

Environmental Assessment

for

Proposed Construction and Operation of a Tactical Urban Target and Maneuver Area at Range 48, Fort Drum, New York

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Prepared by

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LIST OF ACRONYMS

174 AW	174th Attack Wing	N2O	nitrous oxide
AFI	Air Force Instruction	NAAQS	National Ambient Air Quality Standards
ACHP	Advisory Council on Historic Preservation	NAWMP	North American Waterfowl Management Plan
AFB	Air Force Base	NEPA	National Environmental Policy Act
AGL	above ground level	NO2	nitrogen dioxide
ANG	Air National Guard	NOX	nitrogen oxide
APA	Adirondack Park Agency	NPDES	National Pollutant Discharge Elimination System
BDU	Bomb Dummy Unit	NWI	National Wetlands Inventory
CAA	Clean Air Act	NY	New York
CAB	Combat Aviation Brigade	NYANG	New York Air National Guard
CAS	Close Air Support	NYSDEC	New York State Department of Environmental Conservation
CEQ	Council on Environmental Quality	OP	observation point
CERL	Construction Engineering Research Laboratory	O3	ozone
CFR	Code of Federal Regulations	RPA	remotely piloted aircraft
CNEL	Community Noise Equivalent Level	R-48	Range 48
CO2	carbon dioxide	RONA	Record of Non-Applicability
CO	carbon monoxide	SHPO	State Historic Preservation Office
CWA	Clean Water Act	SIP	State Implementation Plan
CZ	Clear Zone	SWPPP	Stormwater Pollution Prevention Plan
dB	decibel	US	United States
DoD	Department of Defense	USA	United States Department of the Army
EA	Environmental Assessment	UAV	unmanned aerial vehicle
EIAP	Environmental Impact Analysis Process	USACE	United States Army Corps of Engineers
EO	Executive Order	USAF	United States Air Force
EOD	Explosive Ordnance Disposal	USEPA	United States Environmental Protection Agency
ESA	Endangered Species Act	USFS	United States Forest Service
FICON	Federal Interagency Committee on Noise	USFWS	United States Fish and Wildlife Service
FNSI	Finding of No Significant Impact	USGS	United States Geological Survey
FTU	Formal Training Unit	VOC	Volatile Organic Compounds
HA	hectare	WSAAF	Wheeler-Sack Army Airfield
HE	High Explosive		
INRMP	Integrated Natural Resources Plan		
IED	Improvised Explosive Device		
IFR	Instrument Flight Rules		
JTAC	Joint Terminal Attack Controllers		
LS	Landing Strip		
LTO	landing and take-off event		
MOA	Military Operating Area		
MTR	Military Training Route		

ENVIRONMENTAL ASSESSMENT

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1.0 PURPOSE, NEED, AND SCOPE

1.1 Introduction

Fort Drum is located in northwestern New York State in Jefferson and Lewis counties. About 83 percent of Fort Drum is in the northeastern corner of Jefferson County with the remainder in the northwestern corner of Lewis County. St. Lawrence County borders the installation to the north. The Cantonment Area is about six miles east of Interstate Highway 81 and about 10 miles northeast of the City of Watertown. Fort Drum is served by several state roads and has an extensive local road network. Most of the installation extends northeastward from the Cantonment Area, averaging about 10 miles wide and 20 miles long. Lake Ontario is about 20 miles west of the installation, and the St. Lawrence River is about 20 miles to the north. Fort Drum encompasses 107,265 contiguous acres (167.6 square miles).

This Environmental Assessment (EA) evaluates the potential environmental impacts of Range 48 (R-48) Improvement Projects proposed by the New York Air National Guard 174th Attack Wing (174AW). The proposal is to develop the existing air-to-ground range target area acreage to include a multi-use urban sprawl inert ordnance target and maneuver complex. The intent of this complex is to provide a realistic training environment capable of supporting a variety of individual and combined (or joint) outcome based/scenario driven training for Air Force aircrews, Joint Terminal Attack Controllers (JTACs), and Army Aviation/Ground/Support Troops.

1.2 PURPOSE AND NEED FOR THE PROPOSED ACTION

This Environmental Assessment (EA) is required to evaluate potential effects to the environment that would occur as a result of improvements proposed for R-48 at Fort Drum

Fort Drum R-48 was constructed to be a multipurpose range to support air to ground gunnery, and ground force operations. The range is located in the north central part of the installation. Range maintenance responsibilities are divided between the US Army Garrison and the New York National Guard at Fort Drum. The range was designed to teach tank crews the skills needed to defeat stationary and moving targets in a tactical array and as a point to prepare tank crews for live fire events at other ranges. Weapons-use included M1/M1A1 battle tanks, M2 machine guns, M60 machine guns, UH-1 utility helicopters, OH58D Kiowa Warrior helicopters, AH-1 Cobra helicopters, and Hellfire missile systems. This range was intentionally constructed within the flight pattern used by A-10 and F-16 aircraft for targeting in adjacent portions of the Main Impact Area. Range activities at that time were conducted primarily within an approximately 240-acre parcel, with occasional use of the Main Impact Area for long-range target practice (US Army, 1999).

Changes in how battles are fought and won have shifted the military from relying on heavy equipment to using lighter equipment with increased use of state-of-the-art technologies. This fact has caused a significant decrease in use of battle tanks at the installation. In the past five years the New York Air National Guard mission changed converting A-10 and F-16 aircraft use for the MQ-9 unmanned aerial system, also known as the Reaper. Today's operations are close multi-force and highly coordinated between air and ground forces. To meet the requirements for current day conflict/battle situations it is important that the personnel train the same way they will fight. It is anticipated that the improvements proposed for R-48 will enhance the training experience to meet requirements the Soldier and Airman will find when deployed.

