suffolk, VA 23437	Pamunkey Tribe Pamunkey Indian Tribe 1054 Pocahontas Trail King William, VA 23086
Chief Robert Gray	Allyn Cook-Swarts Assistant Administrator

Ashley Spivey, P.h.D. Director or Pamunkey Indian Tribal Resource Center Pamunkey Indian Reservation 1084 Pocahontas Trail King William, VA 23086	Rappahannock Tribe Rappahannock Tribe Cultural Center 5036 Indian Neck Road Indian Neck, VA 23148
Chief Anne Richardson	Assistant Chief Mark Fortune 4264 Indian Neck Road Tappahannock, VA 22550
Upper Mattaponi Indian Tribe P.O. Box 184 King William, VA 23086	Chief William F. Adams 5932 East River Road King William, VA 23086
Kenneth Adams 237 Mona Drive Newport News, VA 23608	Chief Bill Harris Catawba Indian Nation 996 Avenue of the Nations Rock Hill, SC 29730
Wenonah G. Haire THPO and Director Catawba Cultural Preservation Project 1536 Tom Steven Road Rock Hill, SC 29730	Chief Brooks Delaware Tribe 170 NE Barbara Avenue Bartlesville, OK 74006
Susan Bachor Delaware Tribe Historic Preservation Representative P.O. Box 64 Pocono Lake, PA 18347	Kimberly Penrod Delaware Nation 31064 State Highway 281 P.O. Box 825 Anadarko, OK 73005

7.0 REFERENCES

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National Register Information System (NRIS). 2017 National Register of Historic Places. Web. 17 January 2019.

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Virginia Department of Historic Resources. Virginia Cultural Resource Information System. Web. 17 January 2019.

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APPENDIX A

Figures

2000 0 2000 ft

Source: USGS Topographic Maps, 7.5 Minute Series, *Hog Island, VA (1999), Yorktown, VA (1994), Bacons Castle, VA (1969 photorevised 1992),* and *Mulberry Island, VA (1965 photorevised 1986)*.

N

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 1: USGS Topographic Map

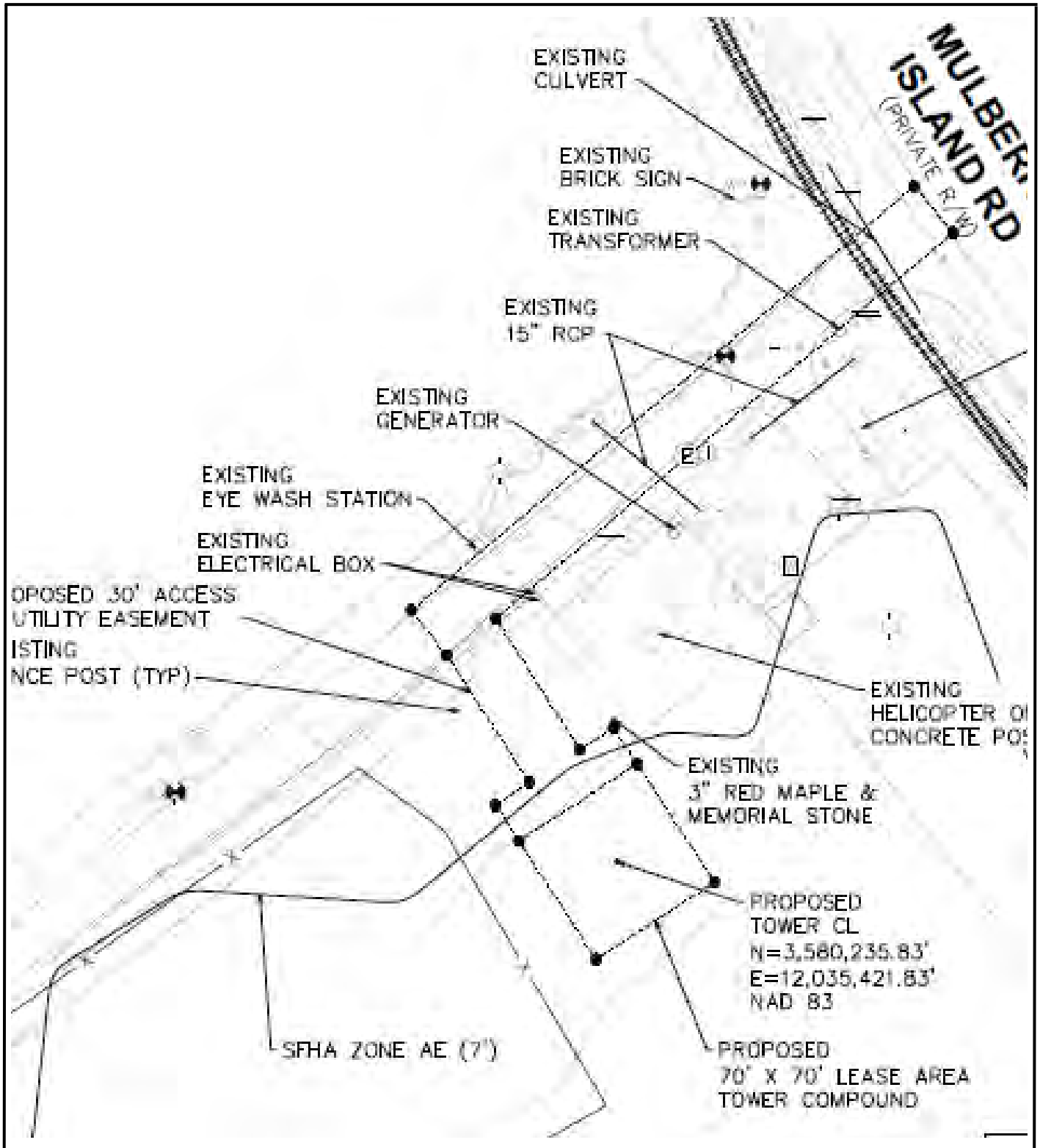
Source: Google Earth 2018

N

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 2: Aerial Photograph



Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 3: Site Plan

Map Unit Symbol	Map Unit Name
1	Altavista-Urban land complex, 0 to 3 percent slopes
2	Augusta-Urban land complex, 0 to 2 percent slopes
6	Bohicket muck, 0 to 1 percent slopes, very frequently flooded
8	Chickahominy-Urban land complex, 0 to 2 percent slopes
17	Newflat-Urban land complex, 0 to 2 percent slopes
27	Urban land

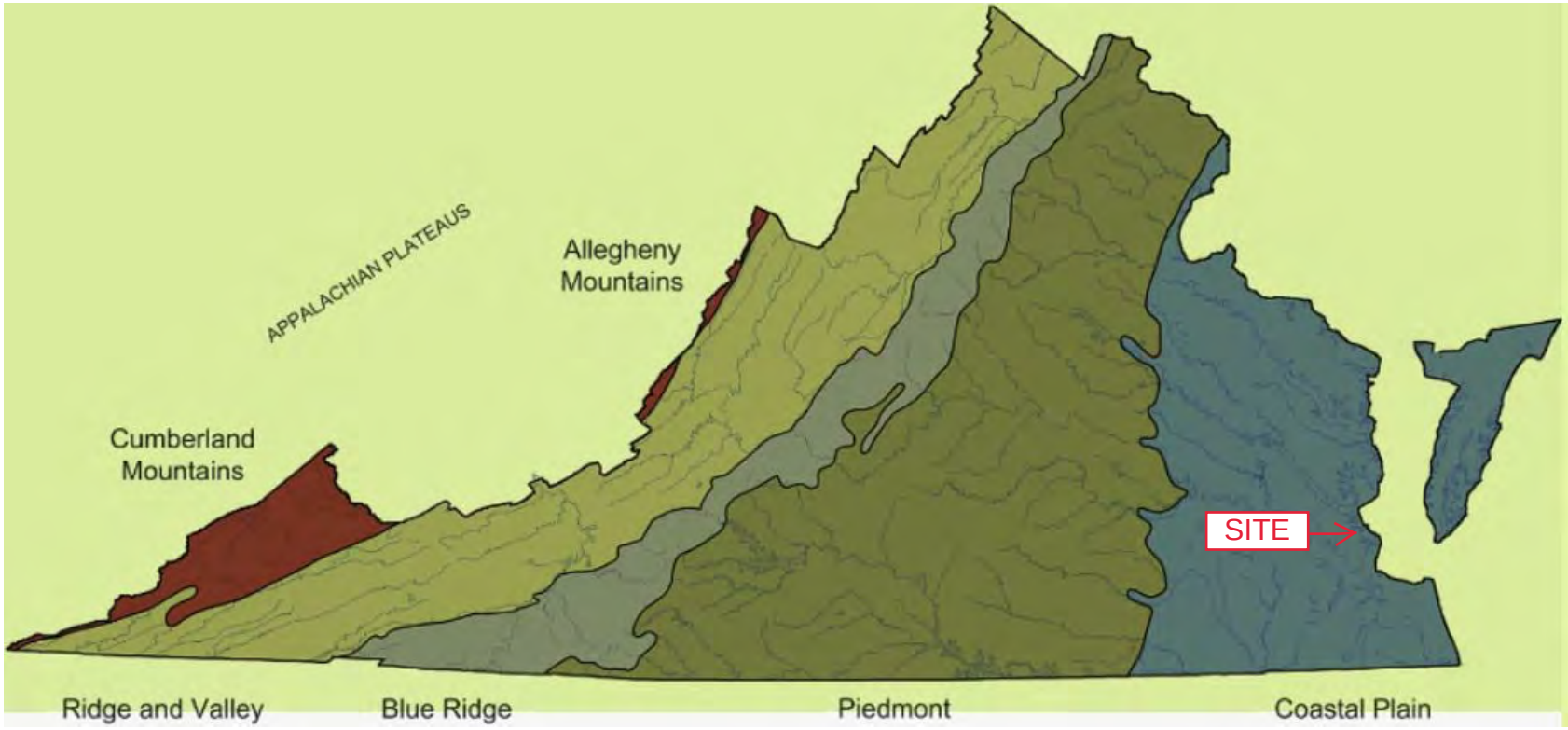
Source: United States Department of Agriculture (USDA) Web Soil Survey

N

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 4: Soil Map



Fort Eustis

Off Condon Road
Newport News, York County, Virginia
Figure 5: Physiographic Map of Virginia

A: Northerly View from Near the Center of the Proposed Lease Area

B: Easterly View from Near the Center of the Proposed Lease Area

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 6b: Photographs of Proposed Action Impact Area

C: Southerly View from Near the Center of the Proposed Lease Area

D: Westerly View from Near the Center of the Proposed Lease Area

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 6b: Photographs of Proposed Action Impact Area

E: Northwesterly Overview of the Proposed Lease

F: Northeasterly Overview of the Proposed Lease Area

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 6c: Photographs of Proposed Action Impact Area

G: Northeasterly View of the Proposed Access/Utility Easement

H: Northeasterly View of the Proposed Access/Utility Easement

Fort Eustis

Off Condon Road
Newport News, York County, Virginia

Figure 6d: Photographs of Proposed Action Impact Area

APPENDIX B

Interagency/Intergovernmental Coordination and Public Participation

6.0 PERSONS AND AGENCIES CONSULTED/COORDINATED

The following Persons and Agencies were contacted in the preparation of this EA

Table 6-1. Persons and Agencies Consulted/Coordinated

Federal Agencies	
U.S. Fish and Wildlife Service Virginia Ecological Services Field Office 6699 Short Lane Gloucester, VA 23061	
State Agencies	
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Tribal Agencies	
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Nansemond Indian Nation Chief Samuel M. Bass 3903 Manning Road Suffolk, VA 23437	Pamunkey Indian Tribe Terry Clouthier – Cultural Resource Director 1054 Pocahontas Trail King William, VA 23086
Rappahannock Tribe Mark Fortune – Assistant Chief 4264 Indian Neck Road Tappahannock, VA 22550	Upper Mattaponi Tribe Chief William (Bill) F. Adams 5932 East River Road King William, VA 23086
Catawba Indian Nation Wenonah G. Haire – THPO 1536 Tom Steven Road Rock Hill, SC 29730	Chickahominy Indian Tribe – Eastern Division Remedios Holmes – Tribal Administrator 2895 Mount Pleasant Road Providence Forge, VA 23140
Delaware Nation Erin Thompson – Historic Preservation/106 Director 31064 State Highway 281 P.O. Box 825 Anadarko, OK 73005	

PUBLIC NOTICE

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT AND
PROPOSED FINDING OF NO SIGNIFICANT IMPACT
FOR A 133-FOOT MONOPOLE TELECOMMUNICATIONS STRUCTURE
JOINT BASE LANGLEY-EUSTIS, VIRGINIA

An Environmental Assessment (EA) has been prepared to analyze the impacts of a telecommunications structure located off Condon Road, adjacent to Felker Army Airfield on JBLE-Eustis, Virginia. The purpose of this project is to provide needed wireless services objectives.

The EA, prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations, and Air Force instructions implementing NEPA; evaluates potential impacts of the alternative actions on the environment including the No-action Alternative. Based on this analysis, the Air Force has prepared a proposed Finding of No Significant Impact (FONSI).

An electronic version of the Draft FONSI/FONPA and EA, as well as supporting Environmental Impact Analysis Process (EIAP) documentation, dated April 3, 2020, are available for public review in the Public Notices section of the JBLE-Eustis Environmental web page at: https://www.jble.af.mil/Units/Army/Eustis-Environmental/.

You are encouraged to submit written comments through XX, XX, 2020. Written comments should be provided to 733 CED/CEIE, 1407 Washington Boulevard, JBLE-Eustis, Virginia 23604. Email comments may be sent to: USAF.jble.733-msg.list.ced-ee-p2-procurement@mail.mil.

If you have any questions, please contact 757-878-7375.

PRIVACY ADVISORY NOTICE

Public comments on this Draft EA are requested pursuant to NEPA, 42 United States Code 4321, et seq. All written comments received during the comment period will be made available to the public and considered during the final EA preparation. Providing private address information with your comment is voluntary and such personal information will be kept confidential unless release is required by law. However, address information will be used to compile the project mailing list and failure to provide it will result in your name not being included on the mailing list.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, 733d MISSION SUPPORT GROUP
JOINT BASE LANGLEY-EUSTIS
FORT EUSTIS, VIRGINIA

Civil Engineering Division

23 October 2019

Mr. Marc Holma
Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Dear Mr. Holma,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. To take into account various environmental concerns, the Air Force is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (*Battle of Yorktown – 099-5283*), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

Battle of Yorktown (099-5283) The proposed undertaking would be located within the *Battle of Yorktown* and has been determined eligible for listing on the NRHP. The proposed

undertaking will be located on an existing airfield, Felker Army Airfield, and would not alter the existing viewshed or effect the setting of the *Battle of Yorktown*. Therefore, we recommend a finding of No Effect for the *Battle of Yorktown*. An Archaeological Assessment was conducted within the APE for direct effects. During our database research, we found 46 previously recorded archaeological sites and one survey (Phase I Survey of Fort Eustis) within a 1-mile radius of the subject site, but outside the APE for direct effects.

Pursuant to 36 CFR §800.4(d), the Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of relevant supporting documents supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included.

We request your comment and/or concurrence on the finding of *No Historic Properties Affected*. If we do not receive your comments and/or concurrence within the required 30 days we will assume concurrence and proceed with the undertaking as described.

Please contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil if you have any questions.

Sincerely,

Donald W. Calder, Jr.
Chief, Environmental Element (CEIE)

Attachments

The VDHR concurs with the Air Force's determination that no historic properties in the area of potential effect of this undertaking.

Project Reference: FE2019.001 – Cell Tower at Felker Army Airfield

6 Dec 19

Signature/Date

2019-0678

Figure 1: Photographs

A: Northerly View from Near the Center of the Proposed Lease Area

B: Easterly View from Near the Center of the Proposed Lease Area

C: Southerly View from Near the Center of the Proposed Lease Area

D: Westerly View from Near the Center of the Proposed Lease Area

E: Northwesterly Overview of the Proposed Lease

F: Northeasterly Overview of the Proposed Lease Area

G: Northeasterly View of the Proposed Access/Utility Easement

H: Northwesterly View of the Proposed Access/Utility Easement

I: Overview of Shovel Test Pit 1 (STP1)

J: Profile View of STP1

Figure 2: 2018 Aerial Photograph

Figure 3: Site Vicinity Plan

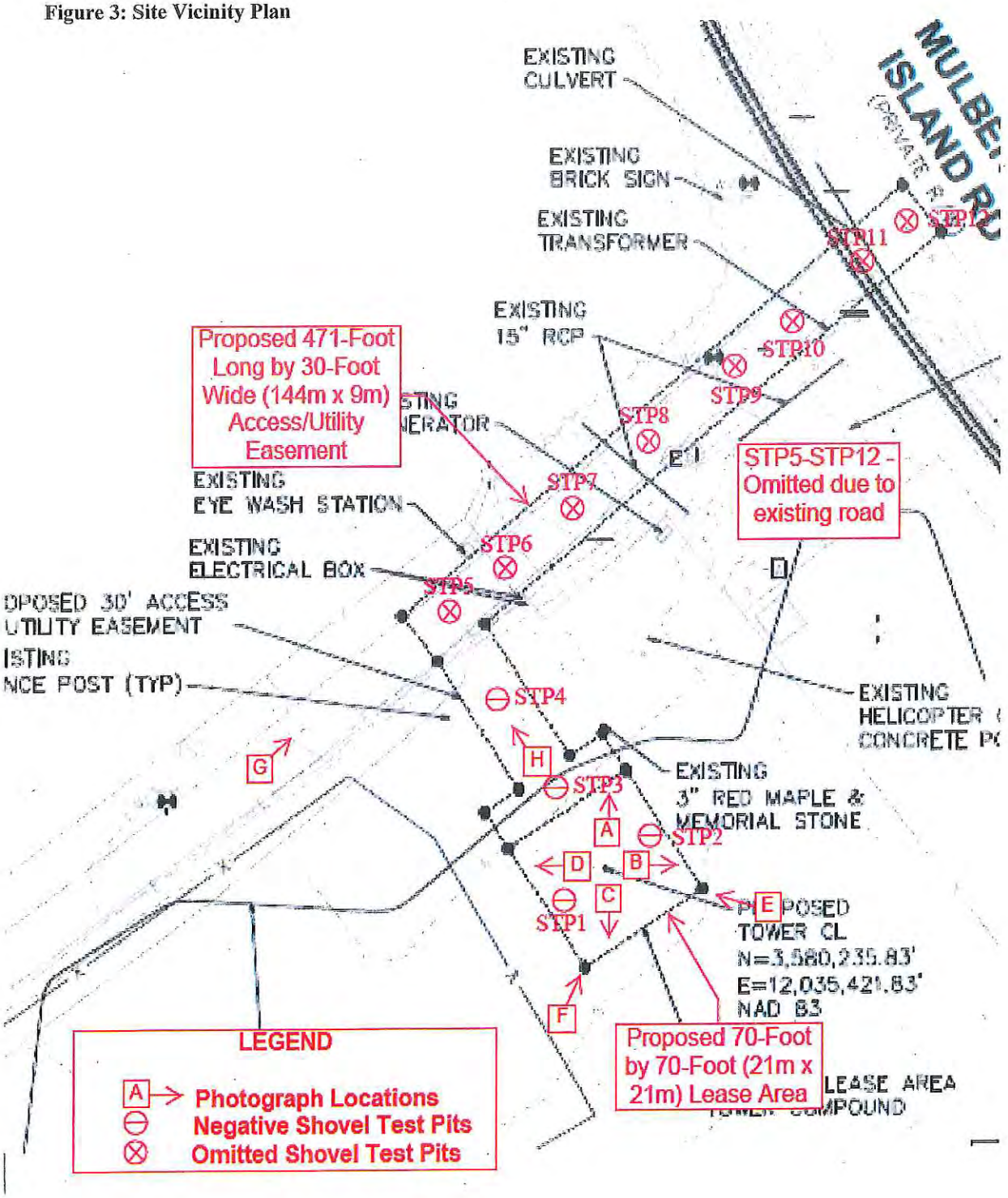
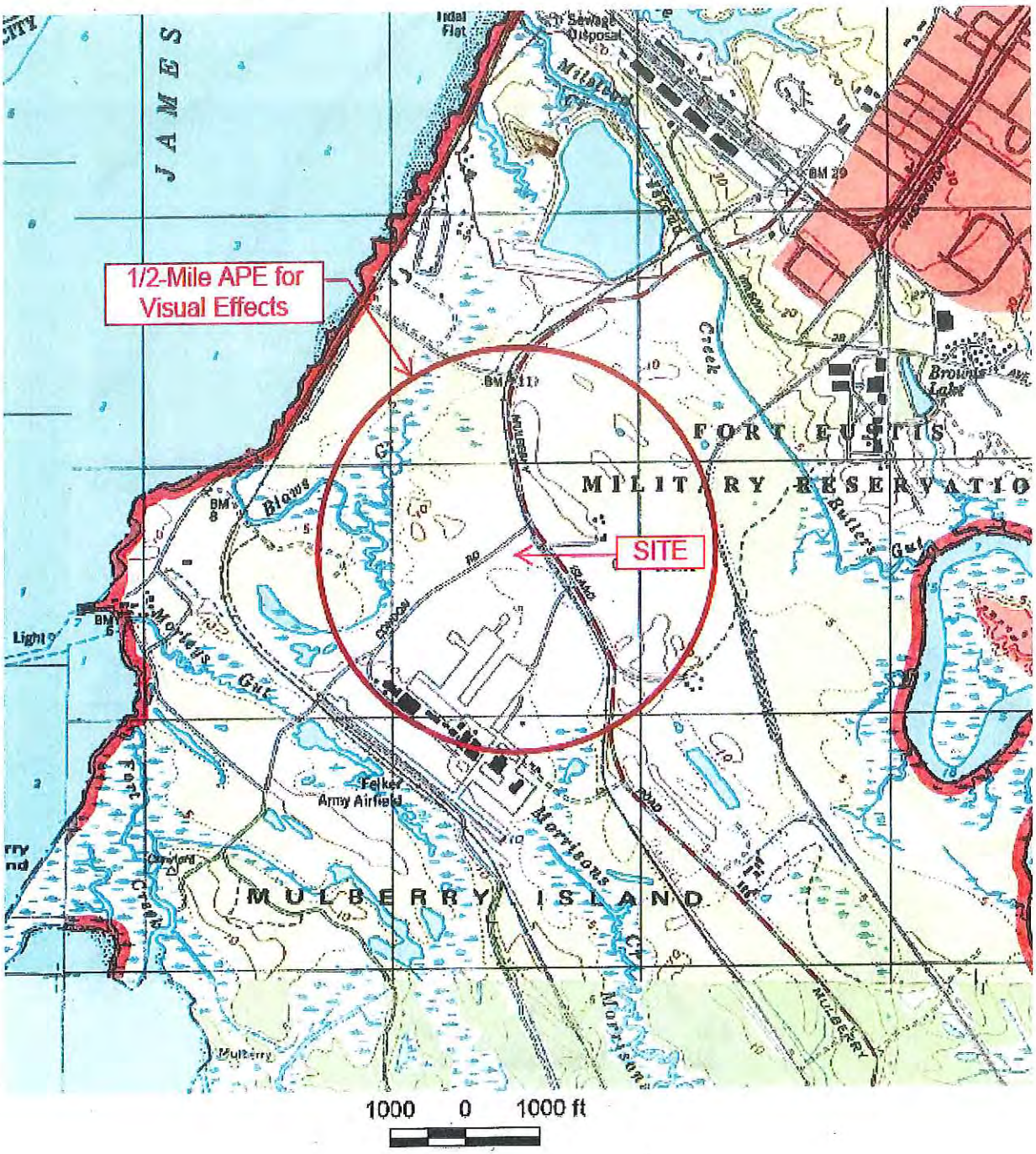


Figure 4: APE for Visual Effects



Source: USGS Topographic Maps, 7.5 Minute Series, *Hog Island, VA (1999), Yorktown, VA (1994), Bacons Castle, VA (1969 photorevised 1992),* and *Mulberry Island, VA (1965 photorevised 1986).*

Figure 5: APE for Direct Effects

Source: USGS Topographic Map, 7.5 Minute Series, *Yorktown, VA (1994)*.

An Archaeoloical Assessment of a Proposed 133-Foot Monopole Telecommunications Facility Newport News, York County, Virginia

Background

The facility would be located off Condon Road, Fort Eustis, Virginia. The purpose of our work was to determine whether any archaeological sites might exist within the project area.

The project area is located within the limits of *Yorktown, VA* (1994) United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, as shown in Figure 5. Figure 3 is a site vicinty plan that shows the site configuration. Figure 2 is a recent aerial photograph (2018) of the site area. The facility would be located in a grassed area, adjacent to Felker Army Airfield, situated at an approximate elevation of approximately 6 feet (2 meters) Above Mean Seal Level (AMSL). The nearest natural surface water is Blows Creek, located approximately 1,600 feet (488 meters) northwest of the project area.

The proposed project area included a 70-foot by 70-foot (21-meter by 21-meter) lease area and a proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed lease area and access/utility easement are located within a grassed and paved area. The proposed undertaking would include an approximate 133-foot (overall height) monopole telecommunications structure within the propsed lease area. The proposed telecommunications facility would be accessbile via a proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement that traverses in a southwesterly over a paved area and then in a southeasterly direction over a grassed area before reaching the proposed lease area. The center of the proposed telecommunications facility would be located at approximately N 37° 8' 25.6" W 76° 36' 15.7" (UTM 18N 357508E 4111657N). Photographs of the project area are provided in Figure 1. Descriptions of the photographs are provided underneath each photograph.

The subject site is located within the Coastal Plain Physiographic Province of Virginia which extended 110 miles inland from the coast. The Coastal Plain region is the only region in Virginia that is composed mostly of unconsolidated deposits, primarily alternating layers of sand, gravel, shell rock, silt, and clay. More ground water is store in these very permeable materials than in any other province in Virginia. According to the USDA Web Soil Survey, soils found at the Property are Urbanland (27). Descriptions of the dominant mapped soil types are displayed below.

Table 1: Mapped Soil Types

Mapped Soil Types	Soil Series Descriptions	Known Subsoil	Typical Subsoil Depth Below Surface
Urbanland	Consists of soils that have been extensively cut or filled as a result of	Unknown	Unknown

	human development activities		

The Area of Potential Effect (APE) is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist" (FCC 2005). For purposed of this work, the APE for direct effects is the actual physical impact area. The important area includes the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area, and approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utiity easement, and all of the immediate adjacent areas.

Literature and Documents Search

National Register of Historic Places (NRHP)

The NRHP is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the NRHP is part of a national program to coordinate and support public and private effors to identifiy, evaluate, and protect historic and archaeological resources. Properties listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Park Service, which is part of the U.S. Department of the Interior, administers the NRHP. A review of the NRHP to determine whether any Historic Properties were located within a ½-mile radius of the project site. The search revealed no NRHP properties within a ½-miles radius of the project site (NRIS 2017).

