

# Fort Campbell

## FY24 Multi- Purpose Training Range

### Environmental Assessment

Prepared for

USAG Fort Campbell

Prepared by

Fort Campbell, Directorate of Public Works

Environmental Division, NEPA Program

June 2023

Page Intentionally Blank

**ENVIRONMENTAL ASSESSMENT and DRAFT FINDING OF NO SIGNIFICANT IMPACT**  
**THE CONSTRUCTION AND OPERATION OF A MULTIPURPOSE TRAINING RANGE AT FORT**  
**CAMPBELL, KENTUCKY**

**EXECUTIVE SUMMARY**

This environmental assessment (EA) provides an analysis of the environmental and socioeconomic effects of the following proposed actions. This EA is being undertaken in accordance with the National Environmental Policy Act of 1969 (NEPA) and Title 32 of the Code of Federal Regulations, Part 651, to inform decision makers and the public of likely environmental consequences of the proposed actions and alternatives, and to provide a forum for public feedback.

**1.0 DESCRIPTION OF THE PROPOSED ACTION**

The proposed action is for the construction and operation of a multipurpose training range (MPTR; Project Number 96182) at Fort Campbell, Tennessee in FY (fiscal year) 2024. Construction and subsequent proposed project operation and maintenance would occur throughout the year at all hours. Fort Campbell is deficient of mounted gunnery ranges according to the 30 March -2 April 2021 planning charrette and follow on 18-19 May 2021 charrette, led by the Department of the Army (DA) Combined Arms Center. Fort Campbell requires a mounted gunnery range allowing long-distance firing for training and qualification. The proposed automated range would support mounted vehicles to include the new Mobile Protected Firepower (MPF) vehicle; no existing Fort Campbell range can support MPF firing and training requirements. However, the decision to construct the MPTR is not dependent on MPF stationing. Army Environmental Command; Army Training and Doctrine Command; Directorate of Planning, Training, Mobilization and Security (DPTMS); and Directorate of Public Works personnel met at the above charrettes to define functionality of a MPTR range and required impact area requirements.

This Environmental Assessment (EA) has been prepared to address effects of constructing and operating the Fort Campbell Multi- Purpose Training Range (MPTR) at the existing Range 28. The proposed MPTR site is located in Stewart County, TN, in the southwest quadrant of the installation.

The objective of this EA is to inform decision makers and the public of the likely consequences of the proposed action and alternatives. If impacts of the proposed action are found to be insignificant, a Finding of No Significant Impact (FONSI) will be prepared and the selected alternative will be implemented. If the environmental impacts of the proposed action are found to be significant according to Council on Environmental Quality criteria (40 CFR 1508.27), a Notice of Intent will be published and an Environmental Impact Statement will be prepared.

This EA has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA; Title 42 of the United States Code [U.S.C.] 4321-4347); the Council on Environmental Quality "Regulations for

Implementing the Procedural Provisions of NEPA,” 40 Code of Federal Regulations (CFR), Parts 1500 through 1508; and 32 CFR Part 651 “Environmental Analysis of Army Actions.”

### 1.1 Purpose and Need for the Proposed Action

Fort Campbell is deficient of mounted gunnery ranges that support training and qualification. The proposed automated range construction would provide operation of mounted vehicles and firing long distance munitions.

### 1.2 What is the Decision to be Made?

The proponent for the proposed action is the Fort Campbell Garrison Commander, who decides which alternative best meets the purpose and need of the proposed action, including location, mitigation, configuration, and supporting infrastructure.

## 2.0 ALTERNATIVES

Description of Alternatives. Five potentially suitable alternatives were identified for the proposed actions and evaluated against screening criteria. The alternatives are as follows:

2.0.1 Alternative 1: No Action Alternative: The No Action Alternative would not construct and operate a MPTR range. This alternative does not meet the purpose and need; however, the Council of Environmental Quality and Army NEPA regulations require consideration and analysis of the No Action Alternative to provide a baseline against which the other alternatives may be compared.

2.0.2 Alternative 2: Construct and operate a range on the existing RNG 28 in the South Impact Area. The proposed MPTR would overlay the existing RNG 28 Multi-Purpose Range Complex (MPRC) located within the training area of Fort Campbell. The site is bounded by Jordan Springs Road to the south and Artillery Road to the north. The proposed footprint will be located within Tennessee. The existing range has multiple roads, targets, and improved area. The terrain is generally rolling and has a mix of grassland and timber. Several small streams, probable wetlands, and other drainage features cross the proposed footprint. Existing timber necessary for removal will be felled during the 16 November-14 March season to avoid potential impacts to endangered bat species. Potential wetlands were delineated to aid in range design and minimize, if not eliminate, impacts to those water features. A Finding of No Practicable Alternative (FONPA) will be completed for any wetland impacts.

2.0.3 Alternative 3: Considered at charrette held 30 March – 2 April 2021 Construct and operate a range west of RNG 55 and northeast of RNG41 now identified as RNG50 in the North Impact Area with MPF



gunnery capability. The northern 40 percent portion of the proposed site is tree covered. Construction would start north of Petraeus Road at the expanded portion would be non-dudded. The project will include 24 months of unexploded ordnance (UXO) support since the proposed project construction will occur within the training area of an active military installation (DA, 2019). The southern portion of the site is impact area. The proposed alternative would directly adversely affect an endangered bat habitat set aside area. Tree removal would occur within. Additionally, range construction would affect a number of acres of potential wetlands on the north end for proposed entrance road, requiring a wetland delineation and mitigation. Major earthwork would be required This site was eliminated from selection.

#### 2.0.4 Alternative 4: Construct and operate a range at RNG 42 (REC R-19-212) west of Patton Road.

This site was considered in August 2019. The existing Range 42 is located in the northeast portion of the North Impact Area, primarily in Trigg County Kentucky. Construction of the MPTR at this location would affect several wetlands with nexus to Waters of the US and also 63 acres would require a Phase I archeological survey. This site was eliminated from selection.

#### 2.0.5 Alternative 5: Construct and operate a range at RNG 52 (REC R-19-211).

This site was considered in August 2019. The existing Range 52 is located in the southwest portion of the North Impact Area in Trigg County Kentucky. Construction of the MPTR at this location would affect several wetlands with nexus to Waters of the US and also 52 acres would require a Phase I archeological survey. This site was eliminated from selection.

Based on the alternatives screening process, Alternatives 1 and 2 were carried forward for analysis.

**3.0 ANTICIPATED ENVIRONMENTAL IMPACTS.** The EA analyses found only non-significant impacts on air quality, soil erosion/water resources, threatened and endangered species, wetlands, and cumulative effects for Alternative 2.

**4.0 PREFERRED ALTERNATIVE.** Of the alternatives considered, the preferred alternative is Alternative 2 – Construct and Operate a MPTR Range on the existing RNG 28.

## TABLE OF CONTENTS

1.0 WHAT IS THE PROPOSED ACTION?	6
1.1 WHAT IS THE PURPOSE AND NEED FOR THE PROPOSED ACTION?	7
1.2 WHAT IS THE DECISION TO BE MADE?	7
1.3 WHAT IS THE SCOPING AND PUBLIC INVOLVEMENT PROCESS?	7
2.0 DESCRIPTION OF THE ALTERNATIVES	8
2.1 WHAT IS THE ALTERNATIVES SCREENING PROCESS?	9
2.2 WHAT IS THE PREFERRED ALTERNATIVE?	10
3.0 ASSOCIATED MPF-FIELDING PROJECTS AND PROJECTS ASSESSED FOR CUMULATIVE ENVIRONMENTAL IMPACTS	10
4.0 ANTICIPATED ENVIRONMENTAL IMPACTS	11
4.1 ENVIRONMENTAL RESOURCES NOT IMPACTED	11
4.2 IMPACTED ENVIRONMENTAL RESOURCES	15
5.0 IMPACT SUMMARY	18
6.0 PREPARATION AND CONSULTATION	19
7.0 DISTRIBUTION LIST	20

## LIST OF APPENDICES

Appendix A: Preferred Alternative

Appendix B: Preferred Alternative Enclosure SDZ

Appendix C: Location of Alternatives 3, 4, and 5

Appendix D: Location of Alternative 3 with Environmental Overlay

Appendix E: Resource Area Issues, Concerns, Risks

Appendix F: Noise Map

Appendix G: Environmental Justice

Appendix H: Soil Survey

Appendix I: Topographic Map

Appendix J: FEMA Maps

Appendix K: Wetland Map

Appendix L: Cultural Resources Consultation

Appendix M: Draft Finding of No Significant Impact (FONSI)

Appendix N: Draft Finding of No Practicable Alternative (FONPA)

Appendix O: Proposed Soil Storage Area

## 1.0 WHAT IS THE PROPOSED ACTION?

The proposed action is for the construction and operation of a multipurpose training range (MPTR; Project Number (PN) 96184 at Fort Campbell, Kentucky. A standard TC 25-8 Training Ranges, Automated Multipurpose Training Range (MPTR) is required to meet the upcoming Mobile Protected Fire Power (MPF) Crew/Section Gunnery requirements. Fort Campbell is deficient in MPTR capable ranges according to the 30 March-2-April and 18-19 May 2021 planning charrettes led by the Department of the Army (DA) Combined Arms Center. Fort Campbell requires a mounted gunnery range allowing long-distance firing for training and qualification. The proposed automated range could support mounted vehicles to include the new Mobile Protected Firepower platform, but the proposed action is not dependent upon stationing of the MPF. The proposed range facility would be constructed in Fiscal Year (FY) 2024. The MPTR will support training requirements of the Army on mounted 7.62, .50 cal, MK19, manned and unmanned aviation platforms, and next generation squad weapons 6.8mm.

### **Multipurpose Training Range Requirement**

The proposed MPTR is specifically designed to satisfy the training and qualification requirements for the crews, teams, and sections of infantry, armor, and aviation combat units. This range would support dismounted infantry squad tactical live-fire operations, either independently of, or simultaneously with supporting vehicles. The range would be utilized to train and test armor, infantry, and aviation teams, crews, and sections on the skills necessary to detect, identify, engage, and defeat stationary and moving armor and infantry targets in a tactical array. A convoy live fire route can include the use of crossover roads. All targets would be fully automated, and the event specific target scenario would be computerized and operated from an on-site control tower. Captured audio/video would be compiled and available to the unit at the after-action review (AAR).

Range construction would begin in FY2024. Primary facilities at the Range Operations Control Area (ROCA) include a 578 square foot (sf) control tower, a 726 square feet (SF) bleacher enclosure, and 1,776 SF non-instrumented range AAR building. ROCA improvements also include 600 square yards (SY) of gravel parking, 500 linear feet (LF) of security fencing, and 250 SY of sidewalks. Six bivouac pads (15 by 25- feet by 6 inches thick each), a 2300 SY gravel staging area, and an 800 SF covered mess will be constructed on the east side of the ROCA. Four port- a-john pads with three-sided wind walls will be dispersed in the area. An existing ammunition loading dock on the eastern boundary will remain.

The range would consist of six moving armor targets, 30 stationary targets and berms, four moving infantry targets, 122 stationary infantry targets, 30 stationary armor targets, 10 battle positions, five urban facades, one urban cluster consisting of seven buildings, two camera towers, 600 LF of trench obstacle and two machine gun bunkers. The project would require utilities to include: storm drainage; fencing; paving; electricity; and communications. Potable water will be trucked on site and a portable toilet contract will provide wastewater services. Additional construction would include a 17,000 LF by 20 foot (ft.)-wide tank trail and a 25,000 LF by 12 ft.-wide maintenance trail. Existing range roads would also continue to be used. Limited clearing of vegetation and grubbing will be necessary (70 acres).

### 1.1 WHAT IS THE PURPOSE AND NEED FOR THE PROPOSED ACTION?

Fort Campbell is deficient of mounted gunnery ranges that support training and qualification. Additionally, the new MPF vehicle would enable instantaneous, long-range direct fire to counter enemy threats. The proposed automated range construction would provide operation of mounted vehicles and firing long distance munitions.

### 1.2 WHAT IS THE DECISION TO BE MADE?

The proponent for the proposed action is the Garrison Commander of the Installation who decides which alternative best meets the purpose and need of the proposed action, including location, mitigation, configuration, and supporting infrastructure.

### 1.3 WHAT IS THE SCOPING AND PUBLIC INVOLVEMENT PROCESS?

The proposed action warrants an environmental assessment (EA) based on 32 Code of Federal Regulations (CFR) Part 651 Appendix B, subparagraph (c)(1) due to new construction exceeding 5.0 cumulative acres of new surface disturbance. This EA was prepared in accordance with the NEPA of 1969 [42 United States Code (USC) 4321 et seq.], Council on Environmental Quality (CEQ) Regulations 40 CFR Parts 1500-1508, and Army Regulations (ARs) 32 CFR Part 651 (Environmental Analysis of Army Actions; DA 2002). This EA will evaluate the potential impacts of the proposed project, inform decision makers and the public of likely environmental consequences of the proposed actions and alternatives, provide a forum for public feedback, and will include a determination of a Finding of No Significant Impact (FONSI) or a Notice of Intent to prepare an Environmental Impact Statement (EIS) and record of decision (ROD). Pursuant to 32 CFR Part 651, this EA will evaluate the potential environmental impacts of the project and cumulative impacts (CEQ, 1997). These actions are based on the best information and data available as of April 2022. Additionally, EO 11990 requires federal agencies to publish a finding of no practicable alternative (FONPA) and provide an opportunity for early public review of plans or proposals for new construction in wetlands. This EA, draft FONSI, and FONPA will be made available to state and federal agencies and the public for a 30-day review at the following locations:

Clarksville- Montgomery County Public Library, 350 Pageant Lane , Clarksville, TN 37042.

Christian County Public Library, 101 Bethel Street, Hopkinsville, KY 42240

Stewart County Public Library, 102 Natcor Drive , Dover, TN 37058

John L. Street Library, 244 Main Street, Cadiz, KY 42211

During the comment period, any public comments received will be collected, logged, and incorporated into draft FNSI as necessary. Once all comments have been received, a final FONSI will be prepared.

## 2.0 WHAT ARE THE ALTERNATIVES CONSIDERED IN THIS EA?

Alternative 1 No Action: The No Action Alternative would not construct and operate a MPTR range. This alternative does not meet the purpose and need; however, the Council of Environmental Quality and Army NEPA regulations require consideration and analysis of the No Action Alternative to provide a baseline against which the other alternatives may be compared.

Alternative 2 Preferred Action: Construct and operate a range on the existing RNG 28 in the South Impact Area.

### Existing Conditions

The project site is located approximately 14.25 miles west of the intersection of 101st Airborne Division Rd. and Jordan Springs Rd. on the existing footprint of Range 28 in the westernmost range complex in Fort Campbell, Stewart County, Tennessee. It is generally bound by Jordan Springs Rd. to the south and Artillery Rd. to the north. The Tennessee/Kentucky state line is just north of the northern boundary of the site. See Appendix A.

Range 28 is currently used as a maneuver and aerial gunnery range. The site includes existing buildings, roads, battle positions, target emplacements, underground power and communications, and storm drainage. It is mostly clear of vegetation except for several areas on the west side of the site that total approximately 70 acres. It generally drains from the west to the east to Noah's Spring Branch.

The proposed MPTR would overlay the existing RNG 28 Multi-Purpose Range Complex (MPRC) located within the training area of Fort Campbell. The site is bounded by Jordan Springs Road to the south and Artillery Road to the north. The proposed footprint will be located within Tennessee. The existing range has multiple roads, targets, and improved area. The terrain is generally rolling and has a mix of grassland and timber. Several small streams, probable wetlands, and other drainage features cross the proposed footprint. Existing timber necessary for removal will be felled during the 16 November-14 March season to avoid potential impacts to endangered bat species. Fort Campbell Environmental Division and Nashville District US Army Corps of Engineers (NCOE) personnel met at RNG 28 on 19 April 2022 to develop a strategy for managing any impacts to potential wetlands. Consensus during the visit was that not all "wetland like" areas in the footprint are considered wetlands. Fort Campbell wetlands GIS will be updated. Wetlands mitigation credits may still be required for loss of wetlands due to the construction activity. The potential wetlands were delineated on 16 March 2023 to aid in range design and minimize impacts to those water features. Fort Campbell will submit a delineation report to NCOE and develop the permitting application under a Nation-wide 404 permit. Tennessee Division of Water Resources permitting requirements for streams and wetlands will also be identified. See Appendix M.

Alternative 3 New RNG west of RNG55: Considered at charrette held 30 March – 2 April 2021 Construct and operate a range west of RNG 55 and northeast of RNG41 now identified as RNG50 in the North Impact Area with MPF gunnery capability. The northern 40 percent portion of the proposed site is tree covered. Construction would start north of Petraeus Road. The expanded portion would be non-dudded. The project

will include 24 months of unexploded ordnance (UXO) support since the proposed project construction will occur within the training area of an active military installation (DA, 2019). The southern portion of the site is impact area. The proposed alternative would directly adversely affect an endangered bat habitat set aside area. Tree removal would occur within. Additionally, range construction would affect a number of acres of potential wetlands on the north end for proposed entrance road, requiring a wetland delineation and mitigation. Major earthwork would be required. This site was eliminated from selection. See Appendix C.

Alternative 4 RNG 42 west of Patton Rd: This site was considered in August 2019. The existing Range 42 is located in the northeast portion of the North Impact Area, primarily in Trigg County Kentucky. Construction of the MPTR at this location would affect several wetlands with nexus to Waters of the U.S. 63 acres would require a Phase I archeological survey. This site was eliminated from selection. See Appendix C.

Alternative 5 RNG 52: Construct and operate a range at RNG 52 : This site was considered in August 2019. The existing Range 52 is located in the southwest portion of the North Impact Area in Trigg County Kentucky. Construction of the MPTR at this location would affect several wetlands with nexus to Waters of the U.S. 52 acres would require a Phase I archeological survey. This site was eliminated from selection. See Appendix C.

## 2.1 WHAT IS THE ALTERNATIVES SCREENING PROCESS?

The screening criteria listed below are used to assess the reasonable alternative(s) to be considered in this EA:

### 2.1.1

Alternatives considered in this EA may not conflict with existing mission assignments and training activities or future mission assignments and training activities that are programmed and funded. Alternatives that disrupt, displace, or eliminate necessary mission activities or future mission activities will be eliminated from full consideration.

2.1.2 Support mission requirements. Alternatives considered must support and provide for the mission requirements of Soldiers at the Installation.

2.1.3 Maintain regulatory compliance. Alternatives considered must allow for compliance with all state and federal regulations.

2.1.4 Maintain safety of Soldiers and Civilians. Alternatives considered must not pose any danger to any Soldiers or Civilians on the Installation.

2.1.5 Avoid significant impacts to environmentally sensitive resources. Alternatives considered must avoid significant impacts to environmentally sensitive resources on the Installation.

2.1.5.1 Alternatives Eliminated From Full Analysis: Alternatives 3, 4, and 5 will be eliminated from full analysis in this EA based on the alternatives screening process.

Alternative 3 would impact federally endangered species. Alternative 3 would result in a significant biological impacts defined as: substantial permanent conversion or net loss of habitat at the landscape scale; long-term loss or impairment of a substantial portion of local habitat (species-dependent); and unpermitted “take” of threatened and endangered species (DA, 2021). Alternative 3 would impact the bat habitat set-aside.

Alternatives 4 and 5 would affect several wetlands with nexus to Waters of the US and also require extensive archeological Phase I surveys. These sites were eliminated from selection.

2.1.5.2 Alternatives Carried Forward For Full Analysis: Alternatives 1-2 will be carried forward for full analysis in this EA.

## 2.2 WHAT IS THE PREFERRED ALTERNATIVE?

Of the alternatives considered, the preferred alternative is Alternative 2 – Construct and Operate a Range north of Jordan Springs Road and south of Artillery Road on the RNG28 footprint. This is the only alternative that will fully satisfy the purpose and need for the mission. Alternative 2 was additionally re-configured during the charrette as specified in this EA to minimize and avoid endangered bat impact. See Appendix B for range surface danger zone (SDZ).

## 3.0 ASSOCIATED MPF-FIELDING PROJECTS AND/OR PROJECTS ASSESSED FOR CUMULATIVE ENVIRONMENTAL IMPACTS

Several future projects are required to support the Mobile Protected Firepower vehicle stationing and operation at Fort Campbell. The project locations, specification and execution dates are conceptual and therefore not assessed in this EA.



## 4.0 ANTICIPATED ENVIRONMENTAL IMPACTS

### 4.1 Environmental Setting

Fort Campbell is in southwestern Kentucky and northwestern Tennessee, within portions of four counties: Christian and Trigg counties in Kentucky, and Montgomery and Stewart counties in Tennessee. Fort Campbell lies within the Western Highland Rim physiographic province, which forms a transition area between Kentucky farmlands to the north, the steeply dissected and wooded rim of the Cumberland River to the south and west, and gently rolling hills of low to moderate relief to the east.

The project site is located approximately 14.25 miles west of the intersection of 101st Airborne Division Rd. and Jordan Springs Rd. on the existing footprint of Range 28 in the westernmost range complex in Fort Campbell, Stewart County, Tennessee. It is generally bound by Jordan Springs Rd. to the south and Artillery Rd. to the north. The Tennessee/Kentucky state line is just north of the northern boundary of the site.

Range 28 is currently used as a maneuver and aerial gunnery range. The site includes existing buildings, roads, battle positions, target emplacements, underground power and communications, and storm drainage. It is mostly clear of vegetation except for several areas on the west side of the site that total approximately 70 acres. It generally drains from the west to the east to Noah's Spring Branch.

### 4.2 ENVIRONMENTAL RESOURCES NOT IMPACTED

This section describes the potential effects of each alternative to baseline environmental resource conditions the Installation. An analysis of the potential direct and indirect effects associated with each of the alternatives immediately follows the description of each environmental resource. The analysis also includes cumulative effects potentially resulting from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Impact classification occurs by identification according to the impact severity (i.e., no impact, non-significant impact, significant impact). Impacts are further identified as short-term or long-term. Both the affected environment and environmental consequences are described for comparison within broad resource areas. The following resources considered based on the 2007 Army NEPA Analysis Guidance Manual are:

- Air Quality and Climate Change
- Airspace
- Cultural Resources
- Energy (Utilities)/ Facilities
- Hazardous and Toxic Substances and Waste
- Land Use
- Noise

- Solid Waste
- Socioeconomics, Environmental Justice, and Protection of Children
- Traffic and Transportation

See Appendix E for the summary list of resources and associated impacts. The following resource areas are not discussed in detail in this EA:

4.2.1 Air Quality and Climate Change: Emissions associated with mobile sources during construction and tree removal will be short-term and temporary. The United States Environmental Protection Agency (EPA) presently designates this region as an attainment area for all criteria pollutants. As a result, an applicability analysis and formal conformity demonstration under the general conformity rule are not required for the proposed action.

The existing KOHLER 60REOZJC generator at Range 28 is currently on Fort Campbell's TN Title V Permit. According to the permit the generator can only run 100 hours outside of emergency use, this includes maintenance and readiness testing. Once hooked up, the Air Quality Program will need to be notified of the current hours on the meter and the hours after the test run. Hours will need to be reported monthly.

Any additional MPTR operational related generators will also be owned and operated by Fort Campbell's Directorate of Public Works. Fort Campbell will assume all the air quality regulatory compliance standards for these generators.

The DPW Forestry, Conservation Branch, will harvest merchantable timber and remaining vegetation will be removed off-site; burning of land clearing debris will not occur.

The EO 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis) outlines policies intended to ensure federal agencies capture greenhouse gas (GHG) emissions while factoring in compounded global emissions. The GHGs are components of the atmosphere that trap heat relatively near the surface of the earth, and therefore, contribute to the greenhouse effect and climate change. Most of the GHGs occur naturally in the atmosphere, but concentrations increase from human activities such as burning fossil fuels. Global temperatures are expected to continue to rise as human activities continue to add carbon dioxide (CO<sub>2</sub>), methane, NO<sub>x</sub>, and other greenhouse (or heat-trapping) gases to the atmosphere. Whether rainfall will increase or decrease remains difficult to project for specific regions (IPCC, 2007). Forested areas act as a sink (absorbing CO<sub>2</sub> from the atmosphere) or a source (fire, conversions, and timber harvesting) of GHG emissions. In the United States, managed forests absorb more CO<sub>2</sub> from the atmosphere than is emitted. Approximately one-half to two thirds of CO<sub>2</sub> from the forest product is emitted at the time of harvest depending on species and region within the United States (USEPA, 2021). Land management activities can both contribute to and reduce GHG emissions (CEQ, 2016). The proposed project will remove 70 acres of forested land. The proposed action will have negligible impacts on regional or local air quality. The proposed action will additionally have negligible impacts to global climate change and the associated Social Cost.

4.2.2 Airspace: The Federal Aviation Administration (FAA) manages all airspace within the US and its territories. The FAA recognizes the military needs to conduct various flight operations and training within

airspace other than commercial and general aviation. Most military operations are conducted within designated airspace and follow specific procedures to maximize flight safety. Neither alternative requires altering airspace designation, expansion, or usage. Therefore, airspace is eliminated from further analysis.