The range currently functions as a multipurpose range that provides for air to ground force, ground force and integrated joint training. It is the only range in the eastern United States, north of Florida, and the only range at Fort Drum capable of sustaining joint training that involves aircraft delivered high explosive ordnance up to and including 2,000 pound bombs most commonly used in current combat theaters. The proposed improvements, like the majority of the existing range, is located within Ft Drum's Main Impact Area (with an actively used and maintained High Explosive Target Area on the south of the R-48 limits, near the center of the Main Impact Area). An outline of the maintained target areas and facilities encompasses approximately 4,000 acres (Figure 1). An EA was prepared in 1999 to assess relocating the then air-to ground gunnery range from Fort Drum, Range 35 to Range 48. The current range was constructed from 1999 through 2003 as a Congressional Project for a joint-use integrated fixed and rotary wing aerial gunnery range and has operated since 2003.

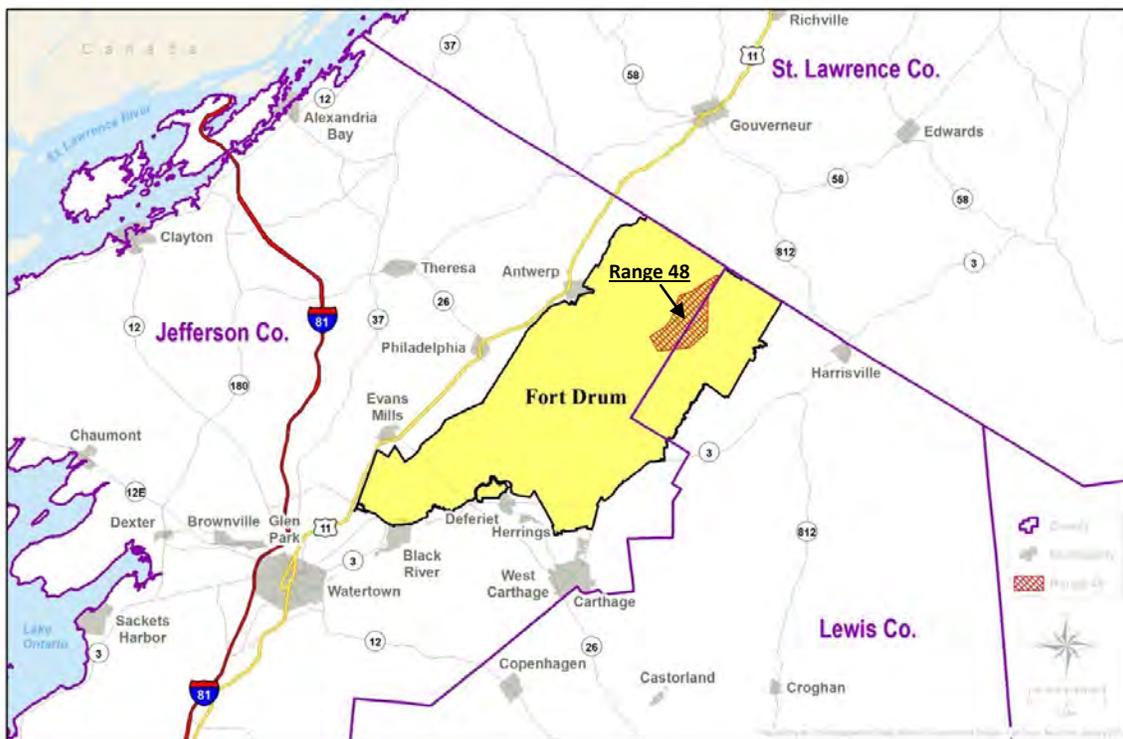


Figure 1 - Fort Drum and Range 48 Locations

1.3 Scope of the Analysis

This document is an assessment of the environmental effects of the proposed actions and alternatives for R-48 at Fort Drum and has been prepared in accordance with the National Environmental Policy Act (NEPA), as implemented by the regulations published by the Council on Environmental Quality (CEQ) 40 C.F.R. Parts 1500-1508, 32 Code of Federal Regulations (CFR) Part 651, Environmental Analysis of Army Actions (March 2002), and 32 CFR 989, [Air Force] Environmental Impact Analysis Process (EIAP), as amended July 2007. NEPA requires federal agencies to consider potential environmental consequences of proposed actions and enhance the environment through well-informed federal decisions. CEQ was established under NEPA to implement and oversee federal policy in this process.

This analysis incorporates past environmental analysis, where applicable, to assess potential impacts of the proposed action. This document analyzes and discloses the direct, indirect and cumulative impacts associated with the proposed action and alternatives. It also relies on and incorporates, by reference, applicable previous NEPA documents that are available on written request

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Three alternatives are considered for this study. Alternative 1, the proposed action, is to develop R-48 to accommodate a 360 degree urban sprawl training facility that resembles a real world environment that would include a mock airfield and runway with a smaller hardened functional landing strip; Alternative 2, the optional scenario action, is to develop R-48 to accommodate a 360 degree urban sprawl training facility that resembles a real world environment with only a mock runway and or without a runway at all; and Alternative 3, the No Action Alternative, which is to continue operations on the site initially approved for the range in 1999. Each alternative was considered for meeting the purpose and need, cost and impact to the human and natural environment. No other alternatives were analyzed for this EA.