Virginia Department of Historic Resources

The Virginia Department of Historic Resources Data Sharing System (VADHR V-CRIS) contains the database records of known arhchaeological sites, architectural structures, and historic districts. The VADHR V-CRIS has architectural and archaeological survey forms and survey forms for any known sites within the research area. VADHR V-CRIS was reviewed to determine whether any listed archaeolgocial sites were located within a 1-mile radius of the subject site. Forty-six archaeological sites and one survey (Phase I Survey of Fort Eustis) were identified within 1 mile of the proposed undertaking.

Table 2: Archaeological Sites Within 1-Mile APE

Site	Period(s)	Notes	NRHP Status
44NN0013	Middle Woodland	Camp	Eligible
44NN0028	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0029	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0086	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0087	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0089	19th c.	Located on C.H. Worrett's 1861 map of southeastern Virginia	Not Evaluated
44NN0102	Early Woodland	Recommended NRHP eligible by investigator	Not Evaluated
44NN0119	Early 20th c.	Recommended NRHP eligible by investigator	Not Evaluated
44NN0120	Early Woodland	Portion of site has been destroyed	Not Evaluated
44NN0121	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Recommended ineligible by investigator	Not Evaluated
44NN0122	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0123	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0124	Prehistoric and Historic	Recommended ineligible by investigator	Not Evaluated
44NN0147	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0148	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Eligible

Site	Period(s)	Notes	NRHP Status
44NN0162	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Portion of site has been destroyed	Not Evaluated
44NN0163	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0166	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0167	20th c.	Portion of site has been destroyed	Not Evaluated
44NN0168	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0184	Civil War	Recommended ineligible by investigator	Not Evaluated
44NN0186	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0187	Late 19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0188	18th c.	Site is undeveloped	Eligible
44NN0189	Late 19th and Early 20th c.	Site is undeveloped	Not Evaluated
44NN0190	18th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0191	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0192	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0193	18th c.	Site is undeveloped	Not Evaluated
44NN0194	Late 18th and 19th c.	Site is undeveloped	Not Evaluated
44NN0195	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0196	Early 19th c.	Site is undeveloped	Not Eligible
44NN0197	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0198	Unknown	Site is undeveloped	Not Evaluated
44NN0199	Early 19th c.	Site is undeveloped	Not Evaluated
44NN0202	19th and Early 20th c.	Recommended eligible by investigator	Not Evaluated
44NN0203	19th c.	Site is undeveloped	Not Evaluated
44NN0204	Late 19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0205	18th c.	Site is undeveloped	Not Evaluated
44NN0206	Late 18th c.	Portion of site has been destroyed	Not Evaluated
44NN0207	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0318	18th c.	75-99% of site has been destroyed	Not Evaluated
44NN0319	19th c.	Cemetery	Not Evaluated
44NN0321	19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0341	18th to Early 20th c.	Recommended ineligible by investigator	Not Eligible
44NN0355	Middle Woodland		Not Evaluated
44NN0013	Middle Woodland	Camp	Eligible
44NN0028	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0029	19th – 20th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0086	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0087	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0089	19th c.	Located on C.H. Worrett's 1861 map of southeastern Virginia	Not Evaluated
44NN0102	Early Woodland	Recommended NRHP eligible by investigator	Not Evaluated
44NN0119	Early 20th c.	Recommended NRHP eligible by investigator	Not Evaluated
44NN0120	Early Woodland	Portion of site has been destroyed	Not Evaluated
44NN0121	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Recommended ineligible by investigator	Not Evaluated
44NN0122	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0123	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0124	Prehistoric and Historic	Recommended ineligible by investigator	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0147	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0148	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Eligible
44NN0162	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Portion of site has been destroyed	Not Evaluated
44NN0163	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0166	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0167	20th c.	Portion of site has been destroyed	Not Evaluated
44NN0168	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0184	Civil War	Recommended ineligible by investigator	Not Evaluated
44NN0186	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0187	Late 19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0188	18th c.	Site is undeveloped	Eligible
44NN0189	Late 19th and Early 20th c.	Site is undeveloped	Not Evaluated
44NN0190	18th and Early 20th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0191	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0192	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0193	18th c.	Site is undeveloped	Not Evaluated
44NN0194	Late 18th and 19th c.	Site is undeveloped	Not Evaluated
44NN0195	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0196	Early 19th c.	Site is undeveloped	Not Eligible
44NN0197	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0198	Unknown	Site is undeveloped	Not Evaluated
44NN0199	Early 19th c.	Site is undeveloped	Not Evaluated
44NN0202	19th and Early 20th c.	Recommended eligible by investigator	Not Evaluated
44NN0203	19th c.	Site is undeveloped	Not Evaluated
44NN0204	Late 19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0205	18th c.	Site is undeveloped	Not Evaluated
44NN0206	Late 18th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0207	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0318	18th c.	75-99% of site has been destroyed	Not Evaluated
44NN0319	19th c.	Cemetery	Not Evaluated
44NN0321	19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0341	18th to Early 20th c.	Recommended ineligible by investigator	Not Eligible
44NN0355	Middle Woodland		Not Evaluated

Table 3: Archaeological Surveys Within 1-Mile APE

Survey Title	Survey Author	Survey Date
Phase I Archaeological Survey of Fort Eustis	Harding Polk III and Antony F. Opperman	1989

In general, most site location models include distance to a permanent water source as a major factor in determining the existence of archaeological sites and also the density of such sitse. There is a higher probablility of encountering a prehistoric archaeological site the closer one is to a source of fresh water with the distances varying depending on topography and difficulty of access. As a result, there are a greater number of prehistoric sites located near streams and natural freshwater lakes. Additionally, there is a greater density of Woodland Period sites, as opposed to Archaic or Paleo-Indian Period sites, near streams due to their greater reliance on horticulture and aquatic resources. Due to the historic ability of excavation wells, historic period sites, in rural areas, can be found equally distributed across the uplands as well as within valleys. Based on the current and past land use, topography, and historic aerial photographs, we believe there is a moderate probabilty for encountering undistrubed archaeological artifacts or features within the proposed project's APE for direct effects.

Field Conditions

The project area consists of a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that is occupied by grassed area. The proposed lease area would be accessed via approximate 471-foot long by 30-foot (144-meter by 9-meter) access/utility easement which would originate from Mulberry Island Road and continue southwesterly and then in a southeasterly direction over a grassed area before reaching the proposed lease area.

The proposed lease area and a majority of the proposed access/utility easement is an existing paved road. The remaining portion of the propsed access/utility easement would pass through a grassed area. The

nearest natural surface water is Blows Creek, located approximately 1,600 feet (488 meters) northwest of the project area. Ground surface visibility within the proposed lease area and access/utility easeemnt were approximately 0% due to vegetative cover.

Field Methods

The methodology for the Phase I intensive field survey for this project was determined by the professional opinions and experience of our principal and staff archaeologists, applicable SHPO guidelines, and applicable Tribal guidelines. The survey was performed by Matt Beazley, MA, Principal Archaeologist of ECA on February 20, 2019. Approximately three hours of field time were recorded for the Phase I intensive field survey.

A pedestrian survey was conducted over the project site by visual inspection of exposed ground surfaces throughout the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area, the proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement, and all of the immediately adjacent areas. Visual inspections were conducted at approximately 16-foot (5-meter) intervals.

During to the site visit, two shovel tests were excavated within the proposed 70-foot 70-foot (21-meter by 21-meter) lease area, and ten shovel tests were excavated within the proposed approximate 471-foot long by 30-foot (144-meter by 9-meter) access/utility easement was determined to be an adequate representative sampling of the project area.

All shovel test pits measured a minimum of 16 inches by 16 inches (41 cm by 41 cm). All shovel test pits were excavated at 50-foot (15-meter) intervals. The locations of the shovel tests are shown on Figure 3. All excavated soils were screened through a six-milimeter wire mesh archaeology screen to isolate any cultural artifacts. Shovel test pits are terminated when one of the following four conditions are met: a depth of 36 inches (91 cm) is reached, or until sterile subsoil, bedrock, or the water table is encountered.

Field Survey Results

Two shovel tests pits (STP) within the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and two shovel tests within the proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. However, eight shovel tests pits were omitted due to an existing paved road. Shovel test dimension measurements and soil characteristics are listed in the table below.

Table 3: Shovel Test Pit Results

Shovel Test Pit (STP)	STP Width/Length	Munsell Color/Texture	Average Depths Between	
			Inches	CM
STP1	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-11	0-28
		10YR 5/6 (yellowish brown) clay loam	11-18	28-46
STP2	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-10	0-25
		10YR 5/6 (yellowish brown) clay loam	10-18	25-46
STP3	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-6	0-15
		10YR 5/6 (yellowish brown) clay loam	6-16	15-41
STP4	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam with gravel mixed in	0-11	0-28
		10YR 5/6 (yellowish brown) clay loam	11-18	28-46

During the pedestrian survey, no archaeological sites or cultural artifacts were identified. No archaeological sites or cultural artifacts were identified during subsurface investigations. Shovel test pits matched the general range of characteristics of the mapped soil series for the project area.

Laboratory Methods and Collection Curation

Since no archaeological sites were identified, curation is not appicable to this work.

Summary of Findings and Recommendations

During the course of this archaeological assessment, no sites, either historic or prehistoric, were identified within the APE for direct effects. We believe that no arhcaeological resources would be affected by the proposed project. Therefore, we recommend a finding of No Effect for the proposed undertaking as it relates to archaeology. We request your concurrence with our finding. Please contact our office with questions or comments or if additional information is required.

Bibliography

Google Earth
2018 Aerial Photographs

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Opperman, Antony F., and Harding Polk III
1989 Phase I Archaeological Survey of Fort Eustis

United States Department of Agriculture (USDA)
2016 Web Soil Survey
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United States Geological Survey USGS
(1969 photorevised 1992), *Bacons Castle, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

United States Geological Survey USGS
(1999), *Hog Island, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

United States Geological Survey USGS
(1965 photorevised 1896), *Mulberry Island, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

Virginia Department of Historic Resources
<https://vcris.dhr.virginia.gov/vcris/>

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 3:59 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: Planned cell tower at Fort Eustis (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Wednesday, April 1, 2020 3:37 PM
To: wayne.adkins@att.net
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned cell tower at Fort Eustis (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Chief Adkins,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure, and we request your comment and/or concurrence, by 30 April if at all possible, on our finding of No Historic Properties Affected for this Cell Tower project.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (Battle of Yorktown - 099-5283), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

Battle of Yorktown (099-5283) The proposed undertaking would be located within the Battle of Yorktown and has been determined eligible for listing on the NRHP. The proposed undertaking will be located on an existing airfield, Felker Army Airfield, and would not alter the existing viewshed or effect the setting of the Battle of Yorktown. Therefore, we recommend a finding of No Effect for the Battle of Yorktown. An Archaeological Assessment was conducted within the APE for direct effects. During our database research, we found 46 previously recorded archaeological sites and one survey (Phase I Survey of Fort Eustis) within a 1-mile radius of the subject site, but outside the APE for direct effects.

The Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of relevant supporting documents (attach.1) supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included (attach.2).

Please provide your response directly to Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 4:06 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: Planned cell tower for Fort Eustis (Bachor) (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Wednesday, April 1, 2020 3:48 PM
To: sbachor@delawaretribe.org
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned cell tower for Fort Eustis (Bachor) (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Ms. Bachor,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure, and we request your comment and/or concurrence, by 30 April if at all possible, on our finding of No Historic Properties Affected for this Cell Tower project.

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Please respond directly to our point of contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

2 Attachments:

1. Archaeological Assessment
2. Resume
3.
4.
5. CLASSIFICATION: UNCLASSIFIED

Conchita Jones

From: Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>
Sent: Monday, March 30, 2020 8:06 AM
To: Conchita Jones
Cc: Sugg, Tracey L CIV USAF (USA)
Subject: FW: Planned cell tower for Fort Eustis Chief Bass (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Morrow, D Keith CIV USAF 733 MSG (USA)
Sent: Friday, March 27, 2020 11:13 AM
To: samflyingeagle48@yahoo.com
Cc: McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; Twigg, Virginia R CIV USAF (USA) <virginia.r.twigg.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned cell tower for Fort Eustis Chief Bass (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Chief Bass,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (Battle of Yorktown - 099-5283), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

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The Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of the archaeological assessment/relevant supporting documents (attach.1) supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included (attach.2).

We request your comment and/or concurrence on the finding of No Historic Properties Affected.

.

Please contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

D. Keith Morrow

Deputy Commander

733d Mission Support Group

Fort Eustis, VA 23604

DSN: 826-2908

Comm: 757-878-2908

Cell: 757-272-5497

Fax: 757-878-5722

email: david.k.morrow.civ@mail.mil

2 Attachments:

1. Archaeological Assessment Documents
2. Résumé

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 4:07 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: Planned Cell Tower for Fort Eustis (Clouthier) (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Wednesday, April 1, 2020 3:51 PM
To: terry.clouthier@pamunkey.org
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned Cell Tower for Fort Eustis (Clouthier) (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Mr. Clouthier,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure, and we request your comment and/or concurrence, by 30 April if at all possible, on our finding of No Historic Properties Affected for this Cell Tower project.

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Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (Battle of Yorktown - 099-5283), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

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Please respond directly to our point of contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

2 Attachments:

1. Archaeological Assessment
2. Resume
3.
4.
5. CLASSIFICATION: UNCLASSIFIED

PAMUNKEY INDIAN TRIBE

Terry Clouthier
Cultural Resource Director

TRIBAL GOVERNMENT
Tribal Office

1054 Pocahontas Trail
King William, VA 23086

(804) 843-2109
FAX (866) 422-3387

THPO File Number: 2020-61

Date: 04/07/2020

Donald W. Calder, Jr.
Chief, Environmental Element (CEIE)
Installation Management Flight
733d Civil Engineer Division
1407 Washington Boulevard
JBLE-Eustis, VA 23604

RE: Planned Cell Tower for Fort Eustis

Dear Mr. Calder,

Thank you for contacting the Pamunkey Indian Tribe regarding the undertaking to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. My office offers the following comments regarding the proposed undertaking.

My office concurs with the No Adverse Effect determination for this proposed undertaking.

Should any human remains or cultural or historic properties be inadvertently discovered, please cease all operations and contact our office immediately.

Thank you for considering our cultural heritage in your decision-making process.

If you have any questions feel free to email me at terry.clouthier@pamunkey.org.

Sincerely,

Conchita Jones

From: Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>
Sent: Friday, April 3, 2020 2:52 PM
To: Conchita Jones
Cc: Sugg, Tracey L CIV USAF (USA)
Subject: FW: Planned Cell Tower on Fort Eustis (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Friday, April 3, 2020 12:11 PM
To: info@rappahannocktribe.org
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>
Subject: Planned Cell Tower on Fort Eustis (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Assistant Chief Fortune,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure, and we request your comment and/or concurrence, by 30 April if at all possible, on our finding of No Historic Properties Affected for this Cell Tower project.

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Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

2 Attachments:

1. Archaeological Assessment

2. Resume

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

Conchita Jones

From: Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>
Sent: Monday, March 30, 2020 8:04 AM
To: Conchita Jones
Cc: Sugg, Tracey L CIV USAF (USA)
Subject: FW: Cell tower planned for Fort Eustis Chief Adams (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

CLASSIFICATION: UNCLASSIFIED

Conchita,
Attached please find the letter to Chief Adams.
v/r
Joanna

Joanna G. Bateman
733d Mission Support Group
Civil Engineer Division - Environmental Element (CEIE)
1407 Washington Blvd
Fort Eustis, VA 23604
(757) 878-7378
joanna.g.bateman.civ@mail.mil

-----Original Message-----
From: Morrow, D Keith CIV USAF 733 MSG (USA)
Sent: Friday, March 27, 2020 11:13 AM
To: wfrankadams@verizon.net
Cc: McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; Calder, Donald W Jr CIV USAF 733 MSG (USA) <donald.w.calder.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Cell tower planned for Fort Eustis Chief Adams (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Chief Adams,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force has developed an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (Battle of Yorktown - 099-5283), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

Battle of Yorktown (099-5283) The proposed undertaking would be located within the Battle of Yorktown and has been determined eligible for listing on the NRHP. The proposed undertaking will be located on an existing airfield, Felker Army Airfield, and would not alter the existing viewshed or effect the setting of the Battle of Yorktown. Therefore, we recommend a finding of No Effect for the Battle of Yorktown. An Archaeological Assessment was conducted within the APE for direct effects. During our database research, we found 46 previously recorded archaeological sites and one survey (Phase I Survey of Fort Eustis) within a 1-mile radius of the subject site, but outside the APE for direct effects.

The Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of the archaeological assessment/relevant supporting documents (attach.1) supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included (attach.2).

We request your comment and/or concurrence on the finding of No Historic Properties Affected.

.

Please contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

D. Keith Morrow

Deputy Commander

733d Mission Support Group

Fort Eustis, VA 23604

DSN: 826-2908

Comm: 757-878-2908

Cell: 757-272-5497

Fax: 757-878-5722

email: david.k.morrow.civ@mail.mil

2 Attachments:

1. Archaeological Assessment Documents
2. Résumé

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 4:00 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: Planned Cell Tower at Fort Eustis (Ms. Holmes) (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Wednesday, April 1, 2020 3:39 PM
To: Remedios.holmes@cied.org
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned Cell Tower at Fort Eustis (Ms. Holmes) (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Ms. Holmes,

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In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

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The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (Battle of Yorktown - 099-5283), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

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The Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of relevant supporting documents (attach.1) supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included (attach.2).

Please respond directly to our point of contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil <mailto:christopher.l.mcdaid.civ@mail.mil> if you have any questions.

Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, 733d MISSION SUPPORT GROUP
JOINT BASE LANGLEY-EUSTIS
FORT EUSTIS, VIRGINIA

27 Mar 20

Donald W. Calder, Jr.
Chief, Environmental Element
733d Civil Engineer Division
1407 Washington Blvd
Fort Eustis, VA 23604

Wenonah G. Haire DMD
THPO and Director, Catawba Cultural Preservation Project
1536 Tom Steven Road
Rock Hill, SC 29730

Dear Dr. Haire,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (*Battle of Yorktown – 099-5283*), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

Battle of Yorktown (099-5283) The proposed undertaking would be located within the *Battle of Yorktown* and has been determined eligible for listing on the NRHP. The proposed undertaking will be located on an existing airfield, Felker Army Airfield, and would not alter the

existing viewshed or effect the setting of the *Battle of Yorktown*. Therefore, we recommend a finding of No Effect for the *Battle of Yorktown*. An Archaeological Assessment was conducted within the APE for direct effects. During our database research, we found 46 previously recorded archaeological sites and one survey (Phase I Survey of Fort Eustis) within a 1-mile radius of the subject site, but outside the APE for direct effects.

The Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of relevant supporting documents (attach. 1) supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included (attach.2).

We request your comment and/or concurrence on the finding of *No Historic Properties Affected.*

With your advice and assistance, we hope to maintain an ongoing cooperative relationship between your Nation and the Air Force. If you have any questions regarding this undertaking, please contact Dr. Christopher L. McDaid, via telephone phone at (757) 878-7365, or via email at Christopher.l.mcdaid.civ@mail.mil.

Sincerely,

Donald W. Calder, Jr.
Chief, Environmental Element
733d Civil Engineer Division

2 Attachments
1. Archaeological assessment
2. Resume

Office 803-328-2427
Fax 803-328-5791

April 30, 2020

Attention: Christopher L. McDaid
Department of the Air Force
Joint Base Langley-Eustis
Fort Eustis, Virginia

Re. THPO #	Project #	Project Description
2020-702-5		Construct a 133ft tall telecommunications structure at Joint Base Langley-Eustis

Dear Mr. McDaid,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Caitlin Rogers for

Wenonah G. Haire
Tribal Historic Preservation Officer

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 4:03 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: [Non-DoD Source] FW: Planned Cell Tower at Fort Eustis (Ms. Holmes) (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Remedios Holmes [mailto:Remedios.Holmes@cied.org]
Sent: Wednesday, April 1, 2020 3:50 PM
To: McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>
Subject: [Non-DoD Source] FW: Planned Cell Tower at Fort Eustis (Ms. Holmes) (UNCLASSIFIED)

All active links contained in this email were disabled. Please verify the identity of the sender, and confirm the authenticity of all links contained within the message prior to copying and pasting the address to a Web browser.

_____

Good Afternoon,

The Chickahominy Indian Tribe- Eastern Division has no questions or concerns reading the new tower.

Regards,

Reme Holmes

Tribal Administrator

Chickahominy Indian Tribe- Eastern Division

P: 804-966-7815 x1001

F: 804-234-4016

remedios.holmes@cied.org < Caution-mailto:remedios.holmes@cied.org >

From: Calder, Donald W Jr CIV USAF 733 MSG (USA) <donald.w.calder.civ@mail.mil>
Sent: Wednesday, April 1, 2020 3:39 PM
To: Remedios Holmes <Remedios.Holmes@cied.org>

Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
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CLASSIFICATION: UNCLASSIFIED

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Sincerely,

Donald W. Calder, Jr.

Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil < Caution-mailto:Donald.W.Calder.Civ@mail.mil >

CLASSIFICATION: UNCLASSIFIED

Conchita Jones

From: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>
Sent: Wednesday, April 1, 2020 4:06 PM
To: Conchita Jones
Cc: Bateman, Joanna G CIV USAF 733 MSG (USA)
Subject: FW: Planned Cell Tower at Fort Eustis, VA (Thompson) (UNCLASSIFIED)
Attachments: attach.1.pdf; attach.2.pdf

-----Original Message-----
From: Calder, Donald W Jr CIV USAF 733 MSG (USA)
Sent: Wednesday, April 1, 2020 3:44 PM
To: ethompson@delawarenation-nsn.gov
Cc: Sugg, Tracey L CIV USAF (USA) <tracey.l.sugg.civ@mail.mil>; Bateman, Joanna G CIV USAF 733 MSG (USA) <joanna.g.bateman.civ@mail.mil>; McDaid, Christopher L CIV USAF 733 MSG (USA) <christopher.l.mcdaid.civ@mail.mil>; Nowakowski, Henry Matthew (Matt) CIV USAF AFCEC (USA) <henry.nowakowski.1@us.af.mil>
Subject: Planned Cell Tower at Fort Eustis, VA (Thompson) (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Dear Director Thompson,

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Sincerely,

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Chief, Environmental Element (CEIE)

Installation Management Flight

733d Civil Engineer Division

1407 Washington Boulevard

JBLE-Eustis, VA 23604

Donald.W.Calder.Civ@mail.mil

2 Attachments:

1. Archaeological Assessment
2. Résumé

CLASSIFICATION: UNCLASSIFIED

APPENDIX C

Air Quality

Air Quality Index Report

Geographic Area: Norfolk City, VA
Summary: by County
Year: 2019 (Annual statistics for 2019 are not final until May 1, 2020)

		Number of Days when Air Quality was...					AQI Statistics			Number of Days when AQI Pollutant was...					
County	# Days with AQI	Good	Moderate	Unhealthy for Sensitive Groups	Unhealthy	Very Unhealthy	Maximum	90th Percentile	Median	CO	NO2	O3	SO2	PM2.5	PM10
Norfolk City, VA	96	94	2	.	.	.	61	36	21	1	70	.	.	20	5

Get detailed information about this report, including column descriptions, at https://www.epa.gov/outdoor-air-quality-data/about-air-data-reports#aqi

AirData reports are produced from a direct query of the AQS Data Mart. The data represent the best and most recent information available to EPA from state agencies. However, some values may be absent due to incomplete reporting, and some values may change due to quality assurance activities. The AQS database is updated by state, local, and tribal organizations who own and submit the data.

Readers are cautioned not to rank order geographic areas based on AirData reports. Air pollution levels measured at a particular monitoring site are not necessarily representative of the air quality for an entire county or urban area.

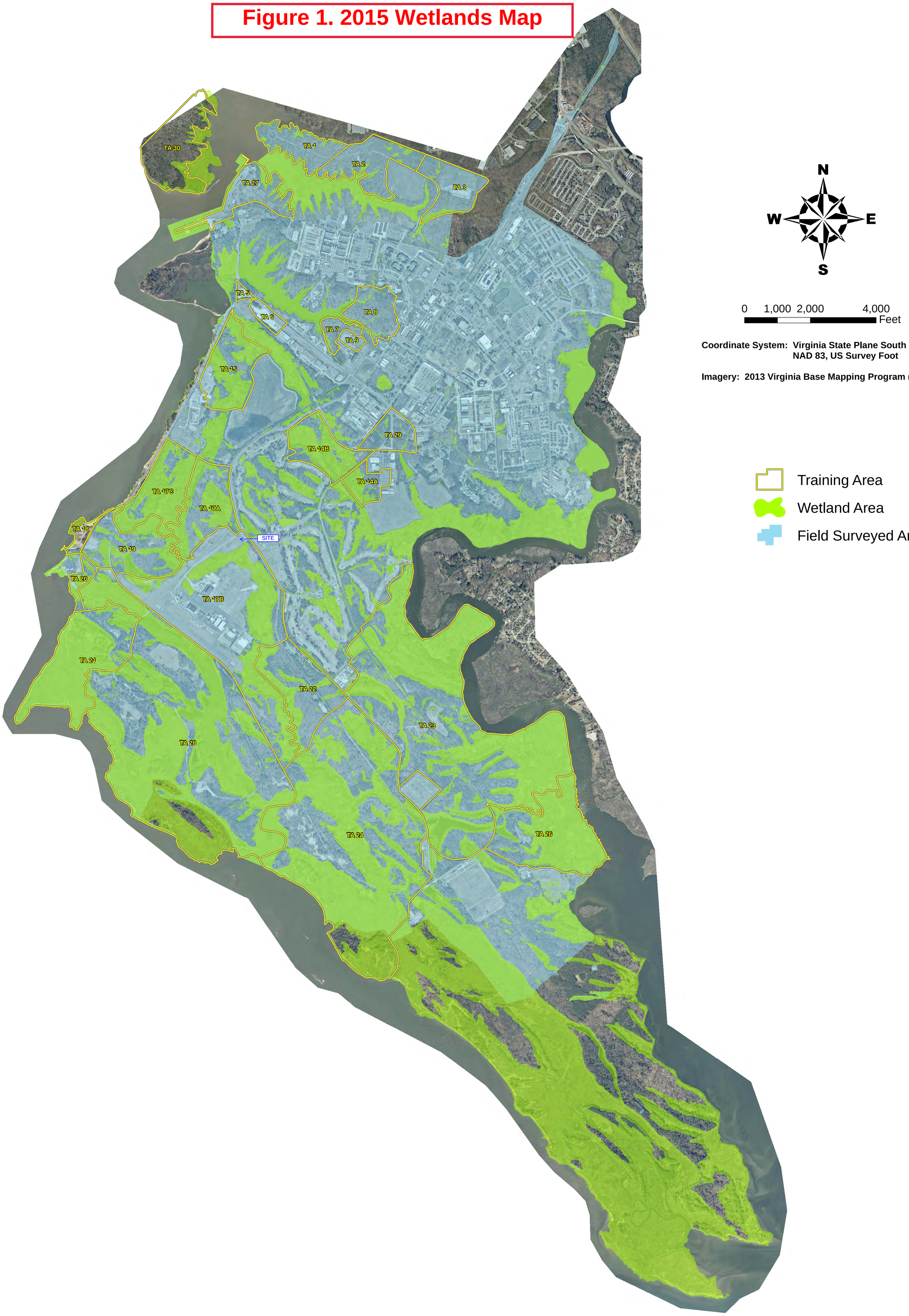
Source: U.S. EPA AirData <https://www.epa.gov/air-data>
Generated: May 30, 2019

APPENDIX D

Water Resources

Fort Eustis - Completed Wetland Delineation as of 18 December 2014

Figure 1. 2015 Wetlands Map



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

Reply to
Attention of

December 18, 2014

PRELIMINARY JURISDICTIONAL DETERMINATION

Southern Virginia Regulatory Section
NAO-2008-02602 (James River)

Joint Base Langley-Eustis
Mr. Mark J. Sciacchitano
Director, Civil Engineering Division
1407 Washington Blvd
Fort Eustis, Virginia 23604

Dear Mr. Sciacchitano:

This letter is in regard to your request for a preliminary jurisdictional determination for waters of the U.S. (including wetlands) at Joint Base Langley-Eustis, Fort Eustis, Virginia. The drawing entitled "Fort Eustis- Completed Wetland Delineation as of 18 December 2014" dated December 18, 2014 and the Esri File Geodatabase named "Wetlands.gdb" by the Corps of Engineers Norfolk District provides the locations of waters and/or wetlands on the property listed above. The basis for this delineation includes application of the Corps' 1987 Wetland Delineation Manual and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region and the positive indicators of wetland hydrology, hydric soils, and hydrophytic vegetation and the presence of an ordinary high water mark.