**4.2.3 Cultural Resources:** Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of the project undertaking on historic properties. Historic properties include buildings, archaeological sites, objects, districts and landscapes that are fifty years old or older and are eligible for listing in the National Register of Historic Places (NRHP) due to their association with an event, person, architectural features, or have the potential to provide new information about the past.

The project Area of Potential Effects (APE) for direct and indirect effects had been partially surveyed for archaeological resources. The areas not surveyed were located within the Impact Area and are considered exempt from archaeological inventory due to safety concerns, per the Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance and Development of the Fort Campbell Army Installation at Fort Campbell, Kentucky (Effective as amended December, 2020). No buildings over fifty years old were within the APE, and there were four known archaeological sites within the APE. Sites 40SW0157, 40SW0158, 40SW0159, and 40SW0571 were determined not eligible for NRHP listing and the Tennessee State Historic Preservation Office (SHPO) concurred with that determination.

Fort Campbell consulted with both the Kentucky and Tennessee SHPOs with the determination of No Adverse Effect to Historic Properties. Tennessee concurred in a letter dated 2 March 2022 and Kentucky concurred in a letter dated 22 March 2022. See Appendix L for consultation details.

Fort Campbell consulted with the Tennessee SHPO in June 2023 after it was determined that an additional dirt staging area (75 acres) was necessary due to USACE requirements and UXO concerns. Fort Campbell made a determination that the dirt staging area would have No Adverse Effect to Historic Properties. Tennessee concurred in a letter dated 15 June 2023. See Appendix L for consultation details.

**4.2.4 Energy (Utilities)/Facilities:** The primary sources of energy utilized at Army installations include electricity, natural gas, fuel oil, and propane. Neither alternative results in utilizing a novel energy mode. Neither alternative requires demolition of facilities or any supporting utilities. Alternative 2 requires constructing supporting electrical and communication lines; however, these utilities would tie into existing utility lines. Existing utilities could support the electrical and communication load required to operate Alternative 2. Therefore, facilities and energy/utilities are eliminated from further analysis.

**4.2.5 Hazardous Waste and Materials:** The proposed actions will not impact asbestos-containing materials or lead-based paint. Operational vehicles will require routine refueling. In addition, vehicle fluids, although changed out during maintenance activities, may periodically need to be topped-off. Grease or other lubricants may be applied on as needed. Technical manuals will outline procedures to minimize the likelihood of a spill during refueling and topping off fluids. Personnel will follow spill prevention plans and standard operating procedures to prevent, or clean and dispose of material in the event of a spill. Munitions, which contain hazardous components, are required for effective crew training. Soldiers receive training on safe handling of munitions. Spent casings will be disposed in accordance with installation

procedures and environmental laws and regulations (DA, 2020). As a result, hazardous waste and hazardous materials will not be impacted or produced by the proposed action.

4.2.6 Land Use: The proposed project location is on a designated existing range and impact area. There are no Installation Restoration Program or Military Munitions Response Program issues associated with the proposed action. The project requires UXO support during construction activities. The proposed project area will continue to be used as a range; therefore, will not affect existing land use.

4.2.7 Noise: Vehicle operational noise is expected to range from approximately 90 decibels (dB) at idle to 120dB at full operational velocity. Live fire exercises will generate impulse noise. The MPF's main cannon is expected to generate Sound Pressure Levels (SPLs) up to 180dB at ignition with an equal SPL at impact downrange. The smaller-caliber coaxial weapons are expected to generate SPLs up to 165dBs. Live fire exercises will be intermittent and may temporarily disrupt wildlife and neighboring communities when occurring. Indirect noise impacts would occur due to construction (DA, 2021). The Fort Campbell Joint Land Use Study (Appendix H) demonstrates the proposed project area intersects an existing noise zone of Fort Campbell consistent with experiencing large arms firing and ordnance blasts. Therefore, the proposed actions will have no effect on the existing noise levels.

4.2.8 Solid Waste: There will be no impacts to solid waste management. The Fort Campbell Construction and Demolition (C&D) Landfill is operational and will accept any C&D waste from the project. All contractors will use the C&D Landfill for C&D and asbestos waste disposal. The contractor is responsible to maintain data of all waste disposed and materials recycled off Fort Campbell. Fort Campbell Environmental Pollution Prevention Branch, Solid Waste/Recycling Office is responsible for compiling data into monthly reports for the Construction Waste Management Report. A provided form from the Solid Waste/Recycling Office or a contractor form will be filled out with the type of waste or recycled material, the weight of the waste/material (tons or pounds) and the facility the waste or recyclables were delivered. This information is required to be sent to the Fort Campbell Solid Waste/Recycling Office by 15th of each month. POC: Pollution Prevention Branch, DPW Environmental Division, BLDG 5134, Wickham Avenue.

The Fort Campbell C&D Landfill will accept certain recyclable items: 1) concrete, brick, block and asphalt (shall be tested and free of asbestos and lead based paint to be recycled; shall be no larger than two-foot by two-foot pieces or equivalent; shall be minimal amount of dirt in load; shall have no rebar protruding out of the concrete) 2) trees and tree limbs shall be cut to six feet or less in length-the landfill no longer accepts tree stumps.- if the tree has a large diameter (example three feet.) it shall be cut to lengths of three feet or less - will accept ground wood chips 3) pallets - serviceable and non-serviceable pallets

Except for the above, the C&D Landfill does not accept most recyclable materials (ie., cardboard, scrap metal). Contractors may take recyclables to the Fort Campbell Convenience Center, BLDG 6802 A Shaw Valley Road. POC: Pollution Prevention Branch, DPW Environmental Division.

State Law and Fort Campbell regulations requires covering waste or recyclable loads to prevent litter. All waste or recyclable material loads are subject to inspection while being present on Fort Campbell. All recyclable materials generated from a construction or demolition job are property of the government unless the contract specifies that the contractor can retain the materials.

4.2.9 Socioeconomics, Environmental Justice, and Protection of Children: EO 12898 (Federal actions to Address Environmental Justice in Minority Populations and Low-income Populations) requires federal agencies to identify and address “disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” The alternatives will be contained within the Fort Campbell boundary on un-inhabited, training and range land; consequently, there will be no direct effect to minority or low-income populations.

In accordance with EO (Protection of Children from Environmental Health Risks and Safety Risks) 13045, all federal actions must evaluate whether there would be any impacts on populations of children in the region from the proposed actions. There will be no environmental or socioeconomic impacts that will cross installation boundaries into areas with populations of children, therefore, there would be no impacts on children or low-income populations resulting from alternatives analyzed in this EA (EPA, 2020; see Appendix I).

4.2.10 Traffic and Transportation: The proposed action will cause a minor increase in traffic volume on Jordan Springs Road but will have no long term effect on existing traffic.

4.3 IMPACTED ENVIRONMENTAL RESOURCES. Resources impacted include soil erosion/water resources (including wetlands) and threatened and endangered species. See Appendix F.

4.3.1 Soil Erosion/Water Resources: Soil and sediment erosion results in elevated stream sedimentation rates and turbidity levels. Primary sources include unpaved roads, drop zones, landing zones, flight strips, artillery firing points, borrow pits, clear-cut operations, and stormwater runoff from developed areas. Fort Campbell monitors water quality to identify erosion specifically associated with streams and wetlands for the purpose of restoring eroded areas. The installation manages stormwater according to National Pollution Discharge Elimination System Storm Water Permit provisions under the Tennessee Division of Water Resources and Kentucky Division of Water.

For construction projects that disturb soil Fort Campbell requires a Stormwater Pollution Prevention Plan (SWPPP) to minimize sediment discharge to waterways and permit coverage on one acre or greater projects from the applicable state water resources agency.

4.3.1.1 Potential Effects of the Proposed Alternatives

4.3.1.1.1 Alternative 1: No Action Alternative

Potential Impacts: Under the No Action Alternative, no construction or tree removal will occur. Therefore, this alternative would have no impact on water resources in the area.

Cumulative Impacts: The No Action Alternative would not alter the topography or geology of the soils from the present conditions aside from the natural process that occurs; therefore, there would be no additional cumulative impacts on water resources.

#### 4.3.1.1.2 Alternative 2: Construct and Operate a Multipurpose Training Range at the Existing RNG28

##### Potential Impacts:

The preferred site is located entirely within Stewart County Tennessee and all construction activities will take place in the State of Tennessee. The water resource flowing through Range 28 is part of the Noah's Spring Branch Sub-watershed, which covers approximately 18,734 acres of training and impact area, about 27 percent of which is forested. The headwaters of Noah's Spring Branch originate entirely on Fort Campbell, in the southwest portion of the installation. Noah's Spring Branch flows through the Impact Area, and then along the north central installation boundary.

Construction of the proposed MPTR will require a Stormwater Pollution Prevention Plan (SWPPP) approved by the DPW Water Management Branch. In addition, the proposed construction exceeds one acre and therefore Tennessee permit coverage will be required. Construction of the range will require a SWPPP designed to meet requirements set forth in Tennessee Construction General Permit TNR10. Plans will be developed per criteria in the Tennessee Erosion and Sediment Control Handbook (2012), and Division of Water Resources Best Management Practices Manual for post construction Stormwater Management.

Development and redevelopment exceeding one acre requires water quality treatment for the first inch of rainfall (Session Law 2006-246). Section 438 of the Energy Independence and Security Act (EISA) of 2007 requires development and redevelopment projects exceeding 5,000 square feet to maintain or restore predevelopment hydrology (including temperature, rate, volume, and duration of flow) to the maximum extent technically feasible. The EPA has issued guidance that on-site management of the total volume of rainfall from the 95th percentile storm addresses Section 438 of EISA. The 95th percentile rain event is equal to 1.8 inches of rainfall for this locality. To comply with Section 438 of EISA, a variety of low-impact development methods, such as vegetated swales and bio-retention, will be incorporated into the development to attain the goal to retain the maximum percentage of stormwater on-site.

The Corps of Engineers or the construction contractor would be responsible for obtaining all necessary stormwater and erosion control project review and permits from the TN Division of Water Resources. The overall design objective is to maintain or restore pre-development hydrology and prevent any net increase in stormwater runoff. The construction phase will follow a Stormwater Pollution Prevention Plan (SWPPP) under permit coverage from the Tennessee Division of Water Resources to minimize sediment discharge to the unnamed tributaries of Noah's Spring Branch. Adherence to these laws and regulations will result in a non-significant impact to water resources due to additional stormwater runoff. The footprints of all chosen utilities will be included within the limits of disturbance for the entire project.

The United States Department of Agricultural (USDA) Natural Resources Conservation Service Web Soil Survey tool provided a map and approximate percentage of soil-type within the proposed project limits. (<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>). The majority soil types and approximate percentages occur in the project area; Dickson silt loam Da, Db, and Sa: 53.3 percent, and Taft silt loam, 11.1 percent. See Appendix H for the complete soil map and report.

The proposed action would not result in significant water resource impacts (exceedance of total maximum daily loads for sediments that causes a change in surface water impairment status, or an unpermitted direct

impact to a water of the U.S), or soil impacts defined by the DA (soil loss or compaction from Army training to the extent that natural reestablishment of native vegetation within two growing seasons is precluded on a land area greater than a total of 1,000 acres; or loss of soil productivity due to construction activities, which converts the soil to improved infrastructure on more than five percent of land under administrative control of the installation) (2021).

Actions under Alternative 2 will comply with the soil conservation measures and the Installation's Stormwater Management Plan because the Fort Campbell Compliance Branch will review designs prior to any ground disturbance to ensure adherence to permit conditions. Additionally, by following the required permitting processes and following Fort Campbell's strict requirements for erosion control and planning, cumulative impacts to water resources will be non-significant.

#### Wetlands and Floodplains:

The legal definition of a wetland in the Clean Water Act (CWA) is "...those areas that are inundated or saturated by surface water at a frequency to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands typically include swamps, marshes, bogs, and similar areas" (33 CFR 328.3(b)). Wetlands provide essential breeding, spawning, nesting, and wintering habitats for many fish and wildlife species. Wetlands also enhance the quality of surface waters by impeding erosive forces of moving water and trapping waterborne sediment and associated pollutants, maintaining base flow to surface waters through the gradual release of stored floodwaters and groundwater, and providing a natural means of flood control and storm damage protection through the absorption and storage of water during high-runoff periods. Fort Campbell utilizes data from wetland surveys and the National Wetland Inventory (NWI) for National Environmental Policy Act (NEPA) reviews. The installation utilizes both GIS and web-based data from the USFWS. Current data indicates 1,463 wetlands encompassing 4,883 acres are located on the installation (Figure 9). Limited field surveys for wetlands have been conducted since the late 1990's but have not been continued due to the high cost. Funding requests for survey efforts are submitted annually.

Floodplains moderate flood events, enhance water quality, recharge groundwater, and stabilize stream channels. Additionally, floodplains provide valuable habitat for fish, wildlife, and plants; recreational opportunities; and aesthetic benefits. The EO 11988 (Floodplain Management) requires federal agencies to "provide leadership and take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains in carrying out the agency's responsibilities." Additionally, EO 11988 defines floodplains relatively flat lowland areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (i.e., 100-year floodplain). The Federal Emergency Management Agency delineates the regulatory 100-year floodplain for use in the National Flood Insurance Program. No floodplains will be impacted by the construction of the MPTR. See Appendix J.

In reference to any impacts on designated or potential wetlands on the proposed site, construction would include a 17,000 linear foot (lf) by 20 foot (ft.)-wide tank trail with nine stream crossings. A wetlands survey conducted on 16 March 2023 has indicated a wetland at only one of the crossings and consultation with Nashville District U.S. Army Corps of Engineers will be completed. Appendix K includes an aerial map

showing the locations of the proposed range access roads that cross ephemeral streams and one emergent wetland. The total impact for the project is 0.067-acres and that includes the stream crossings. The ephemeral wetland acreage is approximately two (2) acres and the impacted area is less than 1 tenth of an acre. It is anticipated that all sites will include fill since digging on the range without UXO clearance could produce munition duds. The other four are ordinary stream crossings and will be permitted under a Tennessee Aquatic Resource Alteration Permit.

A storage area of approximately 75 acres located to the west of the ROCA and north of Jordan Springs Road is proposed for needed fill soil requirements. Best management practices to control runoff and prevent soil transport into the Weaver Branch of Noah's Spring Branch will be installed. See Appendix O.

#### 4.3.2 Threatened and Endangered Species :

4.3.2.1 The No Action Alternative will result in no significant impacts on endangered species.

4.3.2.2 Alternative 2: Construct and Operate a Multipurpose Training Range on the Existing RNG28

Potential Impacts: Three bat species occur adjacent to the proposed project footprint and forested habitat within the range is minimal and less than suitable given the openness of the range. All tree removal activities will occur during the winter while the bats are in hibernation and will not adversely impact these species. An evaluation conducted by Fort Campbell biologists determined the proposed project footprint will not adversely affect the known endangered bat species utilizing adjacent forested habitat.

#### 4.4 CUMULATIVE IMPACTS:

Future projects will include new tank and maneuver trails to access the MPTR; these trails will be constructed under a separate project not dependent on this proposed action and will be analyzed under a future Environmental Assessment and/or Environmental Impact Statement.

### 5.0 IMPACT SUMMARY

No significant impacts will occur as a result of implementing the proposed action provided all mitigation measures as specified in this EA are achieved rendering an EIS and ROD unwarranted. The Army will prepare and publish a FONSI to document this decision. The FNSI will summarize briefly why the proposed action will not significantly affect the environment.

### 6.0 CONCLUSION

In summary, the Proposed Action, "Alternative 2: Construct and Operate a Multipurpose Training Range on the Existing RNG28", is not expected to cause significant adverse effects to the environment and is not expected to result in significant environmental improvements relative to the existing conditions. Therefore, the effects of the Proposed Action are not considered significant as defined by the NEPA implementing regulations (40 CFR 1508.27 and 32 CFR 651).



## 7.0 PREPARATION AND CONSULTATION

7.0.1 List of Preparers: This document was prepared for the Fort Campbell DPW by Mr. Dan Etson, NEPA Program Manager.

7.0.2 List of Persons Consulted: The following persons were consulted during the development of this EA:

- Doan, Tuyen Minh, Solid Waste, DPW Environmental, Fort Campbell, KY
- Lockard, Patrica, Air Quality, DPW Environmental, Fort Campbell, KY
- Pampell, Rehanon, AG Lease, DPW Environmental, Fort Campbell, KY
- Sorensen-Mutchie, Nichole, Cultural Resources, DPW Environmental, Fort Campbell, KY
- Zirkle, Gene, Wildlife Biologist/Wetlands, DPW Environmental, Fort Campbell, KY

## 7.0.4 LITERATURE CITED

Council on Environmental Quality (CEQ), 1997. Considering Cumulative Impacts Under the National Environmental Policy Act. Washington, DC: Executive Office of the President, CEQ. January 1997.

Council for Environmental Quality. 1 Aug 2016 Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas (GHG) Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews.

Department of the Army (DA), 2002. Environmental Effects of Army Actions (Title 32 CFR Part 651), as published in the Federal Register, Vol. 67(61): 15290-

15332. Washington, DC: Headquarters, DA. 29 March 2002.

Department of the Army (DA) Combined Arms Center. Fort Campbell FY 24 MPTR (Tech Team) Outbrief 18-19 May 2021.

Clean Water Act, 33 U.S.C. §§ 1251-1377 (1972; as amended 1994).

General Permit for Stormwater Discharge from Construction Activities, Section 402, CWA.

Environmental Protection Agency, Protection of Environment, 32 CFR Part 260- 299.

Endangered Species Act of 1973 (as amended), U.S. Fish and Wildlife Service, Washington, DC, 1988.

Environmental Analysis of Army Actions, 32 CFR Part 651.

National Environmental Policy Act of 1969 (as amended; 40 CFR 1500 et seq.),

U.S. Environmental Protection Agency, Washington, D.C., 1975.

National Historic Preservation Act 16 U.S.C. §§ 470a et seq. (1966, as amended 2016).

National Pollutant Discharge Elimination System General Permit for Storm Water Discharge from Construction Activities, Section 402, CWA.

United States Department of Agriculture Soil Survey Custom Report. Accessed 18 April 2023. Available online at: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

United States Environmental Protection Agency Environmental Justice Screening and Mapping Tool (Version 2.11). Accessed 18 April 2023. Available online at <https://ejscreen.epa.gov/mapper/>.

United States Corps of Engineers Louisville District. Army MILCON Parametric Design Report; Automated Multipurpose Training Range –PN93184 FY24. December 2021.

United States Corps of Engineers Louisville District. 35 % DESIGN SUBMITTAL Design Analysis Multipurpose Training Range (MPTR) Fort Campbell, Kentucky PN 93184 FY24. 16 May 2022.

8.0 DISTRIBUTION LIST: As part of the internal and public review and comment process on this document, the following libraries and agencies have received copies of the EA and draft FNSI

8.0.1 Libraries:

- Clarksville- Montgomery County Public Library, 350 Pageant Lane , Clarksville, TN 37042.
- Christian County Public Library, 101 Bethel Street, Hopkinsville, KY 42240
- Stewart County Public Library, 102 Natcor Drive , Dover, TN 37058
- John L. Street Library, 244 Main Street, Cadiz, KY 42211

## 8.0.2 Agencies

- Tennessee Department of Environment and Conservation, Nashville Field Office, 711 R.S. Gass Blvd., Nashville, TN 37216
- US Fish and Wildlife Service, Tennessee Ecological Services Office, 446 Neal Street, Cookeville, TN 38501
- Tennessee Wildlife Resources Agency, Ellington Agricultural Center, 5105 Edmonson Pike, Nashville, TN 37211
- US Army Corps of Engineers, Nashville District Regulatory Branch, 3701 Bell Road, Nashville, TN 37214
- US Environmental Protection Agency, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303
- Tennessee State Historic Preservation Office 2941 Lebanon Pike Nashville, TN 37214
- Kentucky Heritage Council State Historic Preservation Officer 410 High Street Frankfort, KY 40601



# Fort Campbell Range 28 Proposed MPTR



LEGEND

- Existing SAT (37ea)
- Existing SIT Emplacement (154ea)
- Existing MIT Emplacement (44ea)
- Existing MAT Emplacement (9ea)
- Existing BP (6ea)
- Proposed SAT-Frontal (10ea)
- Proposed SAT-Flank (6ea)
- Proposed SAT-Fr over existing (14ea)
- Proposed 7-man SIT Cluster (14ea)
- Proposed 6-man SIT Cluster w/MIT (4ea)
- Proposed MAT (3ea New / 3ea Reuse)
- Proposed BP (6ea)
- Proposed Reverse Slope BP (4ea)
- Future BP (5ea)

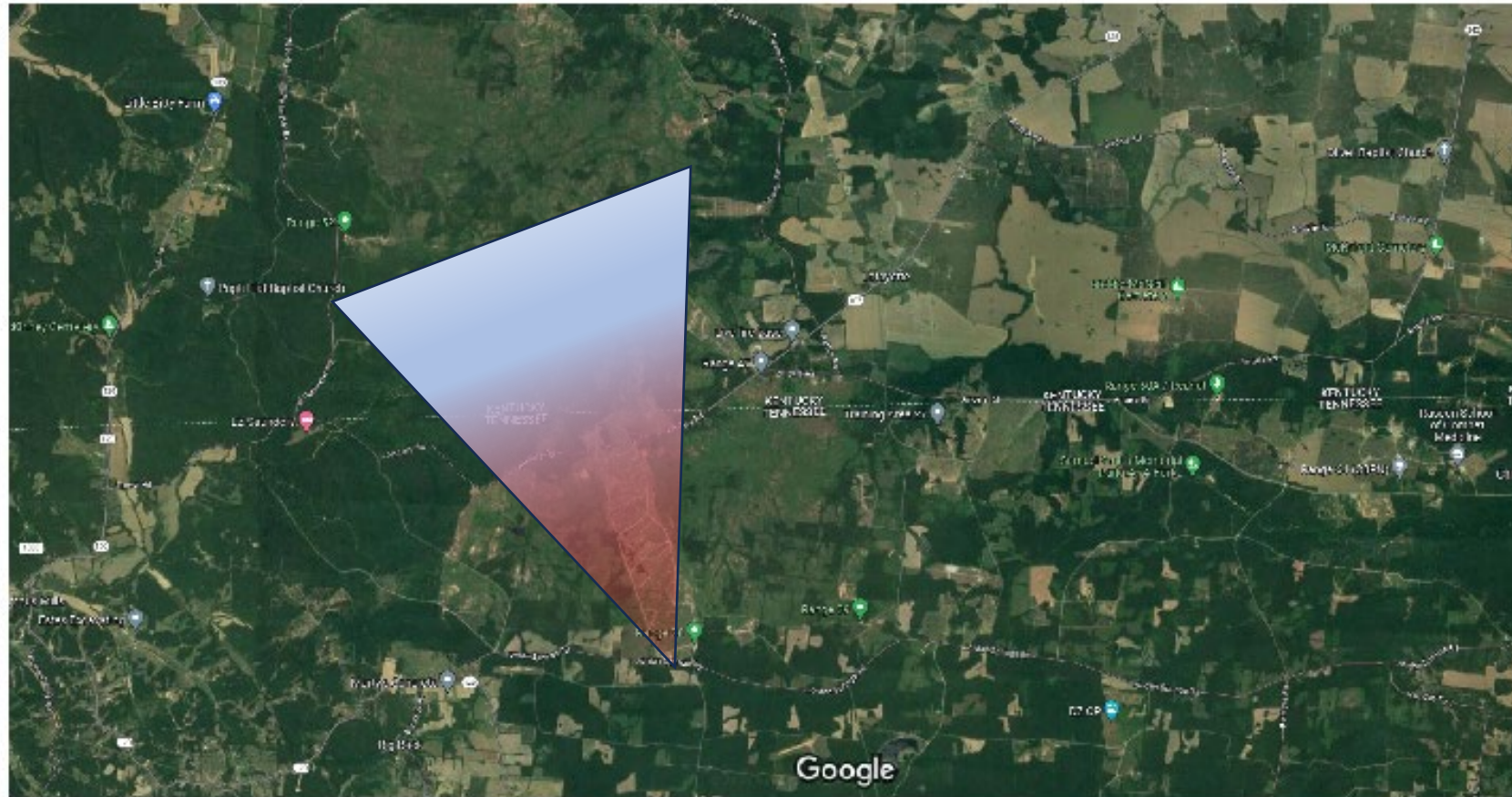
Control Tower



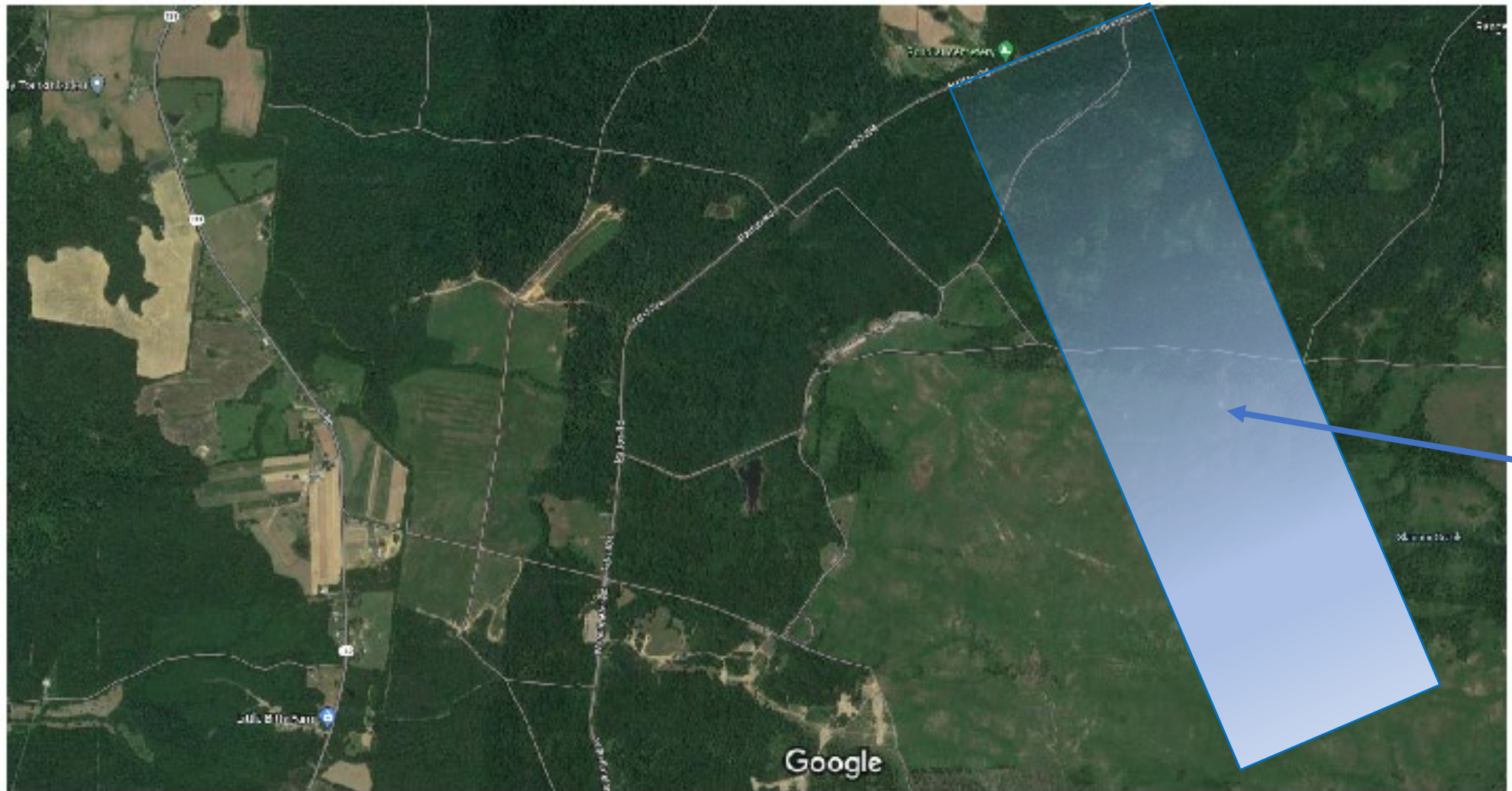
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