This EA identifies the potential direct, indirect and cumulative effects on the human environment that may result from the proposed action and will determine whether or not any such effects are significant. If the EA discloses any significant impacts, the Army will publish a Notice of Intent to prepare an Environmental Impact Statement (EIS). Otherwise, the Army will sign a Finding of No Significant Impact (FNSI).

Currently Fort Drum's Joint Facility on R-48 offers extremely unique capabilities based on its location and resources. There are no reasonable location based alternatives for this proposal as the premise of the project includes allowing aircraft to expend ordnance in and around the proposed development. The only alternatives viable for consideration are changes to the scope of the proposal.

2.1 Alternative 1 – The Preferred Alternative

This alternative is to develop R-48 to accommodate a 360 degree urban sprawl training facility that resembles a real world environment. This facility would have a tactical urban sprawl target and maneuver area that replicates an urban environment and designed to support heavy and light infantry, armor, artillery, and aviation positioning and maneuver. This alternative consists of approximately 302 acres (122 ha) of urban sprawl with buildings, roads, alleys, parking areas, and command and control building, a road and trail network, a full scale mock airfield to include a 9000 x 150 foot mock runway, mock parking ramps, taxiways and support facilities. The northern end of the proposed mock runway would be upgraded to an unpaved dirt assault flight landing strip (3,600 x 60 foot) to accommodate manned and unmanned aircraft up to C-130. The C-130 is a familiar aircraft at Fort Drum, for many years being utilized for a variety of training and support activities to include airborne assault, search and rescue, scientific research support, weather reconnaissance, and aerial firefighting. It is now the main tactical airlifter for many military forces worldwide. (Source: http://en.wikipedia.org/wiki/Lockheed_C-130_Hercules Accessed January 2013).

2.2 Alternative 2 – The Optional Scenario Action

- A. This alternative is to develop R-48 to accommodate a 360 degree urban sprawl training facility that resembles a real world environment with only a mock runway and/or without a runway at all. This alternative would be to construct only the urban sprawl target and maneuver area leaving out the dirt assault landing strip.
- B. This alternative is to construct the urban sprawl target and maneuver area with fewer access roads and trails than is currently proposed. The second alternative would limit the ability of the project to meet its objective for true „urban sprawl“ training which requires, by definition, a complex urban/cultural network to challenge both the air and ground maneuver force decision making.

2.3 Alternative 3 – The No Action Alternative

The No Action Alternative is to not construct improvements proposed for R-48 in this study. Under this alternative R-48 would continue to operate as it does today.

2.4 Screening Criteria

This EA addresses potential impacts to environmental resources, such as vegetation, wildlife, threatened and endangered species, soils; surface waters and wetlands, and cultural resources. The EA was prepared utilizing a systematic, interdisciplinary approach integrating the natural and social sciences and the environmental design arts with planning and decision-making.

The analysis is separated into effects resulting from construction and operation of the preferred action and alternatives to improve R-48, as well as analysis of the No Action

alternative. Mitigation for potential adverse effects, when applicable, is also discussed. Mitigation measures, per 32 CFR Part 651, may include avoidance of impact; minimization of impact, and mitigation of impact, which can include rehabilitation, restoration, reduction of impact and/or compensation.

As a result of initial scoping for this assessment, it has been determined that the action will have no effect on certain resource areas that frequently receive attention in NEPA analyses. Resource areas that were considered but excluded from further detailed analysis in this EA include: airspace, climate, cultural resources, geology (except soils), hazardous materials / hazardous wastes infrastructure (potable water supply, electricity, wastewater treatment, steam and process heat, telecommunications, solid waste disposal, roadways), environmental justice (effects on low-income and minority populations), protection of children from environmental health and safety risks, and traffic and transportation. The proposed action will have no measurable changes in local or regional employment or other economic indicators.

VECs considered pertinent to this EA include air quality, soils, wetlands and water resources, biological resources, land use, and noise. Threshold levels of significance defined are the Environmental Consequences sections for each of these VECs. The summary of environmental consequences of the VECs relevant to this project can be found in the table below. The following categories of impact used for this assessment are defined as follows:

- **Beneficial** - A positive net impact.
- **No Impact** - An environmental impact is not expected to occur.
- **Very Low** - An environmental impact that could occur, but would be negligible and less than minor and might not be perceptible.
- **Low** - While impacts would be perceptible, they would clearly be minor and not be significant.
- **Less than Significant (Medium)** - An impact that is not significant, but is readily apparent. Additional care in following standard procedures, or applying precautionary measures and best management practices to minimize adverse impacts, may be called for.
- **Significant but Mitigable (High)** - A significant impact anticipated, but the Army can put management actions or other mitigation measures in place to reduce impacts to less than significant.
- **Significant Adverse (Severe)** - An adverse environmental impact, which, given the context and intensity, violates or exceeds regulatory or policy standards or otherwise exceeds the identified threshold. The significant impact, however, cannot be mitigated with practical means to a level below significance.

Many of the mitigation measures are built into the proposed action and will be implemented with the project. As a result, the intensity of impact is less than significant from the outset. Table 1 summarizes environmental consequences of the alternatives.