The referenced map differentiates between wetlands and waters of the U.S. delineated in the field and the areas delineated using Geographic Information System (GIS) analysis. The field delineated wetlands was compiled from field surveys performed during the period of October 2004 through May 2014 by the Norfolk District Regulatory Branch. Wetlands and waters of the U.S. were delineated in the field by using the Corps' 1987 Wetland Delineation Manual and the Regional Supplement and the boundaries were surveyed with a hand-held GPS unit.

The GIS analysis included use of 1-meter bare earth LiDAR DEM collected In 2012 (provided by Fort Eustis GeoBase), aerial imagery from VGIN Virginia Base Mapping Program (flight years 2011, 2009, and 2006), and the USGS 1:24,000 Topographic Quad maps. A Mean High Water (MHW) elevation of 1.06' above NAVD88 was calculated and used for the GIS delineation. Tide data was based on a published bench mark sheet for Station 8638017 MARAD (Fort Eustis) Virginia. The GIS based delineation of wetlands and waters of the U.S. within the forested areas may not be all inclusive. Therefore, additional field based delineations using the Corps' 1987 Wetland

Delineation Manual and the Regional Supplement may be required to determine the full extent of wetlands and waters of the U.S. in the forested areas.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into waters and/or wetlands on this site may require a Department of the Army permit and authorization by state and local authorities including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps preliminary jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This is a preliminary jurisdictional determination and is therefore not a legally binding determination regarding whether Corps jurisdiction applies to the waters or wetlands in question. Accordingly, you may either consent to jurisdiction as set out in this preliminary jurisdictional determination and the attachments hereto if you agree with the determination, or you may request and obtain an approved jurisdictional determination. This preliminary jurisdictional determination and associated wetland delineation map may be submitted with a permit application.

The "Preliminary Jurisdictional Determination Form" is enclosed. Please review the document, sign, and return a copy to the Corps Regulatory Office (Melissa Nash, 803 Front St. Norfolk, VA 23510) within 30 days of receipt and keep a copy for your records. This delineation of waters and/or wetlands is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date. Please contact this office prior to the December 18, 2019 expiration of this verification, so we may plan to review areas as needed to extend the delineation.

If you have any questions and/or concerns about this permit authorization, please contact me via telephone at (757) 201-7489 or via email at melissa.a.nash@usace.army.mil.

Sincerely,

Melissa A Nash

Melissa A. Nash
Project Manager
Southern Virginia Regulatory Section

Enclosure:
Preliminary Jurisdictional Determination Form

PRELIMINARY JURISDICTIONAL DETERMINATION FORM

BACKGROUND INFORMATION:

A. **REPORT COMPLETION DATE FOR PRELIMINARY JURISDICTIONAL DETERMINATION (JD):** December 18, 2014

B. **NAME AND ADDRESS OF PERSON REQUESTING PRELIMINARY JD:**
Joint Base Langley-Eustis
Mr. Mark J. Sciacchitano
Director, Civil Engineering Division
1407 Washington Blvd

C. **DISTRICT OFFICE: Norfolk District (CENAO-REG)**

FILE NAME: Joint Base Langley-Eustis, Fort Eustis

FILE NUMBER: NAO-2008-02602

D. **PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**
(USE THE ATTACHED TABLE TO DOCUMENT MULTIPLE WATERBODIES AT DIFFERENT SITES)

State: **VIRGINIA** County/parish/borough: City: Newport News

Center coordinates of site (lat/long in degree decimal format):

Latitude: 37.10471 ° N Longitude: -76.51973 ° W

Universal Transverse Mercator:

Name of nearest waterbody: James River

Identify (estimate) amount of waters in the review area:

Non-wetland waters: linear feet; width (ft); and/or acres.

Cowardin Class: see below

Stream Flow:

Wetlands: 3,611 acres

Cowardin Class: PFO, PSS, PEM, POW, PUB, E2EM, E2SS

Name of any water bodies on the site that have been identified as Section 10 waters:

Tidal: James River

Non-Tidal:

E. **REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
☒ Office (Desk) Determination. Date: December 18, 2014
☒ Field Determination. Date(s): October 2004-May 2014

1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.

2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "pre-construction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD constitutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

3. This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

SUPPORTING DATA:

Data reviewed for preliminary JD (check all that apply) - checked items should be included in case file and, where checked and requested, appropriately reference sources below.

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: The drawing entitled "Fort Eustis- Completed Wetland Delineation as of 18 December 2014" dated December 18, 2014 and the Esri File Geodatabase named "Wetlands.gdb" by the Corps of Engineers Norfolk District.

☐ Data sheets prepared/submitted by or on behalf of the applicant/consultant.

☐ Office concurs with data sheets/delineation report.

☐ Office does not concur with data sheets/delineation report.

☒ Data sheets prepared by the Corps: From October 2004-April 2014

☐ Corps navigable waters' study:

☐ U.S. Geological Survey Hydrologic Atlas:

☐ USGS NHD data.

☐ USGS 8 and 12 digit HUC maps.

☒ U.S. Geological Survey map(s). Cite scale & quad name: Mulberry Island &Yorktown Q

☒ USDA Natural Resources Conservation Service Soil Survey.

Citation: SSURGO Soils Newport News

☒ National wetlands inventory map(s). Cite name: Mulberry Island and Yorktown Quads

☐ State/Local wetland inventory map(s):

☒ FEMA/FIRM maps: Mulberry Island and Yorktown Quads

☐ 100-year Floodplain Elevation: (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): 1990 Color IR; VGIN 2011, 2009 &2006

or ☒ Other (Name & Date): LiDar DEM 2012

☒ Previous determination(s): September 30, 2008; September 26, 2013

File no. and date of response letter:

☒ Other information (please specify): Tide data was based on published bench mark sheet for Station 8638017 MARAD (Fort Eustis) Virginia

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Melissa A Nash

Signature
Regulatory Project Manager
(REQUIRED)

December 18, 2014

Date

Signature of person requesting
Preliminary JD
(REQUIRED, unless obtaining the signature is impracticable)

6 Jan 15

Date

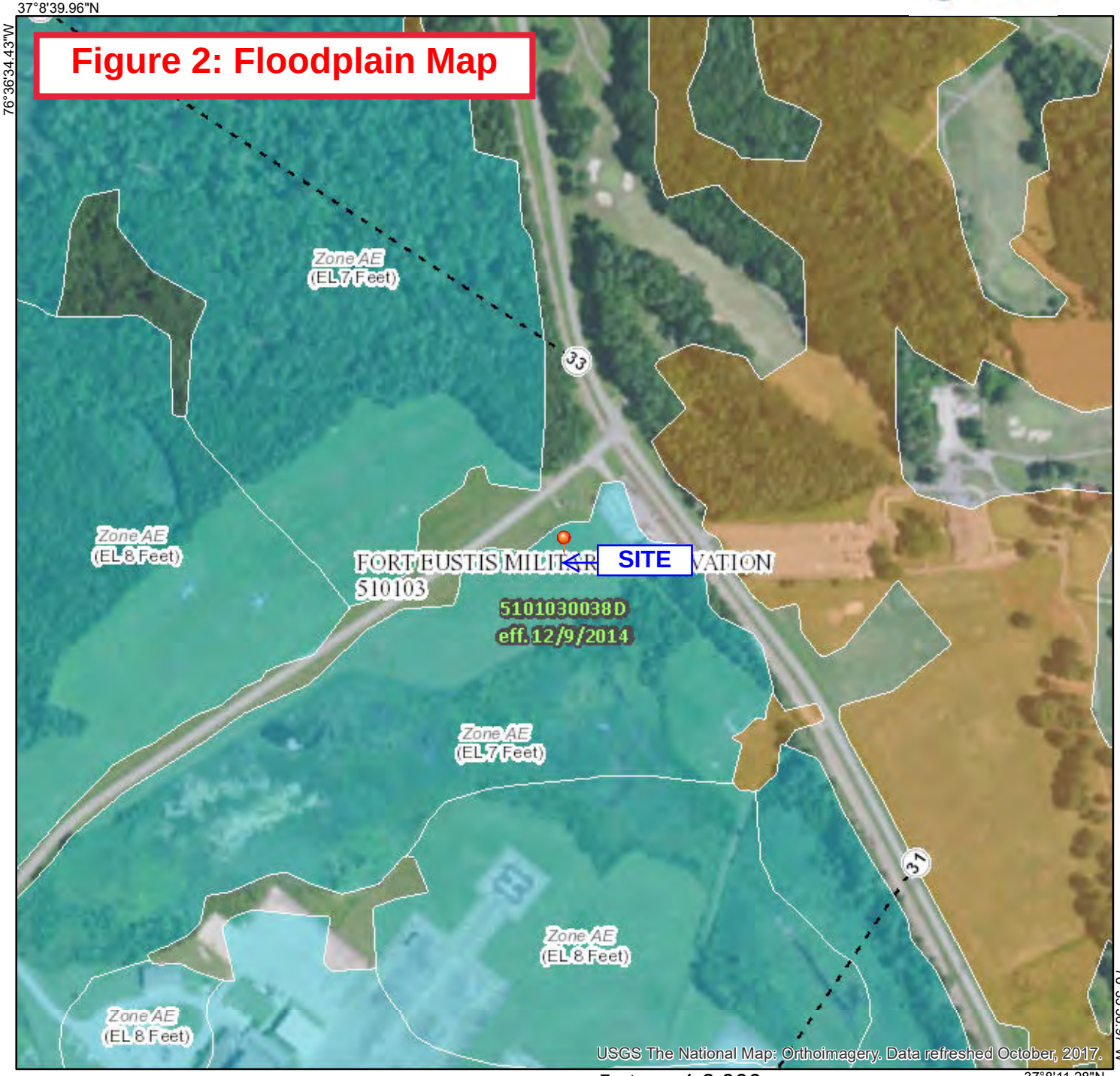
National Flood Hazard Layer FIRMette

FEMA

37°8'39.96"N

76°36'34.43"W

Figure 2: Floodplain Map



0 250 500 1,000 1,500 2,000 Feet

1:6,000

76°35'56.67"W

37°8'11.28"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/4/2019 at 2:37:54 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX E

Hazardous and Toxic Materials and Waste

FINAL
REVISED TECHNICAL MEMORANDUM
FELKER AIRFIELD TANK FARM
INSTALLATION RESTORATION PROGRAM
FORT EUSTIS, VIRGINIA

Prepared for:

Air Force Civil Engineer Center
2261 Hughes Avenue, Suite 155
Lackland Air Force Base, Texas 78236-9853

Contract No. FA8903-09-D-8566
Task Order No. 0005

CLIN 0009DR

Prepared by:

HydroGeoLogic, Inc.
11107 Sunset Hills Road, Suite 400
Reston, Virginia 20190

June 2016

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TABLE OF CONTENTS

Page

TABLE OF CONTENTS (continued)

Page

LIST OF APPENDICES

LIST OF FIGURES

LIST OF TABLES

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LIST OF ACRONYMS AND ABBREVIATIONS

AQA	Analytical Quality Associates, Inc.
AST	aboveground storage tank
BERA	baseline ecological risk assessment
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylene
CCV	continuing calibration verification
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	chemical of potential concern
EPA	U.S. Environmental Protection Agency
EPC	exposure point concentration
HGL	HydroGeoLogic, Inc.
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
ICP	inductively coupled plasma
ICP-MS	inductively coupled plasma-mass spectrometry
IRM	Interim Remedial Measure
JBLE	Joint Base Langley-Eustis
KEMRON	KEMRON Environmental Services Inc.
LOD	limit of detection
LUST	leaking underground storage tank
µg/L	micrograms per liter
NTU	nephelometric turbidity unit
ORNL	Oak Ridge National Laboratory
PAH	polyaromatic hydrocarbon
PAS	Preliminary Assessment Screening
PCB	polychlorinated biphenyl

QAPP	Quality Assurance Project Plan
QC	quality control
RI	Remedial Investigation
ROW	right-of-way
RRF	relative response factor
RSL	regional screening level
SCR	Site Characterization Report
SVOC	semivolatile organic compound
TAL	Total Analyte List
TCL	Target Compound List
TOC	total organic carbon
UCL	upper confidence limit
UST	underground storage tank
VDEQ	Virginia Department of Environmental Quality
VISL	Vapor Intrusion Screening Level
VOC	volatile organic compound

FINAL
REVISED TECHNICAL MEMORANDUM
FELKER AIRFIELD TANK FARM
INSTALLATION RESTORATION PROGRAM
FORT EUSTIS, VIRGINIA

1.0 INTRODUCTION

HydroGeoLogic, Inc. (HGL) prepared this technical memorandum for the Felker Airfield Tank Farm (Site TA032) at Joint Base Langley-Eustis (JBLE), Fort Eustis, Virginia (now referred to as JBLE-Eustis) to evaluate potential impacts to groundwater from petroleum releases at the site. Two fuel releases have been documented: one in 1992 and a second in 2010. Each spill prompted site remediation as a precise incident response to remove the contaminated soil.

A Remedial Investigation (RI) report for the tank farm was prepared in 2010. Sampling conducted for the RI determined that groundwater contained petroleum-related volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) at concentrations above 2008 U.S. Environmental Protection Agency (EPA) regional screening levels (RSLs) for drinking water (Malcom Pirnie, 2010). A human health risk assessment (HHRA) completed as part of the RI evaluated exposure of potential receptors to groundwater at the site. The HHRA concluded that potential exposures to constituents of concern in groundwater would not likely result in an unacceptable risk to human health (Malcom Pirnie, 2010).

As a result of discussions between the Air Force, EPA, and the Virginia Department of Environmental Quality (VDEQ) regarding the RI HHRA, JBLE-Eustis conducted an additional sampling event in 2011 to revise and update the HHRA for groundwater. The results for the additional round of sampling and the updated HHRA were presented in a 2014 technical memorandum; however, the analysis was based on a 2012 risk screening (KEMRON, 2014). This revised technical memorandum reevaluates the data presented in the 2014 report and provides an updated screening level HHRA using the most current (November 2015) EPA RSLs. In addition, the data quality was reexamined because data validation guidelines for some chemicals have changed since the analytical results were originally reported. HGL performed the project work under Contract No. FA8903-09-D-8566, Task Order No. 0005, issued to HGL by the Air Force Civil Engineer Center.

1.1 PURPOSE AND SCOPE

The purpose of this technical memorandum is to evaluate whether groundwater at TA032 contains contaminants (metals, VOCs, and SVOCs) other than petroleum attributable to the tanks that would merit additional Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions. Based on the results of this evaluation, one of the two following actions will be recommended:

- Transfer of the site to the VDEQ petroleum program if no further action is warranted or if only petroleum contamination is attributable to the tanks, as CERCLA Section 101(14) excludes petroleum from the definition of a "hazardous substance." Petroleum is covered by the Oil Pollution Act, originally published in 1973 and amended in 1990, and the underground storage tank (UST) remedial provisions.
- Retention of the site in the CERCLA program if CERCLA hazardous substances attributable to the site are found at concentrations that pose an unacceptable risk to human health or the environment.

1.2 SITE DESCRIPTION

JBLE-Eustis is located in southeastern Virginia, immediately west of the City of Newport News, and 67 miles southeast of Richmond, Virginia. JBLE-Eustis encompasses 8,248 acres and is bound to the east by the Warwick River, and to the west and south by the James River. The location of the Felker Airfield Tank Farm is shown on Figure 1.1. Felker Airfield Tank Farm consists of a gravel lot that is 125 by 250 feet with a perimeter security fence (Figure 1.2). Two 30,000-gallon aboveground storage tanks (ASTs) in concrete secondary containment structures are located at the south end of the fenced area. A curbed concrete parking pad for fueling trucks is located adjacent to and north of the ASTs. A drain in the parking pad appears to discharge to the AST containment structure. A refueling island with two curbed concrete refueling pads on either side of the island is located at the north end of the site (Figure 1.2). A small storage shed is located in the northwest corner of the fenced area. The tank farm has historically been used for the storage of JP-4 aviation fuel, but is currently used for JP-8 fuel storage. JP-4 and JP-8 are the only fuels known to have been stored and used at the site.

1.3 SITE HISTORY

1.3.1 Preliminary Assessment Screening (James M. Montgomery, 1992)

James M. Montgomery conducted a Preliminary Assessment Screening (PAS) in July 1992. The purpose of the PAS was to determine if a release of JP-4 aviation fuel to site soil and groundwater had occurred, and if so, to define the nature and extent of the release. The PAS determined that a release of fuel to the environment had occurred and was attributed to leaks in the underground piping system.

1.3.2 Interim Remedial Measure (IT Corporation, 1994)

Based on the results of the PAS, an Interim Remedial Measure (IRM) was performed in 1993/1994. The remedial measure included the excavation and disposal of approximately 5,000 cubic yards of petroleum-contaminated soil; removal of abandoned piping; confirmation sampling; installation of concrete containment structures for the ASTs, new piping, and appurtenances; and site restoration. No free product was identified during this action.

1.3.3 Site Characterization Report (Montgomery Watson, 1996)

Montgomery Watson completed a Site Characterization Report (SCR) for the site in January 1996, with field investigations completed in 1993 and 1994, concurrent with the IRM. The investigation was designed to determine the presence or absence of significant contamination in site soils, sediments, groundwater, and surface waters and to assess the potential for contaminant migration from the site into the surrounding area. Other objectives of this study included identifying potential risks to human health and the environment and evaluating and selecting an appropriate remedial alternative for the site. The report was completed in accordance with the Virginia leaking underground storage tank (LUST) program.

The SCR determined that the water table aquifer underlying the site was composed of clays, silts, and sands at an approximate depth of 8 feet below ground surface (bgs) and that it exhibited semiconfined conditions. Depth to groundwater was approximately 5 feet across the site. The local groundwater gradient was described as having a radial component from slight groundwater mounding; however, the gradient appeared to be generally flat.

The site geology and hydrogeology strongly influenced the distribution of contamination at the site. JP-4-contaminated soils were present at depths of greater than 6 feet in the area of the IRM. Contaminated soils were present at shallower depths in the southeast section of the site, near the railroad tracks. A benzene, toluene, ethylbenzene, and xylenes (BTEX) groundwater plume extended to the east and west of the aboveground tanks. The most elevated concentrations were in the area where the underground piping system leaked. However, because of the relatively flat gradient and the low permeability of the soils on site, migration appeared to be limited. No free product was measured in site monitoring wells in 1993 or 1994.

Montgomery Watson conducted a qualitative human health and ecological risk assessment, and concluded that the site impacts presented an insignificant current risk to human and ecological receptors. The pollution complaint case was subsequently closed in accordance with the LUST program.

1.3.4 Remedial Investigation Report (Malcom Pirnie, 2010)

An RI was conducted in October and November 2002 at Site TA032, and a groundwater monitoring event was completed in October 2008. The objectives of the RI were to delineate the nature and extent of soil, sediment, and groundwater contamination at and adjacent to the site; evaluate the potential migration of contaminants to off-site soils, groundwater, and sediments; assess risks to human health and the environment; and recommend future actions at the site based on the findings.

Soil, sediment, and groundwater samples were collected during the RI and analyzed for Target Compound List (TCL) VOCs, TCL SVOCs, Target Analyte List (TAL) metals, and total organic carbon (TOC). Select samples were analyzed for TCL pesticides and polychlorinated biphenyls (PCBs). Several VOCs were detected in surface soils and sediment; however, no constituents were detected above the 2008 EPA residential RSLs. Benzo(a)pyrene, Aroclor

1260, and select metals (e.g., aluminum, arsenic, cobalt, iron, and manganese) were detected above the RSLs and were evaluated further in the risk assessment.

In groundwater, benzene was detected above the 2008 EPA/Oak Ridge National Laboratory (ORNL) tap water RSLs in two wells during the 2002 groundwater sampling event and only one well during the 2008 sampling event. Both wells are located inside the tank farm next to the ASTs. Benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene were detected above their RSLs in the 2002 groundwater samples, but were not detected in 2008. Gamma-BHC and heptachlor were each detected in one sample at estimated concentrations in 2002; however, these concentrations did not exceed the EPA/ORNL RSLs. Dissolved aluminum, arsenic, cadmium, chromium, iron, manganese, and vanadium were detected above the 2008 EPA/ORNL RSLs.

The HHRA evaluated risks to potential receptors that could be exposed to soil and groundwater at the site. The risk evaluations were performed for the construction worker, on-site worker, potential trespasser, and recreational user in the vicinity of the adjacent Pines Golf Course. For the most conservative exposure scenario evaluated (construction worker), the baseline hazard index for the site was approximately 1, while the estimated excess lifetime cancer risk fell within the EPA target risk range of 10^{-4} to 10^{-6}. The risk assessment concluded that potential exposures to chemicals of potential concern (COPCs) in soil and groundwater were not likely to result in unacceptable risk to human health.

A baseline ecological risk assessment (BERA) was conducted to evaluate potential risks to ecological receptors. The BERA concluded that there was no complete pathway by which ecological receptors could be exposed to groundwater constituents because the nearest surface water discharge point was more than 500 feet from the Felker Airfield Tank Farm, well beyond the area of affected groundwater. In addition, the BERA concluded that no potential adverse effects were likely for ecological receptors exposed to chemicals detected in the surface soil or sediment.

The RI recommended a Focused Feasibility Study for the site based on the results of the HHRA. Although the HHRA had a “no risk” conclusion, the conclusion was based on the assumption that the existing land use (industrial) for the site would not change. As the HHRA did not evaluate a future residential exposure scenario, the potential risk to this receptor was unknown and, therefore, land use controls were required to ensure that the site was not developed for this use in the future.

1.3.5 2010 Spill Incident

A second petroleum spill occurred in September 2010. A spill response was immediately initiated, and all contaminated soil was removed and transported off site for disposal. The spill was reported to VDEQ, and the incident was closed out in December 2010 (VDEQ, 2015).

1.3.6 2014 Technical Memorandum (KEMRON, 2014)

During the JBLE-Eustis status meeting held on April 28, 2011, EPA and VDEQ requested an additional round of groundwater sampling to support an updated HHRA for the Focused Feasibility Study (KEMRON, 2014). A sampling technical memorandum was finalized in October 2011 and included a description of sampling and analysis procedures and equipment for the groundwater sampling task to be performed at the site. In 2011, KEMRON collected groundwater samples from all existing site wells for the following parameters:

- TCL VOCs by EPA Method 8260B;
- TCL SVOCs by EPA Method 8270C;
- TAL total and dissolved metals by EPA Methods 6010B/6020/7470A/9012; and
- TCL pesticides/herbicides/PCBs by EPA Methods 8081A/8151/8082.

The groundwater sampling logs and laboratory analytical reports for this sampling event are provided in Appendices A and B, respectively, of 2014 technical memorandum (KEMRON, 2014).

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2.0 TOPOGRAPHY AND HYDROGEOLOGIC SETTING

2.1 TOPOGRAPHY

The following information was taken from the RI (Malcolm Pirnie, 2010). The topography of Felker Airfield Tank Farm site is relatively flat with a slope of approximately 2 percent across the site. The topography gently slopes from the northeast side of the railroad tracks to the wetland areas located to the south and southeast. The total drop in elevation is approximately 3 feet. The Condon Road and Mulberry Island Road right-of-ways (ROWs) (and corresponding rail line) are elevated relative to the Felker Airfield Tank Farm site. The elevated roads direct stormwater runoff from the surrounding areas around the Felker Airfield Tank Farm site. Runoff from areas east of the tank farm is directed southeast along the east side of Mulberry Island Road, away from the site. Surface runoff from the areas north and west of the site is directed across Condon Road into a stormwater drainage swale located west of the tank farm as illustrated in Figure 1.2. Stormwater in the western drainage swale is directed to the forested wetland to the southwest of the tank farm.

Owing to the drainage pattern around the tank farm, only stormwater runoff from the Felker Airfield Tank Farm and surrounding area (1.25 acres in size) is directed to a low lying area within an area delineated as forested wetlands. The area is located approximately 35 feet southeast of the tank farm as illustrated on Figure 1.2. The low lying area occupies approximately 0.2 acre, with stormwater runoff from the site collecting in a broad, shallow, oblong depression, the longest dimension of which runs along an existing fence line.

2.2 HYDROGEOLOGY

The following information was obtained from the 2010 RI (Malcom Pirnie, 2010). Two hydrogeologic units, the Columbia aquifer and the Yorktown confining unit, were identified during the 2010 RI. The uppermost unit, the Columbia aquifer, includes the Shirley Formation and, where present, the Moore House Member of the Yorktown Formation. An underlying confining unit is formed by the silty clay to clayey silt sediments of the Morgarts Beach Member of the Yorktown Formation (Meng and Harsh, 1988; Laczniak and Meng, 1988). In general, the sedimentary sequence consists of a fine- to medium-coarse-grained basal deposit, which grades upward to fine-grained sediments with interbeds of silty sand and clayey silt.