## Appendix B: Preferred Alternative (Approximate) Surface Danger Zone (SDZ)



Imagery ©2023 CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 1 mi



Proposed  
Location



## Appendix C: Alternative 4 Range 42



Imagery ©2023 CNES / Airbus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 1000 ft

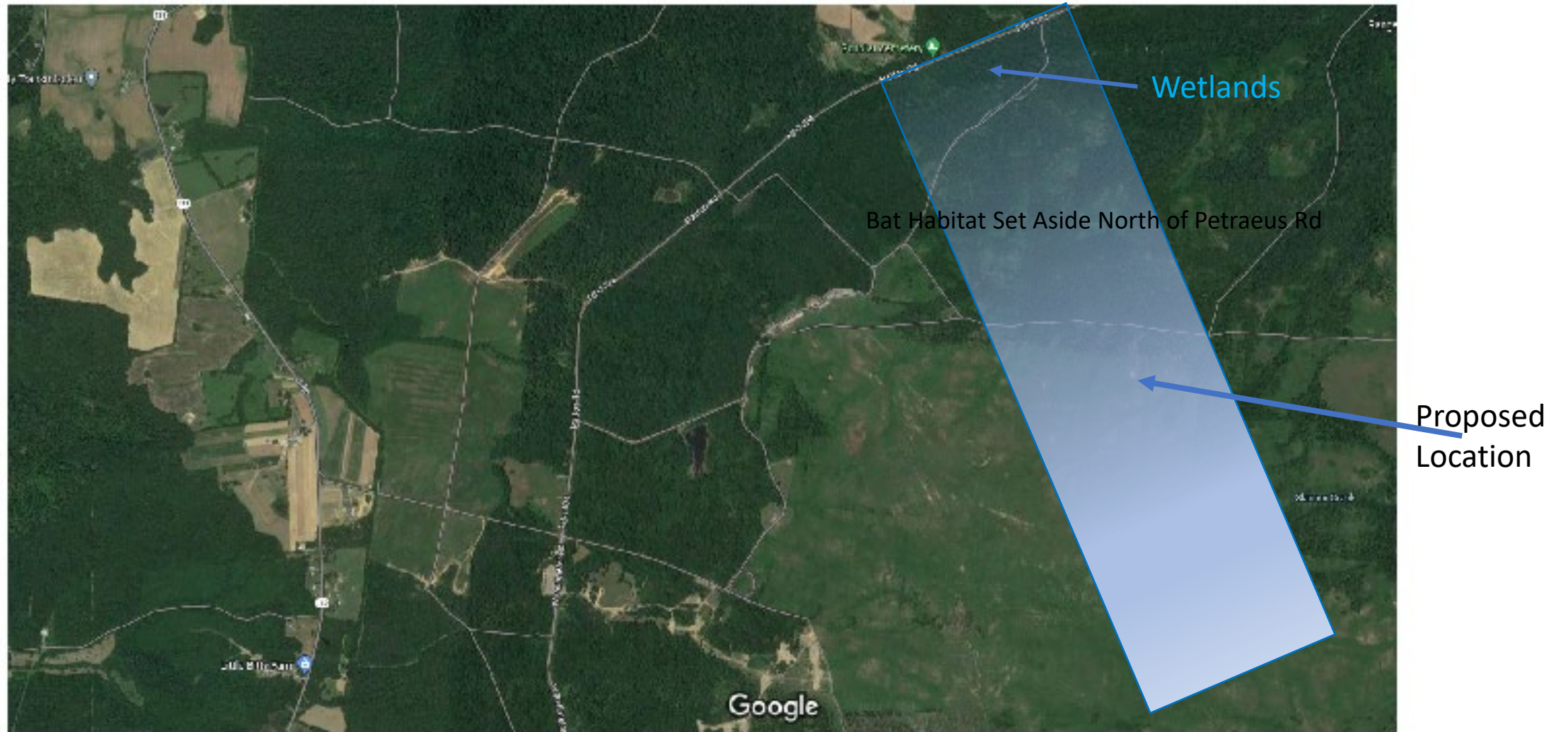
## Appendix C: Alternative 5 Range 52

Google Maps



Imagery ©2023 CNES / Airbus, Landsat / Copernicus, Maxar Technologies, USDA/FPAC/GEO, Map data ©2023 2000 ft





Appendix E:

## Resource Area Issues, Concerns, and Risks

Resource Area	Action Alternatives	No Action Alternative
<p>Land Use</p> <ul style="list-style-type: none"> <li>• land use</li> <li>• real property management</li> <li>• easements</li> <li>• viewsheds not addressed under cultural resources</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• Minimal change in viewshed with the proposed clear cutting of 70 acres.</li> <li>• Proposed project occurs within existing range with no expansion except temporary soil storage area in TA35 .</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Very Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<p>Air Quality and Greenhouse Gas</p> <ul style="list-style-type: none"> <li>• Conformity</li> <li>• NAAQS</li> <li>• PSD</li> <li>• New Source Review</li> <li>• Minor Source Preconstruction Permitting</li> <li>• Dust</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• There could be a wildland fire risk during training, however it is in an area adapted to fires.</li> <li>• Somewhat less trees to absorb greenhouse gases.</li> <li>• Additional generator(s) will be added to installation permit.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Very Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<p>Noise</p> <ul style="list-style-type: none"> <li>• noise zones</li> <li>• noise impacts to community</li> <li>• noise impacts to wildlife</li> <li>• risks of noise complaints</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• The site is approximately 3,000 meters from post boundary and US Highway 79. There may be an occasional risk of noise complaint.</li> <li>• Noise and vibration from the use of vehicles and live fire may disturb wildlife in the immediate and bordering area.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<p>Water Resources/Soil</p>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:</li> </ul>

Resource Area	Action Alternatives	No Action Alternative
<ul style="list-style-type: none"> <li>• surface water</li> <li>• groundwater</li> <li>• floodplains</li> <li>• wetlands</li> <li>• 404 permits</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts to water quality due to anticipated erosion and runoff</li> <li>• Wetland delineation required and executed.</li> <li>• NPDES, 401, and 404 permits required</li> <li>• FONPA drafted, The total impact for the project is 0.067-acres including stream crossings. Ephemeral wetland acreage is less than 0.1 acre. Anticipated that all sites will include fill (digging on range without UXO clearance could produce munition duds).</li> <li>• No drainage issues anticipated</li> </ul>	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
<p>Biological Resources</p> <ul style="list-style-type: none"> <li>• vegetation</li> <li>• wildlife</li> <li>• threatened and endangered species</li> <li>• invasive species</li> <li>• wildland fires</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>○ Indiana Bat</li> <li>○ Gray Bat</li> <li>○ Northern Long-Eared Bat</li> <li>○ Little Brown Bat</li> </ul> </li> <li>• There is a risk for wildlife fires during training.</li> <li>• Trees removed outside of bat season.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified.</li> </ul> </li> </ul>
<p>Cultural Resources</p> <ul style="list-style-type: none"> <li>• historic buildings and structures</li> <li>• archaeological resources</li> <li>• SHPO consultation</li> <li>• Native American Tribes consultation</li> <li>• historic viewsheds</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>Project Area of Potential Effects (APE) for direct and indirect effects had been partially surveyed for archaeological resources. The areas not surveyed were located within the Impact Area and are considered exempt from archaeological inventory. Sites 40SW0157, 40SW0158, 40SW0159, and 40SW0571 were determined not eligible for NRHP listing. TN and KY SHPOs concurred.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low or Medium</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>•</li> </ul> </li> </ul>

<b>Resource Area</b>	<b>Action Alternatives</b>	<b>No Action Alternative</b>
Socioeconomics <ul style="list-style-type: none"> <li>• demographics</li> <li>• housing</li> <li>• economic development</li> <li>• quality of life</li> <li>• environmental justice in minority and low-income populations</li> <li>• protection of children from environmental health risks and safety risks</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified. There will be no environmental or socioeconomic impacts that will cross installation boundaries into areas with populations of children, therefore, there would be no impacts on children or low-income populations resulting from alternatives analyzed in this EA</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Transportation and Traffic <ul style="list-style-type: none"> <li>• traffic</li> <li>• roadways</li> <li>• rail transportation</li> <li>• air transportation</li> <li>• traffic volume</li> <li>• level of congestion</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Some increase in traffic during construction?</li> <li>• With increased range operation there would be an increase in military vehicle traffic to and from the range.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Airspace <ul style="list-style-type: none"> <li>• controlled airspace</li> <li>• SUAs</li> <li>• MOAs</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: TBD</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: TBD</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Utilities <ul style="list-style-type: none"> <li>• potable water</li> <li>• drinking water plants</li> <li>• wastewater</li> <li>• storm water</li> <li>• NPDES permitting</li> <li>• solid waste</li> <li>• energy</li> <li>• heating</li> <li>• cooling,</li> <li>• communications</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Water, sewer, and gas not required.</li> <li>• To either use Porto potties or have a dry flush system</li> <li>• Power is provided by “City Light &amp; Power” with existing RNG28 connection point..</li> <li>• Fiber run in ROCA and downrange from NEC hut.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> <li>•</li> </ul> </li> </ul>

<b>Resource Area</b>	<b>Action Alternatives</b>	<b>No Action Alternative</b>
Hazardous and Toxic Materials and Waste <ul style="list-style-type: none"> <li>• hazardous material</li> <li>• hazardous waste</li> <li>• USTs/ASTs</li> <li>• asbestos</li> <li>• radon</li> <li>• LBP</li> <li>• PCBs</li> <li>• UXOs</li> <li>• MECs</li> <li>• POLs</li> <li>• EPCRA</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Any necessary UXO removal prior to construction.</li> <li>• No digging during construction; clean soil will be added over existing downrange surfaces.</li> <li>• </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Solid Waste <ul style="list-style-type: none"> <li>• Construction and demolition landfill</li> <li>• Recyclable materials</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Debris hauled off-site to C&amp;D Landfill</li> <li>• Recycle concrete/metal debris</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None Identified</li> </ul> </li> </ul>

# Appendix F: Noise Map

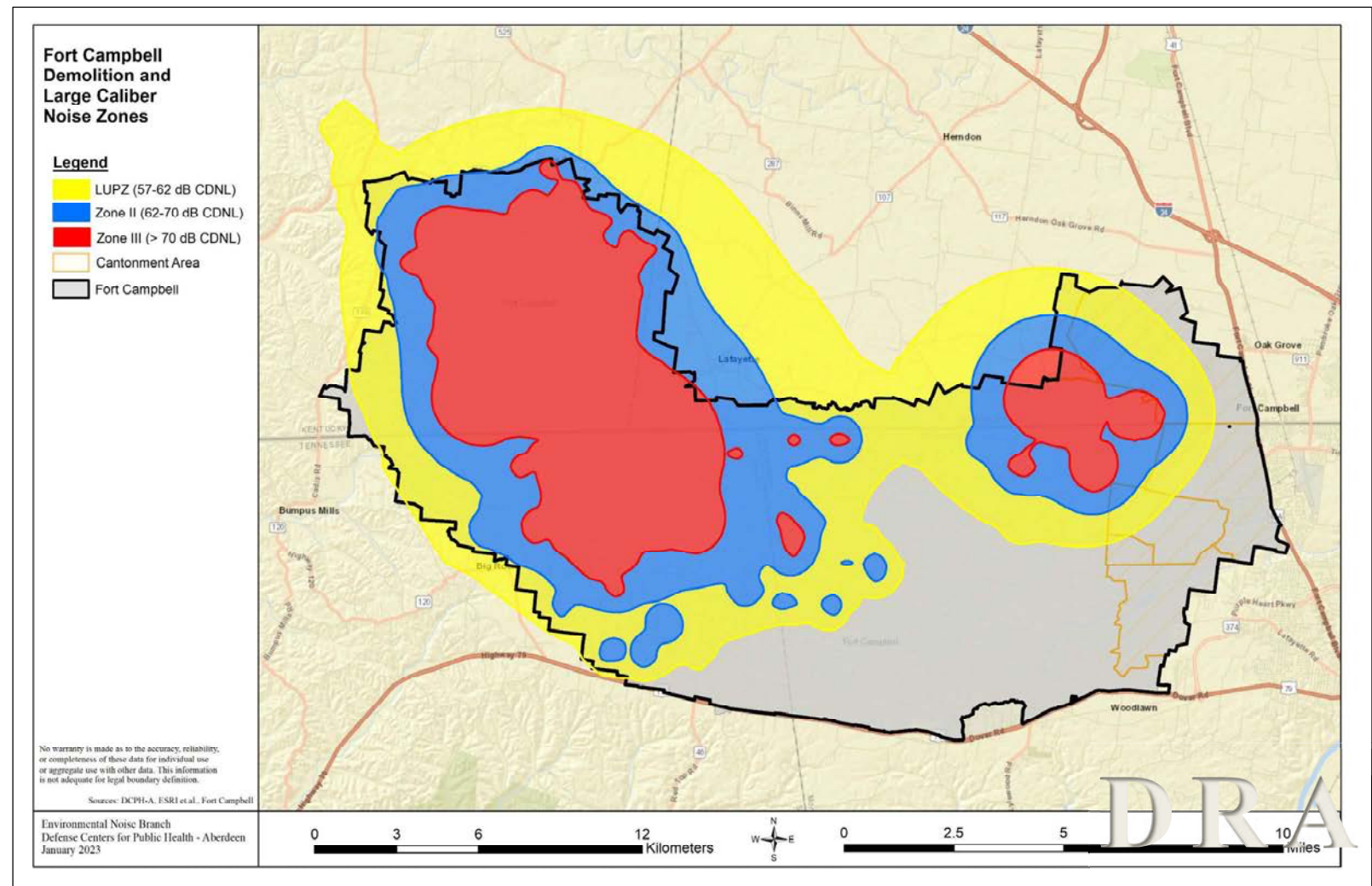


Figure 4-4. Demolition and Large Caliber Noise Zones



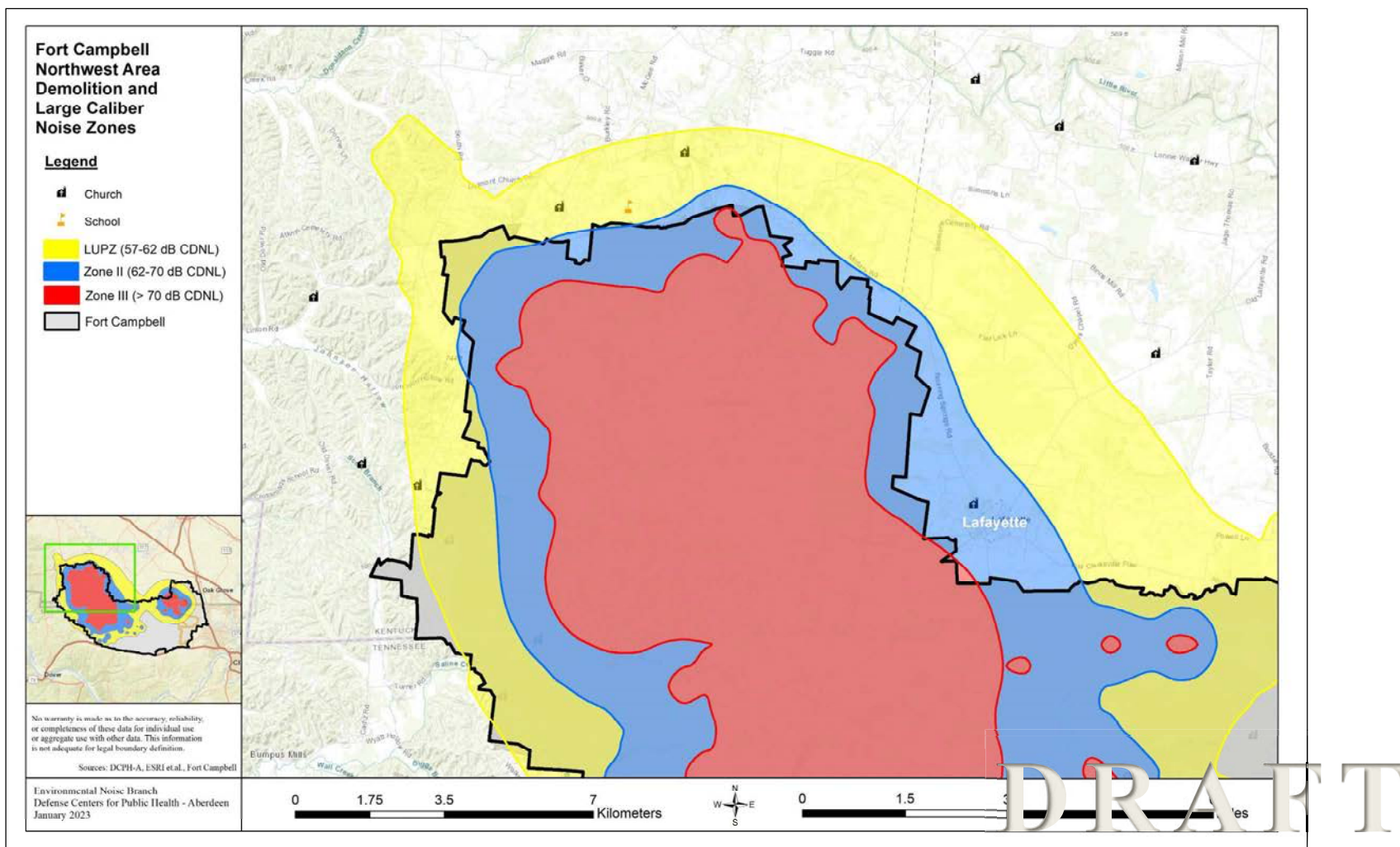


Figure 4-5. Demolition and Large Caliber Noise Zones - Northwestern Area

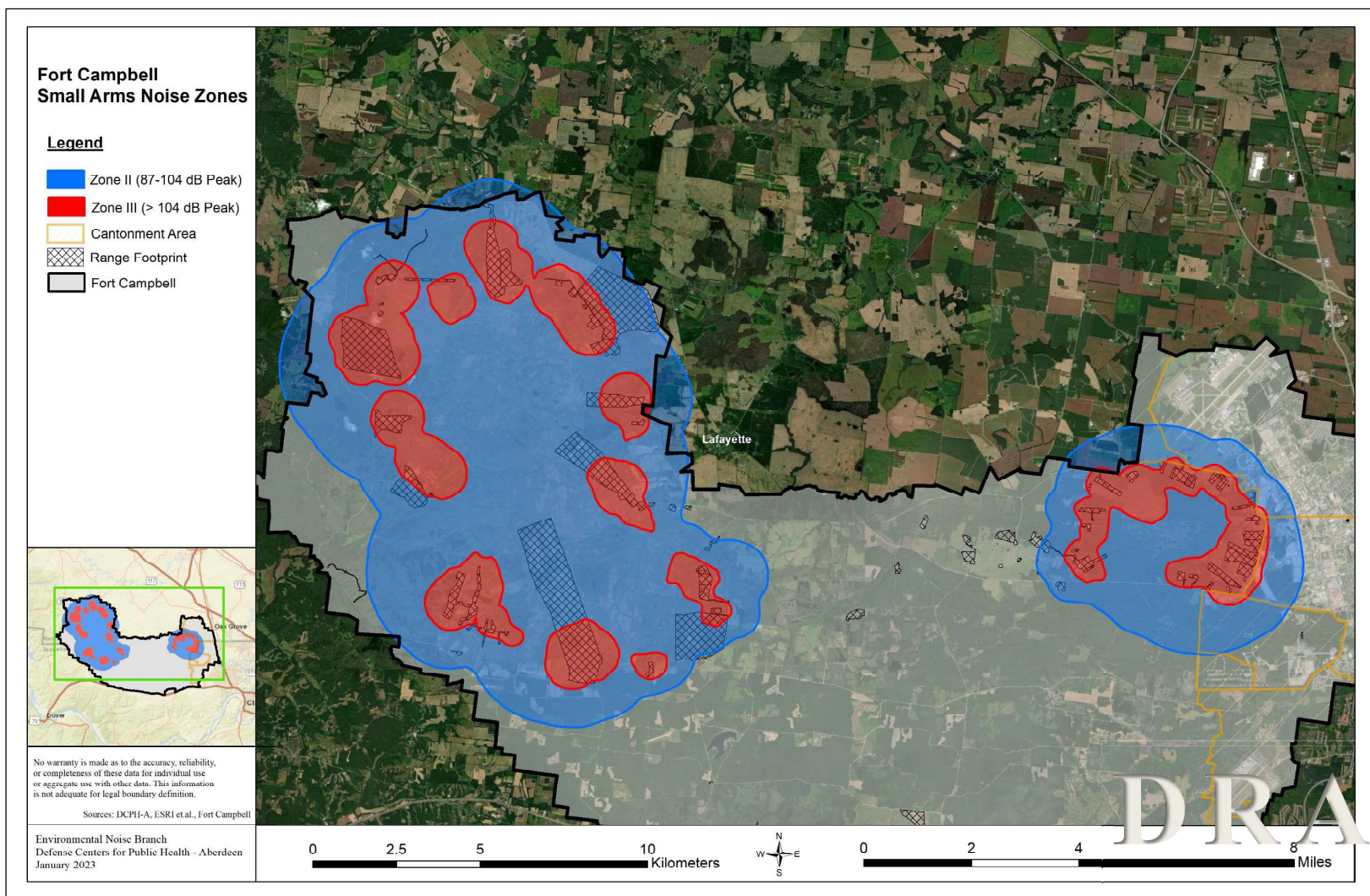


Figure 4-1. Small Arms Noise Zones





## EJScreen Report (Version 2.11)



the User Specified Area, TENNESSEE, EPA Region 4

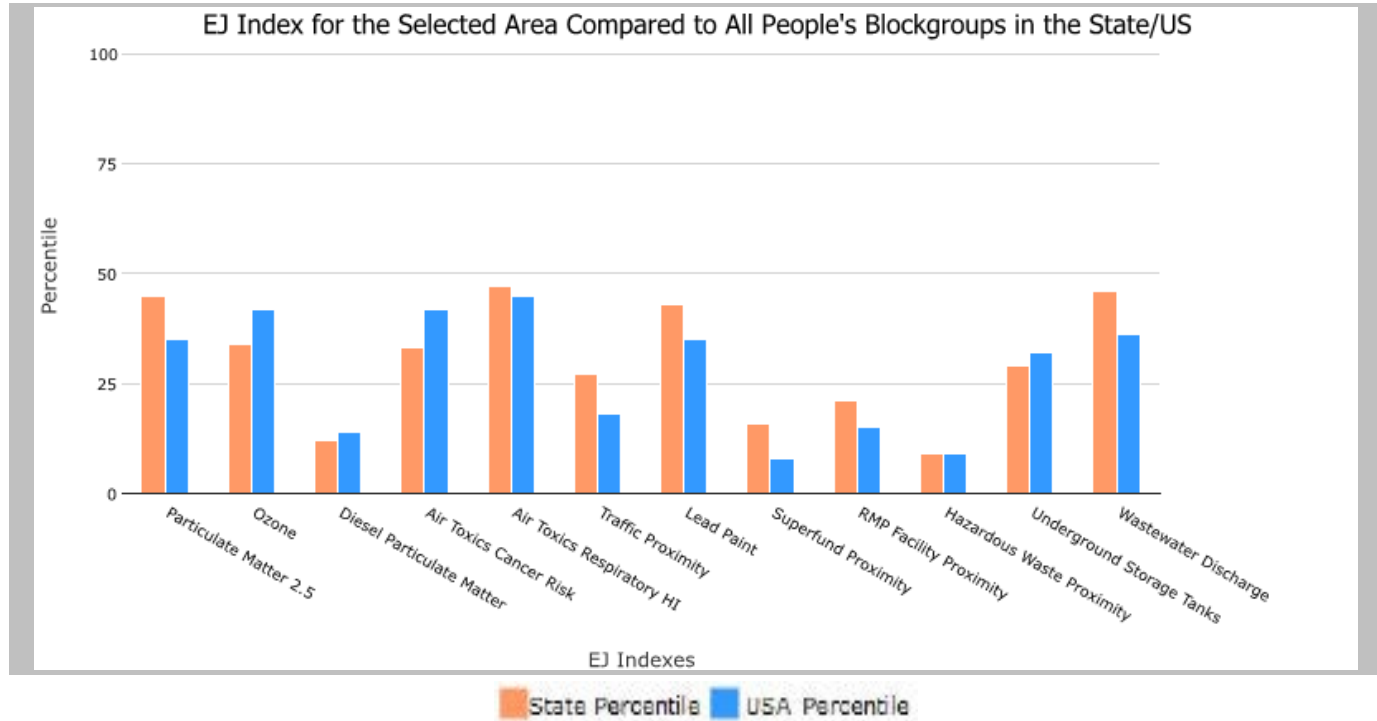
Approximate Population: 1,763

Input Area (sq. miles): 77.36

SW Fort Campbell EJ (The study area contains 3 blockgroup(s) with zero population.)