Table 1: Summary of Environmental Consequences

VECs	Alternative 3 No Action	Alternative 1 and Alternative 2:
Air Quality	Very Low	Low (short-term minor during construction)
Airspace	Low	Low
Climate	No Impact	No Impact
Cultural Resources	No Impact	No Impact
Soils	No Impact	Less than Significant (short-term minor during construction)
Noise	No Impact	Less than Significant (short-term minor during construction)
Biological Resources Flora	No Impact	Significant but Mitigable
Biological Resources Fauna	No Impact	Very Low
Biological Resources T&E	No Impact	Low
Wetlands and Water Resources	No Impact	Significant but Mitigable (through avoidance and mitigation)
Land Use	No Impact	Very Low
Socioeconomics / Environmental Justice	No Impact	No Impact (possible short term beneficial)
Traffic / Transportation	No Impact	No Impact

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the existing natural environment on Fort Drum and the impacts of the proposed action and each alternative on valued environmental components (VEC) of the proposed project location.

3.1 AIR QUALITY

The affected environment includes air emissions associated with Fort Drum, New York. Northern New York, including Fort Drum, is designated as a marginal ozone nonattainment area due to its location within the Northeast Ozone Transport Region. New York State Department of Environmental Conservation (NYSDEC) recommended that Jefferson County be designated as an attainment area for the 2008 ozone NAAQS. This recommendation was made because the ozone monitoring in 2008 indicated that the air is in compliance with the national standard and the ozone levels have not changed significantly since EPA made final designations for the 1997 ozone NAAQS in 2008 (Snyder, 2011). All other criteria pollutants have been designated as being in attainment (EPA, 2011).

Actual emissions from stationary sources at Fort Drum fall below the thresholds for major source determination. Potential emissions from stationary sources at Fort Drum exceed the Major Facility threshold for CO, NO_x, SO₂, and VOCs (see glossary). Because permitting requirements are determined based on a facility's "potential to emit," Fort Drum is considered a major facility and operates in accordance with an approved Title V permit. Since Fort Drum is a major source, the General Conformity Rule of the Clean Air Act applies. The general conformity rule requires analysis of total direct and indirect emissions of criteria pollutants, including precursors, when determining conformity of the proposed action. The rule does not apply to actions where the total direct and indirect emissions of criteria pollutants are at or below established *de minimis* levels.

The proposed R-48 improvement action has the potential to increase VOC and NO_x emissions due to ground clearing, rock blasting, and operation as a firing range and potential landing strip. VOC and NO_x emissions resulting from each proposed action must be estimated and compared to general conformity *de minimis* thresholds for Jefferson County, NY. Actions with actual emissions that are below thresholds have no further regulatory obligations under the general conformity rule.

The General Conformity Rule requires analysis of total direct and indirect emissions of criteria pollutants, including precursors, when determining conformity of the proposed action. The rule does not apply to actions where the total direct and indirect emissions of criteria pollutants are at the *de minimis* levels or lower. In addition, ongoing activities currently conducted are exempt from the rule so long as there is no increase in emissions above the specified *de minimis* level. For the ozone transportation region, the *de minimis* levels are 50 tons per year or greater for volatile organic compounds and 100 tons per year or greater for nitrous oxides. If the proposed emissions levels exceed the *de minimis* levels, a formal air conformity determination is necessary. If the *de minimis* levels are not exceeded and the predicted emissions do not exceed 10% or more of the nonattainment area's total emission budget for that pollutant.

3.1.1 Environmental Consequences: Air Quality

No Action Alternative and Alternatives 1 and 2

None of the alternatives involves major changes to the installation operations and all alternatives would be anticipated to have only very low short term and temporary impacts to air quality. Very low or low impacts are anticipated on during construction on R-48 as a result of all the alternatives. There would not be a change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. The installation would continue to manage its air quality program and Title V permit requirements in accordance with the Clean Air Act. While there is expected minor short-term impacts to air quality during clearing and possible rock blasting neither the proposed action nor its alternative would have potential for long-term adverse affects to air quality.

3.2 SOILS

Soils of Fort Drum are generally developed from deltaic/lacustrine or glacial deposits. These soil types vary from sandy gravels to loams to clays to mucks. Soils in the region are generally shallow and poorly drained; soil permeability is slow to moderate.

A Stormwater Pollution Prevention Plan (SWPPP) will be required to start construction and will be prepared during the project design phase. This plan is reviewed and approved by NYSDEC and activities are monitored during and after construction to ensure the requirements of the SWPPP and best management practices are followed.

There are 193 different soil types mapped on Fort Drum. The soils at the preferred location are predominantly mapped as the Hailesboro-Wegatchie-Insula association, Insula-Millsite-Quetico-Rock outcrop complex, and Wonsqueak-Onjebonge association (USDA, 2013). The following is a brief description of the soils mapped within the study area:

Hailesboro - Very deep, somewhat poorly drained soils on lake plains and lower valley walls. They formed in silty sediments deposited in still water. Slope ranges from 0 to 8 percent (SSS-NRCS-USDA).

- The Insula series consists of shallow, well drained soils that formed in 10 to 20 inches of loamy glacial till on bedrock controlled uplands. Slopes range from 0 to 35 percent. Permeability is moderately rapid (SSS-NRCS-USDA).
- The Millsite series consists of moderately deep, well drained and somewhat excessively drained soils formed in till underlain by crystalline rock. Saturated hydraulic conductivity is moderately high or high. Slope ranges from 0 to 50 percent (SSS-NRCS-USDA).
- The Onjebonge series consists of very deep, very poorly drained soils formed in water laid deposits of silt and very fine sand. They are on nearly level lake plains, deltas, and terraces. Slope ranges from 0 to 3 percent. Saturated hydraulic conductivity is moderately low or moderately high in the organic and mineral