Water table elevations for the Columbia aquifer were calculated from water level measurements reported by KEMRON (2014) for conditions on November 9, 2011. These elevation data were contoured by HGL and are provided on Figure 2.1. Depths to water bgs ranged from 0.01 feet at well MW-4505 to 4.69 feet at MW-1. Groundwater flow was found to be to the west-northwest, which is generally consistent with the historical interpretations of groundwater flow presented in the RI (Malcom Pirnie, 2010).

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3.0 2011 GROUNDWATER SAMPLING EVENT DATA REEVALUATION

3.1 DATA VALIDATION

A subset of the analytical results from the November 2011 groundwater sampling event were validated by Analytical Quality Associates, Inc. (AQA). The overall data set consisted of 12 field samples and 4 field duplicate samples analyzed by SW-846 Methods 8260B (VOCs), 8270C (SVOCs), 8081A (pesticides), 8082 (PCBs), 8151A (herbicides), 6010B (metals by inductively coupled plasma [ICP]), 6020 (metals by ICP-mass spectrometry [ICP-MS]), 7470A (mercury), and 9014-9010C (total cyanide). Data were reported for all requested analytes for each sample. AQA performed EPA Region 3 M3/IM-2 data validation on four water samples analyzed for VOCs, metals, ICP-MS metals, mercury, and cyanide as well as on two water samples analyzed for SVOCs, pesticides, PCBs, and herbicides. The overall sample set and the samples selected for validation are presented in Table 3.1.

The analytical data were evaluated in accordance with the EPA Region 3 Innovative Approaches to Data Validation (June 1995), the EPA Region 3 Modifications to National Functional Guidelines for Organic Data Review (September 1994), the EPA Region 3 Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses (April 1993), the Final Generic Quality Assurance Project Plan, Installation Restoration Program, Fort Eustis, Virginia (September 2002) (project Quality Assurance Project Plan [QAPP]), and the applicable methods. Region 3 M3/IM2 quality control (QC) acceptance criteria were used when QC acceptance criteria were not specified in the project QAPP. Laboratory QC acceptance criteria were used when Region 3 M2/IM2 QC criteria were not specified. In general, most of the data were valid as reported. The data validation report was included as Appendix C of the 2014 KEMRON technical memorandum (KEMRON, 2014).

An HGL senior chemist reviewed the data validation report prepared by AQA to determine whether the QC issues that had affected the subset of samples validated by AQA also had affected the nonvalidated sample results from the November 2011 dataset. Based on this review, modifications have been made to the original data validation findings. These modifications are discussed in the sections below and are summarized in Table 3.2.

3.1.1 VOLATILE ORGANIC COMPOUNDS

AQA rejected the nondetected 2-chloroethyl vinyl ether results in all four validated sample analyses because the samples had been preserved in the field by acidification. This compound breaks down in the presence of acid. The instrument run logs indicated that the other eight field samples and two field duplicate samples had also been acid-preserved. Therefore, the 2-chloroethyl vinyl ether results in all other samples were also rejected and qualified R by the HGL chemist.

AQA rejected the nondetected acetone results in all four validated sample analyses due to a relative response factor (RRF) below 0.05 in the associated continuing calibration verification

(CCV) standard. The requirement for CCV RRFs to be greater than 0.05 is from the Contract Laboratory Program scope of work for organic analysis and is not a requirement of SW-846 Method 8260B. The HGL chemist reviewed the initial and continuing calibration data presented in the data report. All Method 8260B calibration requirements were met for system performance check compounds and calibration check compounds. The initial calibration met method criteria for acetone. Two continuing calibration verification standards are associated with the sample results, one of which met all acceptance criteria for acetone. The continuing calibration standard that showed an acetone RRF below 0.05 also showed a percent difference from the initial calibration that exceeded the method 20 percent limit but were less than 50 percent. In the judgment of the HGL reviewer, the acetone results reported for samples MW-2, MW-3, MW-4, and MW2910 are acceptable for decision-making, and the R qualifiers applied by AQA are replaced with U qualifiers. The acetone results for samples MW-1, MW2910, and MW-8 are also associated with the affected CCV standard and should be qualified UJ. This qualifier has been applied to the data.

Nondetected results were reported by the laboratory as the value of the limit of detection (LOD) with a U qualifier. When results were rejected, AQA changed the value of the result to the limit of quantitation and changed the U qualifier to an R qualifier. It is improper to report values in association with rejected results, and the affected 2-chloroethyl vinyl ether results should not have a numerical value associated with them. AQA changed the numerical value of the four originally rejected acetone results to the limit of quantitation of 5 micrograms per liter (μg/L); these results were changed to the LOD of 2.5 μg/L, with the qualification of UJ as discussed in the above paragraph.

3.1.2 SEMIVOLATILE ORGANIC COMPOUNDS

AQA applied a B qualifier to the detected results for bis(2-ethylhexyl)phthalate in both validated samples due to a detected result of 9.27 μg/L in the associated method blank. All results for bis(2-ethylhexyl)phthalate in site samples were approximately equal to or less than the concentration detected in the blank, with the exception of the bis(2-ethylhexyl)phthalate result of 27.3 μg/L reported for sample MW-2. This compound is a common laboratory contaminant, and sample results that are less than 10 times the concentration detected in the associated method blank are considered to be artifacts of the analytical process (EPA Region 3, 1994, Semivolatile Data Review Section V [pp. 52-56]). The HGL reviewer noted that all November 2011 SVOC samples were extracted in the same preparation batch as the affected method blank, and the detected bis(2-ethylhexyl)phthalate results in samples MW-3, MW-9, MW4503, MW4504, and MW4506 should also be qualified B. Therefore, the data tables provided in the following sections were changed to reflect the correct qualifier.

3.1.3 POLYCHORINATED BIPHENYLS

The validation report correctly indicated that the PCB results reported for sample MW2909 should be qualified UJ because both surrogate compounds showed recoveries below the lower control limit but greater than 10 percent on both chromatography columns. However, it was noted that these qualifiers were not applied to the results reported in Table 1-7 of the 2014 technical memorandum. The current dataset reflects the qualifiers applied by AQA.

3.1.4 METALS

It was noted that the dissolved sodium result for sample MW4506 was reported with a B qualifier in Table 1-6 of the 2014 technical memorandum. This qualifier was applied by the laboratory due to sodium contamination in the associated method blank. The sample MW4506 dissolved sodium concentration of 9,270 μg/L was greater than 10 times the method blank concentration of 359 μg/L, and the laboratory-applied B qualifier was removed.

3.2 LIMITS OF DETECTION

It was noted that the analytical sensitivity was not low enough to resolve concentrations of certain analytes to the level of the November 2015 tap water RSLs. For VOCs the following analytes had limits of detection greater than their tap water RSLs:

- 1,1,2,2-Tetrachloroethane;
- 1,1,2-Trichloroethane;
- 1,2,3-Trichloropropane;
- 1,2-Dibromo-3-chloropropane;
- 1,2-Dibromoethane;
- 1,2-Dichloroethane;
- Bromodichloromethane;
- Chlorodibromomethane;
- Hexachlorobutadiene;
- Naphthalene; and,
- Vinyl chloride.

The following SVOCs had limits of detection greater than their tap water RSLs:

- 1,2,4-Trichlorobenzene;
- 1,4-Dichlorobenzene;
- 2,4,6-Trichlorophenol;
- 2,4-Dintrophenol;
- 2,4-Dinitrotoluene;
- 2,6-Dinitrotoluene;
- 3,3'-Dichlorobenzidine;
- 4,6-Dinitro-2-methylphenol;
- 4-Chloroaniline;
- 4-Nitroaniline;
- Benzo(a)anthracene;
- Benzo(a)pyrene;
- Benzo(b)fluoranthene;
- Benzo(k)fluoranthene;
- Bis(2-Chloroethyl)ether;
- bis(2-Chloroisopropyl)ether;

- Dibenzo(a,h)anthracene;
- Dibenzofuran;
- Hexachlorobenzene;
- Hexachlorobutadiene;
- Hexachloroethane;
- Indeno(1,2,3-cd)pyrene;
- Naphthalene;
- Nitrobenzene;
- N-Nitrosodipropylamine; and,
- Pentachlorophenol.

The following metals/inorganics had limits of detection greater than their tap water RSLs:

- Arsenic;
- Cyanide;
- Mercury; and
- Thallium.

The following herbicides had limits of detection greater than their tap water RSLs:

- MCPA;
- MCPP; and
- Pentachlorophenol.

The following pesticides had limits of detection greater than their tap water RSLs:

- Aldrin;
- Alpha-BHC;
- Dieldrin;
- Heptachlor;
- Heptachlor Epoxide; and
- Toxaphene.

In addition, all seven PCB congeners tested had limits of detection greater than their respective tap water RSLs. The elevated limits of detection do not represent a data gap because the limits used were the lowest achievable by the laboratory for the analytical test methods. These limits are consistent with the laboratory standard operating procedure, are standard for the industry, and are not elevated due to sample dilution or non-target analyte/matrix interference. More discussion is presented in Section 4.0, as required.

4.0 NATURE AND EXTENT OF CONTAMINATION IN GROUNDWATER

4.1 VOLATILE ORGANIC COMPOUNDS

Five VOCs were detected in groundwater in 2011, as indicated in Table 4.1. Three VOC detections exceeded their November 2015 tap water RSLs, including benzene, chloroform, and naphthalene. Benzene was detected above the tap water RSL of 0.46 µg/L at MW-7 (1.44 µg/L, Table 4.1). The concentration is higher than the concentration reported for 2008 samples (0.75 µg/L, Appendix A, Table A.1), but much below 2002 sample levels (42 µg/L, Malcolm Pirnie, 2010). Benzene was not detected in the other 2011 samples. The single benzene detection at MW-7 was near the southernmost AST (Figure 4.1). Based upon the presence of other petroleum hydrocarbons (naphthalene and isopropylbenzene) at this well, the detection likely reflects a historical release from the tank area.

The 2008 chloroform data are presented on Figure 4.2 and in Appendix A (Table A.1). Chloroform is a common by-product of potable water treatment and is not associated with petroleum. Chloroform was detected at a concentration of 0.294 J µg/L in the 2011 sample from MW-1. The detection slightly exceeds the tap water RSL of 0.22 µg/L. MW-1 is upgradient of the tank farm and did not have a chloroform detection in 2008 (Appendix A, Table A.1). There were no other detections of chloroform in the 2011 sampling. There were two detections in 2008, one upgradient of the tank farm (MW-4505) and one downgradient (MW-2910). The presence of this chemical upgradient, its lack of association with petroleum, and its sporadic detection suggest that it is not associated with a release from the tank farm.

Naphthalene was detected at a concentration above the tap water RSL of 0.17 µg/L at MW-7 (0.307 µg/L), which was also the source of the isolated 2011 benzene detection. Naphthalene is associated with petroleum, and its presence in the tank farm area with benzene suggests that it is associated with a tank farm release.

As noted in Section 3.2, 11 VOCs had limits of detection that were greater than their associated RSLs. One of these VOCs, naphthalene, was detected in site groundwater. The other 10 VOCs are halogenated compounds that would not be associated with JP-4 or JP-8. None of these VOCs have been detected in soil or groundwater. For these reasons, it is unlikely that the 10 halogenated VOCs would be present in site groundwater.

4.2 SEMIVOLATILE ORGANIC COMPOUNDS

One SVOC, bis(2-ethylhexyl)phthalate, was detected in groundwater at a concentration above its RSL in 2011. As indicated on Table 4.2 and in Section 3.1.2, all of the detections are qualified B as being artifacts of laboratory contamination. Therefore, these detections are not site related. No other SVOCs were reported for the 2011 samples.

As described in Section 3.2, 26 SVOCs have LODs above their tap water RSLs. Excluding the seven polyaromatic hydrocarbons (PAHs), the remaining SVOCs are halogenated or nitrogen-containing compounds that would not be associated with petroleum products such as jet fuel.

Of the seven PAHs, naphthalene was detected in one sample with the VOC analytical method. The remaining six PAHs are hydrophobic compounds that tend to adsorb to soil rather than migrate through the soil column. In addition, the historical soil data does not indicate that a continuing source of groundwater contamination exists or that significant sources of contaminated soil have been removed. For these reasons, it is unlikely that benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, or indeno(1,2,3-c,d)pyrene would have migrated to groundwater.

4.3 METALS/INORGANICS

Metals and cyanide were analyzed in 2011 for total and dissolved fractions. The results of this testing are presented in Table 4.3. The metals detected at a concentration greater than the tap water RSLs are listed below. In addition, the metal detections were compared to the range of concentrations reported for areas at Fort Eustis that have not been affected by a release (Fort Eustis ambient values). The Fort Eustis ambient samples were collected by Montgomery-Watson in 1990 to 1993 during the 1997 RI that addressed five sites (Montgomery Watson, 1997). The ambient monitoring well locations are depicted on Figure 1.1.

Metal or Inorganic	Above RSL (Total/Dissolved)	Above Fort Eustis Ambient Values (Total/Dissolved)
Aluminum	Yes/No	Yes/No
Arsenic	Yes/Yes	Yes/Yes
Cadmium	Yes/No	No/No
Chromium	Yes*/Yes*	No/No
Cobalt	Yes/Yes	Yes/Yes
Cyanide	Yes/No	No Ambient value
Iron (Ferrous)	Yes/Yes	Yes/Yes
Manganese	Yes/Yes	No/No
Mercury	Yes/Yes	Yes/Yes
Selenium	No/Yes**	No/Yes
Vanadium	Yes/Yes	Yes/Yes

*RSL used is for hexavalent chromium.
** The filtered result is higher than the unfiltered result (see text for discussion).

Aluminum was reported above its RSL only for the total aluminum analyses (Table 4.3). Very little aluminum was reported in the dissolved samples, indicating that the elevated aluminum is due to aquifer material solids in the unfiltered sample and not to a release from the tank farm. For example, the well with the maximum total aluminum concentration, MW-2, had a turbidity of 442 nephelometric turbidity units (NTU) at the time of sample collection.

The arsenic distribution in groundwater is presented as Figure 4.3. The only concentrations of total and dissolved arsenic that are above the ambient range concentrations at Fort Eustis (2.5 to 17 μg/L [total] and 2.5 to 5 μg/L [dissolved])) are found in well MW-4. The maximum total arsenic detection, 17.5 µg/L, is only slightly greater than the maximum ambient range concentration of 17 µg/L. Based on the estimated groundwater flow directions, this well is not directly downgradient of the tank farm. In both 2008 and 2011, arsenic was not detected at well MW-3, located between MW-4 and the tank farm (Figure 4.3). The lack of arsenic

detections upgradient of MW-4 suggests that the arsenic at MW-4 is likely not site related. Limited literature was found describing the trace metal concentration in jet fuels; however, one study by Shumway (2000) had no detections of arsenic in JP-5 and JP-8 (with a detection limit of 4 μg/L, which is below the ambient range of arsenic concentrations at Fort Eustis). In addition, no petroleum compounds were detected at MW-4 in 2008 and 2011. In 2008, 1,4-dichlorobenzene was detected in MW-4 at a concentration of 0.1 J µg/L (Appendix A, Table A.1). This chemical, which is a chlorinated solvent not associated with jet fuel, has not been reported in any other wells or in soil or sediment (Malcolm Pirnie, 2010). The arsenic concentrations around MW-4 may reflect natural heterogeneity not captured in the Fort Eustis ambient range dataset.

Cadmium was reported above its tap water RSL in the unfiltered sample from well MW-4503 (Table 4.3). The concentration was below the ambient range of concentrations. Cadmium in groundwater is likely identified as naturally occurring.

Table 4.3 shows that, with few exceptions, there are generally similar concentrations of total and dissolved chromium, indicating that dissolved chromium predominates. The groundwater samples were not speciated to determine the chromium valence state. In nature, hexavalent chromium (Cr^{6+}) and trivalent chromium (Cr^{3+}) species dominate. Because the Cr^{6+} species is the most toxic, its tap water RSL (0.035 μg/L) was used for screening in Table 4.3. Every chromium detection is greater than this RSL. However, none of the detections were greater than the ambient range of chromium concentrations. This comparison indicates that chromium in site groundwater is likely naturally occurring.

Total and dissolved cobalt were detected above the tap water RSL of 0.6 μg/L at 10 wells (Table 4.3). The only locations that had detections above the ambient range of concentrations and the tap water RSL were MW-1 and MW-7. All other detections were consistent with ambient conditions. Concentrations of cobalt in 2008 were also elevated at MW-1 and MW-7 (Tables A.2 and A.3). Figure 4.4 shows the distribution of total and dissolved cobalt based on the 2011 data. MW-1 had a total cobalt concentration of 14 μg/L and dissolved concentration of 12.7 μg/L, which were only slightly higher than the highest ambient total cobalt concentration of 12 μg/L and dissolved concentration of 10 μg/L. MW-1 is located approximately 200 feet hydraulically upgradient of the tank farm. MW-7 had a total cobalt concentration of 16.8 μg/L and dissolved concentration of 16.3 μg/L, which were both higher than the highest ambient concentrations. MW-7 is located approximately 30 feet hydraulically upgradient of the eastern edge of the tank farm. Other wells in close proximity to the tanks include MW-4506, MW-4503, and MW-6. Well MW-4506 is located approximately 15 feet hydraulically upgradient of the eastern side of the tanks (see Figure 4.4). MW-4506 had a total cobalt concentration of 5.48 μg/L and dissolved concentration of 5.54 μg/L, which are above the RSL but within the range of ambient concentrations (e.g., total cobalt 5-12 μg/L and dissolved cobalt 5-10 μg/L). Well MW-4503 is located approximately 45 feet north of the tanks (see Figure 4.4). MW-4503 had a total cobalt concentration of 1.45 μg/L and dissolved concentration of 0.858 μg/L, which are above the RSL but below the range of ambient concentrations. Well MW-6 is located approximately 10 feet hydraulically downgradient of the western side of the tanks (see Figure 4.4). MW-6 had a total cobalt concentration of 0.935

µg/L, which is above the RSL but below the range of ambient concentrations. The filtered sampled collected at MW-6 to evaluate the dissolved phase was nondetect for cobalt. Although samples from MW-1 and MW-7 contained cobalt concentrations greater than the RSL and ambient levels, it is unlikely these detections are attributable to the site. Both wells are hydraulically upgradient of the tank farm and samples from wells closer to the tanks had lower cobalt detections consistent with ambient levels. The cobalt results for MW-1 and MW-7 may reflect heterogeneity in Fort Eustis ambient conditions not captured by the ambient dataset, which consists of six samples.

Total cyanide was detected in one sample, "MW-9", which is a duplicate of the sample from well MW-6 (Table 4.3). The detected concentration is above the RSL; however, the lack of detection in the parent sample suggests the potential for an error in the analysis. The analytical method used for cyanide (9014-9010C) is a colorimetric method. The sample with the detection had a relatively elevated turbidity (260 NTU). This turbidity could have interfered with the test results. Furthermore, cyanide is extremely soluble (solubility of 9.5E7 µg/L[1]). If present in groundwater, cyanide should have been detected in the filtered sample from MW-6, but it was not. In addition, cyanide would not be expected to be associated with jet fuel, as it is a by-product of the cracking process in petroleum production but is removed with gasses and water (Dzombak et al., 2005). Therefore, the cyanide detection is considered a laboratory artifact, and not a result from a release at the tank farm.

In 2011, several total ferrous iron detections were greater than the corresponding RSL (1,400 µg/L) and the ambient range of concentrations (Figure 4.5). In all cases, the associated dissolved concentration was substantially lower than the total result, indicating a significant contribution of ferrous iron from the aquifer matrix solids. With the exception of MW-4506, the turbidity for these samples was elevated, ranging from 33.2 to 442 NTU. In the dissolved samples, iron detections for MW-2909 and MW-4506 were greater than the ambient range of concentrations. Well MW-4506 is located adjacent to the tanks (Figure 4.5). The iron at this location may reflect localized contamination. MW-2909 is not directly downgradient of the tanks (Figure 4.5). Well MW-3, located between the tanks and MW-2909, has no evidence of iron contamination. The dissolved iron at MW-2909 may reflect natural heterogeneity not captured in the Fort Eustis ambient range dataset.

Manganese was reported at concentrations greater than its RSL for both the dissolved and total analyses (Table 4.3). All manganese concentrations were within the ambient range of concentrations. Manganese in site groundwater is likely identified as naturally occurring.

Mercury is known to be present in petroleum and jet fuel (Hunsar and Hunsar, 2001). It was reported at three locations (MW-2, MW-6 and MW-7) for both the dissolved and total analyses at concentrations greater than its RSL (0.063 µg/L, Table 4.3). With the exception of total mercury in MW-7, all mercury detections were greater than Fort Eustis ambient levels. Figure 4.6 shows the locations of the exceedances. The highest concentration occurred at MW-2, which is not downgradient of the tank farm. The remaining concentrations were just above the limit of detection (0.1 µg/L).

[1] EPA Region 3 June 2015 Parameter Table (http://semspub.epa.gov/src/document/03/2218437)

Selenium has been shown to be present in certain jet fuels (Shumway, 2000). Selenium was reported in the dissolved sample from well MW-4 at a concentration above its RSL (10 μg/L) and the Fort Eustis ambient range (5 μg/L, Table 4.3). The detection at MW-4 is suspect because the selenium concentration in the dissolved sample is an order of magnitude higher than the total sample. MW-4 is not directly downgradient of the tank farm. The wells surrounding the tank farm have total and dissolved selenium results consistent with Fort Eustis ambient conditions. Therefore, if the dissolved selenium result accurately characterizes groundwater conditions at MW-4, the selenium would not have originated from the tank farm.

Vanadium has been shown to be a component of certain jet fuels (Shumway, 2000). Total and dissolved vanadium were reported at concentrations above the RSL (8.6 μg/L, Table 4.3) and the range of Fort Eustis ambient concentrations. In the total vanadium samples, the highest result occurred at location MW-2, which is not downgradient of the tank farm (Figure 2.1). The highest vanadium concentration in the dissolved phase, and the only dissolved result greater than the RSL, occurred at location MW-4503, which is near the middle of the tank farm (Figure 2.1 and Table 4.3).

4.4 HERBICIDES, PCBS, AND PESTICIDES

The 2011 groundwater samples were analyzed for herbicides, PCBs, and pesticides. As shown in Table 4.4, these analytes were not detected in the groundwater samples. As described in Section 3.2, LODs for three herbicides, six pesticides, and all PCBs are greater than the tap water RSLs. These chemicals are not associated with jet fuel.

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5.0 SCREENING LEVEL HUMAN HEALTH RISK ASSESSMENT FOR GROUNDWATER

Through the original RI (Malcolm Pirnie, 2010) and the 2014 technical memorandum (KEMRON, 2014), potential ecological and human exposure pathways were eliminated except for the future hypothetical residential use scenario. Hypothetical future residents may be exposed to groundwater contaminants during potable water use through ingestion, dermal contact, or inhalation of volatilized chemicals.

To evaluate potential threats to the hypothetical future resident, a screening level risk assessment was completed. This assessment evaluated future use of site groundwater as a potable water supply. Currently, site groundwater is not used for any purpose. The evaluation considered only the resident receptor, which is the most conservative potential receptor for the site. A summary of the screening level risk assessment is provided in the following sections.

5.1 DATA USED FOR THE SCREENING LEVEL RISK ASSESSMENT

The monitoring wells at the site were sampled in 2008 and again in November 2011. Because of the petroleum spill that occurred in September 2011, only the November 2011 analytical results were used in the evaluation to account for any potential changes in groundwater conditions due to the 2011 spill. The 2011 dataset includes both total metal and dissolved metal results. The turbidities in 8 of the 12 wells were greater than 50 NTU, and the aluminum and iron results in 10 of the 12 samples showed a substantial difference between the total and dissolved results. This information indicates that the total metal results could have been affected by turbidity and could overestimate the actual aqueous concentrations. Based on information provided in KEMRON's Technical Memorandum, groundwater samples were collected using the low-flow methodology with purge rates between 180 and 1,040 milliliters per minute (KEMRON, 2014). Review of the sample collection logs suggests that, for several wells, continued purging could have removed much of the turbidity interfering with the analytical results. To provide concentrations more representative of what a groundwater user could be exposed to, the dissolved dataset was used for evaluating the potable water scenario. To assess risks to construction workers who may contact groundwater in an excavation, the total dataset was used.

As described in Section 3.0, the data were reviewed by an HGL senior chemist and certain data qualifiers were added or changed as appropriate. For this screening level HHRA, all B qualified analytical results were treated as nondetect results. If an analyte was detected in both the parent and duplicate sample, the maximum concentration was used in the analysis. If only one of the samples in the parent sample/field duplicate pair had a detection, then the detected result was used.

5.2 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN

The COPCs were identified by comparing the maximum reported concentration of each detected analyte to the November 2015 residential tap water RSLs based on a cancer risk of 1E-06 and noncancer hazard quotient (HQ) of 0.1. Analytes with a maximum concentration

that exceeded the selected screening value were retained as COPCs. These screening results are provided in Table 5.1 for potable water use (dissolved dataset) and Table 5.5 for groundwater in an excavation (total dataset). For both datasets, the VOCs benzene, chloroform, and naphthalene were identified as COPCs. For the dissolved dataset, and arsenic, chromium, cobalt, iron, manganese, mercury, selenium, and vanadium were identified as COPCs. For the total dataset, aluminum, arsenic, cadmium, chromium, cobalt, cyanide, iron, manganese, mercury, and vanadium were identified as COPCs. Chromium was assumed to be present entirely in its hexavalent form, and the more conservative hexavalent chromium screening value was used to evaluate this analyte.

5.3 EXPOSURE ASSESSMENT

The purpose of the exposure assessment is to estimate the type and magnitude of exposure for potential human receptors to the COPCs present in groundwater at the site. The site is a remote fueling facility for two 30,000-gallon ASTs that provide aviation fuel for helicopter and training operations. No personnel are stationed at the site on a regular basis. Operational and maintenance activities at the tank farm are sporadic basis and of short duration. The site is secured due to the nature of the flight operations, and potential trespassers would be intercepted by security personnel before they could access the site. Under the current conditions at JBLE-Eustis, the most likely exposure scenario would be for the construction worker, who would have limited exposure to groundwater. To be more conservative, the screening level HHRA evaluated the hypothetical future resident, as it assumes a longer exposure duration and higher exposure frequency than other site receptors. Therefore, if the site is determined to pose no risk to the resident receptor, no risks are likely for the other potential site receptors. Currently, there are no residences at or near the site.