Selected Variables	State Percentile	USA Percentile
<b>Environmental Justice Indexes</b>		
Particulate Matter 2.5 EJ index	45	35
Ozone EJ index	34	42
Diesel Particulate Matter EJ index*	12	14
Air Toxics Cancer Risk EJ index*	33	42
Air Toxics Respiratory HI EJ index*	47	45
Traffic Proximity EJ index	27	18
Lead Paint EJ index	43	35
Superfund Proximity EJ index	16	8
RMP Facility Proximity EJ index	21	15
Hazardous Waste Proximity EJ index	9	9
Underground Storage Tanks EJ index	29	32
Wastewater Discharge EJ index	46	36

EJ Indexes - The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.



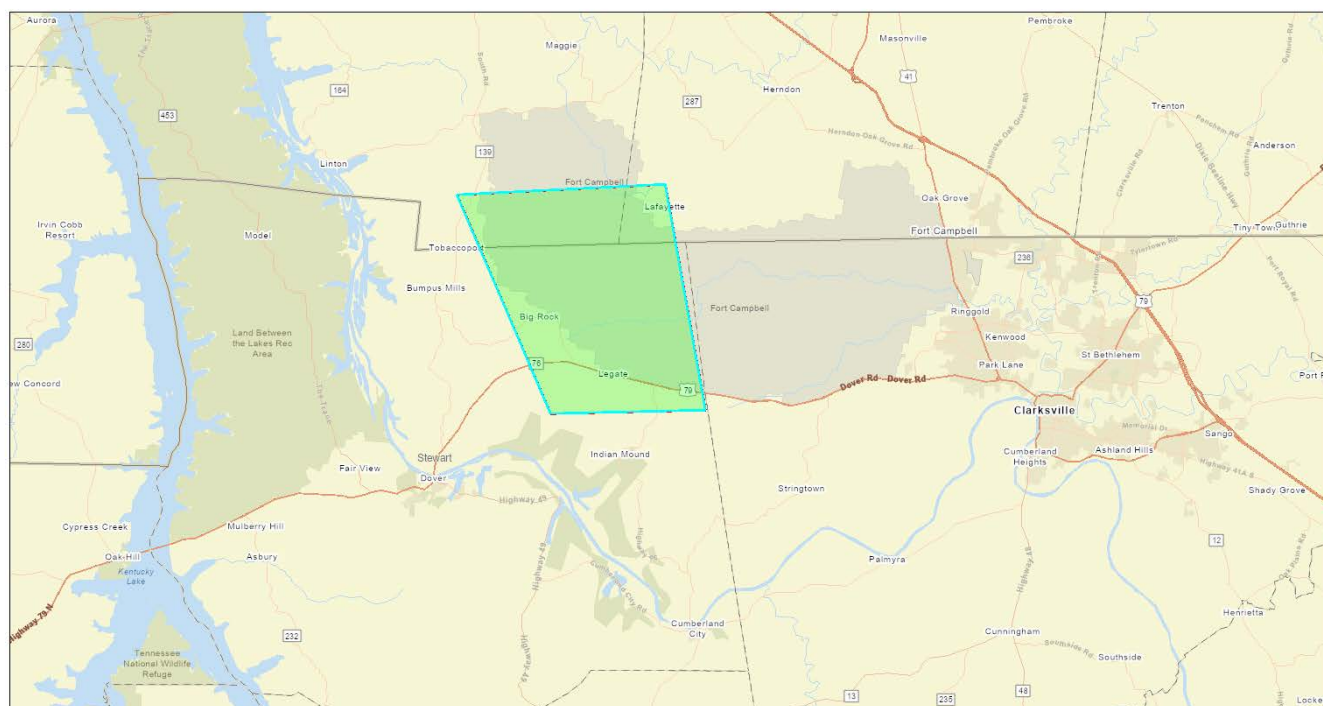
\*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/haps/air-toxics-data-update>.

the User Specified Area, TENNESSEE, EPA Region 4

Approximate Population: 1,763

Input Area (sq. miles): 77.36

**SW Fort Campbell EJ (The study area contains 3 blockgroup(s) with zero population.)**



May 8, 2023

SW Fort Campbell EJ

1:288,895  
0 2.75 5.5 11 mi  
0 4.5 9 18 km

Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA

#### Sites reporting to EPA

Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

## EJScreen Report (Version 2.11)



the User Specified Area, TENNESSEE, EPA Region 4

Approximate Population: 1,763

Input Area (sq. miles): 77.36

SW Fort Campbell EJ (The study area contains 3 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	USA Avg.	%ile in USA
<b>Pollution and Sources</b>					
Particulate Matter 2.5 ( $\mu\text{g}/\text{m}^3$ )	8.21	8.21	49	8.67	39
Ozone (ppb)	42.1	42.6	31	42.5	48
Diesel Particulate Matter* ( $\mu\text{g}/\text{m}^3$ )	0.0956	0.233	11	0.294	<50th
Air Toxics Cancer Risk* (lifetime risk per million)	30	33	78	28	80-90th
Air Toxics Respiratory HI*	0.4	0.41	73	0.36	80-90th
Traffic Proximity (daily traffic count/distance to road)	29	360	25	760	17
Lead Paint (% Pre-1960 Housing)	0.14	0.19	50	0.27	40
Superfund Proximity (site count/km distance)	0.014	0.078	14	0.13	9
RMP Facility Proximity (facility count/km distance)	0.081	0.59	20	0.77	12
Hazardous Waste Proximity (facility count/km distance)	0.043	0.64	8	2.2	7
Underground Storage Tanks (count/km <sup>2</sup> )	0.073	1.3	26	3.9	26
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.0021	0.037	75	12	56
<b>Socioeconomic Indicators</b>					
Demographic Index	18%	32%	30	35%	29
Supplemental Demographic Index	14%	16%	44	15%	56
People of Color	8%	27%	32	40%	20
Low Income	29%	34%	40	30%	52
Unemployment Rate	6%	5%	66	5%	66
Limited English Speaking Households	0%	1%	0	5%	0
Less Than High School Education	10%	12%	45	12%	56
Under Age 5	6%	6%	60	6%	60
Over Age 64	23%	16%	75	16%	76
Low Life Expectancy	24%	22%	71	20%	89

EJScreen is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJScreen outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

## EJScreen Report (Version 2.11)



the User Specified Area, TENNESSEE, EPA Region 4

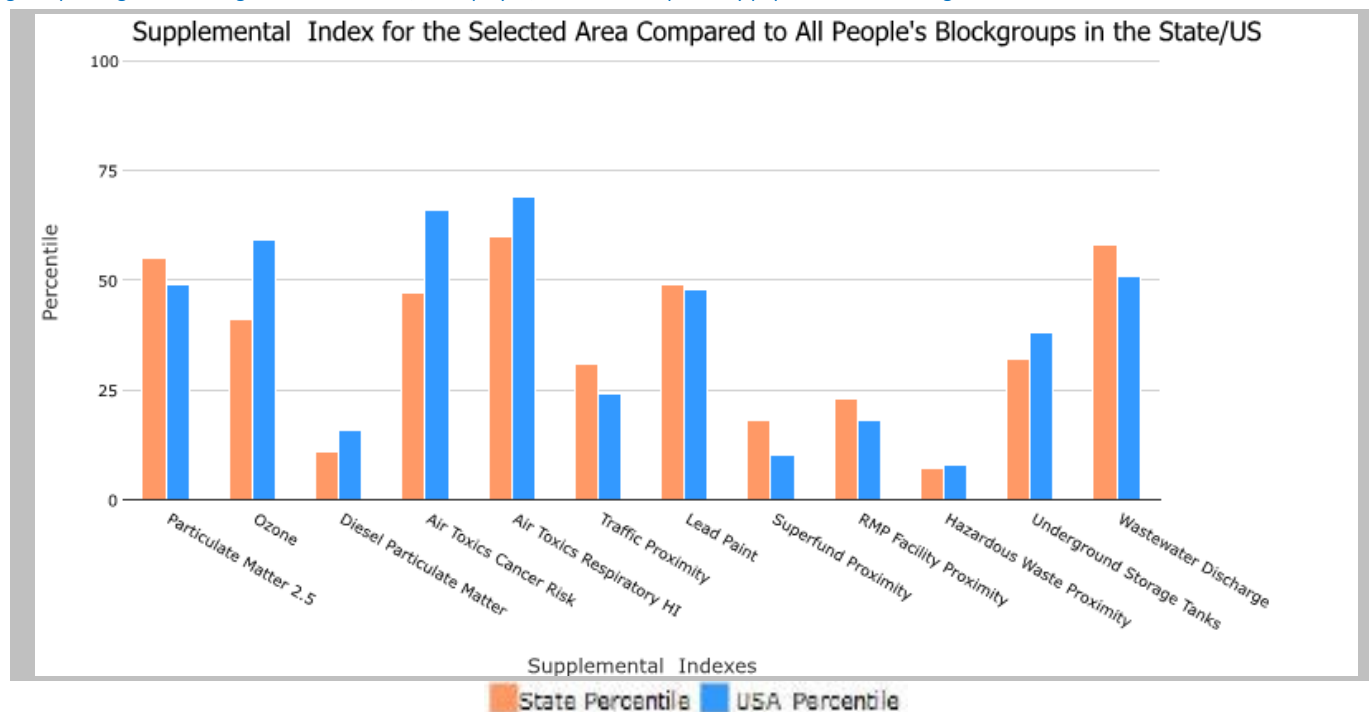
Approximate Population: 1,763

Input Area (sq. miles): 77.36

SW Fort Campbell EJ (The study area contains 3 blockgroup(s) with zero population.)

Selected Variables	State Percentile	USA Percentile
<b>Supplemental Indexes</b>		
Particulate Matter 2.5 Supplemental Index	55	49
Ozone Supplemental Index	41	59
Diesel Particulate Matter Supplemental Index*	11	16
Air Toxics Cancer Risk Supplemental Index*	47	66
Air Toxics Respiratory HI Supplemental Index*	60	69
Traffic Proximity Supplemental Index	31	24
Lead Paint Supplemental Index	49	48
Superfund Proximity Supplemental Index	18	10
RMP Facility Proximity Supplemental Index	23	18
Hazardous Waste Proximity Supplemental Index	7	8
Underground Storage Tanks Supplemental Index	32	38
Wastewater Discharge Supplemental Index	58	51

Supplemental Indexes - The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on low-income, limited English speaking, less than high school education, unemployed, and low life expectancy populations with a single environmental indicator.

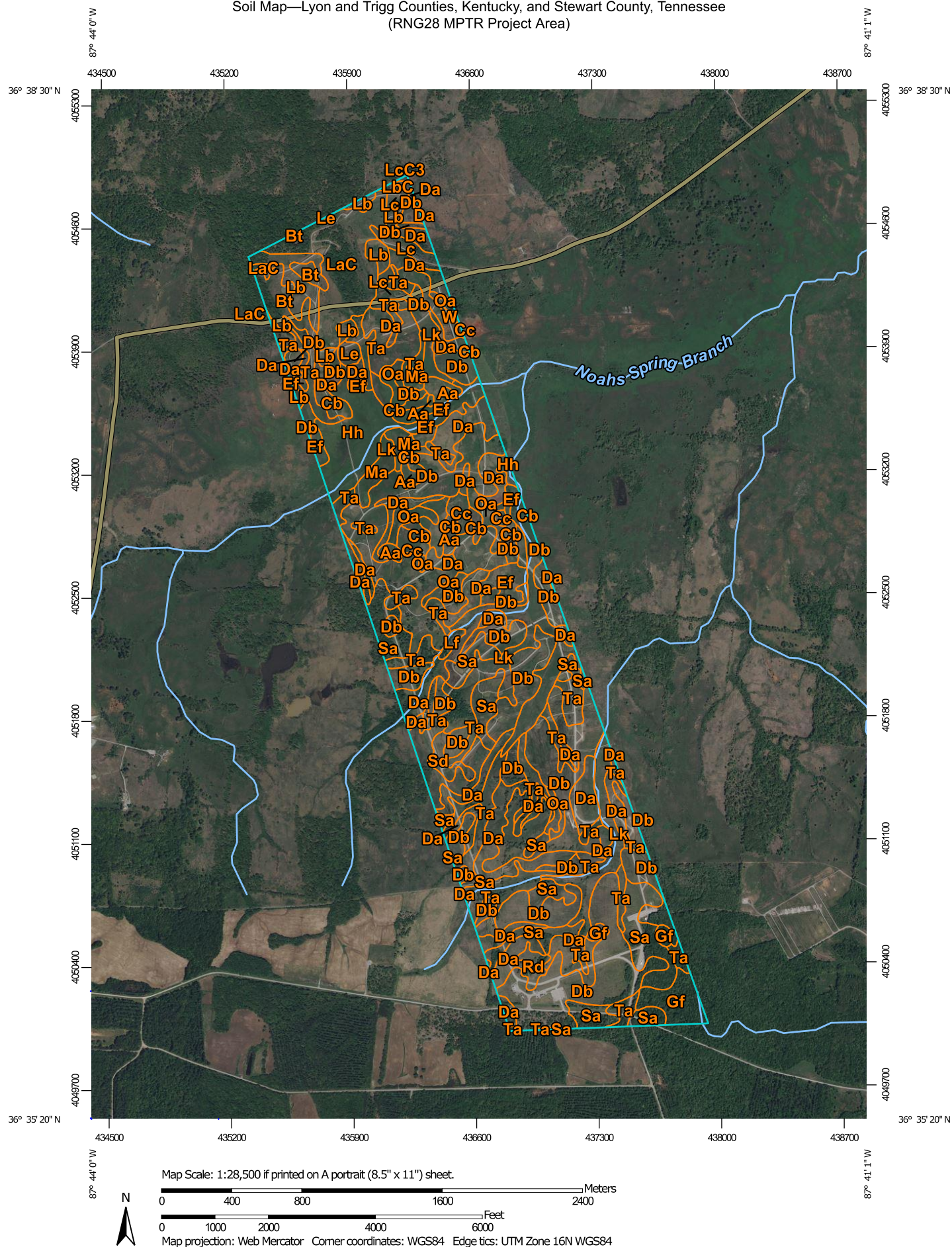


This report shows the values for environmental and demographic indicators, EJScreen indexes, and supplemental indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJScreen documentation for discussion of these issues before using reports. For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice).



## Appendix H: Soil Survey

Soil Map—Lyon and Trigg Counties, Kentucky, and Stewart County, Tennessee  
(RNG28 MPTR Project Area)



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <https://websoilsurvey.sc.egov.usda.gov/>

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lyon and Trigg Counties, Kentucky  
Survey Area Data: Version 19, Sep 2, 2022

Soil Survey Area: Stewart County, Tennessee  
Survey Area Data: Version 21, Sep 15, 2022

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 21, 2021—May 1, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LbC	Lax silt loam, 6 to 12 percent slopes	1.7	0.1%
LcC3	Lax silty clay loam, 6 to 12 percent slopes, severely eroded	0.4	0.0%
<b>Subtotals for Soil Survey Area</b>		<b>2.1</b>	<b>0.2%</b>
<b>Totals for Area of Interest</b>		<b>1,267.3</b>	<b>100.0%</b>

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Aa	Nolin silt loam, occasionally ponded	13.9	1.1%
Bt	Brandon silt loam, 12 to 25 percent slopes	21.3	1.7%
Cb	Bewleyville silt loam, 5 to 12 percent slopes, eroded	26.4	2.1%
Cc	Bewleyville silt loam, 2 to 5 percent slopes, eroded	12.2	1.0%
Da	Dickson silt loam, 5 to 12 percent slopes	191.8	15.1%
Db	Dickson silt loam, 2 to 5 percent slopes	387.8	30.6%
Ef	Armour silt loam, 2 to 5 percent slopes	32.4	2.6%
Gf	Guthrie silt loam, 0 to 2 percent slopes, frequently ponded	22.0	1.7%
Hh	Nolin silt loam, occasionally flooded	53.8	4.2%
LaC	Lax silt loam, 5 to 12 percent slopes	63.2	5.0%
Lb	Lax silt loam, 5 to 12 percent slopes, eroded	33.1	2.6%
Lc	Lax silt loam, 2 to 5 percent slopes	16.7	1.3%
Le	Lax silty clay loam, 5 to 12 percent slopes, severely eroded	3.8	0.3%
Lf	Newark silt loam, occasionally flooded	2.6	0.2%
Lk	Lobelville silt loam, occasionally flooded	93.1	7.3%
Ma	Melvin silt loam, frequently flooded	12.3	1.0%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Oa	Newark silt loam, occasionally ponded	28.6	2.3%
Rd	Dickson-Gullied land complex, 2 to 12 percent slopes	6.1	0.5%
Sa	Dickson silt loam, 0 to 2 percent slopes	96.1	7.6%
Sd	Staser fine sandy loam, occasionally flooded	7.3	0.6%
Ta	Taft silt loam, 0 to 2 percent slopes	140.5	11.1%
W	Water	0.4	0.0%
<b>Subtotals for Soil Survey Area</b>		<b>1,265.1</b>	<b>99.8%</b>
<b>Totals for Area of Interest</b>		<b>1,267.3</b>	<b>100.0%</b>



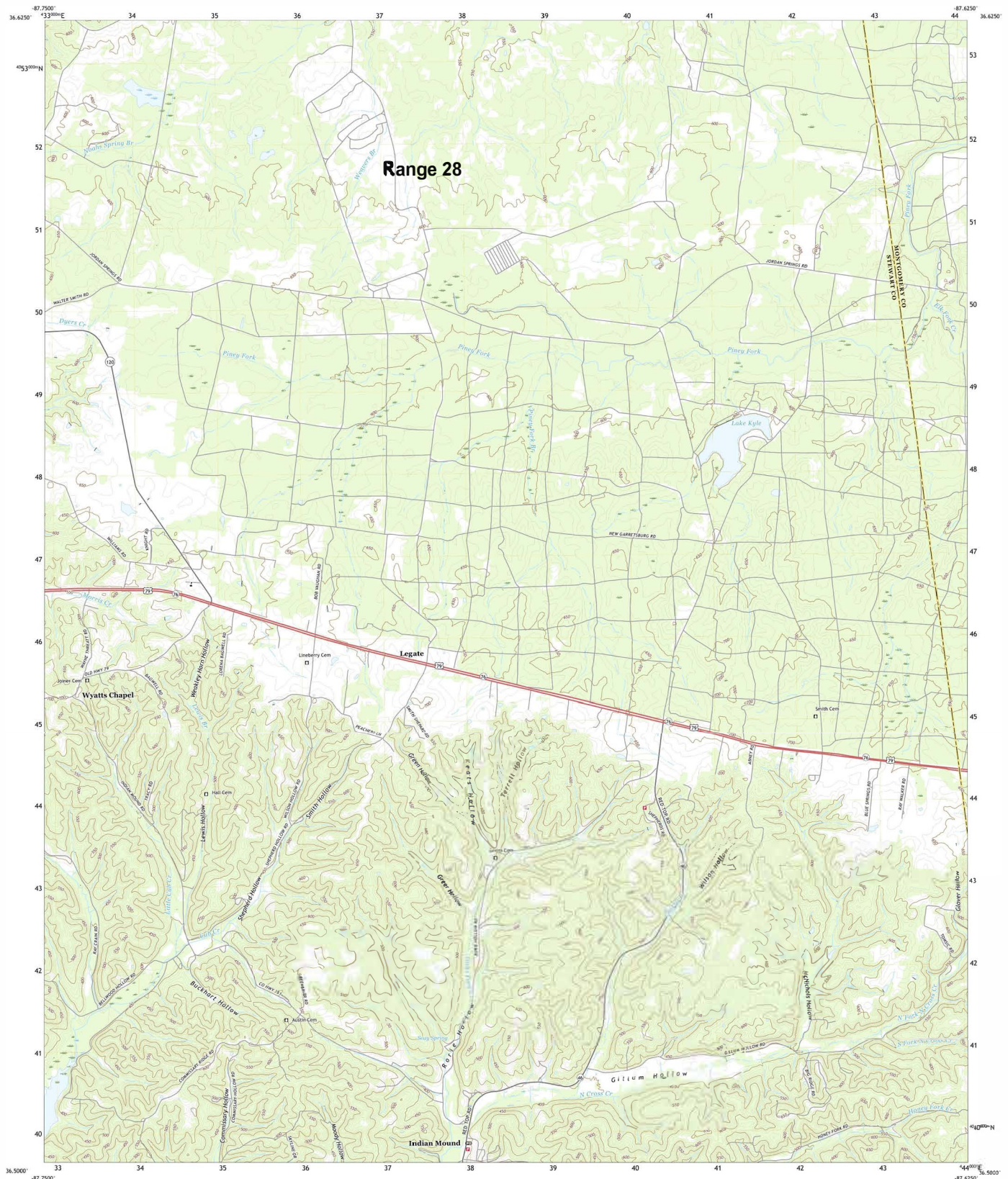
## FORT CAMPBELL RANGE 28



U.S. DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY

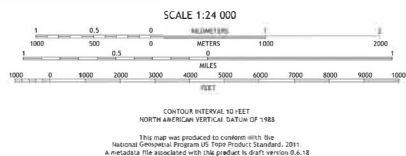
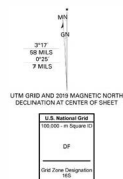


INDIAN MOUND QUADRANGLE  
TENNESSEE  
7.5-MINUTE SERIES



Produced by the United States Geological Survey  
North American Datum of 1983 (NAD83)  
World Geodetic System of 1984 (WGS84)  
This map is not a legal representation of land ownership. It is for informational purposes only and does not constitute a warranty of any kind.