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- material (SSS-NRCS-USDA).
 - The Quetico series consists of very shallow, well drained soils that formed in loamy noncalcareous glacial drift on uplands with relief controlled by the underlying bedrock. These soils have bedrock beginning at depths ranging from 4 to 10 inches. The saturated hydraulic conductivity is moderate in the loamy mantle. Slopes range from 2 to 70 percent (SSS-NRCS-USDA).
 - The Wegatchie series consists of very deep, poorly drained soils formed in silty glacial lake deposits. They are in level or depressional areas on lake plains and in basins on uplands. Slope ranges from 0 to 3 percent (SSS-NRCS-USDA).
 - The Wonsqueak series consists of very deep, very poorly drained soils that formed in a mantle of well decomposed organic soil material over loamy mineral material. They are in depressions in glacial ground moraine, till plains, flood plains, shallow till ridges, outwash plains, and deltas. Slope is 0 to 2 percent. Estimated saturated hydraulic conductivity is moderately high or high in the organic materials and underlying mineral material (SSS-NRCS-USDA).

3.2.1 Environmental Consequences: Soils

No Action Alternative

The No Action Alternative is to continue to operate R-48 as a multipurpose multi force training range. There would be no change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. The installation would continue to manage its training areas and ranges as it does today.

Alternative 1 and 2

Minor short-term impacts to soils are expected during clearing and possible rock blasting activities necessary for the proposed improvements at R-48. Alternative 1 and Alternative 2 would have potential for long-term significant adverse affects to soils as long as SWPPP requirements are followed.

3.3 WETLANDS AND WATER RESOURCES

Wetlands are prevalent throughout the installation and comprise approximately 20% of the land area on Fort Drum. Fort Drum's landcover classifications indicate approximately 15,500 ac (6,273 ha) of wetlands exist on Fort Drum with another 4,675 ac (1,892 ha) of surface waters. There are three main types of wetlands on Fort Drum: riverine, lacustrine, and palustrine. The most common type of wetland on Fort Drum is palustrine, accounting for approximately 77% of all wetlands (approximately 15,498 ac / 6,272 ha). Palustrine wetlands are dominated by trees, shrubs, or emergent vegetation; or they are defined as being less than 20 ac (8 ha) in area with a water depth less than 6 ft (2 m) at low water levels, and they lack a bedrock shoreline. A riverine wetland is contained in a channel unless the wetland is dominated by trees, shrubs, or emergents;

a lacustrine wetland is a deepwater community exceeding 20 ac (8 ha) and tree, shrub, or emergent cover is less than 30%. There are approximately 3,874 ac (1,568 ha) of riverine wetlands and 803 ac (325 ha) of lacustrine wetlands. Wetland boundaries change frequently due to changing hydrology brought on by natural succession and beaver activity. (US Army 2011b).

In 2008, 174AW contracted with C&S Engineering to update the wetlands delineation survey of the proposed area. Thirty-six wetlands, 96.89 total acres of wetlands were delineated in the project study area. With the help of escort from the Army explosive ordnance disposal personnel stationed at Fort Drum, this delineation was accomplished, but without the ability to use soil samples because there is no digging permitted in the impact area.

After receiving the delineation data in 2008, the concept for the improvements was designed to avoid wetland impacts by rerouting planned roads and using discarded military 40 x 8.5 foot flatbed trailers as potential „wetland crossings“, a technique already in place at approximately one dozen area crossings in the ordnance cleared areas that currently allows for new target placement/maintenance and foot/ATV access through the area without additional disturbance of the wetlands (Appendix A, Figures 9, 10, and 12). It is yet to be determined by the Corps of Engineers as to how much of the delineated areas will be determined to be jurisdictional wetlands needing to be mitigated in this project. There are also approximately one mile of access roads which were not delineated for potential wetlands in 2008 which could impact small area wetlands and possibly require additional flatbed trailer crossings. Culverts could also be used in areas to direct water flow through or around areas where wetlands impacts could occur.

3.3.1 Environmental Consequences: Wetlands and Water Resources

No Action Alternative

The No Action Alternative, to continue to operate R-48 as a multipurpose multi force training range, would result in no change in the types of activities conducted on Fort Drum. The installation would continue to manage its training areas and ranges as it does today.

Alternative 1 and 2

The potential exists to impact wetlands by constructing the Alternative 1 or Alternative 2. Thru the use of the *avoid, minimize, and then mitigate* process being applied to the final project design and a SWPPP, wetland impacts will be minimized to least extent possible and then if required will be mitigated for thru the compensatory wetland process.

3.4 BIOLOGICAL RESOURCES

Biological resources consist of the plants and animals in an area. The variable assemblage of interacting plant and animal populations that share a common environment make up an ecological community (US Army, 2011a). At Fort Drum, there are various ecological communities which include both native and introduced plants and animals. Detailed information regarding upland and wetland vegetation, types of wetlands, and fish and wildlife species can be found in the Programmatic EA (US Army, 2000) and Integrated Natural Resources Management Plan (INRMP) (US Army, 2011b).

R-48 is predominantly categorized as uplands and primarily consists of successional shrubland communities with numerous bedrock outcrop. Emergent marsh and scrub/shrub swamp communities dominate the palustrine system at R-48. Much of the existing R-48 impact area is maintained in a successional state by training activities (Fort Drum 1999). Note: Figure 11 (Appendix A) shows areas where vegetation has been managed through cutting and herbicide application to maintain the line-of-site to the target areas. The goal is to eventually populate clear cut and treated areas with grasses. Lists of all flora, fauna species found on Fort Drum can be found in the Fort Drum Integrated Natural Resources Management Plan located at http://fortdrum.isportsman.net/file/fort_drum_inrmp_final_apr2011.pdf (see appendix 5, page 312).