5.3.1 Physical Setting (Groundwater)

The site is located on JBLE-Eustis. The chief potable water supply for the region and the installation is the surface water reservoir system operated by the Newport News Waterworks. The system includes numerous lakes and reservoirs (Lee Hall, Harwoods Mill, Diascund, Little Creek, and Chickahominy) located throughout the Lower Virginia Peninsula. Of these sources, only the Lee Hall reservoir is in the immediate vicinity of the installation. There are nine production wells located on the JBLE-Eustis property, and four are currently being used. These wells are screened in the lower aquifer. The production wells currently in use are described below:

- VDEQ Well #216-072 – used for irrigation at the Pines Golf Course
- VDEQ Well #216-070 – provides non-potable water for the leadership development course pond
- VDEQ Well #216-095 – provides potable water to range maintenance building 3904
- VDEQ Well #216-096 – provides non-potable water for Range 5 latrines

The only well that provides potable water (216-095) is located over 2 miles to the southeast of the tank farm. The closest production well to the site is the irrigation well for the Pines Golf Course and is located over a half mile to the southeast.

The site's groundwater contamination is limited to the shallow Columbia aquifer. Potential future exposure of a hypothetical resident would require installation of a water supply well in the shallow aquifer. In addition to being shallow, this aquifer is thin and provides low yields of water of variable quality. Use of this aquifer is generally restricted to individual domestic supply in rural areas. Based on the site's lowland location and proximity to wetland areas, the groundwater at the site is expected to be very poor in quality and aesthetics. The shallow Columbia aquifer is underlain by the Yorktown confining unit. Based upon regional studies of sites in the vicinity of JBLE-Eustis, the Yorktown confining unit ranges in thickness from 20 to 40 feet and up to 80 feet in paleochannels (Meng and Harsh, 1988). Reported vertical hydraulic conductivity for the Yorktown confining unit ranges from 5.9×10^{-4} to 3.9×10^{-3} ft/day based on laboratory tests of soil samples from the Yorktown confining unit (Harsh and Laczniak, 1990). The leakance for the confining unit has been reported to range from 1.3×10^{-4} to 1.8×10^{-4} ft/day (Harsh and Laczniak, 1990). Based on the properties of the Yorktown confining unit, vertical migration of groundwater contamination from the shallow aquifer into the deep aquifer is expected to be very minimal.

5.3.2 Potential Exposed Receptors and Exposure Routes

The identification of potential exposure pathways encompasses the identification of the medium of concern, the COPCs from each identified medium, and the current and potential future land use scenarios. The current and future use of the site is considered to be military/industrial. An exposure pathway is considered "complete" if the following criteria are met:

- A source and mechanism for chemical release into the environment exists;
- A transport medium for the chemical to move from the source to the receptor exists;
- A point of potential contact of the receptor with the medium exists; and
- An uptake route or means of taking the chemical into the body exists.

Under current site conditions, the site groundwater is not used for any purpose. A construction worker could be exposed to site groundwater if an excavation at the site intersected the water table. Because excavations are dewatered if they extend into the groundwater, a construction worker would experience limited contact with site contaminants under this scenario. To assess potential effects associated with the total metal data, incidental ingestion and dermal contact by a construction worker were included in the quantitative risk assessment.

Although unlikely given the planned future land use and the JBLE-Eustis Installation Master Planner, it is theoretically possible for the site to be converted to residential use and a water supply well installed in the shallow aquifer. This hypothetical scenario is the most conservative exposure scenario for the site. This scenario has the following exposure routes for the hypothetical future resident:

- Ingestion of groundwater,
- Dermal contact with groundwater while showering,
- Inhalation of volatile groundwater contaminants while showering, and

- Inhalation of volatile groundwater contaminants via vapor intrusion.

5.4 SCREENING LEVEL RISK ESTIMATES

5.4.1 Vapor Intrusion Pathway

To evaluate the vapor intrusion pathway, EPA's Vapor Intrusion Screening Level (VISL) calculator was used to calculate screening values based on a target cancer risk of 1E-06 and target HQ of 0.1. An average groundwater temperature of 19.2 degrees Celsius was used for this calculation. This temperature was calculated from the stabilized parameter readings listed in the field forms from the 2011 sampling event (KEMRON, 2014). The maximum detections of the volatile chemicals were compared to the VISL values below. As shown in this table, the VOC detections are less than the vapor intrusion screening values. The maximum mercury detection is greater than the vapor intrusion screening value if it is assumed that mercury is entirely in the elemental form. If mercury is in the form of mercuric chloride, it would not be evaluated for the vapor intrusion pathway because the cationic form is not volatile. Conservatively assuming that mercury is entirely in the elemental form, the maximum detection results in an inhalation HQ of 0.2 using VISL.

Volatile Chemical	Maximum Detection (µg/L)	Screening Value (µg/L)
Benzene	1.44	2.1
Chloroform	0.294	1.0
Isopropylbenzene	0.675	130
Mercury (elemental)	0.225	0.11
Naphthalene	0.307	7.1
Propylbenzene	0.278	350

5.4.2 Potable Water Exposure Routes

The screening level was calculated using the November 2015 tap water RSLs. These RSLs incorporate potential effects from all three exposure routes: ingestion, dermal contact, and inhalation. To assess potential noncancer hazards, the maximum concentration was divided by the noncancer tap water RSL based on an HQ of 1 to obtain an analyte-specific HQ, and the resulting HQ values were summed to calculate a screening level noncancer hazard index (HI) for site groundwater. The screening of cancer risk for the site was similarly calculated by dividing the maximum concentration of each carcinogenic COPC by the November 2015 cancer RSL and multiplying the quotient by 1E-06. Analytes that do not have a cancer RSL did not have a cancer risk calculated. The individual analyte cancer risks were summed to calculate the total cancer screening risk for site groundwater. The noncancer and cancer risks calculated using the maximum detection of each COPC are presented in Table 5.2. and are summarized in Section 5.4.3.1.

Using the maximum concentration for screening is a useful initial tool; however, it may overestimate the contribution to overall risk from a COPC. If there are five or more detected data points, it is possible to use the 95 percent upper confidence limit (UCL) as the exposure point concentration (EPC) of a contaminant, which represents a conservative estimate of the

mean chemical concentration in an environmental medium. The 95 percent UCLs were calculated using the ProUCL software (version 5.0.00) available from EPA. The ProUCL output is provided in Appendix B. The Felker Field groundwater COPCs for which an EPC was calculable are cobalt, iron, manganese, and selenium. The datasets for all other metals and organic COPCs consisted of five or fewer detected results, and the maximum concentrations were used as the EPCs. The EPCs and the associated risk are shown in Table 5.3 and are summarized in Section 5.4.3.2.

5.4.3 Summary of Estimated Risks for Groundwater

5.4.3.1 Estimated Risks Using Maximum Site Concentrations

A noncancer HI of 7 (Table 5.2) was calculated utilizing the maximum COPC concentrations. Note that the cancer risks and HQ calculations are calculated to one significant figure in Table 5.2. Because the HI is greater than 0.5, the risk of noncancer health effects was further refined to evaluate potential effects by target organ using the available literature and the IRIS database. The target organs are listed in Table 5.2. When categorized by target organ, the HI exceeded 0.5 for the following organ systems:

1. The HI for neurological was 2 due primarily to manganese and mercury.
2. The skin and vascular HIs were 2 due primarily to arsenic.
3. The HI for the thyroid was 3 due to cobalt.

All other COPCs HQs did not contribute to a target organ HI greater than 0.5.

The total cancer screening risk of 3×10^{-4} was greater than 5×10^{-5}, the midpoint of the EPA target risk range of 1×10^{-6} to 1×10^{-4}, indicating that COPCs at the site have the potential to cause unacceptable levels of cancer health effects. Arsenic and chromium are the primary drivers for the cumulative cancer risk. The cancer risks associated with the VOCs ranged from 1E-06 to 3E-06, and contributed negligibly to the cumulative cancer risk.

As noted in Section 4.3, the following metals in groundwater are not considered to be a result of a release from the tank farm:

- Arsenic: The concentration at well MW-4 does not appear to be from a release from the tank farm because of its location and the lack of jet fuel-related organic chemical contamination in current and historical data. All other arsenic detections are within the range of Fort Eustis ambient concentrations.
- Chromium: Chromium in the dissolved phase was not reported at concentrations above Fort Eustis ambient levels.
- Cobalt: Elevated cobalt detections were reported for upgradient wells MW-1 and MW-7, but not for wells positioned adjacent to the tanks. Based on the distribution of cobalt detections at the site, the metal cannot be attributed to a release from the tank farm. The elevated cobalt detections may reflect natural heterogeneity not captured by the Fort Eustis ambient dataset of six groundwater samples.

- Manganese: All detections of manganese were within the ambient range of concentrations.
- Selenium: The concentration at well MW-4 does not appear to be from a release from the tank farm because of its location and the lack of jet fuel-related organic chemical contamination in current and historical data. All other selenium detections are within the range of Fort Eustis ambient values, and the detection at MW-4 is suspect due to elevated concentrations being found in the dissolved sample and not the total sample.

Only arsenic (MW-4), cobalt (MW-1 and MW-7) and selenium (MW-4) had concentrations exceeding ambient levels. MW-1 and MW-4 have no jet fuel contamination and therefore would not be affected by potential change in geochemical conditions by jet fuel. MW-7 has had low level detections of petroleum constituents. Through microbial degradation of the lighter fractions, petroleum hydrocarbons can cause anaerobic conditions to develop in groundwater. Because neither dissolved oxygen nor oxidation-reduction potential were recorded during purging of MW-7, the redox conditions at this well are not known. The development of anaerobic groundwater conditions typically coincides with dissolution of iron and manganese from oxide/hydroxide minerals. Because arsenic often co-precipitates with iron, dissolution of iron-bearing minerals can release arsenic into solution. Thus, if petroleum contamination had altered the groundwater's geochemistry at MW-7, there should be evidence of arsenic, iron, and manganese contamination at this well. The 2011 filtered and unfiltered results for arsenic and manganese were within or less than the range of ambient concentrations at Fort Eustis. The unfiltered iron result was greater than the ambient range, but the sample turbidity was 86.3 NTU. The filtered iron result was within the range of ambient conditions, suggesting that iron is not a groundwater contaminant at MW-7. Based on the analytical results, it is unlikely that the low levels of petroleum constituents reported for MW-7 affected groundwater geochemistry and caused a release of cobalt.

Removal of arsenic, cobalt, chromium, manganese, and selenium from the risk calculations results in a total cancer risk of 6×10^{-6}, which is within the acceptable risk range for Superfund sites, and a total HI of 1. Only the neurological HI is greater than 0.5.

5.4.3.2 Estimated Site Risks Using the 95 Percent UCL for Site Groundwater

Chromium, cobalt, iron, manganese, and selenium had enough detections to support calculation of 95 percent UCLs. For the other COPCs, the maximum concentration was retained as the EPC. Table 5.3 lists the results of the screening level HHRA when using the 95 percent UCL as the EPC. These results indicate that for the metals, the organ-specific HIs for skin and for the vascular system drop very slightly; however, the HI for the thyroid decreases from 3 to 1. There is no change to the cumulative cancer risk because arsenic did not have enough detections to support a UCL calculation, and the chromium 95 percent UCL, 2.6 μg/L, is only slightly lower than its maximum detection of 3.57 μg/L.

As described in Sections 4.3 and 5.4.3.1, arsenic, chromium, cobalt, manganese, and selenium were not attributed to historical releases from the tank farm. When only the potential site-related COPCs are considered, the cumulative cancer risk is 6E-06 and the HI is 1. The

cumulative cancer risk is on the low end of the target risk range, indicating that site contaminants are not potential risk drivers. The noncancer HI is greater than 0.5. On a target organ basis, only the neurological HI is greater than 0.5. For the following reasons, this result does not pose a threat to human health:

- To two significant figures, the neurological HI is 0.56, which is only slightly greater than the target value of 0.5 for a screening level HHRA.
- The neurological HI is based on the maximum mercury detection. Mercury was detected in only three of the 2011 groundwater samples. Given that a water supply well draws in groundwater from a broader area than a monitoring well based on the greater volume removed by a supply well, it is highly conservative to assume that a future resident would be exposed only to the maximum mercury concentration for the entire exposure duration. The 2008 dataset included two mercury detections of similar magnitude as the 2011 detections, suggesting that mercury concentrations at the site are stable. If the 2008 and 2011 mercury results are pooled, the dataset has enough mercury detections to support a UCL calculation. Using this pooled dataset, ProUCL calculated a 95 percent UCL of 0.125 µg/L for mercury. If this UCL were used as the EPC, the neurological HI would decrease to 0.3 (Table 5.4), which is less than the target value of 0.5 for a screening level HHRA. In addition, if it were assumed that mercury is in the form of mercuric chloride, it would not be identified as a COPC because the maximum detection of 0.225 µg/L is less than the tap water RSL of 0.57 µg/L (RSL corresponding to an HQ of 0.1).
- The neurological HI is based on the assumption that all mercury in site groundwater is in the elemental form. If the mercury were in the mercuric form, there would be no COPCs for the vapor intrusion pathway, and use of the groundwater as potable water would correspond to an HQ of 0.04. In this situation, the neurological HI would be less than 0.5.

5.5 CONSTRUCTION WORKER RISK ASSESSMENT

Exposure point concentrations for the construction worker are listed in Table 5.6. Because construction worker exposure to groundwater in an excavation is not a default exposure scenario, a screening level risk evaluation was not performed. The site-specific exposure assumptions are provided in Table 5.7. The toxicity values are listed in Table 5.8 (non-cancer) and Table 5.9 (cancer). The risk calculations are provided in Tables 5.10 (dermal uptake calculations), 5.11 (non-cancer hazard calculations), and 5.12 (cancer risk calculations). As shown in the latter two tables, the non-cancer HI is 0.02 and the cumulative cancer risk is 5E-08. The HI is less than the target value of 1, and the cancer risk is less than the EPA target risk range of 1E-06 to 1E-04. Groundwater constituents do not pose a threat to construction workers.

5.6 HUMAN HEALTH RISK SCREENING SUMMARY

The screening level HHRA evaluated potential future exposure of a hypothetical resident to groundwater contaminants via use of the shallow aquifer as a potable water supply and vapor

intrusion. Because the maximum detections resulted in cumulative cancer risks and noncancer HIs greater than the target values of 5E-05 cancer risk and 0.5 noncancer target organ HI, risks were calculated using the 95 percent UCL of COPCs detected in five or more groundwater samples.

Based on the 2011 data for all COPCs, use of the 95 percent UCLs where possible results in a cumulative cancer risk of 3E-04 and target organ HIs greater than 0.5 for neurological system, skin, vascular system, and thyroid. When only the site-related constituents are considered, the cumulative cancer risk decreases to 6E-06, which is less than the target risk of 5E-05. The noncancer HI decreases to 0.9, and only the neurological HI of 0.6 is greater than the target value of 0.5. This HI is due to mercury. As described above, the mercury evaluation is very conservative because it is based on the maximum detected concentration, and it assumes that all mercury is in the elemental form. If the 95 percent UCL for mercury is calculated from the pooled 2008 and 2011 groundwater, then the neurological HI decreases to 0.3. Based on this EPC, mercury, even in the elemental form, does not pose a potential threat to hypothetical future residents. In conclusion, site-related groundwater constituents do not pose an unacceptable threat to human health if the shallow aquifer were used as a potable residential water supply.

In addition, potential risks to a construction worker were quantitatively evaluated. No threats to this receptor were identified.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The 2010 RI found no unacceptable risks associated with petroleum constituents in the site soil. This technical memorandum used the 2011 groundwater data to evaluate potential threats associated with future use of the shallow groundwater as a potable water supply for a hypothetical future resident and to a construction worker exposed to groundwater in an excavation. The reassessment included an evaluation of data quality that resulted in the following changes:

- All 2-chloroethyl vinyl ether results have been changed to rejected.
- Rejected acetone results were changed to U, and U qualified results qualified were changed to UJ.
- B qualifiers were applied to all bis(2-ethylhexyl)phthalate detections, and these detections are considered to laboratory artifacts, not the result of contamination.
- PCB results reported for sample MW-2909 were flagged with UJ qualifiers.
- The qualifier for the dissolved sodium result for sample MW-4506 was removed.

As noted in Section 3.2, a number of analytes were reported with LODs above their RSLs. As described in Sections 4.1 through 4.4, these LODs do not represent a data gap for the following reasons.

- The chemicals were not associated with jet fuel and thus would not have been released from the tank farm. These chemicals include halogenated compounds and nitrogen-containing compounds.
- The chemicals tend to adsorb to the solid matrix and resist leaching. These chemicals include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)-fluoranthene, dibenzo(a,h)anthracene, or indeno(1,2,3-c,d)pyrene. Furthermore, soil removal has been completed in the known release areas, and the RI concluded that there was no source of continuing groundwater contamination in the site soil.

Furthermore, the LODs that exceed tap water RSLs are the lowest achievable by the laboratory for this analytical test method. These limits are appropriate for the analytical method, are consistent with those routinely available from commercial laboratories, and are not elevated due to sample dilution or nontarget analyte/matrix interference.

Using 95 percent UCLs as EPCs where possible, the screening level HHRA for the resident receptor estimated the cumulative cancer risk to be 3E-04 and the noncancer HI to be 4. Arsenic and chromium were the primary contributors to the cancer risk. Target organ HIs for the neurological system, vascular system, skin, and thyroid are greater than 0.5. Arsenic, cobalt, manganese, and mercury are the primary contributors to the elevated target organ HIs. Based on a comparison to the Fort Eustis ambient groundwater data and an evaluation of chemical distribution across the site, it was concluded that arsenic, chromium, cobalt, manganese, and selenium are not site related. If only the site-related COPCs are considered,

the cumulative cancer risk is 6E-06, and the total non-cancer HI is 1. The cumulative cancer risk for site-related constituents is less than the target value of 5E-05. Only the neurological HI is greater than target value of 0.5. This HI is due entirely to mercury in groundwater and is based on the maximum mercury concentration reported for the 2011 samples and the assumption that mercury is in the elemental form. As described in Section 5.4.3.2, it is overly conservative to assume that the hypothetical future resident will be exposed to the maximum detection for the entire exposure duration. By pooling the 2008 and 2011 datasets, which show mercury detections of similar magnitude, there are enough detections to allow calculation of a 95 percent UCL. If the 95 percent UCL is used as the EPC, the neurological HI decreases to 0.3. Based on this more realistic risk estimate provided by the mercury 95 percent UCL, this metal does not pose a potential health threat to the hypothetical future resident. In addition, if mercury were in the form of mercuric chloride, it would not be identified as a COPC.

A quantitative risk assessment was performed for the construction worker. The non-cancer HI, 0.02, and the cancer risk, 5E-08, are less than the target values. No potential threat was identified for the future construction worker exposed to site groundwater.

Based on the HHRA, site-related groundwater constituents do not pose a threat to the hypothetical future on-site resident, which is the most conservative potential receptor for this site, or the construction worker. Accordingly, a CERCLA response action is not required, and it is recommended that Felker Airfield Tank Farm be administratively moved to the VDEQ petroleum program.

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FIGURES

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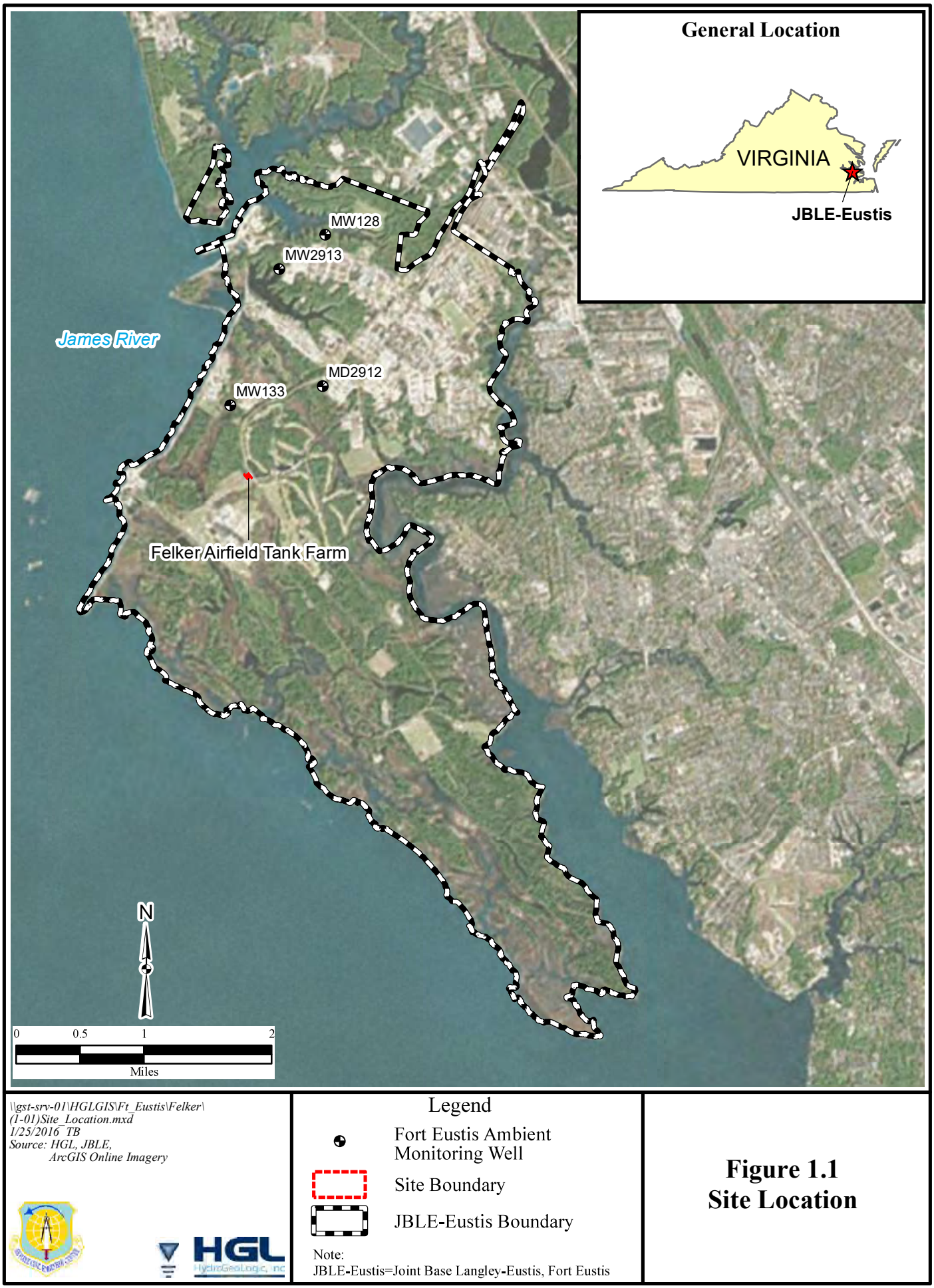

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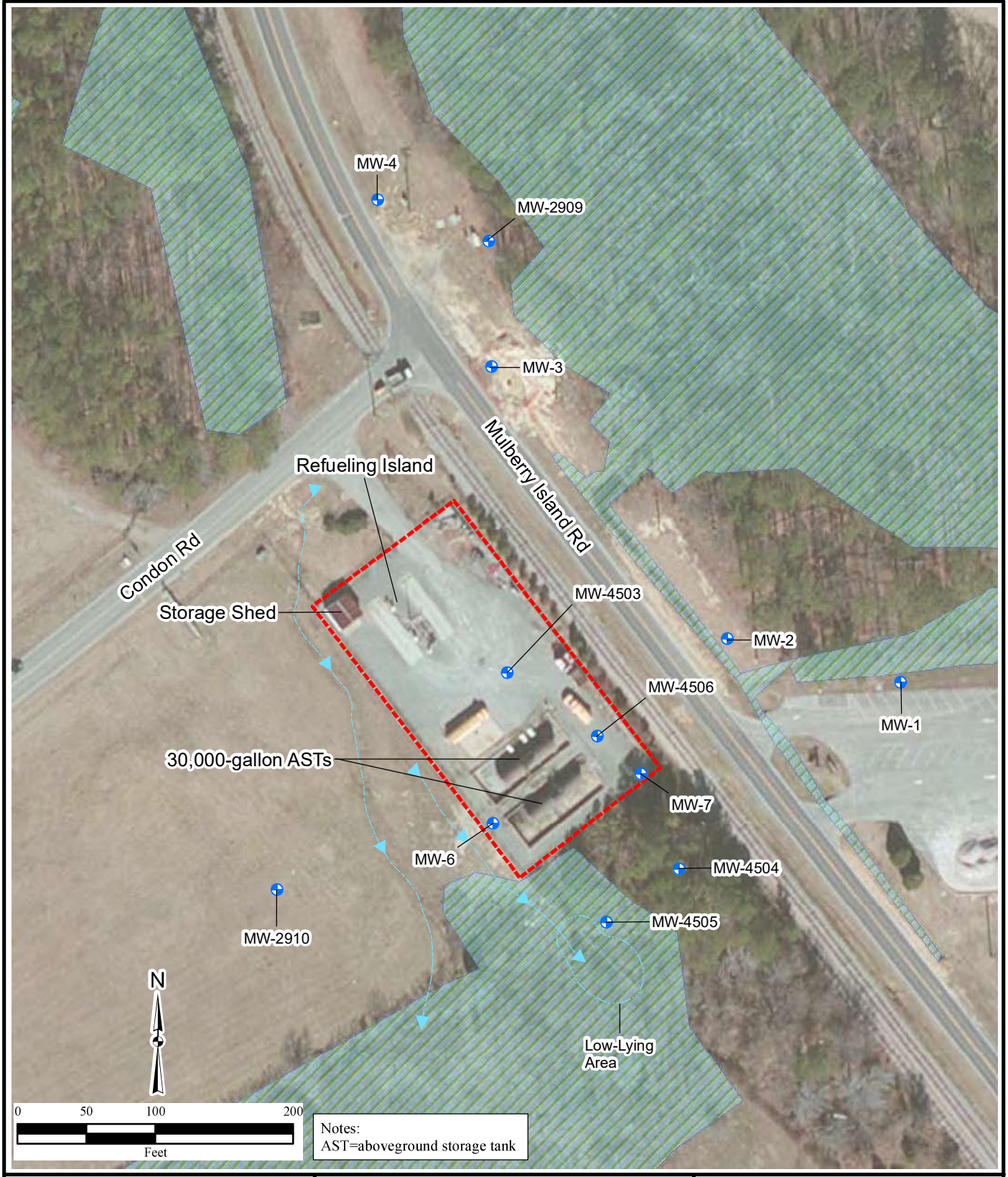
Legend

- Fort Eustis Ambient Monitoring Well
- Site Boundary
- JBLE-Eustis Boundary

Note:
JBLE-Eustis=Joint Base Langley-Eustis, Fort Eustis

Figure 1.1
Site Location



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Legend

- Monitoring Well
- Felker Airfield Tank Farm
- Drainage with Direction of Flow
- Wetland