Imagery: U.S. Census Bureau, 2016 - 2019  
Topography: National Hydrography Dataset, 1984 - 2019  
Contours: Multiple sources, color metadata file 2017 - 2018  
Wetlands: FWS National Wetlands Inventory 1981



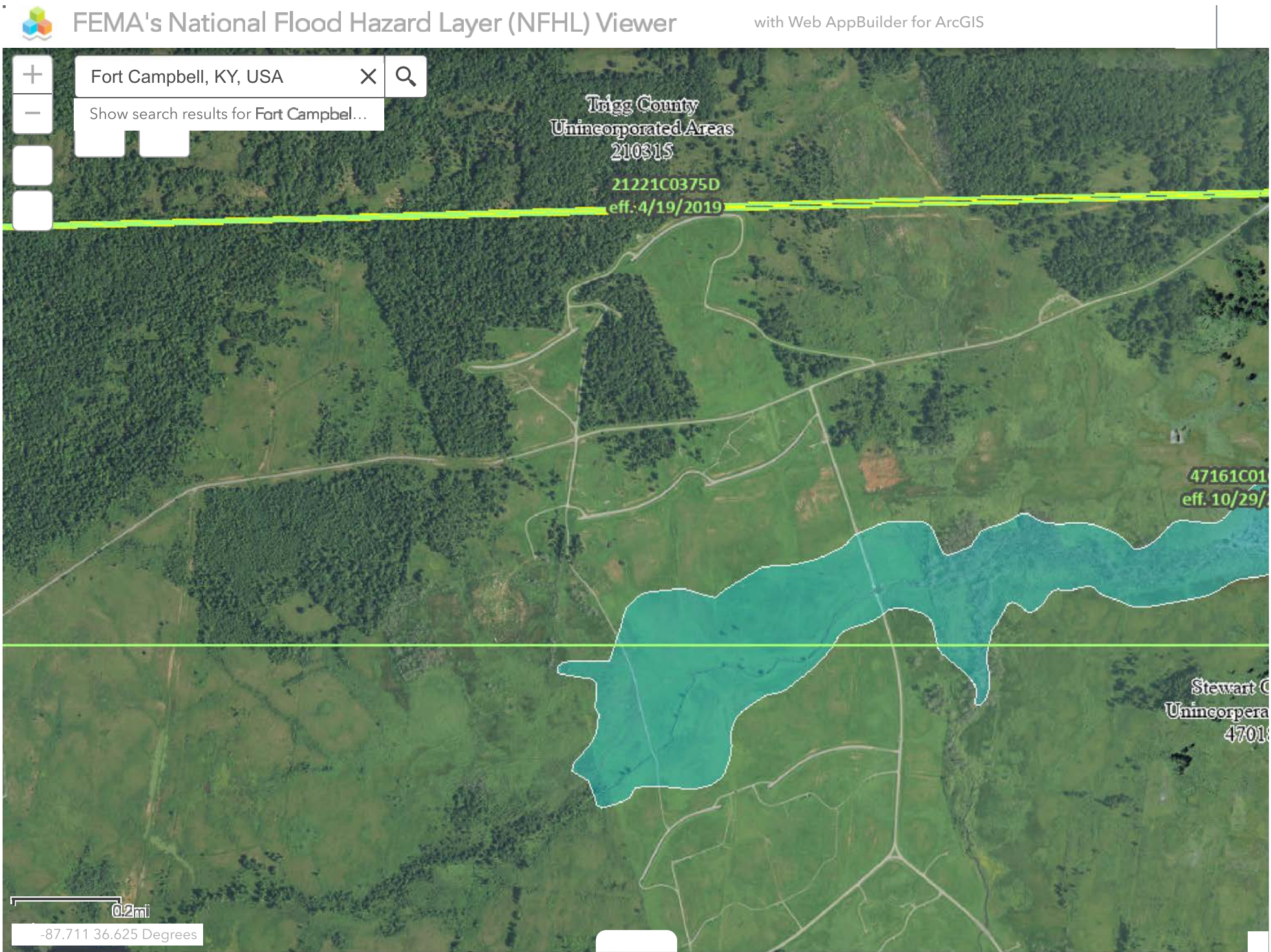
**ROAD CLASSIFICATION**

Expressway: Red line with double yellow center  
Secondary Hwy: Red line with single yellow center  
Interstate: Blue line with red and blue shield  
Local Connector: Red line with single yellow center  
Local Road: Red line with single yellow center  
US Route: Red line with white shield  
State Route: Red line with white shield



INDIAN MOUND, TN  
2019















**Undertaking Information and Analysis**  
**FY24 Multipurpose Training Range**  
**Record of Environmental Consideration: 21-095**  
**Michael J. Miller, M.A., RPA - SpecPro Professional Services, LLC.**  
**Fort Campbell Cultural Resources Office**  
**07 FEB 2022**

**I. Overview of the Proposed Undertaking**

Fort Campbell proposes to construct a multipurpose training range (MPTR) and supporting facilities in Stewart County, Tennessee, and Trigg County, Kentucky, on the Fort Campbell Military Installation (Figure 1). This project is scheduled for construction in Fiscal Year (FY) 24.

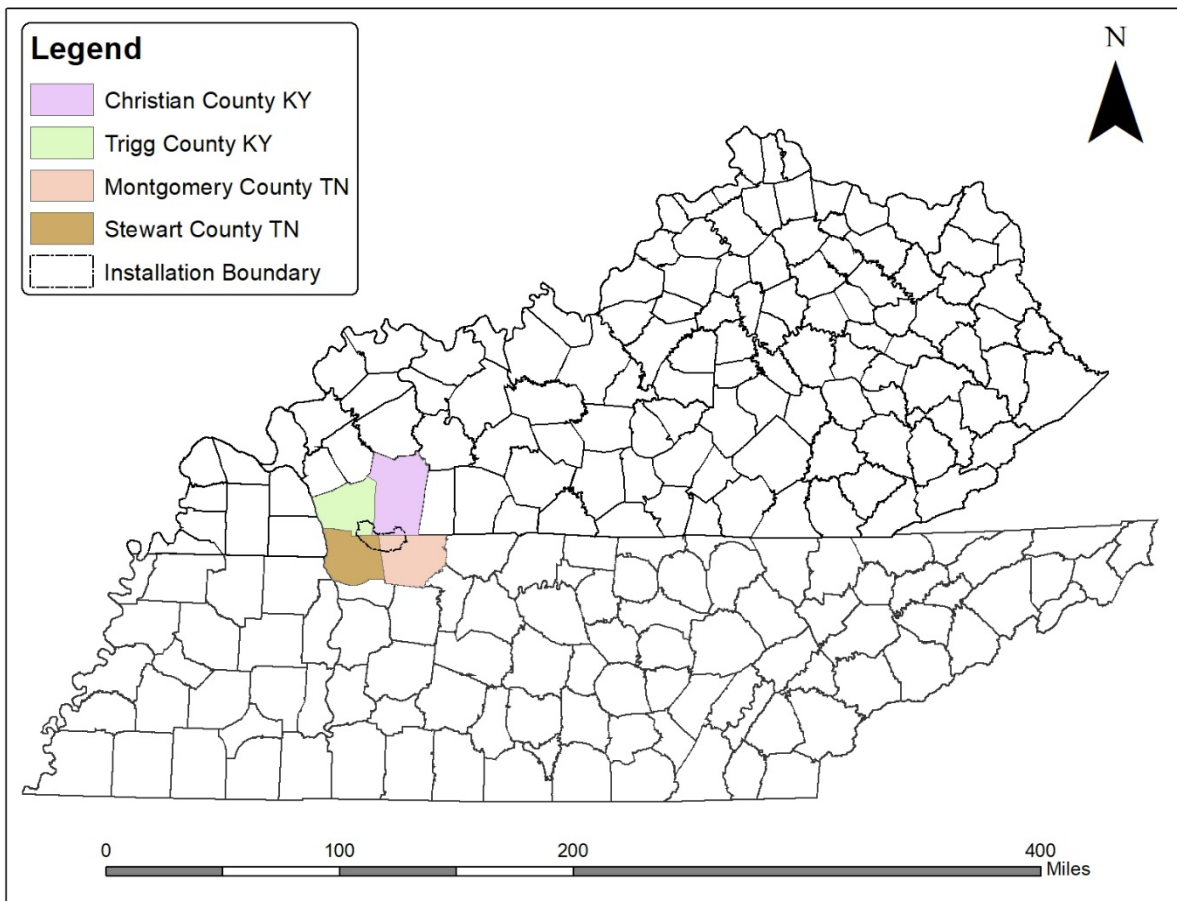


Figure 1: Location of Fort Campbell.

The proposed Area of Potential Effect (APE) for this undertaking is located within the South Impact Area in Stewart County, Tennessee ( $\approx 1250$  acres), and in Trigg County, Kentucky ( $\approx 25$  acres), at Range 28 (Figure 2).

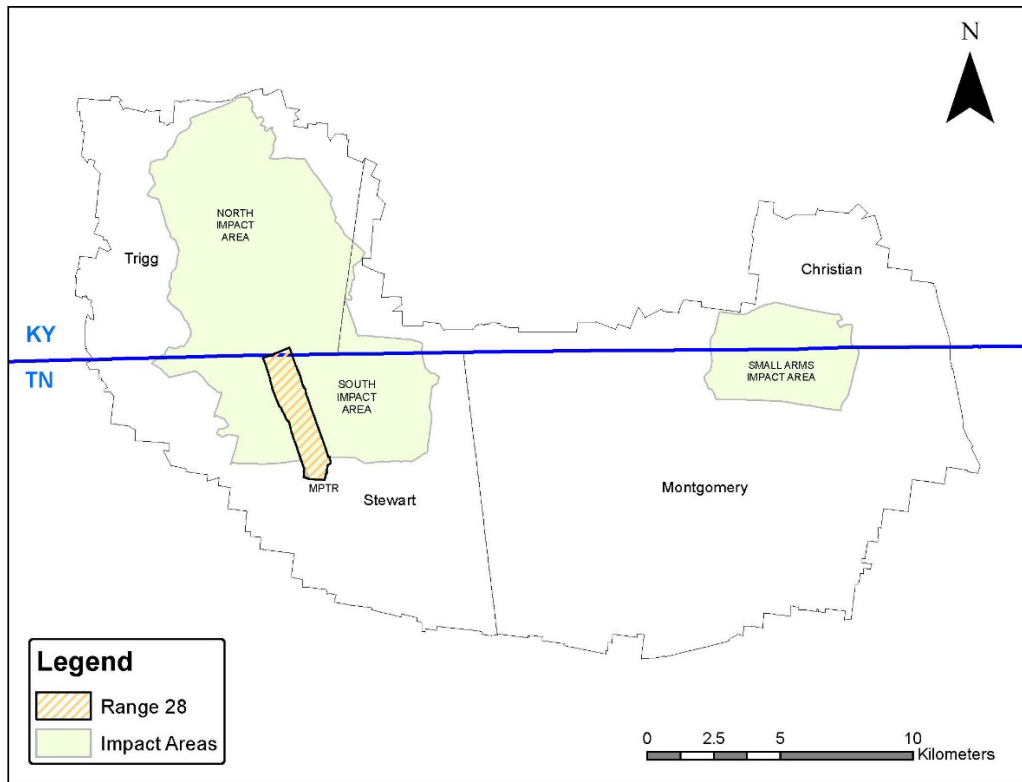


Figure 2: Location of APE within Impact Area and Range 28 on Fort Campbell.

The proposed project was initially submitted as part of the REC 20-007 in October of 2019 and finalized in REC 21-095 MOD 1. A detailed project summary for the MPTR, new control tower, and upgraded support facilities are included here. The facilities are located within the Impact Area and Range 28, the known archaeological resources within and near the APE are the focus of this document.

The construction project will be discussed separately in Section II. The area of potential effect (APE) will be discussed in Section III. The previous archaeological investigations in the project area will be presented in Section IV. The application of criteria of adverse effect for the proposed undertaking are in Section V, and Fort Campbell's determination of effects to historic properties is discussed in Section VI.

## **II. Project Area Descriptions**

The Multipurpose Training Range (MPTR) will be constructed within Range 28 in the South Impact Area (Figure 3). The MPTR will be 1,000m wide by 3,500m long and replace existing infrastructure.

It will have two course roads with center cross-over and designed to satisfy the training and qualification requirements for the crews, teams, and sections of combat units. This range supports dismounted infantry squad tactical live fire operations either independently of, or simultaneously with supporting vehicles. It will be used to train and test armor, infantry, and aviation teams, crews, and sections on the skills necessary to detect, identify, engage, and defeat stationary and moving armor and infantry targets in a tactical array. All targets are fully automated.

Earth work will be required down range to reshape landforms for targets and road construction. Service roads will be required to maintain all target systems, which there are 195 various types throughout the range complex. Construction plans include: a large new control tower and upgraded operations storage building, after action review building, bleacher enclosure, ammo loading dock, latrine or latrine pad, and covered mess facilities. The exact location of the facilities is in the planning phase, but the entirety of Range 28 is considered the APE for direct effect.

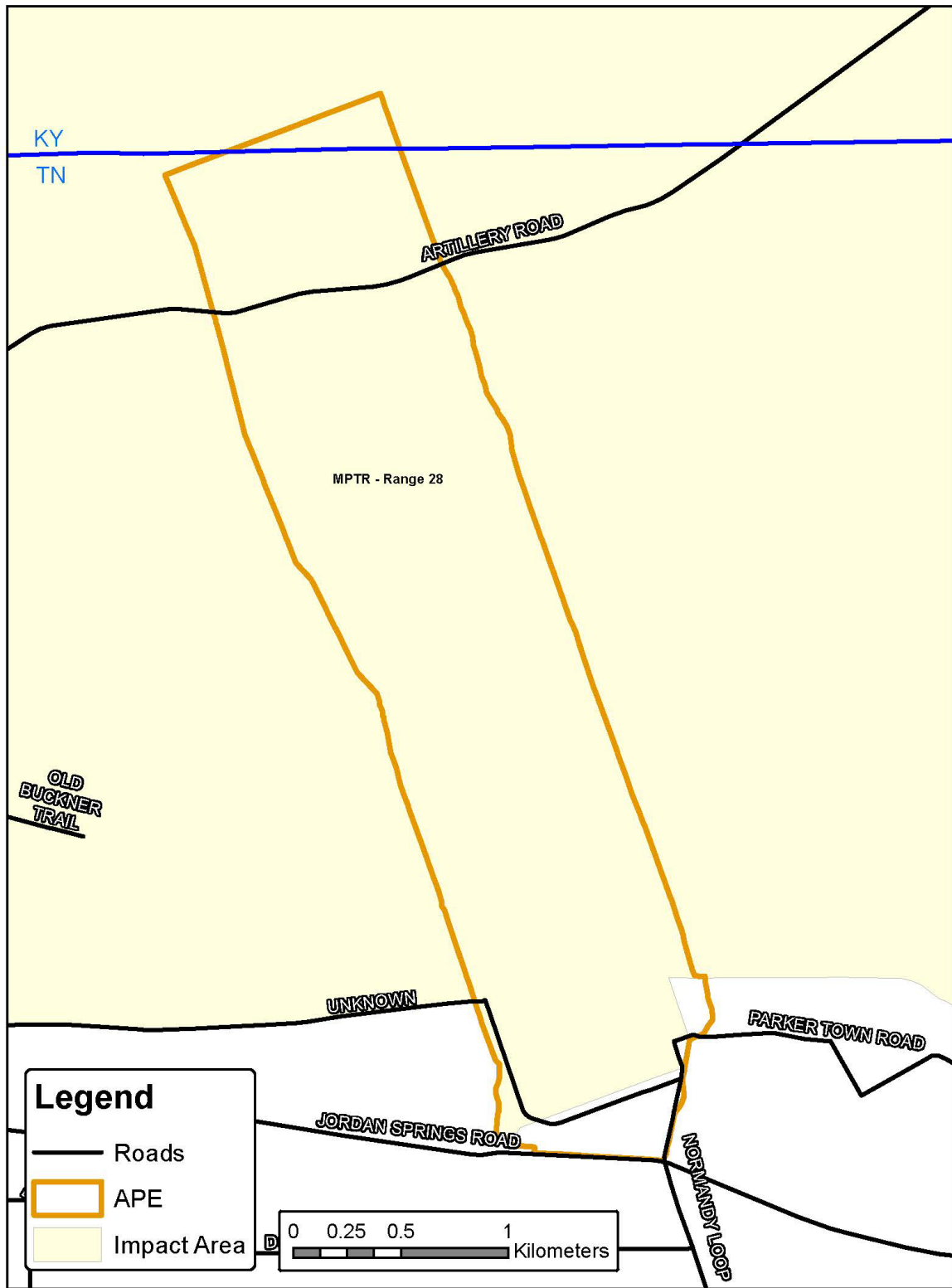


Figure 3. MPTR APE at Range 28.



### **III. Area of Potential Effects**

It is the determination of the U.S. Army that the Area of Potential Effects (APE) for direct effects includes the area of ground disturbance associated with the construction of the MPTR and associated facilities. The APE for direct effects is defined as the entirety of Range 28 due to the numerous construction corridors, building footprints, parking areas and access roads. All ground disturbance will remain within the APE for direct effects as shown in Section II Project Area Descriptions.

It is the determination of the U.S. Army that the APE for indirect effects includes the surrounding landscape that will be altered with the construction of the new facilities, causing a minor visual alteration of the existing landscape with the installation of the MPTR. The APE for indirect effects is defined as the 100-foot buffer surrounding the construction corridors, building footprints, parking areas, and access roads. The APE for indirect effects includes both the visual and auditory impacts of the proposed project in Range 28.

#### *Direct Effects:*

The APE for direct and indirect effects for MPTR are shown in Figure 4. The APE for direct effects is defined as the construction corridors, building footprints, parking areas and access roads within Range 28. All ground disturbance associated with the installation of service roads to target systems (n=195), a large control tower, operations storage building, after action review building, bleacher enclosure, ammo loading dock, latrine or latrine pad, and covered mess are within the APE for direct effects. All work will be completed in Range 28. The APE of direct effects has been partially surveyed for archaeological resources due to survey limitations imposed by the presence of unexploded ordinance (UXO). There are four (4) known archaeological sites within or near the APE for direct effects for the MPTR (Figure 4). These sites will be discussed in detail in Section IV. There are no previously identified Traditional Cultural Properties, Sacred Objects, or historic cemeteries within the APE for direct effects.

#### *Indirect Effects:*

The APE for indirect effects is defined as a 100-foot buffer surrounding Range 28. There will be no visual effects or auditory effects for the proposed undertaking; zero (0) archaeological sites are within the APE for indirect effects at Range 28 (Figure 4). There are no previously identified Traditional Cultural Properties, Sacred Objects, or historic cemeteries within the APE for indirect effects.

**PHOTO REMOVED IN ACCORDANCE WITH  
THE ARCHAEOLOGICAL RESOURCES PROTECTION ACT**

Figure 4: APE for direct and indirect effects at Range 28.

#### **IV. Investigations in the Project Area**

In accordance with stipulation (C.2.b.), of the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective January, 2009), a formal consultation with the State Historic Preservation Office (SHPO) is required if identification efforts have not been determined adequate and there are properties needing evaluation present in areas of potential effects for an undertaking (OPS PA).

The Impact Areas are considered exempt from archaeological inventory per the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective as amended December, 2020) (OPS PA).

*Areas in which archaeological survey would be unsafe due to the presence of unexploded ordnance (designated Impact Areas and any immediately adjacent area considered of elevated danger by the Range Safety official) shall also be exempted from further archaeological survey or identification efforts (OPS PA Section B.4).*

The proposed project area, outside of the Impact Area, has been partially investigated for archaeological resources. The southern portion of the APE was surveyed for archaeological resources, before it became a part of Range 28, in 1983 by O'Malley in a report entitled *A Cultural Resources Reconnaissance of Fort Campbell Kentucky – Tennessee* (Figure 5). Fort Campbell determined that, in accordance with the National Historic Preservation Act (NHPA) regulation 36 CFR 800.4, the survey was a reasonable and good faith effort to identify historic properties in the areas investigated. The TN SHPO concurred in a letter dated December 4, 1997.

The portion of the APE nearest Normandy Loop is not part of the impact area and was surveyed by Burt (2016: 223-226). Fort Campbell determined that, in accordance with the NHPA regulation 36 CFR 800.4, the survey was a reasonable and good faith effort to identify historic properties in the areas investigated. The TN SHPO concurred in a letter dated December 6, 2016.

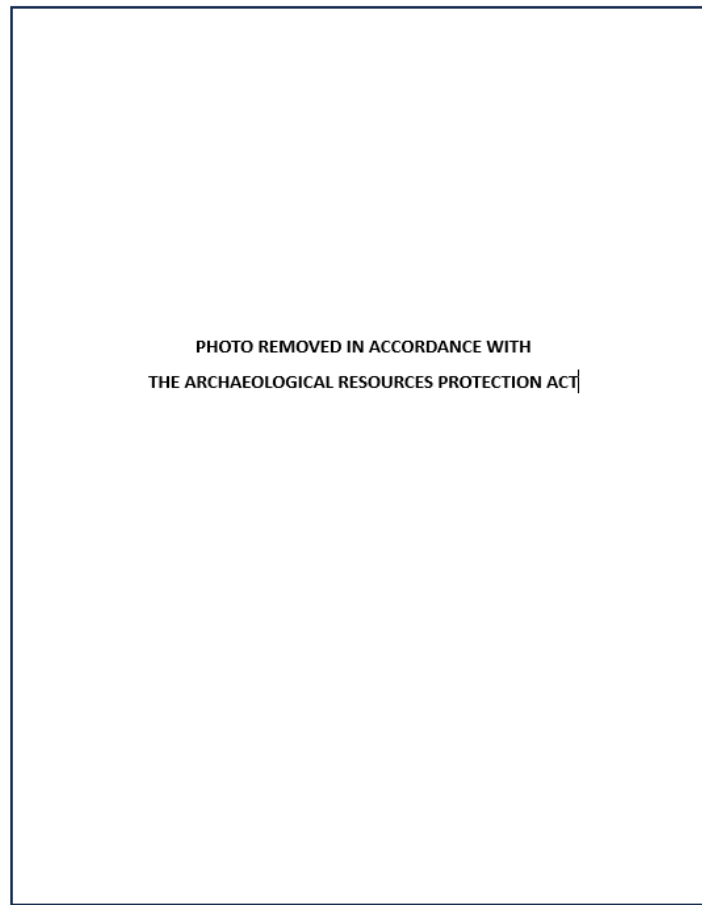


Figure 5: Phase I Survey Coverage and Known Archaeological Sites.

Four (4) previously identified archaeological sites lie within the proposed project area. These sites (Table 1) have been evaluated for their eligibility for listing on the National Register of Historic Places (NRHP).

Site Trinomial	Eligibility Evaluation for listing on the NRHP
40SW0157	<i>Not Eligible</i>
40SW0158	<i>Potentially Eligible</i>
40SW0159	<i>Not Eligible</i>
40SW0571	<i>Not Eligible</i>

Table 1: Eligibility evaluation determinations.

In a letter dated December 4, 1997, Fort Campbell received concurrence on site eligibility determinations for 40SW0157, 40SW0158, and 40SW0159 from the Tennessee SHPO. In a letter dated December 6, 2016, Fort Campbell received concurrence on site eligibility determination for 40SW0571 from the Tennessee SHPO.

***Archaeological Sites:***

The APE contains sites 40SW0157, 40SW0158, 40SW0159, and 40SW0571.

Site 40SW0157 is an undetermined prehistoric light lithic scatter. Site 40SW0159 is a lithic scatter containing six flakes. They were first identified by O'Malley (1983). Both sites have been determined *Not Eligible* for listing on the NRHP by Fort Campbell, with concurrence from the TN SHPO in a letter dated December 4, 1997.

Site 40SW0571 was submitted for eligibility determination in 2016 (Burt). A total of 16 artifacts including cores and debitage were found during the Phase I survey. Monitoring later confirmed the site was destroyed by road construction between 2003-2013 as described in Burt (2016: 223-226) and recommended *Not Eligible* and destroyed. 40SW0571 has been determined *Not Eligible* for listing on the NRHP by Fort Campbell, with concurrence from the TN SHPO in a letter dated December 6, 2016.

Site 40SW0158 was first identified by O'Malley (1983) during Phase I survey proposing the site *Potentially Eligible* for listing on the NRHP; the TN SHPO concurred in a letter dated December 4, 1997.

Archaeologists from the FTC-CRO staff assessed 40SW0158 on May 13, 2021 by shovel testing within the site boundary for the proposed Control Tower (Figure 6). The results showed that the APE was highly disturbed along the road and there was very little likelihood of any significant cultural materials remaining. Negative shovel testing buttressed this finding (see Appendix 1).

FTC-CRO staff submitted a site record update to TDOA Site File to document the destruction of site 40SW0158, recommending the site *Not Eligible* for listing on the NRHP. This site record update was reviewed and approved by TDOA Site File on December 8, 2021.

Based on the site assessment, Fort Campbell has determined site 40SW0158 is Not Eligible for listing on the NRHP.