3.4.1 Vegetation (Flora)

Overall, Fort Drum supports a diverse and varied flora due to the convergence of different areas, or ecoregions, defined by environmental conditions such as climate, landforms, and soil characteristics. In general, the Eastern Lake Ontario, Western Adirondack Transition, and Black River Valley ecoregions with sand and limestone influenced soils often contain more specialized and/or rare plants and plant communities; while the St. Lawrence Valley and Indian Lakes Transition ecoregions with more common loamy or clay soils support more common plants. (US Army 2011b).

A total of 997 plant species have been recorded on Fort Drum. In general, floristic surveys have been limited and additional species continue to be documented. (US Army 2011b).

3.4.2 Wildlife (Fauna)

Due to the diversity of flora and habitats, Fort Drum supports a wide variety of wildlife. Various surveys have confirmed the occurrence of 49 mammals, 242 birds, 45 fish, 12 reptiles, and 18 amphibian species on the installation. Invertebrates have not been adequately surveyed on Fort Drum to determine the number of species. In general, most species of wildlife can be found throughout the installation. (US Army 2011b).

3.4.3 THREATENED AND ENDANGERED

There are 51 special status species of flora and fauna that are known to occur within the Fort Drum area, 10 federal and 41 state listed species. Fort Drum currently records only one endangered species as contiguous to the installation, and on-site, the Indiana Bat. A revised Biological Assessment on the Proposed Activities on the Fort Drum Military Installation, Fort Drum, New York (2012-2014) for the Federally- Endangered Indiana Bat (*Myotis sodalis*) has been prepared and submitted to the U.S. Fish and Wildlife Service (USFWS) for opinion. The current Biological Opinion issued by USFWS can be found at http://www.fws.gov/midwest/endangered/mammals/inba/bos/12_NY_FortDrum.pdf .

3.4.4 Environmental Consequences: Biological Resources

The proposed alternatives will have minimal impact to biological resources due to the way the range is currently managed. The intent with or without the proposed alternatives is to keep the range in open low growing vegetation thru herbicide, mechanical clearing and prescribed fire. The biggest impacts will come from uplands being graveled to support the urban operations and to simulate a urban site picture from the air. No roosting habitat will be impacted for bats due to no trees currently in the proposed construction footprint. By minimizing wetland impacts bat foraging areas are not impacted.

3.5 CULTURAL RESOURCES

The Fort Drum affected environment for cultural resources is the footprint of the installation. Fort Drum has completed archeological inventory of approximately 87 percent of its surveyable territory, excluding the permanent impact areas and the previously developed portion of the Cantonment Area. The archeological survey completed thus far has identified a total of 891 sites that began with earliest human occupation of the region approximately 11,000 years ago and continued through construction of World War II military training features in the 1940s (U.S. Army, 2010).

Fort Drum currently tracks a total of 940 archeological sites, one district with standing structures, and five archeological districts, and supports management of 13 historic cemeteries. Resources of concern include the historic districts, two traditional cultural properties, 13 cemeteries and an as-yet undetermined number of archeological sites considered eligible for listing on the NRHP (U.S. Army, 2010c).

A Phase I survey was conducted at R-48 in 1997 to address down range elements of this proposed project located outside of the Main Impact Area (US Army, 1998b). Results of visual walking surveys (walk-over) indicated that no further investigation was required for developed areas of R-48 (US Army, 1999). Documentation of the actions and determinations of the 1997 survey was provided to the New York State Historic Preservation Office (SHPO) for record.

3.5.1 Environmental Consequences: Cultural Resources

No Action Alternative, Alternative 1 and 2

No impacts are anticipated under the No Action Alternative and the improvements proposed for Alternative 1 and 2 are located in the areas indicated in the 1997 study as requiring no further investigation. This determination remains the same today and is documented in correspondence found in Appendix B.

3.6 LAND USE

Training areas can vary from classrooms to firing ranges. Therefore, the siting of a particular training facility should be determined by the specific type of training to be undertaken. Activities in the training space at R-48 include general training, specialized training, weapons firing, and projectile impact. Training space dominates land use at R-48 that can be divided into two major sections, a maneuver area and a main impact area. The maneuver area provides for ground activity and aircraft over flight. The main impact area occupies approximately one-half of the total acreage of the range and provides a place for weapons to impact safely. The airfield would be in the manner of an assault dirt landing strip at the northeastern end of the proposed mock runway and be upgraded to an 3,600 x 60 foot unpaved/dirt assault/flight landing strip for C-130s (Appendix A, Figures 2 and 7). The strip would also be utilized by helicopters, and as a small/medium Unmanned Aerial Vehicles (UAVs)/Unmanned Aerial Systems (UASs) (i.e. Shadow/Hunter) field launch/recovery strip.

3.6.1 Environmental Consequences: Land Use

The No Action Alternative, Alternative 1 and Alternative 2

None of the alternatives involves major changes to the installation operations and all alternatives would be anticipated to have only very low short term and temporary impacts to land use during the construction of improvements proposed. There would not be a change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. Neither the proposed action nor its alternative would have potential for long-term adverse affects to land use.

3.7 NOISE

Annoyance is the primary human response to environmental noise. The degree of annoyance has been found to correlate well with the day-night average sound level (DNL). The DNL is computed by adding 10 dB to noise between 10:00 p.m. and 7:00 a.m. to take into account the general annoyance of nighttime noises. An estimate of the

number of persons "highly annoyed" by noise can be arrived at by comparing DNL with the percentage of the exposed population that is "highly annoyed" and with the estimated population exposed to DNL levels greater than 65 decibels.