Figure 1.2
Site Layout

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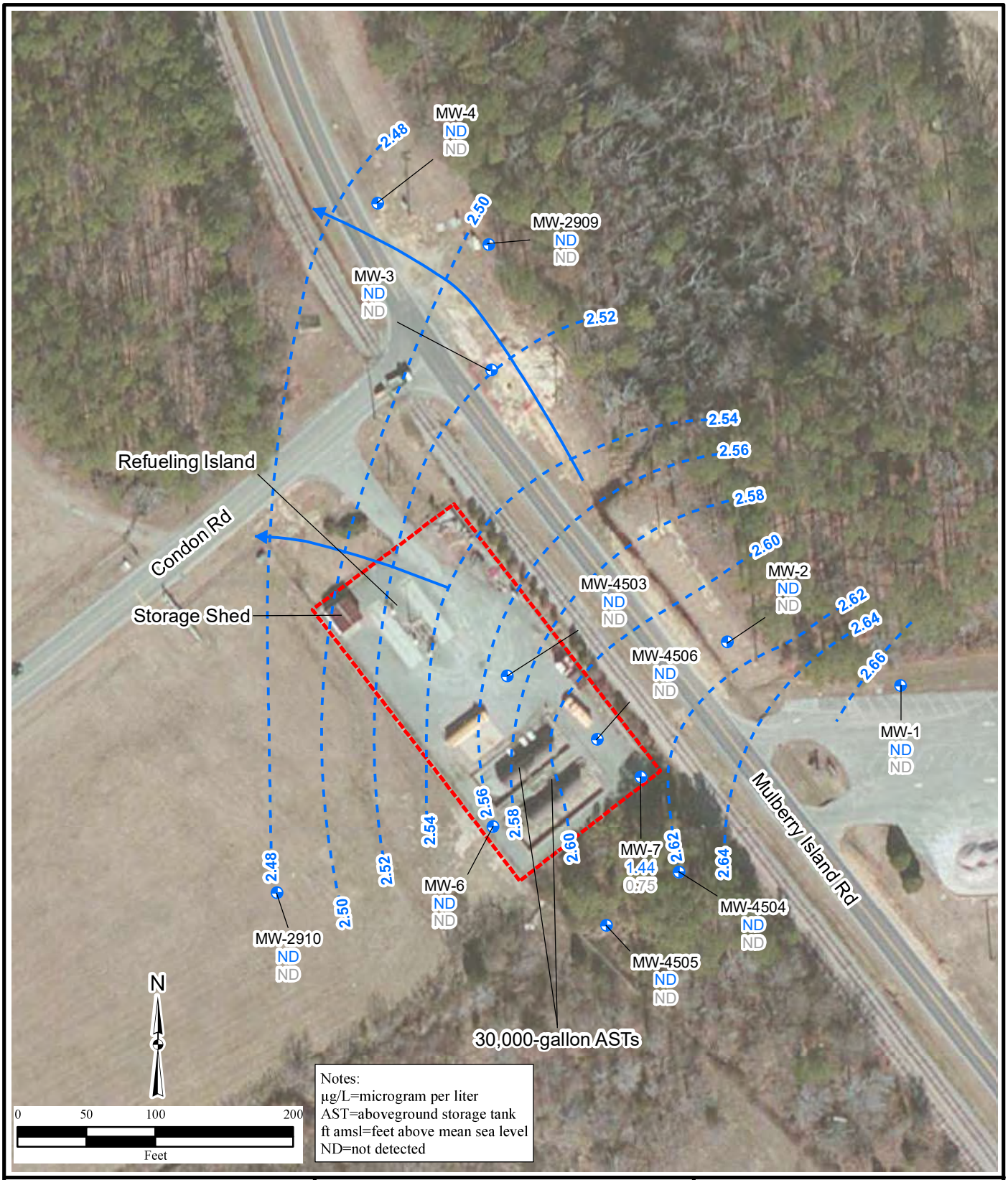
Source: HGL, JBLE, ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 2.61 — Well ID, Groundwater Elevation
- Groundwater Flow Direction
- 2.48 — Inferred Groundwater Elevation Contour (ft amsl)

Figure 2.1
Groundwater Potentiometric Surface Map



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ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 Well ID
- 1.44 2011 Data
- 0.75 2008 Data
- Groundwater Flow Direction
- 2.48 Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.1
Benzene Concentration in Groundwater (µg/L)

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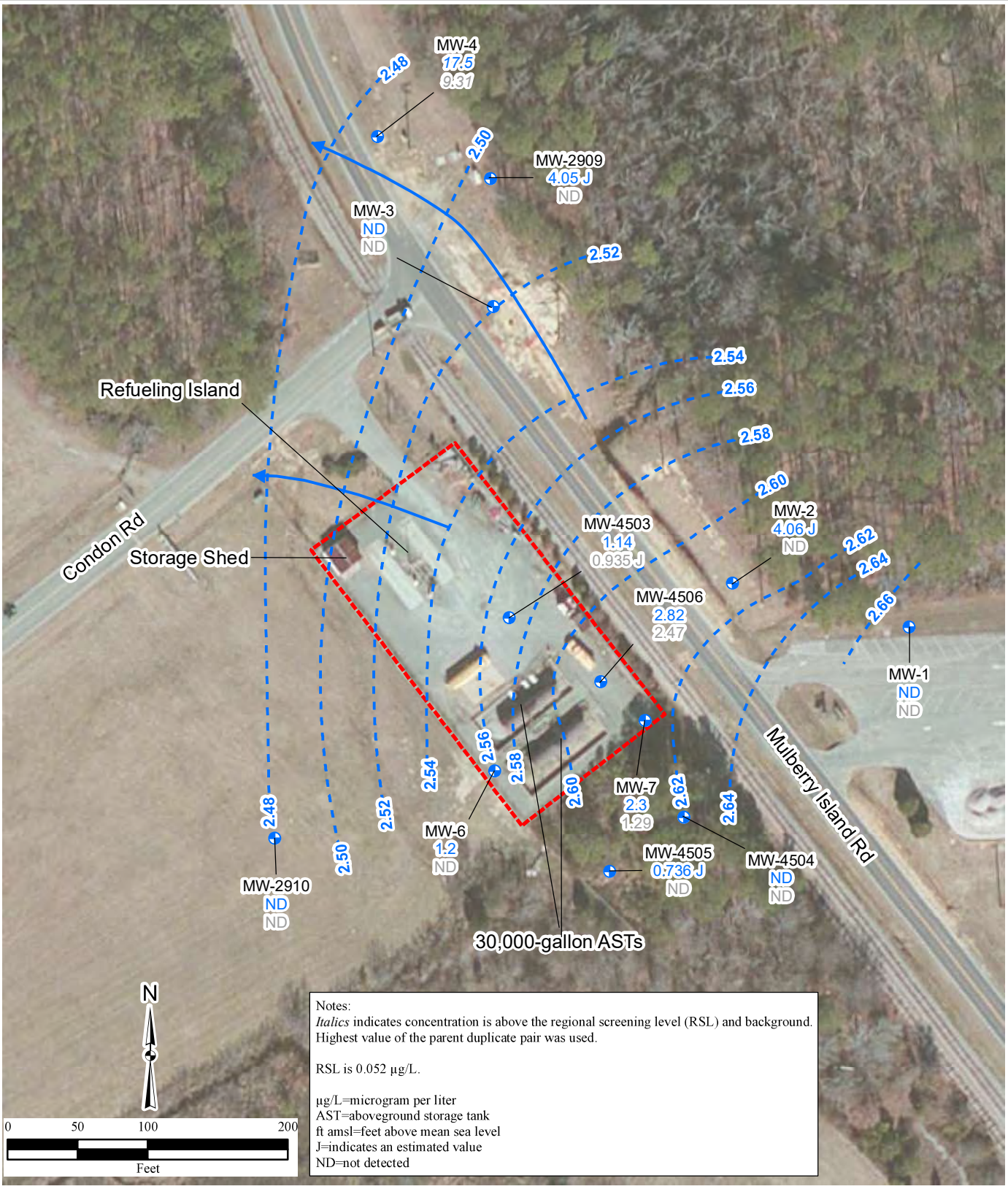
Source: HGL, JBLE,
ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 Well ID
- 1.44 2011 Data
- 0.75 2008 Data
- Groundwater Flow Direction
- 2.48 Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.2
Chloroform Concentration in Groundwater (µg/L)



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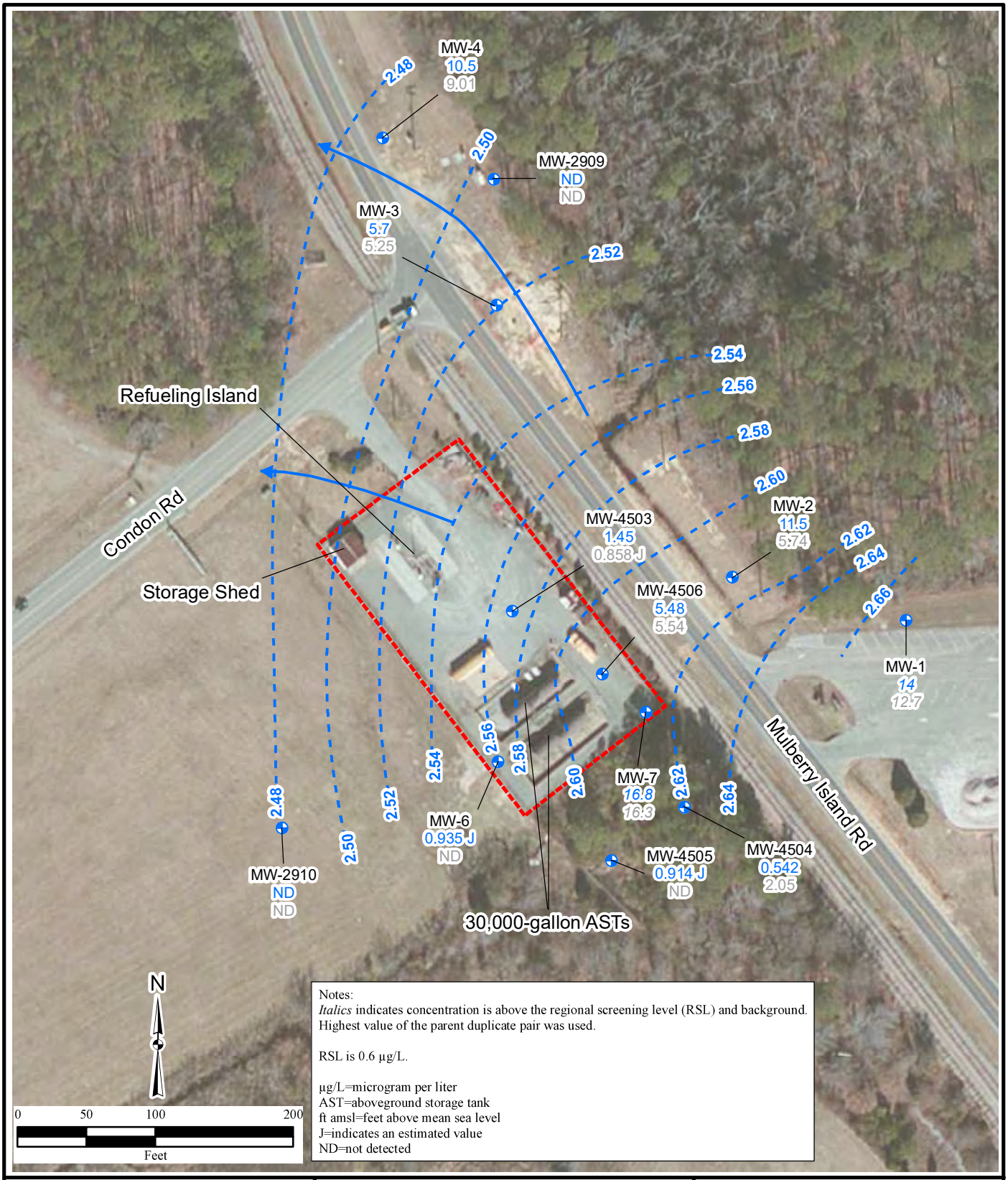
Source: HGL, JBLE, ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 — Well ID
- 1.44 — Total Arsenic
- 0.75 — Dissolved Arsenic
- Groundwater Flow Direction
- – 2.48 – Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.3
Arsenic Concentration in Groundwater (µg/L) 2011



Notes:
Italics indicates concentration is above the regional screening level (RSL) and background.
Highest value of the parent duplicate pair was used.

RSL is 0.6 µg/L.

µg/L=microgram per liter
AST=aboveground storage tank
ft amsl=feet above mean sea level
J=indicates an estimated value
ND=not detected

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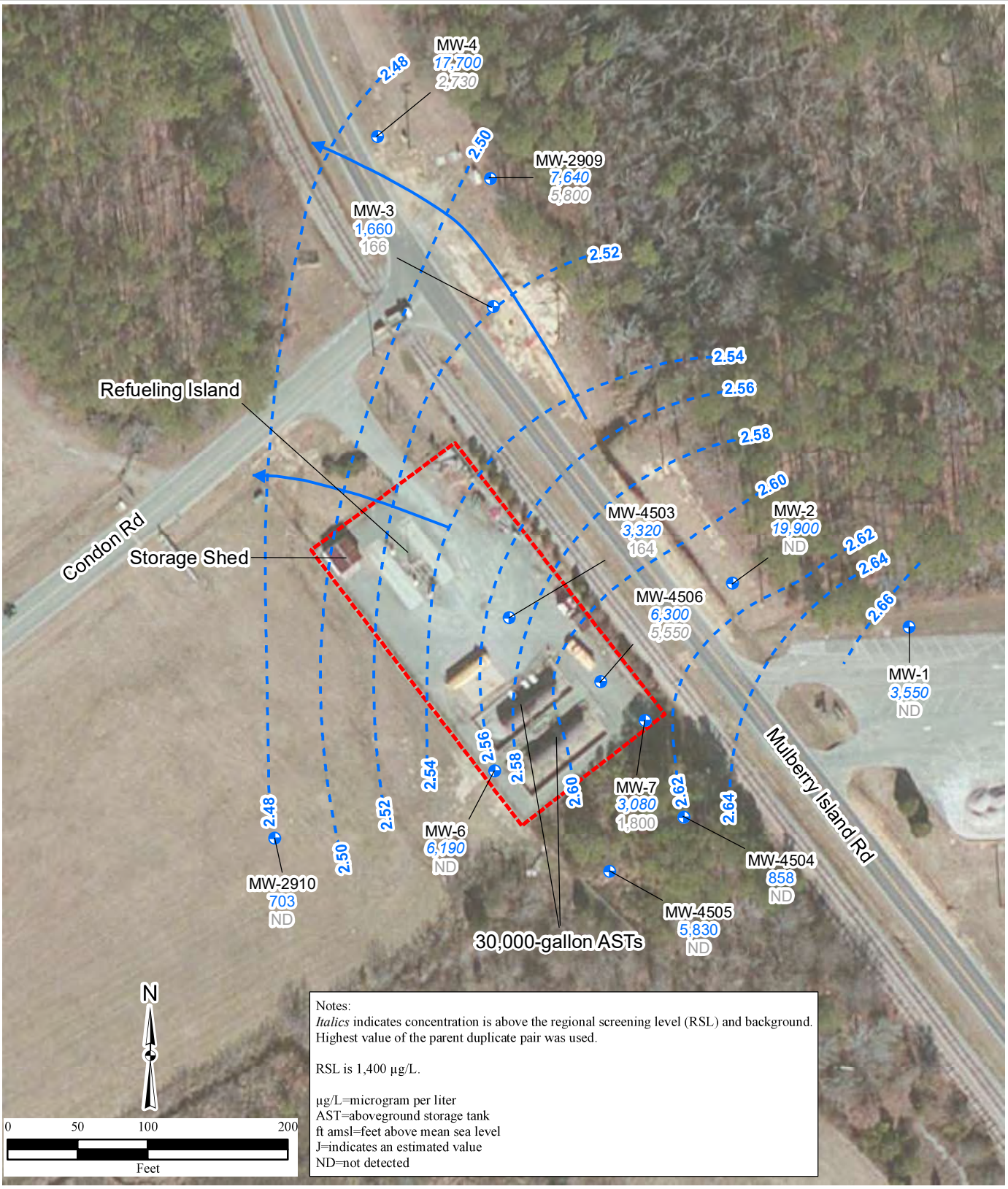
Source: HGL, JBLE, ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 Well ID
- 1.44 Total Cobalt
- 0.75 Dissolved Cobalt
- Groundwater Flow Direction
- – 2.48 – Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.4
Cobalt Concentration in Groundwater (µg/L) 2011



Notes:
Italics indicates concentration is above the regional screening level (RSL) and background.
Highest value of the parent duplicate pair was used.

RSL is 1,400 µg/L.

µg/L=microgram per liter
AST=aboveground storage tank
ft amsl=feet above mean sea level
J=indicates an estimated value
ND=not detected

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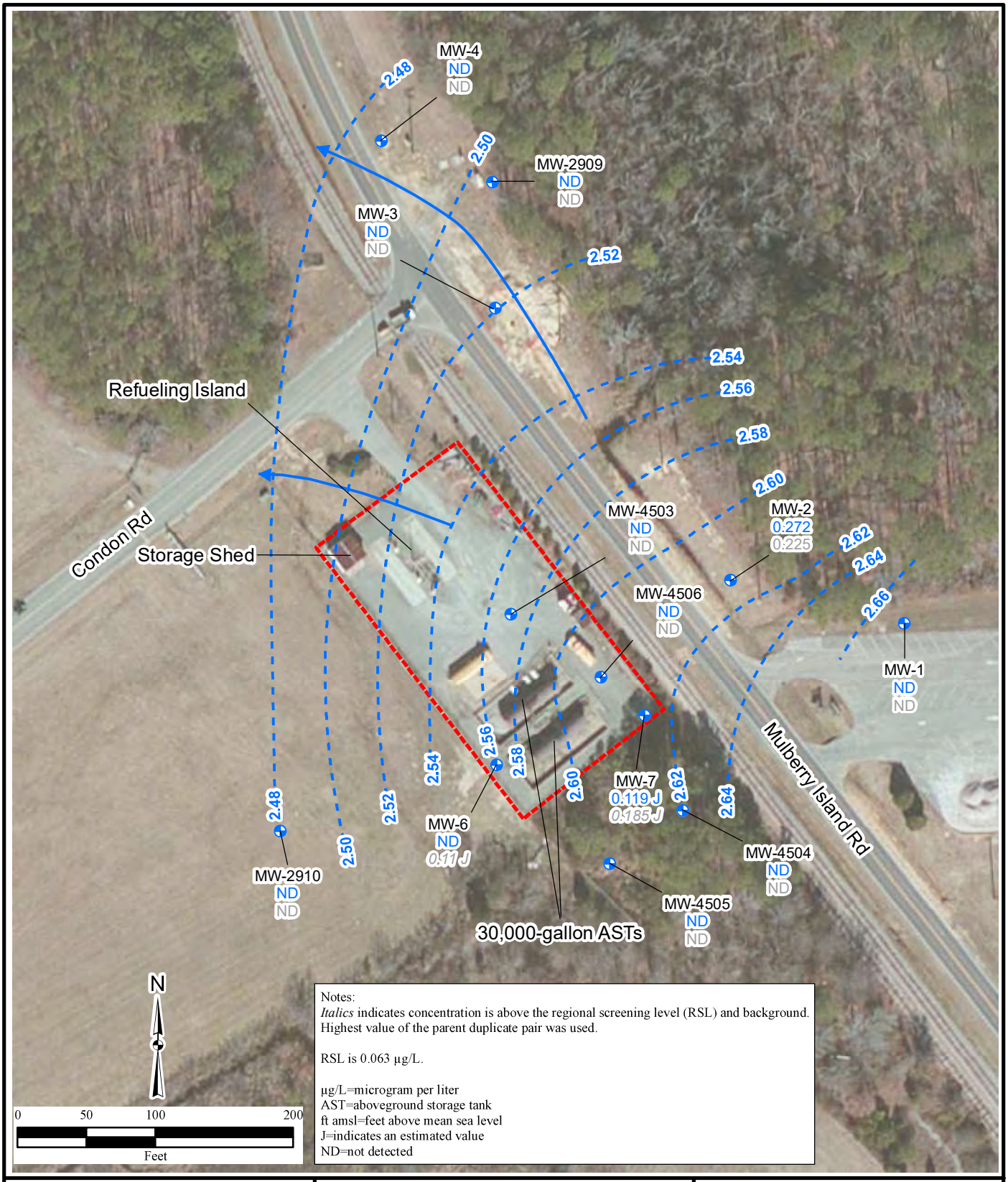
Source: HGL, JBLE, ArcGIS Online Imagery

Legend

- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 Well ID
- 1.44 Total Iron
- 0.75 Dissolved Iron
- Groundwater Flow Direction
- – 2.48 – Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.5
Iron Concentration in Groundwater (µg/L) 2011



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1/25/2016 TB
Source: HGL, JBLE,
ArcGIS Online Imagery

Legend

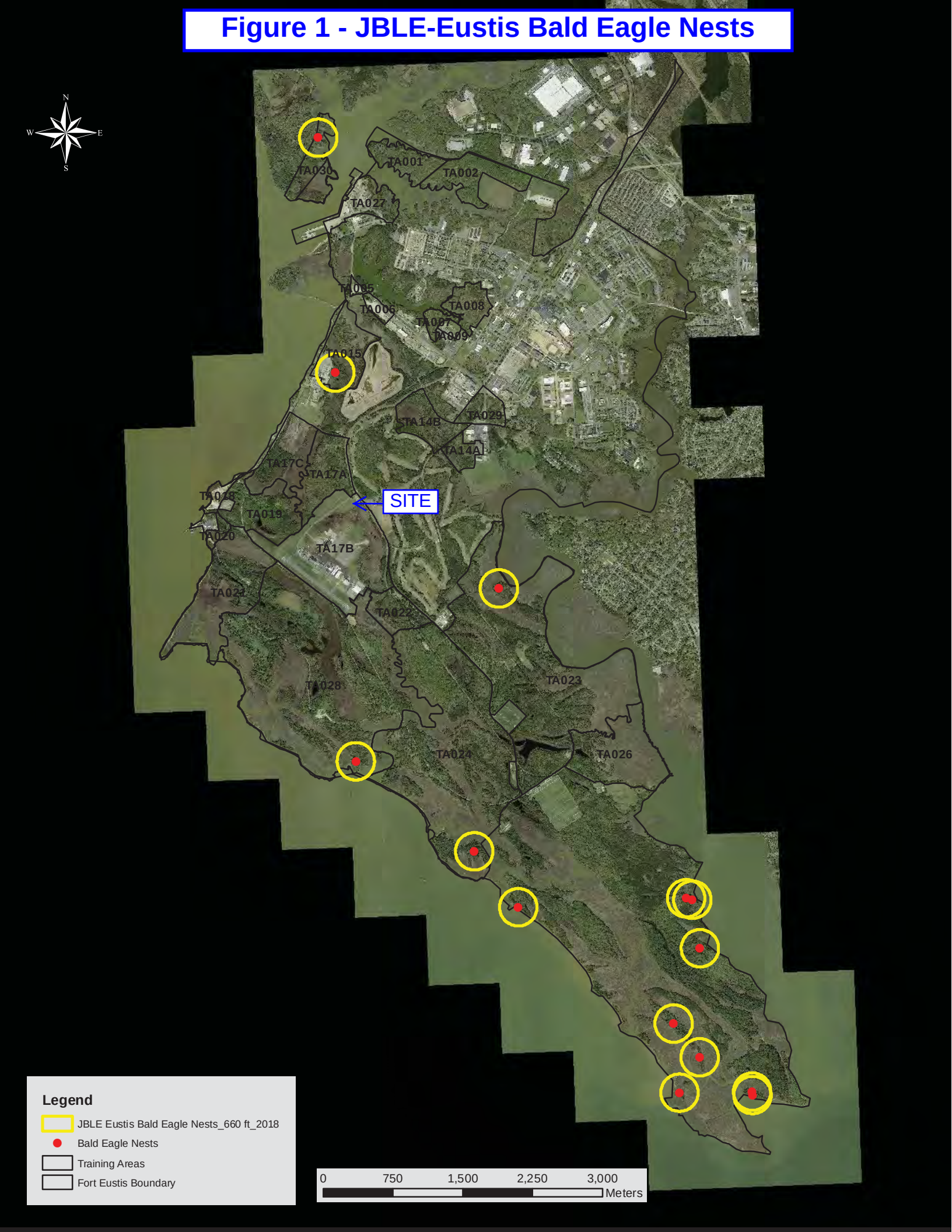
- Monitoring Well
- Felker Airfield Tank Farm
- MW-7 Well ID
- 1.44 Total Mercury
- 0.75 Dissolved Mercury
- Groundwater Flow Direction
- – 2.48 – Inferred Groundwater Elevation Contour (ft amsl)

Figure 4.6
Mercury Concentration in Groundwater (µg/L) 2011

APPENDIX F

Biological Resources

Figure 1 - JBLE-Eustis Bald Eagle Nests



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
http://www.fws.gov/northeast/virginiafield/

In Reply Refer To: January 10, 2020
Consultation Code: 05E2VA00-2020-SLI-1398
Event Code: 05E2VA00-2020-E-03858
Project Name: Ft. Eustis

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered

species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

Project Summary

Consultation Code: 05E2VA00-2020-SLI-1398

Event Code: 05E2VA00-2020-E-03858

Project Name: Ft. Eustis

Project Type: COMMUNICATIONS TOWER

Project Description: Proposed 133-Foot Monopole Telecommunications Structure

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/37.140504969446226N76.6041513874159W

Counties: Newport News, VA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

APPENDIX G

Cultural Resources

The VDHR concurs with the Air Force's determination that no historic properties in the area of potential effect of this undertaking.

Project Reference: FE2019.001 – Cell Tower at Felker Army Airfield

6 Dec 19

Signature/Date

2019-0678

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, 733d MISSION SUPPORT GROUP
JOINT BASE LANGLEY-EUSTIS
FORT EUSTIS, VIRGINIA

Civil Engineering Division

23 October 2019

Mr. Marc Holma
Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Dear Mr. Holma,

Municipal Communications, LLC is proposing to construct a 133-foot tall (overall height) monopole telecommunications structure at Joint Base Langley-Eustis, Virginia. To take into account various environmental concerns, the Air Force is engaging early with the appropriate resource and regulatory agencies as it formulates the undertaking. The Air Force is also preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate potential environmental impacts associated with the 133-foot tall (overall height) monopole telecommunications structure.

In accordance with Section 306108 of the National Historic Preservation Act (NHPA) and its implementing regulations at 36 CFR Part 800, the Air Force, Joint Base Langley-Eustis, is advising you of a proposed undertaking that has the potential to affect historic properties.

Municipal Communications, LLC is proposing to construct a telecommunications facility consisting of a 133-foot tall (overall height) monopole telecommunications structure and associated ground-level support equipment within a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that would be accessible via a 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed facility would be located off Condon Road, Fort Eustis, Virginia. The proposed undertaking would be located within a cleared area and would include 0.4 acres (0.16 hectares) of ground disturbance. The proposed monopole would be situated at an approximate elevation of 6 feet (2 meters) Above Mean Sea Level (AMSL). Photographs of the proposed project area are included.