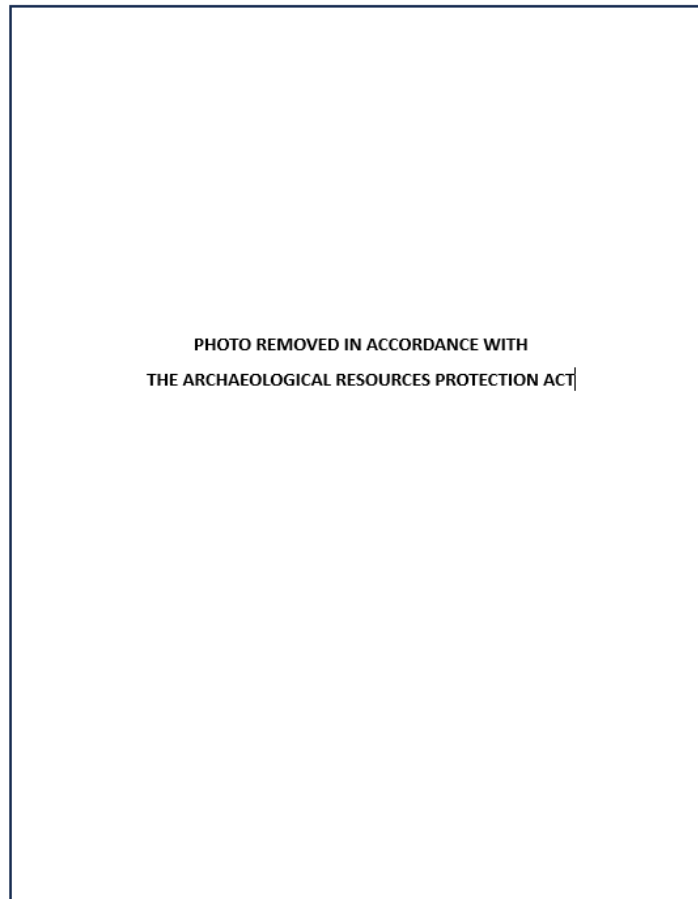


Figure 6: 40SW0158 Shovel Testing Results.

**V. Application of Criteria of Adverse Effect**

It is the determination of the U.S. Army that in accordance with 36 CFR 800.4, the existing cultural resource studies within the areas that can be safely investigated represent a reasonable and good faith effort to identify historic properties.

It is the determination of the U.S. Army that the Area of Potential Effects (APE) for direct effects includes the area of ground disturbance associated with the construction of the MPTR. The APE for direct effects is defined as the construction footprints provided by Range Control. All ground disturbance associated with the construction of the facilities will remain within the APE for direct effects.

It is the determination of the U.S. Army that the APE for indirect effects includes the surrounding landscape that will be altered with the construction of the new facilities, causing a minor visual alteration of the existing landscape within the Installation. The APE for indirect effects is defined as the 100-foot buffer surrounding the area of direct effect. The APE for indirect effects includes both the visual and auditory impacts of the proposed project.

The proposed facilities at Range 28 will have similar visual and auditory effects currently associated with the Range.

Portions of the project area that can be safely investigated have been surveyed for archaeological materials. Areas that have not been surveyed for archaeological materials are within Impact Areas and excluded under the OPS PA due to UXO safety concerns. There are four (4) previously identified archaeological sites identified within the APE for direct effects. There are zero (0) previously identified historic properties identified within the APE for indirect effects. Three (3) sites have previously been determined *Not Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. One (1) site had been determined *Potentially Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. After additional fieldwork, site 40SW0158 was shown to be destroyed by road construction and determined *Not Eligible* for listing on the NRHP.

It is the determination of Fort Campbell that there will be no adverse effects to the archaeological resources within the APE. If modifications to the project occur and/or the project area changes, Fort Campbell will contact the TN and KY SHPOs to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

If modifications to the project occur and/or project area changes, Fort Campbell will contact the TN and KY SHPOs to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

#### **VI. Determination of Effect to Historic Properties**

It is the determination of the U.S. Army (Fort Campbell) that the proposed undertaking will have *No Adverse Effect to Historic Properties*.

## References Cited

Burt, H.

- 2016 Management Report and Revision of Fort Campbell 9: A Report Documenting PCI's Ninth Intensive Cultural Resources Survey, Covering 3,715 Acres at Ft. Campbell, KY-TN.

North Wind Consulting

- 2020 Phase I Archaeological Survey of Portions of Training Areas 00B, 05, 11, 17, 19, 20, 23, 24, 25, 27, 28 and 35 in Montgomery and Stewart Counties Tennessee, in press.

O'Malley, N.

- 1983 Cultural Resource Reconnaissance of Ft. Campbell. Prepared for U.S. Army Corps of Engineers, Louisville District.



## Grayson, Ronald I CIV USARMY ID-READINESS (USA)

---

**From:** Romero, Ross A CIV USARMY (USA)  
**Sent:** Wednesday, February 23, 2022 10:42 AM  
**To:** Grayson, Ronald I CIV USARMY USAG (USA)  
**Cc:** Sorensen-Mutchie, Nichole E CIV USARMY ID-READINESS (USA); Miller, Michael J CTR USARMY ID-READINESS (USA)  
**Subject:** RE: MPTR Consultation (UNCLASSIFIED)  
**Classification:** UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

Great. Thanks Ron.

---

**From:** Grayson, Ronald I CIV USARMY USAG (USA) <[ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)>  
**Sent:** Wednesday, February 23, 2022 10:07 AM  
**To:** Romero, Ross A CIV USARMY (USA) <[ross.a.romero.civ@army.mil](mailto:ross.a.romero.civ@army.mil)>  
**Cc:** Sorensen-Mutchie, Nichole E CIV USARMY ID-READINESS (USA) <[nichole.e.sorensen-mutchie.civ@army.mil](mailto:nichole.e.sorensen-mutchie.civ@army.mil)>; Miller, Michael J CTR USARMY ID-READINESS (USA) <[michael.j.miller1034.ctr@army.mil](mailto:michael.j.miller1034.ctr@army.mil)>  
**Subject:** RE: MPTR Consultation (UNCLASSIFIED)

Ross:

I went ahead and added that there may be a latrine or latrine pad. I left in the Ammo loading dock though. If something is not done on the consultation, there is not much of an issue, however, if it has to be added later, then it requires more work. Leaving the dock in does not impact the consultation as a whole and allows for the possibility to add it back in the future without an additional consultation requirement.

I am going to push this up for signature with the minor corrections. (attached)

ron

---

**From:** Romero, Ross A CIV USARMY (USA) <[ross.a.romero.civ@army.mil](mailto:ross.a.romero.civ@army.mil)>  
**Sent:** Friday, February 18, 2022 1:48 PM  
**To:** Grayson, Ronald I CIV USARMY USAG (USA) <[ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)>  
**Subject:** FW: MPTR Consultation (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Ron,

See below for DPTMS comments.

V/R,

Ross Romero  
Community Planner  
Directorate of Public Works

Fort Campbell, KY  
270-798-9730

---

**From:** Williams, Robert S CIV USARMY ID-READINESS (USA) <[robert.s.williams9.civ@army.mil](mailto:robert.s.williams9.civ@army.mil)>  
**Sent:** Thursday, February 17, 2022 4:42 PM  
**To:** Romero, Ross A CIV USARMY (USA) <[ross.a.romero.civ@army.mil](mailto:ross.a.romero.civ@army.mil)>  
**Cc:** Shannon, Paul W CIV USARMY ID-READINESS (USA) <[paul.w.shannon.civ@army.mil](mailto:paul.w.shannon.civ@army.mil)>  
**Subject:** RE: MPTR Consultation (UNCLASSIFIED)

Ross,

Disregard last email as there was an oversight on my part. On page 5 of the document we opted out of building an ammo loading dock as we already have one on site that will be used. Additionally, the document says latrine, and I wanted to clarify that it should say latrine pad. There was some discussion of a wet latrine at the charrette but we opted out of that option as well due to cost. I apologize for any confusion. Thank you Sir

Rob

---

**From:** Romero, Ross A CIV USARMY (USA) <[ross.a.romero.civ@army.mil](mailto:ross.a.romero.civ@army.mil)>  
**Sent:** Thursday, February 17, 2022 2:40 PM  
**To:** Williams, Robert S CIV USARMY ID-READINESS (USA) <[robert.s.williams9.civ@army.mil](mailto:robert.s.williams9.civ@army.mil)>  
**Cc:** Shannon, Paul W CIV USARMY ID-READINESS (USA) <[paul.w.shannon.civ@army.mil](mailto:paul.w.shannon.civ@army.mil)>  
**Subject:** FW: MPTR Consultation (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Rob,

Our Cultural Resources folks have prepared this consultation for the MPTR site. If you have some time, can you review for accuracy also?

V/R,

Ross Romero  
Community Planner  
Directorate of Public Works  
Fort Campbell, KY  
270-798-9730

---

**From:** Grayson, Ronald I CIV USARMY USAG (USA) <[ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)>  
**Sent:** Wednesday, February 9, 2022 1:02 PM  
**To:** Romero, Ross A CIV USARMY (USA) <[ross.a.romero.civ@army.mil](mailto:ross.a.romero.civ@army.mil)>  
**Cc:** Sorensen-Mutchie, Nichole E CIV USARMY ID-READINESS (USA) <[nichole.e.sorensen-mutchie.civ@army.mil](mailto:nichole.e.sorensen-mutchie.civ@army.mil)>; Miller, Michael J CTR USARMY ID-READINESS (USA) <[michael.j.miller1034.ctr@army.mil](mailto:michael.j.miller1034.ctr@army.mil)>  
**Subject:** MPTR Consultation

Ross:

Please look over the attached consultation for accuracy. We will be sending this to both Tennessee and Kentucky SHPOs since there is a small overlap in the project area.

Once I hear that it is accurate, please respond via email and I will get this in the mail (electronically that is).

If you have any questions, please feel free to contact me on my cell (863) 257-3601.

ron

Ronald Grayson, M.A., RPA

NEW Email: [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)

Archaeologist, Cultural Resources Program Manager Directorate of Public Works Fort Campbell, KY  
270-412-8174 (DSN 635-8174)

Fort Campbell Cultural Resources Website:

<https://home.army.mil/campbell/index.php/cultural-resources>

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED



DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT CAMPBELL  
T39 INDIANA AVENUE, SUITE 223  
FORT CAMPBELL KY 42223-3570

February 23, 2022

Directorate of Public Works

Mr. Craig A. Potts  
Kentucky Heritage Council  
State Historic Preservation Office  
300 Washington Street  
Frankfurt, Kentucky 40601

Dear Mr. Potts:

Fort Campbell proposes to construct a Multipurpose Training Range. The proposed project area is located within existing Range 28 in Stewart County, Tennessee, and Trigg County, Kentucky, within the South Impact Area.

Due to the project location within the South Impact Area and Range 28, the proposed undertaking must be reviewed in accordance with the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective as amended December, 2021) (OPS PA). In accordance with stipulation C.2.b of the agreement, a formal consultation is required when undertakings are performed if properties needing evaluation are present in areas of potential effects for an undertaking. Four (4) archaeological sites are located within the project area. Three (3) sites have previously been determined *Not Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. One (1) site had been determined *Potentially Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. After additional fieldwork, site 40SW0158 was shown to be destroyed by road construction and determined *Not Eligible* for listing on the NRHP. The undertaking will have zero (0) visual impacts. All construction activities will be limited to areas that have been previously disturbed by Range construction.

It is the determination of Fort Campbell that the proposed undertaking will have *No Adverse Effect to Historic Properties*. Please review the enclosed information supporting that determination and advise whether you concur with the determination. If you have any further questions regarding this matter, please contact Mr. Ronald Grayson, Cultural Resources Program Manager at [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil), or by telephone 270-412-8174.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeffery J. Atkins", is written over a horizontal line.

Jeffery J. Atkins, PE  
Chief, DPW Environmental Division

Enclosure: Undertaking Information and Analysis: FY24 Multipurpose Training Range.



DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT CAMPBELL  
T39 INDIANA AVENUE, SUITE 223  
FORT CAMPBELL KY 42223-3570

February 24, 2022

Directorate of Public Works

Mr. E. Patrick McIntyre Jr., Executive Director and SHPO  
Tennessee Historic Commission  
Clover Bottom Mansion  
2941 Lebanon Road  
Nashville, Tennessee 37243-0041

Dear Mr. McIntyre:

Fort Campbell proposes to construct a Multipurpose Training Range. The proposed project area is located within existing Range 28 in Stewart County, Tennessee, and Trigg County, Kentucky, within the South Impact Area.

Due to the project location within the South Impact Area and Range 28, the proposed undertaking must be reviewed in accordance with the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective as amended December, 2021) (OPS PA). In accordance with stipulation C.2.b of the agreement, a formal consultation is required when undertakings are performed if properties needing evaluation are present in areas of potential effects for an undertaking. Four (4) archaeological sites are located within the project area. Three (3) sites have previously been determined *Not Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. One (1) site had been determined *Potentially Eligible* for listing on the NRHP under Criteria D by Fort Campbell with concurrence from the TN SHPO. After additional fieldwork, site 40SW0158 was shown to be destroyed by road construction and determined *Not Eligible* for listing on the NRHP. The undertaking will have zero (0) visual impacts. All construction activities will be limited to areas that have been previously disturbed by Range construction.

It is the determination of Fort Campbell that the proposed undertaking will have *No Adverse Effect to Historic Properties*. Please review the enclosed information supporting that determination and advise whether you concur with the determination. If you have any further questions regarding this matter, please contact Mr. Ronald Grayson, Cultural Resources Program Manager at [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil), or by telephone 270-412-8174.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeffery L. Atkins", is written over a horizontal line.

Jeffery L. Atkins, PE  
Chief, DPW Environmental Division

Enclosure: Undertaking Information and Analysis: FY24 Multipurpose Training Range.





**ANDY BESHEAR**  
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET**  
**KENTUCKY HERITAGE COUNCIL**  
**THE STATE HISTORIC PRESERVATION OFFICE**

**MICHAEL E. BERRY**  
SECRETARY

**JACQUELINE COLEMAN**  
LT. GOVERNOR

410 HIGH STREET  
FRANKFORT, KENTUCKY 40601  
(502) 564-7005  
[www.heritage.ky.gov](http://www.heritage.ky.gov)

**CRAIG A. POTTS**  
EXECUTIVE DIRECTOR &  
STATE HISTORIC  
PRESERVATION OFFICER

March 22, 2022

Mr. Ronald Grayson  
Cultural Resources Program Manager  
Department of the Army  
Headquarters, U.S. Army Garrison, Fort Campbell  
T39 Indiana Avenue, Suite 223  
Fort Campbell, Kentucky 42223  
Via Email: [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)

Re: FY24 Multipurpose Training Range  
Record of Environmental Consideration: 21-095

Dear Mr. Grayson,

Thank you for your letter and documentation concerning the above-referenced project. We understand Fort Campbell proposes to construct a Multipurpose Training Range within the existing Range 28 within the South Impact Area, in Stewart County, Tennessee and Trigg County, Kentucky. Due to its proposed location, the proposed project must be reviewed under the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee Regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell Kentucky* (OPS PA). We submit the following comments regarding the portion of the project area that falls within the Commonwealth of Kentucky (KY).

The entirety of the project area within KY falls within the Impact Area, and is considered exempt from archaeological inventory per the OPS PA.

Due to resources identified within the area of potential effect (APE) but outside of KY, Fort Campbell has determined that the undertaking will have No Adverse Effect to Historic Properties. In an email dated March 22, 2022, Ronald Grayson of Fort Campbell indicated that a finding of No Effect to Historic Properties would be appropriate for the portion of the APE that falls within KY. We concur with the determination of *No Historic Properties Affected* for the undertaking for the portion of the APE within KY.

In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council. If human remains are encountered during project activities, all work should be immediately stopped in the area. The area should be cordoned off and the county coroner and



An Equal Opportunity Employer



Re: FY24 Multipurpose Training Range  
Record of Environmental Consideration: 21-095

local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should the project plans change, or should additional information become available regarding cultural resources or citizens' concerns regarding impacts to cultural resources, please submit that information to our office as additional consultation may be warranted. Should you have any questions, please contact Nicole Konkol of my staff at [Nicole.Konkol@ky.gov](mailto:Nicole.Konkol@ky.gov)

Sincerely,

A handwritten signature in dark ink, appearing to read 'C. Potts', written over the printed name.

Craig A. Potts,  
Executive Director and  
State Historic Preservation Officer

KHC # 64821  
CP/PEH



**TENNESSEE HISTORICAL COMMISSION**  
**STATE HISTORIC PRESERVATION OFFICE**  
2941 LEBANON PIKE  
NASHVILLE, TENNESSEE 37243-0442  
OFFICE: (615) 532-1550  
[www.tnhistoricalcommission.org](http://www.tnhistoricalcommission.org)

March 2, 2022

Mr. Jeffrey J. Atkins  
Department of the Army, Installation Management Command, Atlantic Region  
Headquarters, United States Army Garrison, Ft. Campbell  
39 Normandy Boulevard  
Ft. Campbell, KY 42223-5617

RE: DOD / Department of Defense, Multipurpose Training Range within Existing Range 28, Ft. Campbell, Stewart County, TN

Dear Mr. Atkins:

In response to your request, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

After considering the documentation submitted, we concur with your agency that site 40SW128 is not eligible for inclusion in the National Register of Historic Places. We further concur that there are no National Register of Historic Places listed or eligible properties affected by this undertaking. We have made this determination because either: no National Register listed or eligible Historic Properties exist within the undertaking's area of potential effects, the specific location, size, scope and/or nature of the undertaking and its area of potential effects precluded affects to Historic Properties, the undertaking will not alter any characteristics of an identified eligible or listed Historic Property that qualify the property for listing in the National Register, or it will not alter an eligible Historic Property's location, setting or use. We have no objections to your proceeding with your undertaking.

If your agency proposes any modifications in current project plans or discovers any archaeological remains during the ground disturbance or construction phase, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. You may direct questions or comments to ((615) 687-4780, [Jennifer.Barnett@tn.gov](mailto:Jennifer.Barnett@tn.gov)). This office appreciates your cooperation.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jmb

## Grayson, Ronald I CIV USARMY ID-READINESS (USA)

---

**From:** Grayson, Ronald I CIV USARMY USAG (USA)  
**Sent:** Thursday, March 31, 2022 9:32 AM  
**To:** Romero, Ross A CIV USARMY (USA); Etson, Daniel L CIV USARMY USAG (USA)  
**Cc:** Sorensen-Mutchie, Nichole E CIV USARMY ID-READINESS (USA)  
**Subject:** MPTR Cultural Resources Consultation  
**Attachments:** REC 21-095\_MPTR\_FTC to KY.pdf; REC 21-095\_MPTR\_KY to FTC.pdf; REC 21-095\_MPTR\_FTC to TN.pdf; REC 21-095\_MPTR\_TN to FTC.pdf; MPTR Consultation Final.pdf

Ross and Dan:

Attached is the Section 106 of the National Historic Preservation Act (NHPA) consultation for the FY24 Multi-Purpose Training Range (MPTR) project. I am including the information package itself, outgoing cover letters, and the response letters from each state for your records. This will have to be included in the Environmental Assessment (EA) eventually, but if the final design does not exceed what we consulted on, additional consultation with the State Historic Preservation Officers should not be needed. The Federally Recognized Native American Tribes will still need to be consulted with for the EA though.

Please let me know if you have any questions or concerns.

ron

Ronald Grayson, M.A., RPA  
NEW Email: [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)  
Archaeologist, Cultural Resources Program Manager Directorate of Public Works Fort Campbell, KY  
270-412-8174 (DSN 635-8174)

Fort Campbell Cultural Resources Website:  
<https://home.army.mil/campbell/index.php/cultural-resources>

**Undertaking Information and Analysis**  
**Multipurpose Training Range Dirt Staging Area**  
**Record of Environmental Consideration: 23-198**  
**Michael J. Miller, M.A., RPA - SpecPro Professional Services, LLC.**  
**Fort Campbell Cultural Resources Office**  
**14 June 2023**

**I. Overview of the Proposed Undertaking**

Fort Campbell proposes to construct a dirt staging area in Stewart County, Tennessee on the Fort Campbell Military Installation (Figure 1). This project is scheduled for Fiscal Year (FY) 24 and is associated with the construction of the Multipurpose Training Range (MPTR) rebuild at Range 28 (Figure 2).

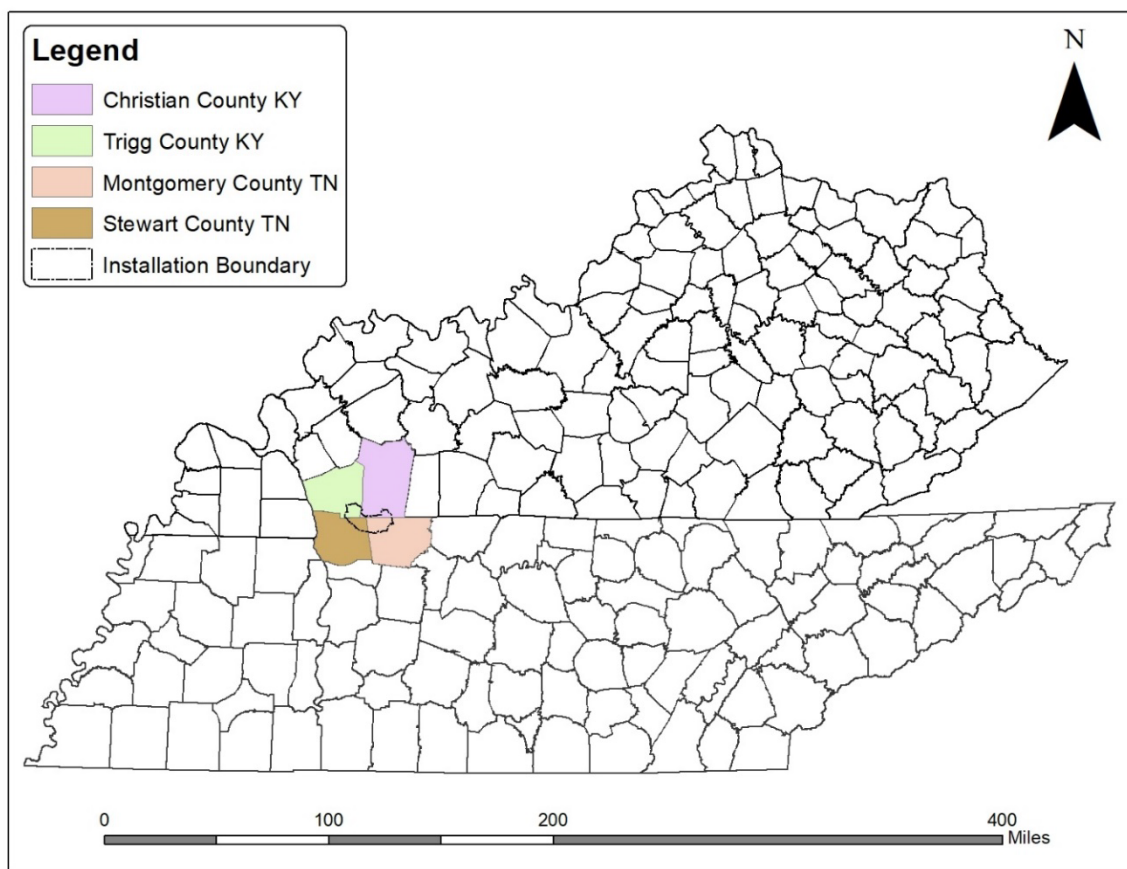


Figure 1: Location of Fort Campbell.

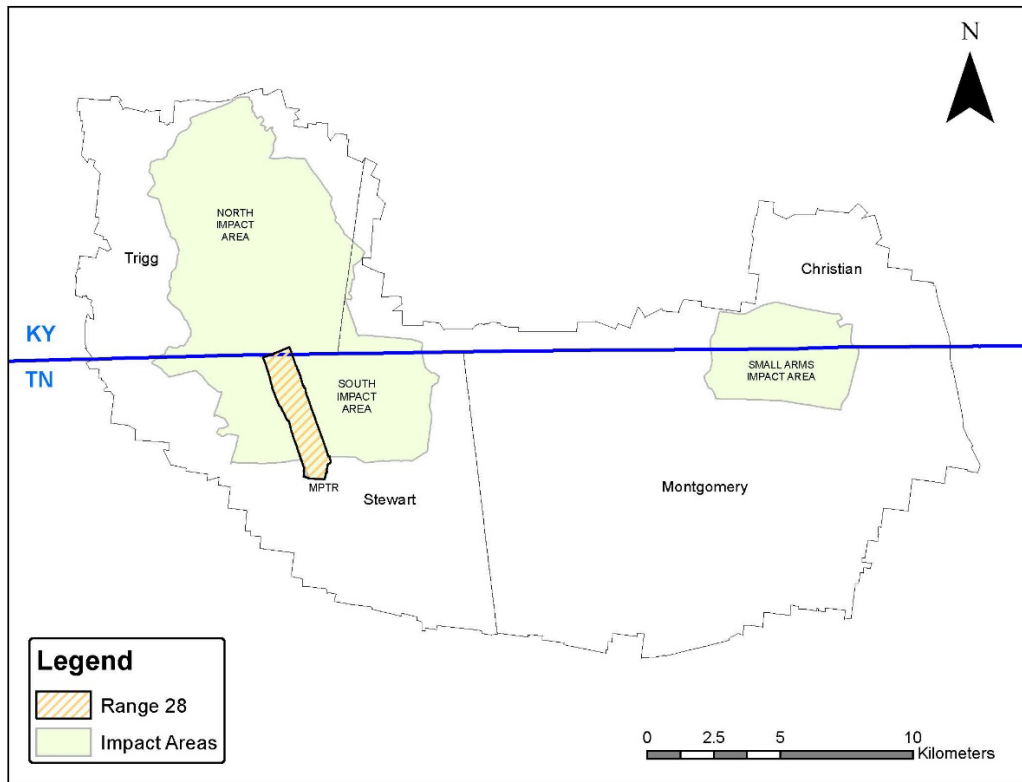


Figure 2: Location of Impact Areas and Range 28 on Fort Campbell.