These levels of annoyance are based on long-term exposure. Annoyance for short-term activities, such as construction noise, could be influenced by other factors such as land use and attitude toward the activity creating the noise, and the understanding that the noise levels are not permanent. Nonetheless, a comparison of this type provides the best available information to predict human responses to a new noise exposure. A discussion of the effects of noise on annoyance, speech, sleep, hearing loss, health, and animals is provided in Appendix E to the October Programmatic EA (US Army 2000).

Noise Criteria and Regulations

Federal and local governments have established noise guidelines and regulations for the purpose of protecting citizens from potential hearing damage and from various other adverse physiological, psychological, and social effects associated with noise. Chapter 7 of AR 200-1 implements all Federal laws concerning environmental noise from Army activities. The Army uses noise zone maps to assess the noise generated by military operations (US Army 1997) and Fort Drum also has an Environmental Noise Management Plan. The following provides a description of each noise zone:

Noise Zone I - includes all areas around a noise source in which the A-weighted, day-night average sound level (ADNL) is less than 65 dBA, or the C-weighted, day-night average sound level (CDNL) is less than 62 dBC. This area is considered "normally acceptable" and usually suitable for all types of land use activities.

Noise Zone II - consists of an area where the DNL is between 65 and 75 dBA and between 62 and 70 dBC. Exposure to noise within this area is considered significant and use of the land within Noise Zone II should normally be limited to activities such as industrial, manufacturing, transportation, and resource production. This area is considered "normally unacceptable" for residential and other noise-sensitive land uses.

Noise Zone III - consists of an area around the source of the noise which the DNL is greater than 75 dBA or 70 dBC. The noise level within Noise Zone III is considered "clearly unacceptable" and so severe that noise sensitive activities should not be conducted therein.

Typical noise sources in Fort Drum and the surrounding vicinity include aircraft, artillery and blast, surface traffic, and miscellaneous and related human activities. The major noise contributors at Fort Drum are Army ground weapon firing and the impact of the projectile; Army, Air Force, and Air National Guard fixed-wing and rotary-wing aircraft; and, the impact of air-to-ground weapons. Artillery weapons typically generate the highest noise levels; however, the highest sound exposure levels generated by single events are attributed to aircraft overflights.

3.7.1 Environmental Consequences: Noise

The No Action Alternative, Alternative 1 and Alternative 2

Neither the operations of proposed action nor the alternatives are anticipated to have any significant adverse effects on noise. The only minor short-term and temporary impacts will be from construction activities and rock blasting to create the dirt air strip.

3.8 SOCIOECONOMICS

Analysis of socioeconomic includes looking at potential impacts the proposed action and alternatives may have on socioeconomic characteristics such as income, employment, population; public and social services, public schools, public safety, recreational activities, government services; and housing. Activities associated with proposed construction, such as employment opportunities during construction and purchasing of materials, may provide a very minor and short-term economic benefit to the local economy; however, these beneficial impacts would be negligible on a regional scale. The Proposed Action would not result in a change in the number of personnel at Fort Drum and it is feasible that the work could be accomplished as training by military engineers. Implementation of the Proposed Action would not result in a significant impact to regional or local socioeconomic characteristics. No impacts are anticipated to occur in conjunction with the implementation of the Proposed Action

3.8.1 Environmental Consequences: Socioeconomics

The No Action Alternative, Alternative 1 and Alternative 2

No impacts are anticipated under the No Action Alternative and the improvements proposed for Alternative 1 and 2. No impacts to income, employment, and population; public and social services, public schools, public safety, recreational activities, government services; housing; and environmental justice are anticipated.

R-48 would continue to be a multipurpose multi force training range. There would be no change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. The installation would continue to manage its training areas and ranges as it does today.

3.9 Environmental Justice and Protection of Children

Minority and Low-Income Populations. Construction activities would be confined to Fort Drum and would therefore not impact residents of the surrounding region. Since no significant, adverse environmental impacts associated with the Proposed Action would occur, no populations (minority, low-income, or otherwise) would be disproportionately

impacted. Consequently, no significant impact with regard to environmental justice would result.

Protection of Children. No housing or facilities for children currently exist in the immediate vicinity of the Proposed Action site. Because children would not have access to construction sites and increased aircraft activity noise would not constitute a significant impact to local residential areas, implementation of the Proposed Action would not result in increased environmental health or safety risks to children. Therefore, implementation of the Proposed Action would not result in increased or is proportionate environmental health risks or safety risks to children.

3.9.1 Environmental Consequences: Environmental Justice and Protection of Children

The No Action Alternative, Alternative 1 and Alternative 2

No impacts are anticipated under the No Action Alternative and the improvements proposed for Alternative 1 and 2 to minority and low-income populations or the environmental health or safety risks to children.

R-48 would continue to be a multipurpose multi force training range. There would be no change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. The installation would continue to manage its training areas and ranges as it does today.