The Area of Potential Effect (APE) for this undertaking is therefore defined as a ½-mile APE for visual effects and would include the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and the proposed 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The National Park Service identified one historic battlefield (*Battle of Yorktown – 099-5283*), which has been determined eligible for listing on the National Register of Historic Properties (NRHP).

Battle of Yorktown (099-5283) The proposed undertaking would be located within the *Battle of Yorktown* and has been determined eligible for listing on the NRHP. The proposed

undertaking will be located on an existing airfield, Felker Army Airfield, and would not alter the existing viewshed or effect the setting of the *Battle of Yorktown*. Therefore, we recommend a finding of No Effect for the *Battle of Yorktown*. An Archaeological Assessment was conducted within the APE for direct effects. During our database research, we found 46 previously recorded archaeological sites and one survey (Phase I Survey of Fort Eustis) within a 1-mile radius of the subject site, but outside the APE for direct effects.

Pursuant to 36 CFR §800.4(d), the Air Force has determined that no historic properties will be affected by the 133-foot tall (overall height) monopole telecommunications structure. Attached for your review are copies of relevant supporting documents supporting the Air Force's findings and determinations. The supporting documents were developed by Mr. Matthew Beazley of the Environmental Corporation of America. Mr. Beazley's résumé is included.

We request your comment and/or concurrence on the finding of *No Historic Properties Affected*. If we do not receive your comments and/or concurrence within the required 30 days we will assume concurrence and proceed with the undertaking as described.

Please contact Dr. Christopher L. McDaid, Archaeologist, Cultural Resources Manager, at (757) 878-7365 or email christopher.l.mcdaid.civ@mail.mil if you have any questions.

Sincerely,

Donald W. Calder, Jr.
Chief, Environmental Element (CEIE)

Attachments

The VDHR concurs with the Air Force's determination that no historic properties in the area of potential effect of this undertaking.

Project Reference: FE2019.001 – Cell Tower at Felker Army Airfield

_____

Signature/Date

Figure 1: Photographs

A: Northerly View from Near the Center of the Proposed Lease Area

B: Easterly View from Near the Center of the Proposed Lease Area

C: Southerly View from Near the Center of the Proposed Lease Area

D: Westerly View from Near the Center of the Proposed Lease Area

E: Northwesterly Overview of the Proposed Lease

F: Northeasterly Overview of the Proposed Lease Area

G: Northeasterly View of the Proposed Access/Utility Easement

H: Northwesterly View of the Proposed Access/Utility Easement

I: Overview of Shovel Test Pit 1 (STP1)

J: Profile View of STP1

Figure 2: 2018 Aerial Photograph

Figure 3: Site Vicinity Plan

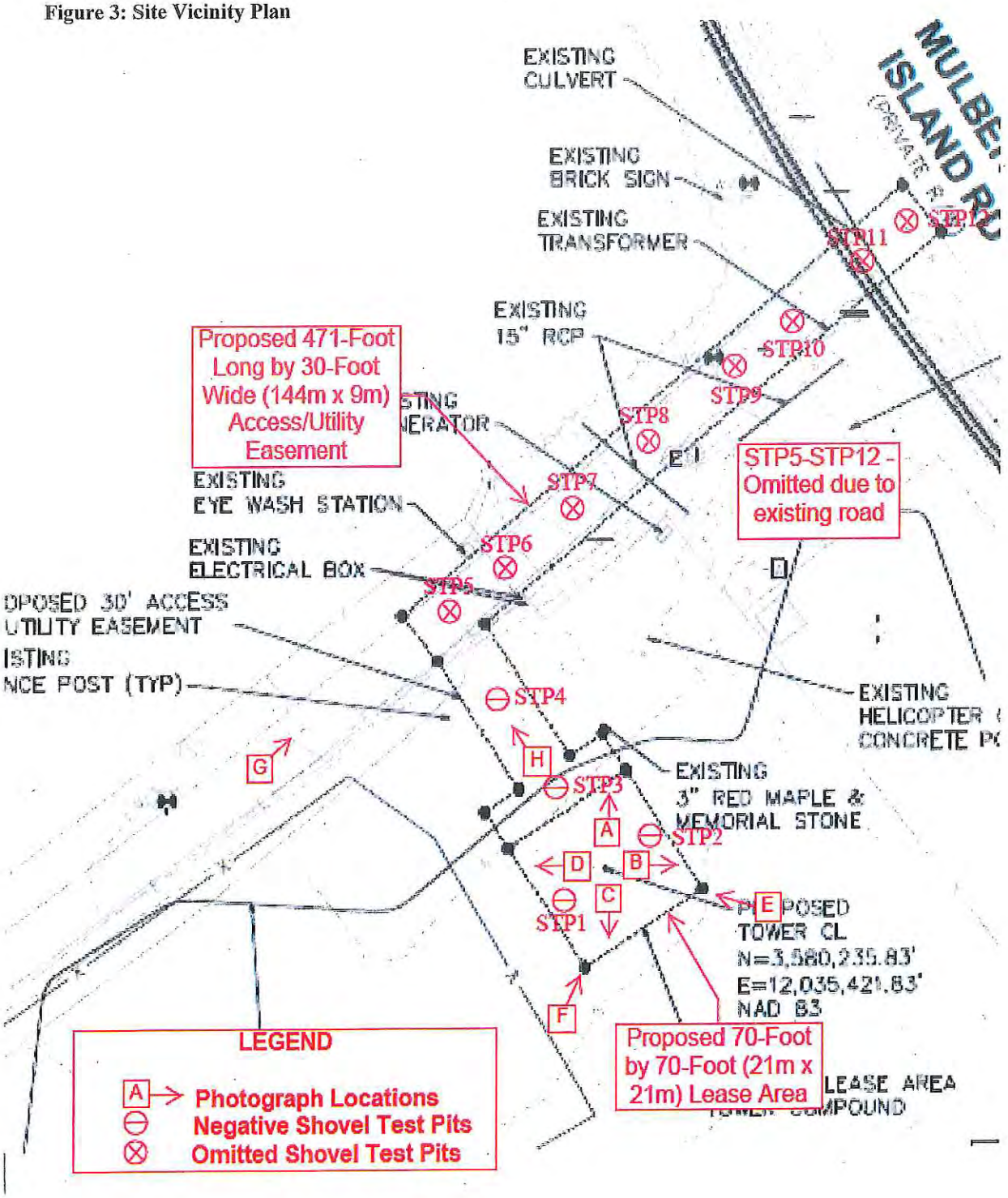
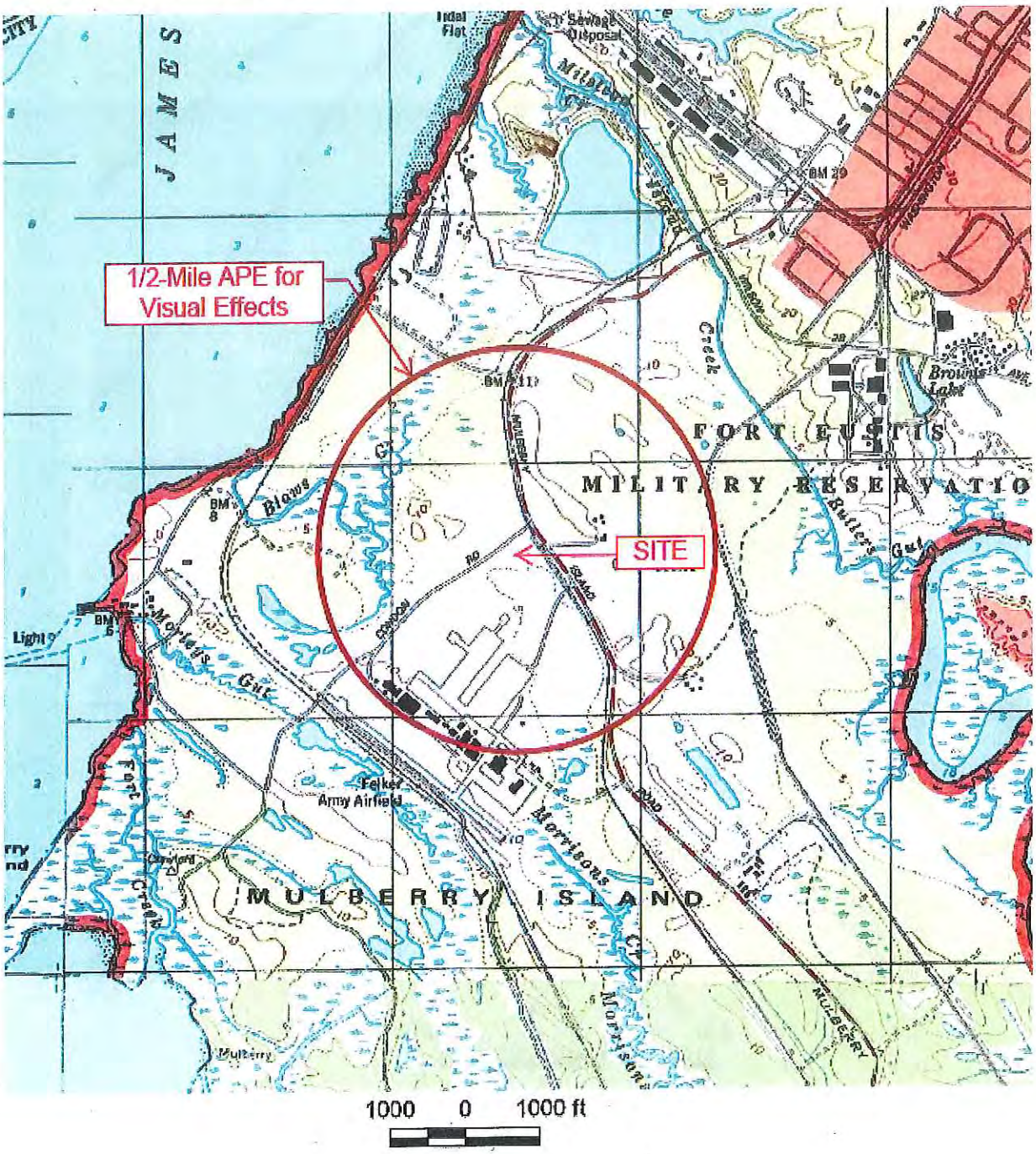


Figure 4: APE for Visual Effects



Source: USGS Topographic Maps, 7.5 Minute Series, *Hog Island, VA (1999), Yorktown, VA (1994), Bacons Castle, VA (1969 photorevised 1992),* and *Mulberry Island, VA (1965 photorevised 1986).*

Figure 5: APE for Direct Effects

Source: USGS Topographic Map, 7.5 Minute Series, *Yorktown, VA (1994)*.

An Archaeoloical Assessment of a Proposed 133-Foot Monopole Telecommunications Facility Newport News, York County, Virginia

Background

The facility would be located off Condon Road, Fort Eustis, Virginia. The purpose of our work was to determine whether any archaeological sites might exist within the project area.

The project area is located within the limits of *Yorktown, VA* (1994) United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, as shown in Figure 5. Figure 3 is a site vicinty plan that shows the site configuration. Figure 2 is a recent aerial photograph (2018) of the site area. The facility would be located in a grassed area, adjacent to Felker Army Airfield, situated at an approximate elevation of approximately 6 feet (2 meters) Above Mean Seal Level (AMSL). The nearest natural surface water is Blows Creek, located approximately 1,600 feet (488 meters) northwest of the project area.

The proposed project area included a 70-foot by 70-foot (21-meter by 21-meter) lease area and a proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. The proposed lease area and access/utility easement are located within a grassed and paved area. The proposed undertaking would include an approximate 133-foot (overall height) monopole telecommunications structure within the propsed lease area. The proposed telecommunications facility would be accessbile via a proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement that traverses in a southwesterly over a paved area and then in a southeasterly direction over a grassed area before reaching the proposed lease area. The center of the proposed telecommunications facility would be located at approximately N 37° 8' 25.6" W 76° 36' 15.7" (UTM 18N 357508E 4111657N). Photographs of the project area are provided in Figure 1. Descriptions of the photographs are provided underneath each photograph.

The subject site is located within the Coastal Plain Physiographic Province of Virginia which extended 110 miles inland from the coast. The Coastal Plain region is the only region in Virginia that is composed mostly of unconsolidated deposits, primarily alternating layers of sand, gravel, shell rock, silt, and clay. More ground water is store in these very permeable materials than in any other province in Virginia. According to the USDA Web Soil Survey, soils found at the Property are Urbanland (27). Descriptions of the dominant mapped soil types are displayed below.

Table 1: Mapped Soil Types

Mapped Soil Types	Soil Series Descriptions	Known Subsoil	Typical Subsoil Depth Below Surface
Urbanland	Consists of soils that have been extensively cut or filled as a result of	Unknown	Unknown

	human development activities		

The Area of Potential Effect (APE) is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist" (FCC 2005). For purposed of this work, the APE for direct effects is the actual physical impact area. The important area includes the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area, and approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utiity easement, and all of the immediate adjacent areas.

Literature and Documents Search

National Register of Historic Places (NRHP)

The NRHP is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the NRHP is part of a national program to coordinate and support public and private effors to identifiy, evaluate, and protect historic and archaeological resources. Properties listed in the NRHP include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. The National Park Service, which is part of the U.S. Department of the Interior, administers the NRHP. A review of the NRHP to determine whether any Historic Properties were located within a ½-mile radius of the project site. The search revealed no NRHP properties within a ½-miles radius of the project site (NRIS 2017).

Virginia Department of Historic Resources

The Virginia Department of Historic Resources Data Sharing System (VADHR V-CRIS) contains the database records of known arhchaeological sites, architectural structures, and historic districts. The VADHR V-CRIS has architectural and archaeological survey forms and survey forms for any known sites within the research area. VADHR V-CRIS was reviewed to determine whether any listed archaeolgocial sites were located within a 1-mile radius of the subject site. Forty-six archaeological sites and one survey (Phase I Survey of Fort Eustis) were identified within 1 mile of the proposed undertaking.

Table 2: Archaeological Sites Within 1-Mile APE

Site	Period(s)	Notes	NRHP Status
44NN0013	Middle Woodland	Camp	Eligible
44NN0028	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0029	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0086	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0087	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0089	19th c.	Located on C.H. Worrett's 1861 map of southeastern Virginia	Not Evaluated
44NN0102	Early Woodland	Recommended NRHP eligible by investigator	Not Evaluated
44NN0119	Early 20th c.	Recommended NRHP eligible by investigator	Not Evaluated
44NN0120	Early Woodland	Portion of site has been destroyed	Not Evaluated
44NN0121	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Recommended ineligible by investigator	Not Evaluated
44NN0122	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0123	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0124	Prehistoric and Historic	Recommended ineligible by investigator	Not Evaluated
44NN0147	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0148	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Eligible

Site	Period(s)	Notes	NRHP Status
44NN0162	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Portion of site has been destroyed	Not Evaluated
44NN0163	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0166	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0167	20th c.	Portion of site has been destroyed	Not Evaluated
44NN0168	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0184	Civil War	Recommended ineligible by investigator	Not Evaluated
44NN0186	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0187	Late 19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0188	18th c.	Site is undeveloped	Eligible
44NN0189	Late 19th and Early 20th c.	Site is undeveloped	Not Evaluated
44NN0190	18th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0191	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0192	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0193	18th c.	Site is undeveloped	Not Evaluated
44NN0194	Late 18th and 19th c.	Site is undeveloped	Not Evaluated
44NN0195	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0196	Early 19th c.	Site is undeveloped	Not Eligible
44NN0197	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0198	Unknown	Site is undeveloped	Not Evaluated
44NN0199	Early 19th c.	Site is undeveloped	Not Evaluated
44NN0202	19th and Early 20th c.	Recommended eligible by investigator	Not Evaluated
44NN0203	19th c.	Site is undeveloped	Not Evaluated
44NN0204	Late 19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0205	18th c.	Site is undeveloped	Not Evaluated
44NN0206	Late 18th c.	Portion of site has been destroyed	Not Evaluated
44NN0207	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0318	18th c.	75-99% of site has been destroyed	Not Evaluated
44NN0319	19th c.	Cemetery	Not Evaluated
44NN0321	19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0341	18th to Early 20th c.	Recommended ineligible by investigator	Not Eligible
44NN0355	Middle Woodland		Not Evaluated
44NN0013	Middle Woodland	Camp	Eligible
44NN0028	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0029	19th – 20th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0086	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0087	18th c.	Located on Alexanders Berthier's 1781 map of James York peninsula	Not Evaluated
44NN0089	19th c.	Located on C.H. Worrett's 1861 map of southeastern Virginia	Not Evaluated
44NN0102	Early Woodland	Recommended NRHP eligible by investigator	Not Evaluated
44NN0119	Early 20th c.	Recommended NRHP eligible by investigator	Not Evaluated
44NN0120	Early Woodland	Portion of site has been destroyed	Not Evaluated
44NN0121	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Recommended ineligible by investigator	Not Evaluated
44NN0122	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0123	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0124	Prehistoric and Historic	Recommended ineligible by investigator	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0147	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0148	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Eligible
44NN0162	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Portion of site has been destroyed	Not Evaluated
44NN0163	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0166	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0167	20th c.	Portion of site has been destroyed	Not Evaluated
44NN0168	19th – 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0184	Civil War	Recommended ineligible by investigator	Not Evaluated
44NN0186	Late 19th c.	Portion of site has been destroyed	Not Evaluated
44NN0187	Late 19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0188	18th c.	Site is undeveloped	Eligible
44NN0189	Late 19th and Early 20th c.	Site is undeveloped	Not Evaluated
44NN0190	18th and Early 20th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0191	19th c.	Portion of site has been destroyed	Not Evaluated
44NN0192	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0193	18th c.	Site is undeveloped	Not Evaluated
44NN0194	Late 18th and 19th c.	Site is undeveloped	Not Evaluated
44NN0195	Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0196	Early 19th c.	Site is undeveloped	Not Eligible
44NN0197	Early Woodland, Middle Woodland, and Late Woodland	Site is undeveloped	Not Evaluated
44NN0198	Unknown	Site is undeveloped	Not Evaluated
44NN0199	Early 19th c.	Site is undeveloped	Not Evaluated
44NN0202	19th and Early 20th c.	Recommended eligible by investigator	Not Evaluated
44NN0203	19th c.	Site is undeveloped	Not Evaluated
44NN0204	Late 19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0205	18th c.	Site is undeveloped	Not Evaluated
44NN0206	Late 18th c.	Portion of site has been destroyed	Not Evaluated

Site	Period(s)	Notes	NRHP Status
44NN0207	19th and Early 20th c.	Portion of site has been destroyed	Not Evaluated
44NN0318	18th c.	75-99% of site has been destroyed	Not Evaluated
44NN0319	19th c.	Cemetery	Not Evaluated
44NN0321	19th c.	Recommended ineligible by investigator	Not Evaluated
44NN0341	18th to Early 20th c.	Recommended ineligible by investigator	Not Eligible
44NN0355	Middle Woodland		Not Evaluated

Table 3: Archaeological Surveys Within 1-Mile APE

Survey Title	Survey Author	Survey Date
Phase I Archaeological Survey of Fort Eustis	Harding Polk III and Antony F. Opperman	1989

In general, most site location models include distance to a permanent water source as a major factor in determining the existence of archaeological sites and also the density of such sitse. There is a higher probablility of encountering a prehistoric archaeological site the closer one is to a source of fresh water with the distances varying depending on topography and difficulty of access. As a result, there are a greater number of prehistoric sites located near streams and natural freshwater lakes. Additionally, there is a greater density of Woodland Period sites, as opposed to Archaic or Paleo-Indian Period sites, near streams due to their greater reliance on horticulture and aquatic resources. Due to the historic ability of excavation wells, historic period sites, in rural areas, can be found equally distributed across the uplands as well as within valleys. Based on the current and past land use, topography, and historic aerial photographs, we believe there is a moderate probabilty for encountering undistrubed archaeological artifacts or features within the proposed project's APE for direct effects.

Field Conditions

The project area consists of a proposed 70-foot by 70-foot (21-meter by 21-meter) lease area that is occupied by grassed area. The proposed lease area would be accessed via approximate 471-foot long by 30-foot (144-meter by 9-meter) access/utility easement which would originate from Mulberry Island Road and continue southwesterly and then in a southeasterly direction over a grassed area before reaching the proposed lease area.

The proposed lease area and a majority of the proposed access/utility easement is an existing paved road. The remaining portion of the propsed access/utility easement would pass through a grassed area. The

nearest natural surface water is Blows Creek, located approximately 1,600 feet (488 meters) northwest of the project area. Ground surface visibility within the proposed lease area and access/utility easeemnt were approximately 0% due to vegetative cover.

Field Methods

The methodology for the Phase I intensive field survey for this project was determined by the professional opinions and experience of our principal and staff archaeologists, applicable SHPO guidelines, and applicable Tribal guidelines. The survey was performed by Matt Beazley, MA, Principal Archaeologist of ECA on February 20, 2019. Approximately three hours of field time were recorded for the Phase I intensive field survey.

A pedestrian survey was conducted over the project site by visual inspection of exposed ground surfaces throughout the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area, the proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement, and all of the immediately adjacent areas. Visual inspections were conducted at approximately 16-foot (5-meter) intervals.

During to the site visit, two shovel tests were excavated within the proposed 70-foot 70-foot (21-meter by 21-meter) lease area, and ten shovel tests were excavated within the proposed approximate 471-foot long by 30-foot (144-meter by 9-meter) access/utility easement was determined to be an adequate representative sampling of the project area.

All shovel test pits measured a minimum of 16 inches by 16 inches (41 cm by 41 cm). All shovel test pits were excavated at 50-foot (15-meter) intervals. The locations of the shovel tests are shown on Figure 3. All excavated soils were screened through a six-milimeter wire mesh archaeology screen to isolate any cultural artifacts. Shovel test pits are terminated when one of the following four conditions are met: a depth of 36 inches (91 cm) is reached, or until sterile subsoil, bedrock, or the water table is encountered.

Field Survey Results

Two shovel tests pits (STP) within the proposed 70-foot by 70-foot (21-meter by 21-meter) lease area and two shovel tests within the proposed approximate 471-foot long by 30-foot wide (144-meter by 9-meter) access/utility easement. However, eight shovel tests pits were omitted due to an existing paved road. Shovel test dimension measurements and soil characteristics are listed in the table below.

Table 3: Shovel Test Pit Results

Shovel Test Pit (STP)	STP Width/Length	Munsell Color/Texture	Average Depths Between	
			Inches	CM
STP1	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-11	0-28
		10YR 5/6 (yellowish brown) clay loam	11-18	28-46
STP2	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-10	0-25
		10YR 5/6 (yellowish brown) clay loam	10-18	25-46
STP3	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam	0-6	0-15
		10YR 5/6 (yellowish brown) clay loam	6-16	15-41
STP4	16"x16" (41cm x 41cm)	10YR 5/2 (grayish brown) mottled with 10YR 5/6 (yellowish brown) and 10YR 6/1 (gray) clay loam with gravel mixed in	0-11	0-28
		10YR 5/6 (yellowish brown) clay loam	11-18	28-46

During the pedestrian survey, no archaeological sites or cultural artifacts were identified. No archaeological sites or cultural artifacts were identified during subsurface investigations. Shovel test pits matched the general range of characteristics of the mapped soil series for the project area.

Laboratory Methods and Collection Curation

Since no archaeological sites were identified, curation is not appicable to this work.

Summary of Findings and Recommendations

During the course of this archaeological assessment, no sites, either historic or prehistoric, were identified within the APE for direct effects. We believe that no arhcaeological resources would be affected by the proposed project. Therefore, we recommend a finding of No Effect for the proposed undertaking as it relates to archaeology. We request your concurrence with our finding. Please contact our office with questions or comments or if additional information is required.

Bibliography

Google Earth
2018 Aerial Photographs

Natural Register Information System (NRIS)
2017 National Register of Historic Places
http://www.nps.gov/nr/

Opperman, Antony F., and Harding Polk III
1989 Phase I Archaeological Survey of Fort Eustis

United States Department of Agriculture (USDA)
2016 Web Soil Survey
http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

United States Geological Survey USGS
(1969 photorevised 1992), *Bacons Castle, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

United States Geological Survey USGS
(1999), *Hog Island, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

United States Geological Survey USGS
(1965 photorevised 1896), *Mulberry Island, VA* Quadrangle Map, 7.5 minute series
U.S. Geological Survey, Washington DC

Virginia Department of Historic Resources
<https://vcris.dhr.virginia.gov/vcris/>

APPENDIX H

Notice of Availability

PUBLIC NOTICE

NOTICE OF AVAILABILITY
DRAFT ENVIRONMENTAL ASSESSMENT AND
PROPOSED FINDING OF NO SIGNIFICANT IMPACT
FOR A 133-FOOT MONOPOLE TELECOMMUNICATIONS STRUCTURE
JOINT BASE LANGLEY-EUSTIS, VIRGINIA

An Environmental Assessment (EA) has been prepared to analyze the impacts of a telecommunications structure located at Joint Base Langley-Eustis (JBLE-Eustis), Fort Eustis, Virginia. The purpose of this project is to provide needed wireless services objectives and satisfy the Unified Facilities Criteria (UFC) 3-535-01 for an airfield beacon.

The EA, prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations, and Air Force instructions implementing NEPA; evaluates potential impacts of the alternative actions on the environment including the No-action Alternative. Based on this analysis, the Air Force has prepared a proposed Finding of No Significant Impact (FONSI).

Selection standards (Standard 1 – Proximity to built infrastructure; Standard 2 – Conformance with land use planning/zoning and airfield operations; Standard 3 – Placement away from known environmental, natural and cultural resource sensitive areas; Standard 4 – Maintain/improve the quality of life enjoyed by personnel and dependents on and nearby JBLE-Eustis; Standard 5 – Suitability for airfield beacon) were considered with five alternative locations (Alternative 1 – Located off Condon Road adjacent to Felker Army Airfield (Preferred Alternative), Alternative 2 0 Located behind Building 2115 off Wilson Avenue, Alternative 3 – Located behind Building 3310 off Meyer Road, Alternative 4 – Located behind Building 1499, Alternative 5 – Located off Klingenhagen Road, and “No-Action” Alternative). Alternative 1 would meet Standards 1-5. Alternative 2 would not meet Standards 2, 4, and 5. Alternative 3 would not meet Standards 2 and 3. Alternative 4 would not meet Standards 2, 3, and 5. Alternative 5 would not meet Standard 5. The “No-Action” Alternative would not provide cellular coverage to areas south of the cantonment area and airfield, and would not satisfy the UFC for the existing airfield beacon.

The telecommunications structure and airfield beacon are subject to requirements and objectives of 11988 *Floodplain Management*, as it is located within a Special Flood Hazard Area. The area to be disturbed during construction activities would be 0.44 acres of Federal Emergency Management Act 100-year floodplain. The proposed action would not contribute to any measurable loss with regard to flood control capacity. The telecommunications structure would not be located within wetlands, therefore the proposed action would not impact wetlands or waters under the jurisdiction of the U.S.