The proposed Area of Potential Effect (APE) for this undertaking is located in Stewart County, Tennessee ( $\approx 75$  acres) west of Range 28 in Training Area 35 (Figure 3).



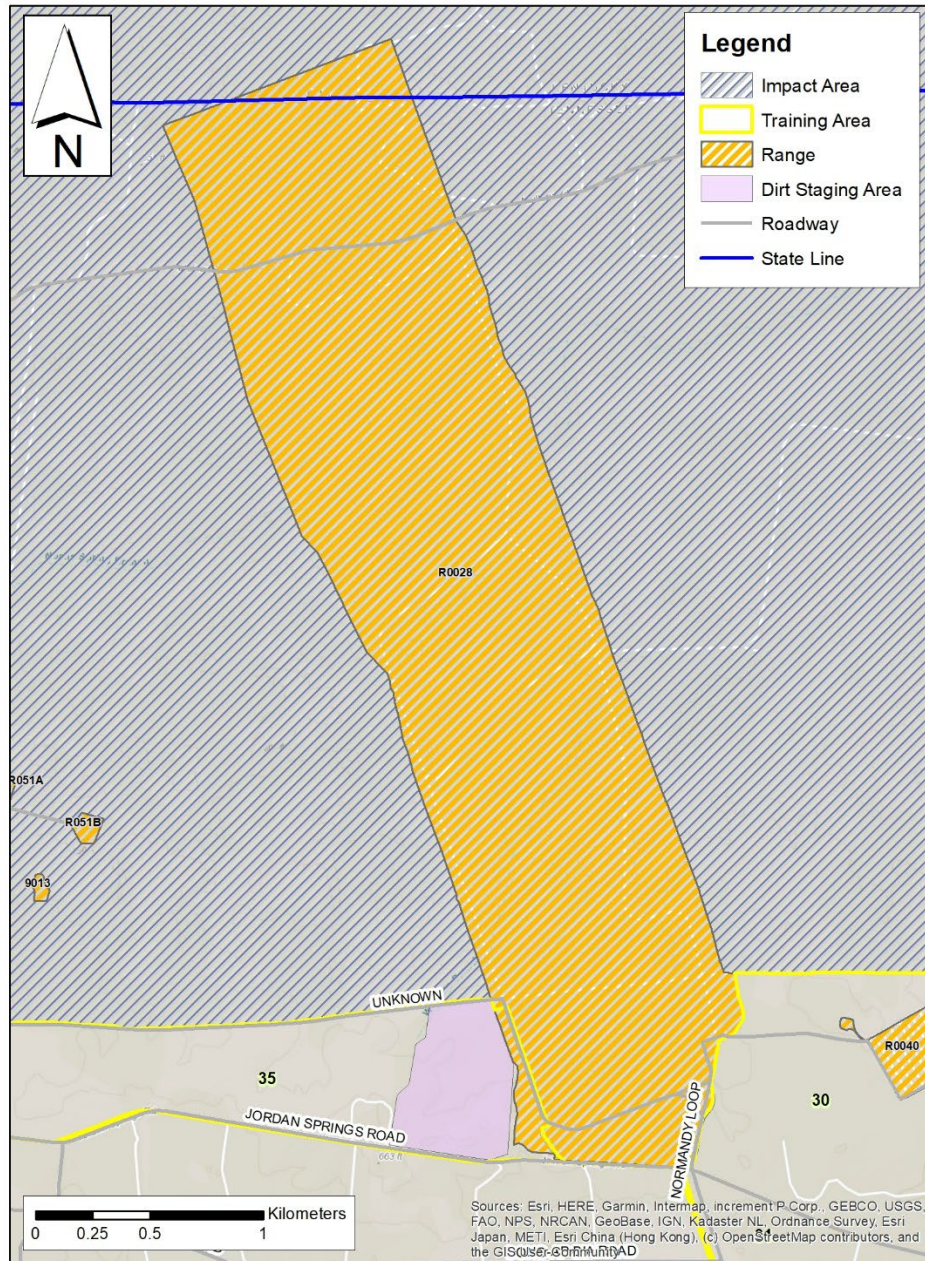


Figure 3: Location of Proposed Dirt Staging Area.

The proposed project was not submitted as part of the MPTR consultation submitted in February of 2022. The original design planned the use of the northern portion of Range 28 as a dirt staging area; due to unexploded ordinance (UXO) safety concerns, budget limitations, and U.S. Army Corps of Engineers requirements this was not allowable as determined during a Range Branch Planning Charette on June 9, 2023.



A detailed project summary for the MPTR is documented in the finalized consultation for the FY24 MPTR; a letter dated March 2, 2022 from the TN SHPO concurred with Fort Campbell that no National Register listed or eligible Historic Properties exist within the area of potential effect (APE) finding no objections to the undertaking.

The Phase I survey of the APE for the dirt staging area is the focus of this document.

The project area will be discussed separately in Section II. The area of potential effect (APE) will be discussed in Section III. The previous archaeological investigations in the project area will be presented in Section IV. The application of criteria of adverse effect for the proposed undertaking are in Section V, and Fort Campbell's determination of effects to historic properties is discussed in Section VI.

## II. Project Area Description

The dirt staging area is located directly west of the southern end of Range 28 in Training Area 35 (Figure 4 and 5). The dirt staging area will be approximately 75 acres.

During the rebuild process for the MPTR, an estimated 335,000 cubic yards of dirt will need to be removed from the range and yarded in an area that is easily accessible for the contractor. The contractor will be responsible for the containment and stabilization of the material being placed within the dirt staging area. No other materials will be placed in this location during the process of rebuilding the MPTR.

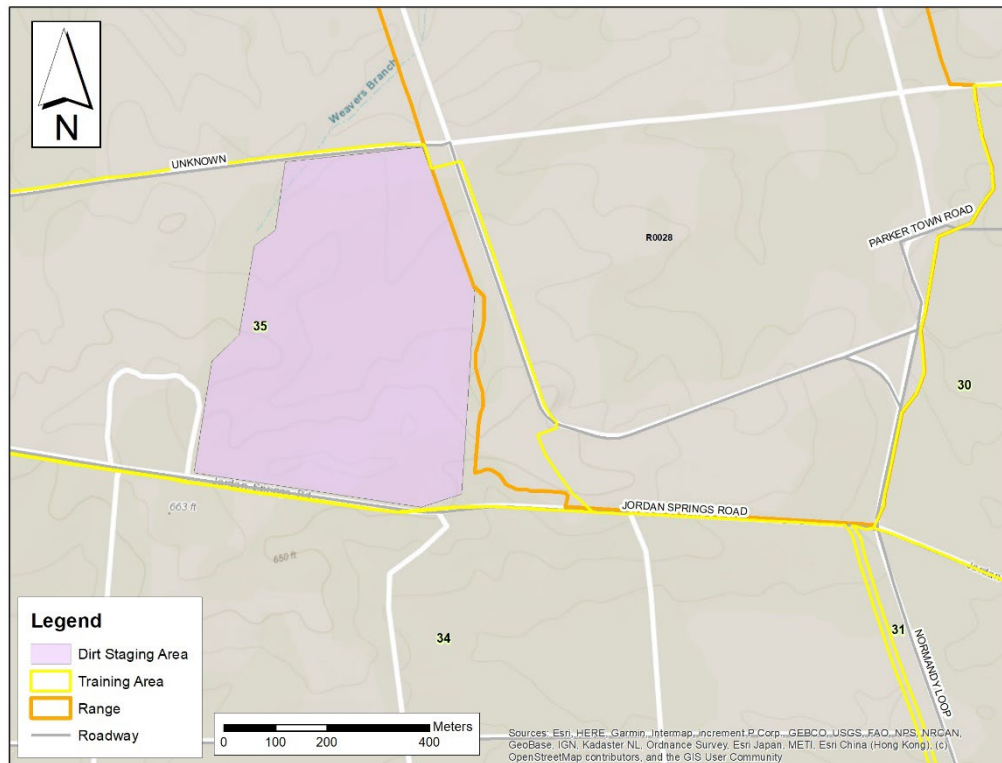


Figure 4: Location of Dirt Staging Area.



Figure 5: APE from Jordan Springs Road looking North.

### **III. Area of Potential Effects**

It is the determination of the U.S. Army that the Area of Potential Effects (APE) for direct effects includes the area of ground disturbance associated with the dirt staging area. The APE for direct effects is defined as the 75 acres adjacent to Range 28. All ground disturbance will remain within the APE for direct effects as shown in Section II Project Area Description.

It is the determination of the U.S. Army that the APE for indirect effects includes the surrounding landscape that will be altered with the new dirt staging area, causing a minor visual alteration of the existing landscape. The APE for indirect effects is defined as the 50-meter buffer surrounding the staging area. The APE for indirect effects includes both the visual and auditory impacts of the proposed project in Training Area 35.

#### *Direct Effects:*

The APE for direct and indirect effects for the dirt staging area are shown in Figure 6. The APE for direct effects is defined as the staging area within Training Area 35 direct west of Range 28. All ground disturbance associated with the staging area are within the APE for direct effects. All associated disturbances will be in the APE. The APE of direct effects has been surveyed for archaeological resources. There are zero (0) known archaeological sites within or near the APE for direct effects for the staging area (Figure 6). The Phase I survey will be discussed in detail in Section IV. There are no previously identified Traditional Cultural Properties, Sacred Objects, or historic cemeteries within the APE for direct effects.

#### *Indirect Effects:*

The APE for indirect effects is defined as a 50-meter buffer surrounding the staging area. The proposed undertaking will have similar visual and auditory effects currently associated with the staging area in the northern portion of Range 28; zero (0) archaeological sites are within the APE for indirect effects (Figure 6). There are no previously identified Traditional Cultural Properties, Sacred Objects, or historic cemeteries within the APE for indirect effects.



Figure 6: APE for Direct and Indirect Effects at Dirt Staging Area.

#### **IV. Investigations in the Project Area**

In accordance with stipulation (C.2.b.), of the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective January, 2009), a formal consultation with the State Historic Preservation Office (SHPO) is required if identification efforts have not been determined adequate and there are properties needing evaluation present in areas of potential effects for an undertaking (OPS PA).

The proposed project area has been investigated for archaeological resources. The entire APE was surveyed for cultural resources by North Wind Resource Consulting LLC in March of 2021. In a draft report entitled *Phase I Archaeological Survey of Portions of Training Areas 00B, 5, 11, 17, 19, 20, 23, 24, 25, 27, 28, and 35 Montgomery and Stewart Counties, Tennessee* prepared for Fort Campbell Cultural Resources in fulfillment of Section 110, North Wind documents the results of their Phase I Survey in Training Area 35 within the APE for this undertaking.

While the draft report has not been finalized (in process), Fort Campbell has determined that, in accordance with the National Historic Preservation Act (NHPA) regulation 36 CFR 800.4, the survey was a reasonable and good faith effort to identify historic properties in the areas investigated. The TN SHPO has not concurred with this finding as of the writing of this consultation.

Fort Campbell presents the shovel testing methodology used by North Wind and their results (Figure 7) within the APE for the consideration of the TN SHPO.

A shovel test pit was excavated on June 13, 2023 by Fort Campbell Cultural Resources Office staff (Figure 8) to provide a representative soil profile of the residual soil horizons found in the APE. The A horizon (0-8 cmbs) is a clay loam (Munsell 10YR 4/3, brown) and the Ap horizon (8-33 cmbs) consisted of mostly clay (Munsell 10YR 5/4, yellowish brown).





Figure 7: Phase I Survey Shovel Testing Locations within the APE.



Figure 8: Representative Soil Profile from within the APE.

**Shovel Testing Methodology**

The methods for investigation were performed in accordance with Phase I survey requirements outlined in the Fort Campbell Standard Operating Procedure (SOP) for Phase I Archaeological Surveys. The Phase I Archaeological Survey consisted of Shovel Test Pits (STPs) excavated at 20m intervals along transects established at 20m intervals. Each STP was excavated to at least 30cm in diameter to sterile subsoil and screened through ¼ inch hardware mesh. Each transect was given a sequential number, with each STP receiving a sequential number per transect.

Each STP was documented as positive or negative for cultural resources and noted if not excavated due to standing water, roadway, or underground utility. All STPs were recorded using a handheld global positioning system (GPS) and these data were uploaded as a shapefile for use in ArcGIS.

**Shovel Testing Results**

The results of the North Wind Phase I Survey document a lack of cultural resources within the APE for the dirt staging area. A total of 644 STPs were located within the APE; of these, one (1) was not dug due to standing water, seven (7) were not dug due to the possibility of underground utilities within road right-of-way, and 656 were excavated and found negative for cultural resources. No artifacts or historic features were identified by shovel testing within the APE for this undertaking.

**V. Application of Criteria of Adverse Effect**

It is the determination of the U.S. Army that in accordance with 36 CFR 800.4, the existing cultural resource studies within the area represent a reasonable and good faith effort to identify historic properties.

It is the determination of the U.S. Army that the Area of Potential Effects (APE) for direct effects includes the area of ground disturbance associated with the dirt staging area. All ground disturbance associated with the staging area will remain within the APE for direct effects.

It is the determination of the U.S. Army that the APE for indirect effects includes the surrounding landscape that will be altered with the new dirt staging area, causing a minor visual alteration of the existing landscape within the installation. The APE for indirect effects is defined as the 50-meter buffer surrounding the area of direct effect. The APE for indirect effects includes both the visual and auditory impacts of the proposed project.

The proposed dirt staging area will have minor temporary visual and auditory effects. The increase in auditory levels during the MPTR rebuild associated with the dirt staging area in the southern portion of Range 28 will be temporary. Auditory levels, as well as any visual effects, in the APE should return to normal following the completion of the project.

The project area has been surveyed for archaeological materials. There are zero (0) previously identified historic properties identified within the APE for direct and indirect effects. A Phase I Archaeological Survey performed by North Wind Resource Consulting documented the APE does not contain cultural resources.

It is the determination of Fort Campbell that there will be no adverse effects associated with the proposed dirt staging area within the APE. If modifications to the project occur and/or the project area changes, Fort Campbell will contact the TN SHPO to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

**VI. Determination of Effect to Historic Properties**

It is the determination of the U.S. Army (Fort Campbell) that the proposed undertaking will have *No Adverse Effect to Historic Properties*.

## References Cited

Brown, E., R. Latham, J. Blood, K. McMillian, J. Williamson, and H. Lash  
2023 *Phase I Archaeological Survey of Portions of Training Areas 00B, 05, 11, 17, 19, 20, 23, 24, 25, 27, 28 and 35 in Montgomery and Stewart Counties Tennessee, in process*. North Wind Resource Consulting, LLC. Knoxville, TN.



DEPARTMENT OF THE ARMY  
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT CAMPBELL  
DIRECTORATE OF PUBLIC WORKS  
3709 POLK RD, SUITE A  
FORT CAMPBELL KY 42223-5617

June 14, 2023

Directorate of Public Works

Mr. E. Patrick McIntyre, Jr., Executive Director  
Tennessee Historical Commission  
Clover Bottom Mansion  
2941 Lebanon Road  
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

Fort Campbell proposes a new dirt staging area located within Training Area 35 on the Fort Campbell Military Installation in Stewart County, Tennessee. The dirt staging area will support the rebuild of the Multipurpose Training Range (MPTR).

The proposed undertaking must be reviewed in accordance with the *Programmatic Agreement Among the United States Army, The State Historic Preservation Officer of Kentucky and the State Historic Preservation Officer of Tennessee regarding the Operation, Maintenance, and Development of The Fort Campbell Army Installation at Fort Campbell, Kentucky* (Effective as amended December, 2021) (OPS PA). In accordance with stipulation C.2.b of the agreement, a formal consultation is required when undertakings are performed if properties needing evaluation are present in areas of potential effects (APE) for an undertaking.

A Phase I Archaeological Survey of the APE was completed by North Wind Resource Consulting in March of 2021; the report on this work has not been finalized and is considered *in process* by Fort Campbell. Fort Campbell has determined that, in accordance with the National Historic Preservation Act (NHPA) regulation 36 CFR 800.4, the survey was a reasonable and good faith effort to identify historic properties in the areas investigated. The TN SHPO has not concurred with this finding as of the writing of this consultation. Fort Campbell presents the shovel testing methodology used by North Wind and their results within the APE to support the negative finding. No artifacts or historic features were identified by shovel testing within the APE for this undertaking.

It is the determination of Fort Campbell that the proposed dirt staging area undertaking will have *No Adverse Effect* to Historic Properties. Please review the enclosed information supporting that determination and advise whether you concur



with the determination. If you have any further questions regarding this matter, please contact Mr. Ronald Grayson, Cultural Resources Program Manager at [ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil), or by telephone 270-412-8174.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Atkins', with a long horizontal line extending to the right.

Jeffrey J. Atkins, P.E.  
Chief, DPW Environmental Division

Enclosure



**TENNESSEE HISTORICAL COMMISSION**  
STATE HISTORIC PRESERVATION OFFICE  
2941 LEBANON PIKE  
NASHVILLE, TENNESSEE 37243-0442  
OFFICE: (615) 532-1550  
[www.tnhistoricalcommission.org](http://www.tnhistoricalcommission.org)

2023-06-14 16:03:18 CDT

Mr. Ronald Grayson  
Us Army, Fort Campbell  
[ronald.i.grayson.civ@army.mil](mailto:ronald.i.grayson.civ@army.mil)

RE: Department of Defense (DOD), Multipurpose Training Range within Existing Range 28, Project#: SHPO0003318, Ft. Campbell, Stewart County, TN

Dear Mr. Ronald Grayson:

In response to your request, we have reviewed the cultural resources survey report and accompanying documentation submitted by you regarding the above-referenced undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicants for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739).

Considering the information provided, we find that no historic properties eligible for listing in the National Register of Historic Places will be affected by this undertaking. For future submissions, if you are stating that there will "no adverse effect," please state what historic resource(s) will not be adversely affected.

If project plans are changed or archaeological remains are discovered during project construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. Please provide your Project # when submitting any additional information regarding this undertaking. Questions or comments may be directed to Casey Lee, who drafted this response, at [Casey.Lee@tn.gov](mailto:Casey.Lee@tn.gov), +16152533163.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer  
Ref:MSG8668316\_107VBSYYGsPkqzwcVcFP

Fort Campbell FY24 MPTR FONSI

## **Finding of No Significant Impact (FONSI): Fort Campbell FY24 Multi-Purpose Training Range**

---

Fort Campbell has prepared an Environmental Assessment (EA) that evaluates the potential environmental impacts associated with the construction and operation of a Multi-Purpose Training Range (MPTR) at the existing Range 28 Range Complex located in Stewart County Tennessee. During the preparation of the EA, the proposed action and no-action alternatives were evaluated. After careful consideration, it was determined that only the proposed action would satisfy the Army's requirement for a MPTR. The attached EA was prepared pursuant to 32 Code of Federal Regulations Part 651 and U.S. Council on Environmental Quality regulations (Title 40, U.S. Code, Parts 1500-1508) for implementing the procedural requirements of the National Environmental Policy Act.

### **Description of the Proposed Action**

The Proposed Action is for the construction and operation of a multipurpose training range (MPTR; Project Number 96182) at Fort Campbell, Tennessee in FY (fiscal year) 2024. The proposed MPTR would overlay the existing RNG 28 Multi-Purpose Range Complex (MPRC) located within the training area of Fort Campbell. The site is bounded by Jordan Springs Road to the south and Artillery Road to the north. The proposed footprint will be located within Tennessee. The existing range has multiple roads, targets, and improved area.

### **No Action Alternative**

Under the No Action Alternative, Fort Campbell would not construct and operate a MPTR range. This alternative does not meet the purpose and need; however, the Council on Environmental Quality and Army NEPA regulations require consideration and analysis of the No Action Alternative to provide a baseline against which the other alternatives may be compared.

### **Environmental Consequences**

14 broad environmental components were considered to provide a context for understanding the potential effects of the Proposed Action and to provide a basis for assessing the significance of potential impacts. The environmental components considered are air quality, biological resources, cultural resources, health and safety, land use, noise, soils, socioeconomics, and water resources. Neither the effects of the Proposed Action nor

the No Action Alternative are expected to be controversial, involve unique or unknown risks, or to establish a precedent for future actions. No significant negative effects to the environment are anticipated under either alternative.

<b>Resource Area</b>	<b>Proposed Action</b>	<b>No Action Alternative</b>
<b>Land Use</b> <ul style="list-style-type: none"> <li>• land use</li> <li>• real property management</li> <li>• easements</li> <li>• viewsheds not addressed under cultural resources</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• Minimal change in viewshed with the proposed clear cutting of 70 acres.</li> <li>• Proposed project occurs within existing range with no expansion.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Very Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<b>Air Quality and Greenhouse Gas</b> <ul style="list-style-type: none"> <li>• Conformity</li> <li>• NAAQS</li> <li>• PSD</li> <li>• New Source Review</li> <li>• Minor Source Preconstruction Permitting</li> <li>• Dust</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• There could be a wildland fire risk during training, however it is in an area adapted to fires.</li> <li>• Somewhat less trees to absorb greenhouse gases.</li> <li>• Additional generator(s) will be added to installation permit.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Very Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<b>Noise</b> <ul style="list-style-type: none"> <li>• noise zones</li> <li>• noise impacts to community</li> <li>• noise impacts to wildlife</li> <li>• risks of noise complaints</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• The site is approximately 3,000 meters from post boundary and US Highway 79. There may be an occasional risk of noise complaint.</li> <li>• Noise and vibration from the use of vehicles and live fire may disturb wildlife in the immediate and bordering area.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
<b>Water Resources/Soil</b>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:</li> </ul>

Resource Area	Proposed Action	No Action Alternative
<ul style="list-style-type: none"> <li>• surface water</li> <li>• groundwater</li> <li>• floodplains</li> <li>• wetlands</li> <li>• 404 permits</li> </ul>	<ul style="list-style-type: none"> <li>• Impacts to water quality due to anticipated erosion and runoff</li> <li>• Wetland delineation required and executed.</li> <li>• NPDES, 401, and 404 permits required</li> <li>• FONPA drafted, The total impact for the project is 0.273-acres including stream crossings. Ephemeral wetland acreage is 0.067-acres (less than 0.1 acre). Anticipated that all sites will include fill (digging on range without UXO clearance could produce munition duds).</li> <li>• No drainage issues anticipated</li> </ul>	<ul style="list-style-type: none"> <li>• None identified</li> </ul>
<p>Biological Resources</p> <ul style="list-style-type: none"> <li>• vegetation</li> <li>• wildlife</li> <li>• threatened and endangered species</li> <li>• invasive species</li> <li>• wildland fires</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>○ Indiana Bat</li> <li>○ Gray Bat</li> <li>○ Northern Long-Eared Bat</li> <li>○ Little Brown Bat</li> </ul> </li> <li>• There is a risk for wildlife fires during training.</li> <li>• Trees removed outside of bat season.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None identified.</li> </ul> </li> </ul>
<p>Cultural Resources</p> <ul style="list-style-type: none"> <li>• historic buildings and structures</li> <li>• archaeological resources</li> <li>• SHPO consultation</li> <li>• Native American Tribes consultation</li> <li>• historic viewsheds</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks: <p>Project Area of Potential Effects (APE) for direct and indirect effects had been partially surveyed for archaeological resources. The areas not surveyed were located within the Impact Area and are considered exempt from archaeological inventory. Sites 40SW0157, 40SW0158, 40SW0159, and 40SW0571 were determined not eligible for NRHP listing. TN and KY SHPOs concurred.</p> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low or Medium</li> <li>❖ Issues/concerns/risks: <ul style="list-style-type: none"> <li>• None Identified</li> </ul> </li> </ul>



<b>Resource Area</b>	<b>Proposed Action</b>	<b>No Action Alternative</b>
Socioeconomics <ul style="list-style-type: none"> <li>• demographics</li> <li>• housing</li> <li>• economic development</li> <li>• quality of life</li> <li>• environmental justice in minority and low-income populations</li> <li>• protection of children from environmental health risks and safety risks</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified. There will be no environmental or socioeconomic impacts that will cross installation boundaries into areas with populations of children, therefore, there would be no impacts on children or low-income populations resulting from alternatives analyzed in this EA.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Transportation and Traffic <ul style="list-style-type: none"> <li>• traffic</li> <li>• roadways</li> <li>• rail transportation</li> <li>• air transportation</li> <li>• traffic volume</li> <li>• level of congestion</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Some increase in traffic during construction?</li> <li>• With increased range operation there would be an increase in military vehicle traffic to and from the range.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Airspace <ul style="list-style-type: none"> <li>• controlled airspace</li> <li>• SUAs</li> <li>• MOAs</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None Identified</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>
Utilities <ul style="list-style-type: none"> <li>• potable water</li> <li>• drinking water plants</li> <li>• wastewater</li> <li>• storm water</li> <li>• NPDES permitting</li> <li>• solid waste</li> <li>• energy</li> <li>• heating</li> <li>• cooling,</li> <li>• communications</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Water, sewer, and gas not required.</li> <li>• To either use Porto potties or have a dry flush system</li> <li>• Power is provided by “City Light &amp; Power” with existing RNG28 connection point.</li> <li>• Fiber run in ROCA and downrange from RNEC hut.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None identified</li> </ul> </li> </ul>

<b>Resource Area</b>	<b>Proposed Action</b>	<b>No Action Alternative</b>
Hazardous and Toxic Materials and Waste <ul style="list-style-type: none"> <li>• hazardous material</li> <li>• hazardous waste</li> <li>• USTs/ASTs</li> <li>• asbestos</li> <li>• radon</li> <li>• LBP</li> <li>• PCBs</li> <li>• UXOs</li> <li>• MECs</li> <li>• POLs</li> <li>• EPCRA</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Any necessary UXO removal prior to construction.</li> <li>• No digging during construction downrange; clean soil will be added over existing downrange surfaces.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None Identified.</li> </ul> </li> </ul>
Solid Waste <ul style="list-style-type: none"> <li>• Construction and Demolition Landfill</li> <li>• Recyclable material</li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Medium</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• Debris hauled off-site to C&amp;D Landfill</li> <li>• Recycle concrete/metal debris.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ Level of Analysis: Low</li> <li>❖ Issues/concerns/risks:               <ul style="list-style-type: none"> <li>• None Identified.</li> </ul> </li> </ul>

Cumulative impacts of the Proposed Action to these environmental components were also analyzed. Future projects will include new tank and maneuver trails to access the MPTR; these trails will be constructed under a separate project not dependent on this proposed action and will be analyzed under a future Environmental Assessment and/or Environmental Impact Statement. Therefore, the effects of the Proposed Action are not considered significant as defined by the NEPA implementing regulations (40 CFR 1508.27 and 32 CFR 651).

### **Public and Intergovernmental Review**

The EA was released for a 30 day public review period beginning XX XXXX 2023. The EA and related documents were posted to the Fort Campbell public webpage and on the FC Facebook page. A notice of availability including a request for comments on the draft EA was published in newspapers serving the Fort Campbell area. Comments were accepted through XXXX X, 2023 via mail and email.

Review comments were received from various agencies (Enter comments summary).

## **Conclusion**

Based on the analysis presented in the EA, I find that implementation of the proposed action, in conjunction with the implementation of specified mitigation measures, would have no significant negative impact on the human or natural environment. Therefore, a Finding of No Significant Impact is issued for the proposed action and no Environmental Impact Statement is required.

---

Andrew Q. Jordan  
COL, SF  
Commander USAG

---

DATE



**DEPARTMENT OF THE ARMY**  
**HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT CAMPBELL**  
**T39 INDIANA AVENUE, SUITE 223**  
**FORT CAMPBELL KY 42223-3570**

**DRAFT FINDING OF NO PRACTICABLE ALTERNATIVE**  
**for the**  
**CONSTRUCTION AND OPERATION OF A MULTIPURPOSE TRAINING RANGE at**  
**FORT CAMPBELL, KENTUCKY**

### **1.0 Introduction.**

To support mission requirements, the Department of the Army proposes to construct and operate a multipurpose training range (MPTR; Project Number 96184) with Mobile Protected Firepower (MPF) vehicle capability. The proposed action is slated for construction and operation on the existing Range 28, in the western training area portion of Fort Campbell (see Figure 1). The proposed MPTR is specifically designed to satisfy the training and qualification requirements for the crews, teams, and sections of infantry, armor, and aviation combat units, a capability that the installation is currently deficient. This range would support dismounted infantry squad tactical live-fire operations, either independently of, or simultaneously with supporting vehicles. The range would be utilized to train and test armor, infantry, and aviation teams, crews, and sections on the skills necessary to detect, identify, engage, and defeat stationary and moving armor and infantry targets in a tactical array, according to the 30 March-2 April and 18-19 May 2021 planning charrettes led by the Department of the Army (DA) Combined Arms Center (see Figure 2).

Three ephemeral riverine wetlands have been identified in the Proposed Action area. Executive Order (EO) 11988, Floodplain Management, requires federal agencies to determine whether a proposed action will occur within a floodplain and to avoid floodplains to the maximum extent possible when there is a practicable alternative. The 100-year floodplain is defined as an area adjacent to a water body that has a 1 percent or greater chance of inundation in any given year. EO 11990, Protection of Wetlands, requires that each federal agency, to the extent permitted by law, "shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use." The term "wetlands" means "those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction."

Fort Campbell contains approximately 2533 acres of wetlands. Wetlands have unique and important biological functions. They provide critical habitat for many wildlife species, absorb and abate floodwaters, improve water quality by removing pollutants, affect groundwater discharge and recharge, stabilize sediments, abate stormwater; and enhance aesthetics. The proposed action will impact 0.067 acres of ephemeral wetlands by the construction of low water crossings.

The Finding of No Practicable Alternative (FONPA), along with the MPTR Environmental Assessment (EA), will be made available for public review and comment for 30 days at:

- Clarksville- Montgomery County Public Library, 350 Pageant Lane, Clarksville, TN 37042.
- Robert F. Sink Library, Building 38, Screaming Eagle Blvd, Fort Campbell, KY 42223.
- Christian County Public Library, 101 Bethel Street, Hopkinsville, KY 42240
- Stewart County Public Library, 102 Natcor Drive, Dover, TN 37058
- John L. Street Library, 244 Main Street, Cadiz, KY 42211

The Notice of Availability (NOA) for the EA and FONPA will be published in the Clarksville Leaf Chronicle, Stewart County Standard, Kentucky New Era, and the Cadiz Record. The NOA will also be posted on the Fort Campbell Facebook page. The FONPA and EA will be available on the Fort Campbell Environmental Division public webpage.

This draft finding incorporates the analysis in the draft Fort Campbell FY24 Multi-Purpose Training Range Environmental Assessment.

Written comments and questions about the FONPA, EA and draft FNSI and its analyses may be directed to:

Mr. Dan Etson, NEPA Program Manager, United States Army Installation Management Command, Headquarters, United States Army Garrison, Fort Campbell, 3709 Polk Road Fort Campbell, Kentucky 42223. Mr. Etson is also available for questions regarding the EA, draft FNSI and FONPA by phone at (270) 798-9784 and by email at [daniel.l.etsen.civ@army.mil](mailto:daniel.l.etsen.civ@army.mil).

## **2.0 Proposed Action.**

The MPTR construction would begin in FY2024. The proposed MPTR is specifically designed to satisfy the training and qualification requirements for the crews, teams, and sections of combat units. This range would support dismounted infantry squad tactical live-fire operations, either independently of, or simultaneously with supporting vehicles. The range would be utilized to train and test armor, infantry, and aviation teams, crews, and sections on the skills necessary to detect, identify, engage, and defeat stationary and moving armor and infantry targets in a tactical array. All targets would be fully automated, and the event specific target scenario would be computerized and operated



from an on-site control tower. Captured audio/video would be compiled and available to the unit at the after action review (AAR).

Primary facilities include a control tower, an operations facility, port-a-john pads with three-sided wind walls, a bleacher enclosure, a covered mess, a non-instrumented range AAR building, an existing ammunition loading dock, six bivouac pads, and unit storage. The range would consist of six moving ammunition targets, 30 stationary targets and berms, four moving infantry targets, 122 stationary infantry targets, ten battle positions, five urban facades, one urban cluster consisting of seven buildings, one helicopter tactical landing area, four camera towers and two machine gun bunkers. The project would require utilities to include: storm drainage; fencing; paving; electricity; and communications. Potable water will be trucked on site and a portable toilet contract will provide wastewater services.

Construction would include a 17,000 linear foot (lf) by 20 foot (ft) -wide tank trail with nine ephemeral stream crossings. The National Wetland Inventory and a field wetland survey has confirmed three riverine wetlands within the project footprint that will require consultation with Nashville District U.S. Army Corps of Engineers. Figure 3 shows the locations of the proposed range access roads that cross ephemeral streams. The total impact for the project is 0.067-acres for stream crossings. It is anticipated that all sites will include fill since digging on the range without UXO clearance could produce munition duds. All ephemeral stream crossings will be permitted under a Tennessee Aquatic Resource Alteration Permit.

### **3.0 Impacts and Mitigation Measures**

#### **3.1 100-Year Floodplain**

No FEMA recognized floodplains occur within the project footprint (Figure 4).

#### **3.2 Wetlands**

EO 11990 states that if the only practicable alternative requires siting in a wetland, the agency shall, prior to taking action, design or modify its action to minimize potential harm to or within the wetland. A wetland survey conducted in March 2023 confirmed the presence of three riverine wetlands within the project footprint that will require consultation with Nashville District U.S. Army Corps of Engineers. Impacts to the wetlands will include fill to create low water crossings for the range service roads.

Implementation of the Proposed Action would result in the Army impacting 0.067 acres of wetlands.

Under the Proposed Action, the Army would implement best management practices (BMPs) and low-impact-development (LID) measures to reduce the potential for adverse impacts on the wetlands. BMPs and LID measures are incorporated into the Proposed Action to avoid or minimize impacts on wetlands and are collectively described, as follows: Coverage under Clean Water Act Sections 401 and 404 will be

obtained under the Tennessee Aquatic Resource Alteration Permit and the US Army Corps of Engineers Nationwide Permit.

Taken together, these and other yet to be determined BMPs and mitigation measures would avoid or minimize the loss of and impacts on ephemeral riverine wetlands (Figure 3). These measures represent all practicable measures to minimize harm to wetlands.

#### **4.0 Finding of No Practicable Alternative**

During development of the Proposed Action, the Fort Campbell Environmental Division Office worked proactively to ensure the purpose and need of the Proposed Action was met while also avoiding as many potential impacts to floodplains and wetlands as practicable. Due to operational requirements, it was determined that complete avoidance of floodplains and/or wetlands was not feasible; however, the Proposed Action minimizes potential impacts to the greatest degree practicable while also achieving the required results.

Accordingly, I find there is no practicable alternative to siting the Proposed Action entirely outside of the floodplains and/or wetlands; however, the Army will ensure that all practicable measures to minimize impacts are incorporated into the Proposed Action.

---

Date

---

Ms. Carla K. Coulson  
Deputy Assistant Secretary of the Army Installations,  
Housing & Partnerships

#### **Attachments:**

Figure 1. Site Map

Figure 2. Project Map

Figure 3. Surface Water Features (including Floodplain/wetlands)

#### **References:**

EO 11988

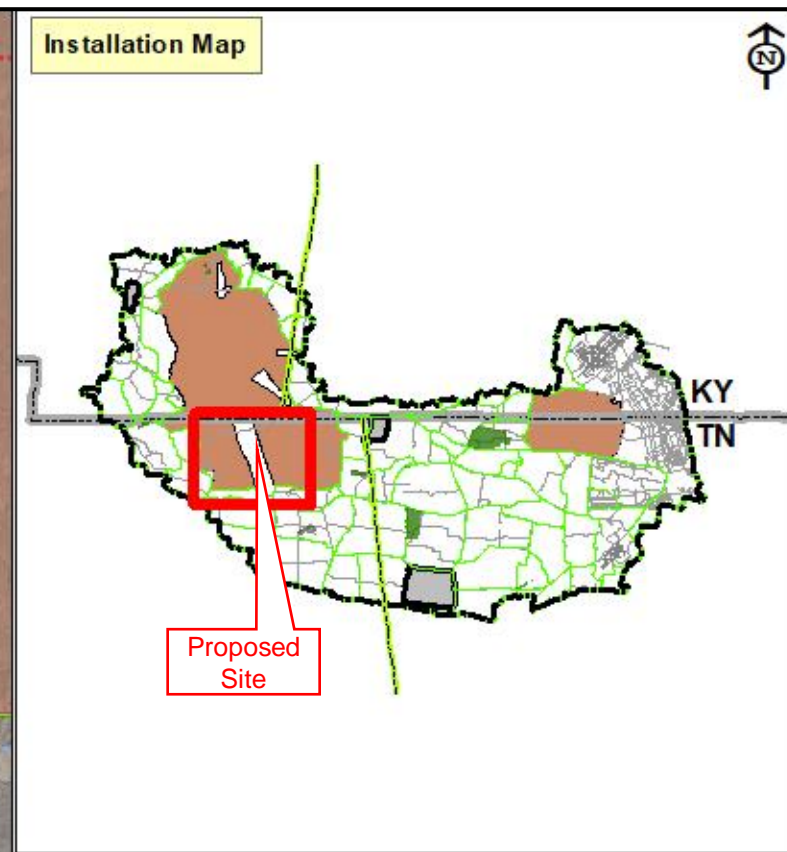
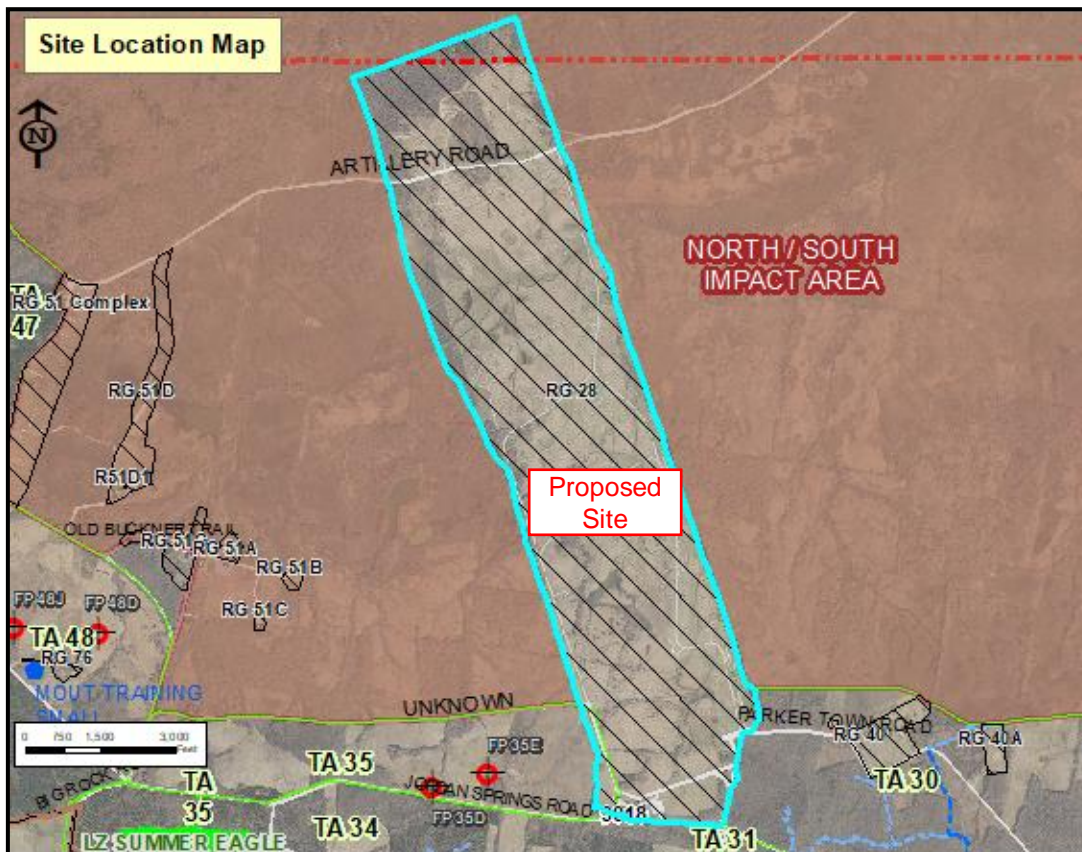
EO 11990

Fort Campbell's MPTR Environmental Assessment



# Fort Campbell Siting Request

**DPTMS – New Multi-Purpose Training Range, PN96184 (revised site)**



**Location:** Range 28, Jordan Springs Road

**DPW MP#:** 19-10-002R

**W.O./Project #:** PN96184

DPTMS is requesting site approval to construct a new Multi-Purpose Training Range (MPTR) on the existing Range-28 footprint, which extends from Jordan Springs Road to the KY/TN State line. The proposed project is a Military Construction Army (MCA) Project currently scheduled for FY24. **Required Utilities:** Electric, Fiber.

**ADP PLANNING DISTRICT:** N/A

(RCMP Guidance should be considered)

**Approval Authority:** Garrison Commander





# Fort Campbell Siting Request

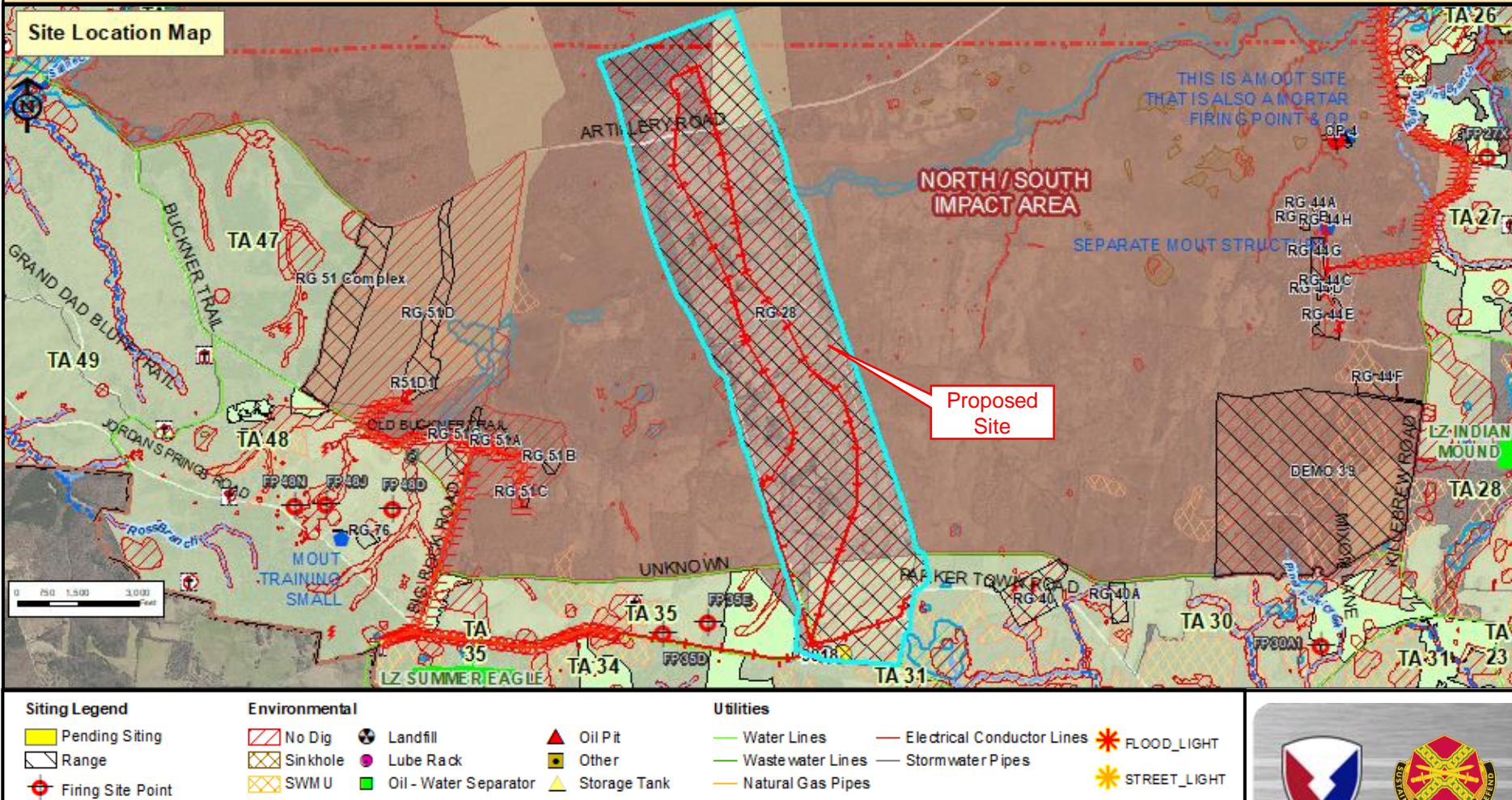
***DPTMS – New Multi-Purpose Training Range, PN96184 (revised site)***

## Existing Constraints & Utilities Map

**Location:** Range 28, Jordan Springs Road

**DPW MP#:19-10-002R**

**W.O./Project #: PN96184**





# Fort Campbell Range 28 Proposed MPTR



## LEGEND

- Existing SAT (37ea)
- Existing SIT Emplacement (154ea)
- Existing MIT Emplacement (44ea)
- Existing MAT Emplacement (9ea)
- Existing BP (6ea)
- Proposed SAT-Frontal (10ea)
- Proposed SAT-Flank (6ea)
- Proposed SAT-Fr over existing (14ea)
- Proposed 7-man SIT Cluster (14ea)
- Proposed 6-man SIT Cluster w/MIT (4ea)
- Proposed MAT (3ea New / 3ea Reuse)
- Proposed BP (6ea)
- Proposed Reverse Slope BP (4ea)
- Future BP (5ea)

Control Tower

500 250 0 500 Meters

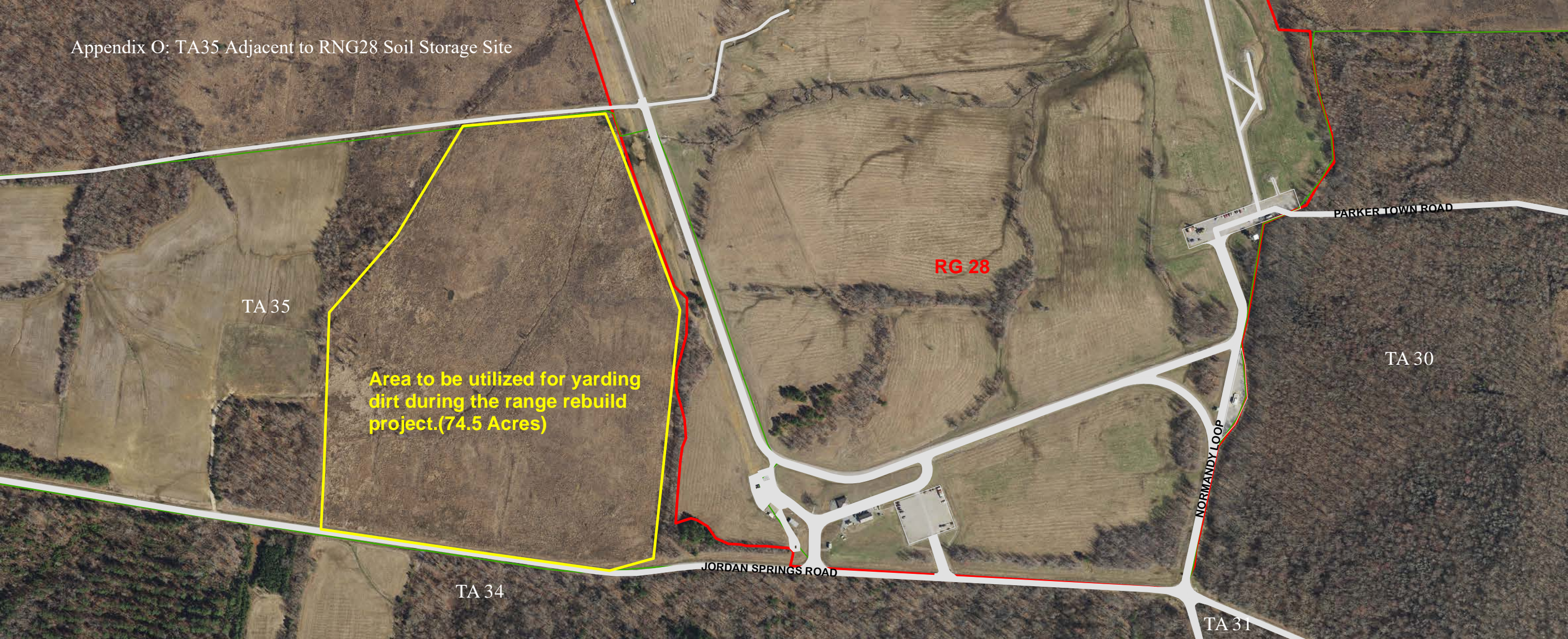
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community







Appendix O: TA35 Adjacent to RNG28 Soil Storage Site



TA 35

Area to be utilized for yarding  
dirt during the range rebuild  
project.(74.5 Acres)

RG 28

TA 30

TA 34

TA 31

JORDAN SPRINGS ROAD

NORMANDY LOOP

PARKER TOWN ROAD