This notice is being issued to all interested parties in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code 4321, et seq.), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and the Air Force Environmental Impact Analysis Process (32 CFR Part 989).

An electronic version of the Draft FONSI/FONPA and EA, as well as supporting Environmental Impact Analysis Process (EIAP) documentation, dated April 3, 2020, are available for public

review in the Public Notices section of the JBLE-Eustis Environmental web page at: https://www.jble.af.mil/Units/Army/Eustis-Enviromental/.

You are encouraged to submit written comments through October 19, 2020. Written comments should be provided to 733 CED/CEIE, 1407 Washington Boulevard, JBLE-Eustis, Virginia 23604. Email comments may be sent to: USAF.jble.733-msg.list.ced-ee-p2-procurement@mail.mil.

This is a revised notice of availability originally published in the Daily Press on April 5, 2020 and April 6, 2020. If you have any questions, please contact 757-878-7375.

PRIVACY ADVISORY NOTICE

Public comments on this Draft EA are requested pursuant to NEPA, 42 United States Code 4321, et seq. All written comments received during the comment period will be made available to the public and considered during the final EA preparation. Providing private address information with your comment is voluntary and such personal information will be kept confidential unless release is required by law. However, address information will be used to compile the project mailing list and failure to provide it will result in your name not being included on the mailing list.

VIRGINIA MEDIA

Sold To:
Environmental Corporation of America - CU00353272
1375 Union Hill Industrial Ct Ste A
Alpharetta, GA 30004

Bill To:
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1375 Union Hill Industrial Ct Ste A
Alpharetta, GA 30004

Affidavit of Publication

State of Illinois
County of Cook

Order Number: 6648226
Purchase Order:

This day, Amy Houser appeared before me and, after being duly sworn, made oath that:

1) He/she is affidavit clerk of Daily Press, a newspaper published by Daily Press, LLC in the city of Newport News and the state of Virginia
2) That the advertisement hereto annexed has been published in said newspaper on the dates stated below
3) The advertisement has been produced on the websites classifieds.pilotonline.com and https://www.publicnoticevirginia.com

Published on: **Apr 05, 2020; Apr 06, 2020**.

Amy Houser

Subscribed and sworn to before me in my city and state on the day and year aforesaid this 9 day of April, 2020.

My commission expires 11-23-20

Brendan Kolasa

Signature of Notary

BRENDAN KOLASA
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
November 23, 2020

VIRGINIA MEDIA

PUBLIC NOTICE
NOTICE OF AVAILABILITY DRAFT ENVIRONMENTAL ASSESSMENT AND PROPOSED FINDING OF NO SIGNIFICANT IMPACT FOR A 133-FOOT MONOPOLE TELECOMMUNICATIONS STRUCTURE JOINT BASE LANGLEY-EUSTIS, VIRGINIA

An Environmental Assessment (EA) has been prepared to analyze the impacts of a telecommunications structure located off Condon Road, adjacent to Felker Army Airfield on JBLEEustis, Virginia. The purpose of this project is to provide needed wireless services objectives.

The EA, prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations, and Air Force instructions implementing NEPA; evaluates potential impacts of the alternative actions on the environment including the No-action Alternative. Based on this analysis, the Air Force has prepared a proposed Finding of No Significant Impact (FONSI).
An electronic version of the Draft FONSI/FONPA and EA, as well as supporting Environmental Impact Analysis Process (EIAP) documentation, dated April 3, 2020, are available for public review in the Public Notices section of the JBLE-Eustis Environmental web page at: https://www.jble.af.mil/Units/Army/Eustis-Environmental/.
You are encouraged to submit written comments through May 6, 2020. Written comments should be provided to 733 CED/CEIE, 1407 Washington Boulevard, JBLE-Eustis, Virginia 23604. Email comments may be sent to: USAF.jble.733-msg.list.ced-ee-p2-procurement@mail.mil.
If you have any questions, please contact 757-878-7375.

PRIVACY ADVISORY NOTICE
Public comments on this Draft EA are requested pursuant to NEPA, 42 United States Code 4321, et seq. All written comments received during the comment period will be made available to the public and considered during the final EA preparation. Providing private address information with your comment is voluntary and such personal information will be kept confidential unless release is required by law. However, address information will be used to compile the project mailing list and failure to provide it will result in your name not being included on the mailing list.
4/05, 4/06/2020 6648226

Client Name: Environmental Corp of America (ECA)
Advertiser: Legal Notices/B010/ALL
Section/Page/Zone: Monopole Construction
Description:
Ad Number: 6458158-1
Insertion Number:
Size: 1 x 6.58
Color Type: 4 Colors
Press on the date and page indicated. You may not create derivative works, or in any way exploit or repurpose any content.
Daily Press
Publication Date: 10/02/2019
This E-Sheet(R) is provided as conclusive evidence that the ad appeared in Daily Press

CLASSIFIEDS

WEDNESDAY
OCTOBER 2, 2019

Call (757) 247-4700 to advertise or place your ad online at placeanad.dailypress.com. Now easier than ever!

Announcements

$$ COIN SHOW $$
VA BEACH COIN SHOW
Oct 12 & 13, 2019, VB Conv Center, 1000 19th St, Virginia Beach, VA 23451 sp. Tidewater Coin Club, Sat 9 - 5, Sun 9 - 4, A Free, T 65. ANACS on site. BSA Merit Badge Pgm Sat 10 AM. www.tidewatercoinclub.org.

JUICY KING CRAB HOUSE
NOW OPEN FOR BUSINESS
lagniappe (lan-yap) is a Cajun-French inspired noun that means "a little extra." This term is the foundation of our service at the Juicy King Crab House. We serve our food with perfection and a little more.

NEW BOOK ON THE COLONIAL SHERO: MARY PATTON

Order from Amazon the story about the black powder expert in print, audio, or e-reader. See the final truth about the battle of King's Mountain. By Martin Mongiello.

Dogs, Cats, Other Pets

BEAGLE

This loving girl was dumped. She is now looking for a forever loving home ideally with a friend and share a fenced yard. She has a loving personality and will be a great companion. $50 adoption fee. Contact Avril: 869-5639 lv message.

SCHNOODLES
2 male and 2 female puppies. Ready for new homes on October 25th. Accepting deposits. 804-815-5539

Firewood/Woodstoves

FIREWOOD
All seasoned OAK or mixed hardwood – cut and split $190 per cord or 2 for $380 delivered. Five cord logs $450 delivered or smaller quantities. Call Rick
757-719-9273
Jamesriverenterprises.us

Garage/Yard Sales, etc.

ESCANABA
ESTATE SALE
Friday-Saturday. 9-5 pm. 68 years of family treasures. Cash, carry, no holds. 507 N18 St.

NEWPORT NEWS
Moving sale 8am to 1pm. Oak dining table with 4 chairs $250 obo, two armoires $45 ea, chaise $40, many other items priced to move

WILLIAMSBURG
MOVING YARD SALE Furniture, clothes, pictures etc. Sept 28th 8-1300. Rolling Woods 5509 Nuthatch Dr. 7579039930

Items Under $250

SEEKING VINTAGE BOURBON
and Rye. Full/Sealed Bottles (Pre-1990) Call Alex 443-223-7669

Misc. Merchandise For Sale

CEMETERY PLOTS
2 cemetery plots $2000 each, located in Peninsula Memorial Park (Garden of the Challis). Must Sell 571-213-3396

TREADMILL BOWFLEX BXT 216
Like New. $500. Call: 757-258-5704

Wanted To Buy

WANTED FREON R12
We pay CA$H. R12 R500 R11. Convenient. Certified professionals. www.refrigerantfinders.com/ad 312-291-9169

ABC Notices

ABC NOTICE

Colonial Downs Group, LLC, Trading As: Rosie's Gaming Emporium, 1990-1996 Power Plant Parkway, Hampton , Virginia 23666-3156.
The above establishment is applying to the Virginia Alcoholic Beverage Control (ABC) Authority for a Wine and Beer On Premises, Mixed Beverage On Premises license to sell or manufacture alcoholic beverages.

Natalie Schramm Vice President/ Ownership, Mary Ellen Kanoff Secretary/ Ownership, Brent Stevens President and CEO/Owner

Note: Objections to the issuance of this license must be submitted to ABC no later than 30 days from the publishing date of the first of two required newspaper legal notices. Objections should be registered to www.abc.virginia.gov or 800-552-3200.
9/25/19, 10/2/19 6453108

ABC NOTICE

Aldi (Virginia), LLC, Trading As: Aldi, Inc., 1577 General Booth Blvd, Virginia Beach , Virginia 23454-5105.
The above establishment is applying to the Virginia Alcoholic Beverage Control (ABC) Authority for a Wine and Beer Off Premises/Delivery Permit license to sell or manufacture alcoholic beverages.

Chris Daniels, Vice President

Note: Objections to the issuance of this license must be submitted to ABC no later than 30 days from the publishing date of the first of two required newspaper legal notices. Objections should be registered to www.abc.virginia.gov or 800-552-3200.
10/02,09/2019 6463420

Trustees Sale

HAMPTON

NOTICE OF SUBSTITUTE TRUSTEE SALE
8 Woody Circle, Hampton, VA 23669

By virtue of the power and authority contained in a Deed of Trust dated November 4, 2009, and recorded in Deed Book 090018357, Page 0491 in the Clerk's Office for the Circuit Court for Hampton City, VA, securing a loan which was originally $314,250.00. The appointed SUBSTITUTE TRUSTEE, Commonwealth Trustees, LLC will offer for sale at public auction at the front steps of the Circuit Court for the City of Hampton, 237 N. King Street, Hampton, VA 23669 on:
October 25, 2019 at 12:30 PM
improved real property, with an abbreviated legal description of The following described property, to wit:
All that certain lot, piece or parcel of land situate , lying and being in the City of Hampton, Virginia, known and designated as Lot Numbered Thirty-Three (33), as shown on that certain Plat entitled, "Little Creek, Section Four, City of Hampton, Virginia," dated January 23, 1986, made by T. J. Savage & Associated, Surveyors and Planners, duly recorded March 14, 1986 in the Clerk's Office of the Circuit Court for the City of Hampton, Virginia, in Plat Book 8, at Page 121, in which reference is here made.
Subject however, to any easements or restrictions of record affecting subject property.
Together with all and singular the buildings and improvements thereon, the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining, and as more fully described in the aforesaid Deed of Trust.
TERMS OF SALE: The property will be sold "AS IS," WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND AND SUBJECT TO conditions, restrictions, reservations, easements, rights of way, and all other matters of record taking priority over the Deed of Trust to be announced at the time of sale. A deposit of $20,000.00, or 10% of the sale price, whichever is lower, will be required at time of sale, in the form of certified check, cashier's check or money order by the purchaser. The balance of the purchase price, with interest at the rate contained in the Deed of Trust Note from the date of sale to the date said funds are received in the office of the SUBSTITUTE TRUSTEE, will be due within fifteen (15) days of sale. In the event of default by the successful bidder, the entire deposit shall be forfeited and applied to the costs and expenses of sale and Substitute Trustee's fee. All other public charges or assessments, including water/sewer charges, whether incurred prior to or after the sale, and all other costs incident to settlement to be paid by the purchaser. In the event taxes, any other public charges have been advanced, a credit will be due to the seller, to be adjusted from the date of sale at the time of settlement. Purchaser agrees to pay the seller's attorneys at settlement, a fee of $460.00 for review of the settlement documents.
Additional terms will be announced at the time of sale and the successful bidder will be required to execute and deliver to the Substitute Trustees a memorandum or contract of the sale at the conclusion of bidding.

FOR INFORMATION CONTACT:
Rosenberg & Associates, LLC
(Attorney for the Secured Party)
4340 East West Highway, Suite 600
Bethesda, MD 20814
301-907-8000
www.rosenberg-assoc.com
9/25 & 10/2/20019 6450171

YORKTOWN
TRUSTEE'S SALE OF 211 TALLYHO DR, YORKTOWN, VA 23693

In execution of a Deed of Trust in the original principal amount of $331,290.00, with an annual interest rate of 3.750000% dated March 8, 2012, recorded among the land records of the Circuit Court for the County of York as Deed Instrument Number LR120004855, the undersigned appointed Substitute Trustee will offer for sale at public auction all that property located in the County of York, at the front of the Circuit Court building for the County of York located at 300 Ballard Street, Yorktown, Virginia on October 31, 2019 at 10:00 AM, the property with improvements to wit:
Tax Map No. S04C-0268-1415
THIS COMMUNICATION IS FROM A DEBT COLLECTOR.
TERMS OF SALE: ALL CASH. A bidder's deposit of 10% of the sale price, will be required in cash, certified or cashier's check. Settlement within fifteen (15) days of sale, otherwise Trustees may forfeit deposit. Additional terms to be announced at sale. Loan type: VA. Reference Number 19-283515.
PROFESSIONAL FORECLOSURE CORPORATION OF VIRGINIA, Substitute Trustees, C/O SHAPIRO & BROWN, LLP, 10021 Balls Ford Road, Suite 200, Manassas, Virginia 20109 (703) 449-5800.

Publication Dates:
September 25, 2019 and October 2, 2019

HAMPTON
NOTICE OF SUBSTITUTE TRUSTEE SALE
812 Dorestshire Terrace, Hampton, VA 23666

By virtue of the power and authority contained in a Deed of Trust dated October 2, 2008, and recorded at Instrument Number 080017877 in the Clerk's Office for the Circuit Court for Hampton City, VA, securing a loan which was originally $176,225.00. The appointed SUBSTITUTE TRUSTEE, Commonwealth Trustees, LLC will offer for sale at public auction at the front steps of the Circuit Court for the City of Hampton, 237 N. King Street, Hampton, VA 23669 on:
November 1, 2019 at 12:30 PM
improved real property, with an abbreviated legal description of All that certain lot, piece or parcel of land situate, lying and being in the City of Hampton, Virginia, known and designated as Lot Numbered Nine (9) in Block Lettered "F" as shown on the certain Plat entitled, "Northampton, Section One", dated June 27, 1955, and made by R. F. Pyle, Certified Land Surveyor, duly of record in the Clerk's Office of the Circuit Court for the City of Hampton, Virginia, in Plat Book 3, Page 196, and as more fully described in the aforesaid Deed of Trust.
TERMS OF SALE: The property will be sold "AS IS," WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND AND SUBJECT TO conditions, restrictions, reservations, easements, rights of way, and all other matters of record taking priority over the Deed of Trust to be announced at the time of sale. A deposit of $20,000.00, or 10% of the sale price, whichever is lower, will be required at time of sale, in the form of certified check, cashier's check or money order by the purchaser. The balance of the purchase price, with interest at the rate contained in the Deed of Trust Note from the date of sale to the date said funds are received in the office of the SUBSTITUTE TRUSTEE, will be due within fifteen (15) days of sale. In the event of default by the successful bidder, the entire deposit shall be forfeited and applied to the costs and expenses of sale and Substitute Trustee's fee. All other public charges or assessments, including water/sewer charges, whether incurred prior to or after the sale, and all other costs incident to settlement to be paid by the purchaser. In the event taxes, any other public charges have been advanced, a credit will be due to the seller, to be adjusted from the date of sale at the time of settlement. Purchaser agrees to pay the seller's attorneys at settlement, a fee of $460.00 for review of the settlement documents.
Additional terms will be announced at the time of sale and the successful bidder will be required to execute and deliver to the Substitute Trustees a memorandum or contract of the sale at the conclusion of bidding.
FOR INFORMATION CONTACT:

Rosenberg & Associates, LLC
(Attorney for the Secured Party)
4340 East West Highway, Suite 600
Bethesda, MD 20814
301-907-8000
www.rosenberg-assoc.com

10/2, 10/9/2019 6462687

NEWPORT NEWS
TRUSTEE'S SALE OF 120 MULBERRY AVENUE, NEWPORT NEWS, VA 23607

In execution of a certain Deed of Trust dated December 21, 2001, in the original principal amount of $61,750.00 recorded in the Clerk's Office, Circuit Court for Newport News City, Virginia, in Book 1695 at Page 0133 . The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for the City of Newport News, 2500 Washington Avenue, Newport News, Virginia on October 29, 2019, at 9:00 AM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: ALL THOSE CERTAIN LOTS, PIECES OR PARCELS OF LAND, WITH ALL IMPROVEMENTS THEREON AND APPURTENANCES THEREUNTO BELONGING. LYING, SITUATE AND BEING IN THE CITY OF NEWPORT NEWS, VIRGINIA, AND BEING SHOWN AND DESIGNATED AS LOTS THIRTEEN (13) AND FOURTEEN (14), IN BLOCK NINETEEN (19), ON A CERTAIN PLAT ENTITLED, "NEWPORT NEWS, HAMPTON AND OLD POINT DEVEL CO.", WHICH SAID PLAT IS RECORDED IN THE CLERK`S OFFICE OF THE CIRCUIT COURT OF THE CITY OF HAMPTON, VIRGINIA IN DEED BOOK 24, PAGE 192, ET SEQ. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a $50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-339543-1.
9/25, 10/2/2019 6454465

SEAFORD
TRUSTEE'S SALE OF 3905 SEAFORD ROAD, SEAFORD, VA 23696

In execution of a certain Deed of Trust dated October 13, 2017, in the original principal amount of $143,603.00 recorded in the Clerk's Office, Circuit Court for York County, Virginia as Instrument No. 170019745 . The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for York County/Poquoson, 300 Ballard Street, Yorktown, Virginia on October 31, 2019, at 12:00 PM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND, SITUATE, LYING AND BEING IN GRAFTON MAGISTERIAL DISTRICT, YORK COUNTY, VIRGINIA, AS SHOWN ON THAT CERTAIN PLAT ENTITLED, "PLAT OF THE PROPERTY OF LYLE A. KUROSKI & MADELINE G. KUROSKI", DATED MARCH 19, 1969, MADE BY E.E. PAINE, CIVIL ENGINEER, NEWPORT NEWS, VIRGINIA, AND DULY RECORDED IN THE CLERK`S OFFICE OF THE CIRCUIT COURT FOR THE COUNTY OF YORK, VIRGINIA, IN DEED BOOK 218, PAGE 451, TO WHICH REFERENCE IS HEREBY MADE. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a $50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-340030-1.
9/25, 10/2/2019 6454431

WILLIAMSBURG
TRUSTEE'S SALE OF 8586 POCAHONTAS TRAIL, WILLIAMSBURG, VA 23185

In execution of a certain Deed of Trust dated March 4, 2014, in the original principal amount of $148,087.00 recorded in the Clerk's Office, Circuit Court for James City, Virginia as Instrument No. 140004033 . The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for the City of Williamsburg and James City, 5201 Monticello Avenue, Williamsburg, VA 23188 on October 31, 2019, at 11:00 AM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: LAND SITUATED IN THE COUNTY OF JAMES CITY IN THE STATE OF VA ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND CONTAINING 0.1354 ACRE, MORE OR LESS, LOCATED IN JAMES CITY COUNTY, VIRGINIA, AND MORE PARTICULARLY SET OUT, SHOWN AND DESCRIBED ON A CERTAIN PLAT OF SURVEY ENTITLED, "PHYSICAL SURVEY OF PROPERTY TO BE CONVEYED TO BRIAN ROWE AND CO., LLC, BEING 0.1354 +/-ACRE, PART OF DAVIS, LOCATED JAMES CITY COUNTY, VIRGINIA,"DATED OCTOBER 14, 1998 MADE BY SPEARMAN & ASSOCIATES, PC, SURVEYORS AND PLANNERS, WHICH PLAT IS DULY RECORDED IN THE CLERK`S OFFICE OF THE CIRCUIT COURT OF THE CITY OF WILLIAMSBURG AND COUNTY OF JAMES CITY, VIRGINIA, WITH INSTRUMENT NUMBER 98002170. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a $50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-340653-1.
9/25, 10/2/2019 6454417

WILLIAMSBURG
TRUSTEE'S SALE OF 706 PARCHMENT BOULEVARD, WILLIAMSBURG, VA 23185

In execution of a certain Deed of Trust dated January 13, 2017, in the original principal amount of $221,415.00 recorded in the Clerk's Office, Circuit Court for York County, Virginia as Instrument No. 170005441 . The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for York County/Poquoson, 300 Ballard Street, Yorktown, Virginia on October 31, 2019, at 12:00 PM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND WITH THE IMPROVEMENTS THEREON AND THE APPURTENANCES THEREUNTO BELONGING, LYING AND BEING IN YORK COUNTY, VIRGINIA, KNOWN NUMBERED AND DESIGNATED AS LOT 46, AS SHOWN ON THAT CERTAIN PLAT ENTITLED, "WILLIAMSBURG BLUFFS, SECTION 1, PHASE 1, COUNTY OF YORK, VIRGINIA", MADE BY RICKMOND ENGINEERING, INC., DATED JUNE 12, 1991, WHICH PLAT IS DULY RECORDED IN THE CLERK`S OFFICE OF THE CIRCUIT COURT OF YORK COUNTY, VIRGINIA (HEREINAFTER "CLERK`S OFFICE") IN PLAT BOOK 11, PAGES 397-398, TO WHICH PLAT REFERENCE IS HEREBY MADE FOR A MORE PARTICULAR DESCRIPTION OF THE REAL PROPERTY CONVEYED HEREIN. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a $50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-340653-1.
9/25, 10/2/2019 6454417

WILLIAMSBURG
TRUSTEE'S SALE OF 706 PARCHMENT BOULEVARD, WILLIAMSBURG, VA 23185

In execution of a certain Deed of Trust dated January 13, 2017, in the original principal amount of $221,415.00 recorded in the Clerk's Office, Circuit Court for York County, Virginia as Instrument No. 170005441 . The undersigned Substitute Trustee will offer for sale at public auction in the front of the Circuit Court building for York County/Poquoson, 300 Ballard Street, Yorktown, Virginia on October 31, 2019, at 12:00 PM, the property described in said Deed of Trust, located at the above address, and more particularly described as follows: ALL THAT CERTAIN LOT, PIECE OR PARCEL OF LAND WITH THE IMPROVEMENTS THEREON AND THE APPURTENANCES THEREUNTO BELONGING, LYING AND BEING IN YORK COUNTY, VIRGINIA, KNOWN NUMBERED AND DESIGNATED AS LOT 46, AS SHOWN ON THAT CERTAIN PLAT ENTITLED, "WILLIAMSBURG BLUFFS, SECTION 1, PHASE 1, COUNTY OF YORK, VIRGINIA", MADE BY RICKMOND ENGINEERING, INC., DATED JUNE 12, 1991, WHICH PLAT IS DULY RECORDED IN THE CLERK`S OFFICE OF THE CIRCUIT COURT OF YORK COUNTY, VIRGINIA (HEREINAFTER "CLERK`S OFFICE") IN PLAT BOOK 11, PAGES 397-398, TO WHICH PLAT REFERENCE IS HEREBY MADE FOR A MORE PARTICULAR DESCRIPTION OF THE REAL PROPERTY CONVEYED HEREIN. TERMS OF SALE: ALL CASH. A bidder's deposit of ten percent (10%) of the sale price or ten percent (10%) of the original principal balance of the subject Deed of Trust, whichever is lower, in the form of cash or certified funds payable to the Substitute Trustee must be present at the time of the sale. The balance of the purchase price will be due within fifteen (15) days of sale, otherwise Purchaser's deposit may be forfeited to Trustee. Time is of the essence. If the sale is set aside for any reason, the Purchaser at the sale shall be entitled to a return of the deposit paid. The Purchaser may, if provided by the terms of the Trustee's Memorandum of Foreclosure Sale, be entitled to a $50 cancellation fee from the Substitute Trustee, but shall have no further recourse against the Mortgagor, the Mortgagee or the Mortgagee's attorney. A form copy of the Trustee's memorandum of foreclosure sale and contract to purchase real property is available for viewing at www.bwwsales.com. Additional terms, if any, to be announced at the sale. This is a communication from a debt collector and any information obtained will be used for that purpose. The sale is subject to seller confirmation. Substitute Trustee: Equity Trustees, LLC, 2101 Wilson Blvd., Suite 1004, Arlington, VA 22201. For more information contact: BWW Law Group, LLC, attorneys for Equity Trustees, LLC, 6003 Executive Blvd, Suite 101, Rockville, MD 20852, 301-961-6555, website: www.bwwsales.com. VA-340030-1.
9/25, 10/2/2019 6454431

Legal Notice

PUBLIC NOTICE
EARLY NOTICE OF A PROPOSED ACTIVITY WITH THE POTENTIAL TO IMPACT WETLANDS AND FLOODPLAINS JOINT BASE LANGLEY-EUSTIS, FORT EUSTIS, VIRGINIA

The United States Air Force is preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts associated with a project to construct a 133-foot monopole telecommunications structure to be located off Condon Road, adjacent to Felker Army Airfield, that would provide needed wireless telecommunications services and support a beacon for the nearby Felker Army Airfield. The purpose and need of this proposed action is to provide needed wireless telecommunications services and support a beacon for the nearby Felker Army Airfield and nearby areas. Failure to implement an appropriate corrective action would result in not meeting the needed wireless telecommunications services objectives or beacon lighting needs.
The proposed telecommunications structure is subject to the National Environmental Policy Act (Title 42 United States Code (USC) Sections 4321 to 4347). The Air Force requests advance public comment to determine if there are any public concerns regarding the project's potential impacts on historical properties or the natural environment. The Air Force would also like to solicit public input or comments on potential project alternatives. The proposed project will be analyzed in the forthcoming EA and the public will have the opportunity to comment on the draft EA when it is released.
This notice complies with Section 2(a)(4) of EO 11988 and Section 2(b) of EO 11990. The Air Force requests advance public comment to determine if there are any public concerns regarding the project's potential impacts on floodplains. The Air Force would also like to solicit public input or comments on potential project alternatives. The Virginia Department of Historic Resources is also being consulted for any comments regarding the proposed telecommunications structure. The proposed project will be analyzed in the forthcoming EA and the public will have the opportunity to comment on the draft EA when it is released.
The public comment period is 2 October to 1 November. Please submit comments or requests for more information to Ms. Tracey Sugg by email at tracey.l.sugg.civ@mail.mil or by mail at 733 Civil Engineer Division, Environmental Element (CED/CEIE), 1407 Washington Blvd, Fort Eustis, VA 23604.

10/2/2019 6458158

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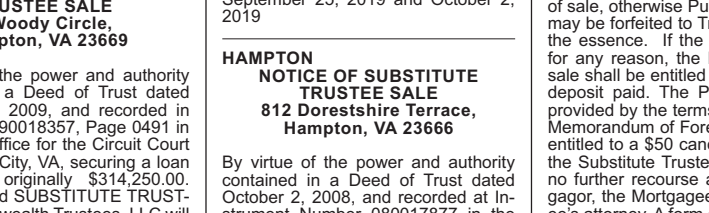

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