4.0 CUMULATIVE IMPACTS

The Proposed Action to develop the Air-to-Ground R-48 target area acreage as a multi-use urban sprawl inert ordnance target and maneuver complex at Fort Drum, New York was analyzed by comparing potential environmental consequences against existing conditions. Findings indicate that implementation of the Proposed Action would result in no significant or adverse effects by proceeding with the Proposed Action. No significant cumulative effects would be expected. The proposed action has minimal potential for irreversible or irretrievable commitment of natural resources by either actions and or cumulative effects

5.0 FINDINGS AND CONCLUSIONS

This Range has been in operation and supported multiple forces since the 1940's and has had many types of military training occur on it, from the 4th Armored Division Armored Tanks that served in WWII, and Air Force B-52's in the 1950's, to the 20th century M1 Abrams Tanks and Multiple Launch Rocket Systems to the Army National Air Guard fighter jets. It is uniquely positioned at the northern end of the installation

north of and on the installations main impact area. The Range will continue to be used as it has been intended, as a multipurpose, multi-force training range. The proposed action to improve the range will provide additional asset to the training arsenal required by today's armed forces.

Implementation of the Proposed Action would not have major adverse impacts on the resources or socioeconomics of R-48 areas proposed for training. Resources such as airspace, climate, cultural resources, geology (except soils), hazardous materials / hazardous wastes infrastructure, environmental justice, protection of children from environmental health and safety risks, and traffic and transportation would not be significantly affected by this action and there would be no measurable changes in local or regional employment or other economic indicators.

There will be less than significant and/or short-term/temporary effects to, air quality, soils, land use, and noise and an will be mitigated with use of standard procedures and best management practices

Based on this analysis, it is concluded that the development of the multi-use urban sprawl inert ordnance target and maneuver complex to provide Combined Arms/Joint Exercises and training is not a major federal action that would significantly affect the quality of the environment within the conditions of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, the preparation of an Environmental Impact Statement for this Proposed Action is not required.

6.0 LIST OF PREPARERS

This EA was prepared by Brent R. Lynch, Environmental Engineer, Hancock Field, NY with the support from Fort Drum Installation Public Works Environmental Division, and R-48 personnel.

Brent R. Lynch, Environmental Engineer, Hancock Field Air National Guard Base, Syracuse, Civil Engineering Squadron; BS, 2008, Natural Resource and Forest Engineering, State University of New York, College of Environmental Science and Forestry at Syracuse University, Syracuse, New York, Years of experience: 3

Cait Schadock, NEPA Coordinator, Fort Drum Public Works Environmental Division; BA, 1983, Anthropology/Biology, State University of New York, Potsdam, New York; Years of Experience: 25.

7.0 AGENCIES AND PERSONS CONSULTED

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 Hancock Field Air National Guard Base

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Meg Schultz	CSU-CEMML Research associate Archeologist
Chris Dobony	Fish and Wildlife (ESA Biologist) Fort Drum Public Works Environmental Division
Jeff Bolsinger	Fish and Wildlife (MBTA Biologist) Fort Drum Public Works Environmental Division
Rodger Voss	Forester Fort Drum Public Works Environmental Division
Alfred E. Tomaselli	Adirondack Joint Range/ Fort Drum R-48 LtCol, NYANG 174 th Attack Wing, Det 1 Commander

8.0 REFERENCES

- USDA, 2013. *Custom Soil Resource Report for Jefferson County New York, Range 48*. Prepared through the USDA Natural Resources Conservation Service's Web Soil Survey (WSS) found at <http://websoilsurvey.nrcs.usda.gov/app/>. Accessed 16 January 2013.
- USAF, 2011. *Air Force Fact Sheet on C-130 Aircraft*. Posted on 29 November 2011. <<http://www.af.mil/information/factsheets/factsheet.asp?fsID=92>> Accessed January 2013.
- USANG, 2009. *Wetlands & Waterways Delineation Report*, New York Air National Guard, Adirondack Range 48 at Fort Drum Jefferson County, New York. C&S Engineers, Inc. November 2009.
- US Army, 1998a. United States Army, Fort Drum, New York, *Environmental Baseline Survey for Range 35 at Fort Drum*. Prepared by Parsons Engineering Science,

Inc. Washington, DC. June 1998..

US Army, 1998b. *Cultural Resource Investigations at Fort Drum, FY 1997*. Technical Report prepared for Public Works - Environmental Division, Fort Drum by Steven W. Ahr (CSU-CEMML), August 1998

US Army, 1999. *Environmental Assessment for the Range 35-48 Project at Fort Drum, Fort Drum, New York*. Prepared for United States Army, 10th Mountain Division Fort Drum, Fort Drum, New York and Environmental Planning Function: New York Air National Guard, 174 Fighter Wing, Hancock Field, Syracuse, New York. Prepared by Parsons Engineering Science, Inc., Liverpool, New York 13088. April 1999.

US Army, 2005. *Environmental Assessment for Army Transformation Implementation at Fort Drum, New York*. Prepared for the Fort Drum Directorate of Public Works. Prepared by Parsons, Liverpool, New York. April 2005

US Army, 2006. *Supplemental Environmental Assessment for Proposed Projects and Actions in the Installation Master Plan*. Prepared by Northern Ecological Associates, Inc, Fredonia, New York, Contract No. GS-10F-0421N, for the Department of the Army, Fort Drum, New York. June 2006.

US Army, 2007. *Operational Noise Consultation 52-En-06W7a-07, Operational Noise Contours for Fort Drum*. March 2007. Prepared for the Fort Drum Directorate of Public Works. Prepared by US Army Center for Health Promotion and Preventative Medicine, Aberdeen Proving Grounds, Maryland. March 2007.

US Army, 2007. *Final Programmatic Environmental Impact Statement (PEIS) for the Growth and Force Structure Realignment of the United States Army*. Prepared by the U.S. Army Environmental Command, Aberdeen Proving Ground, MD, for Headquarters, Department of the Army, Washington, DC. October 2007.

USANG, 2009. *Wetlands & Waterways Delineation Report*, New York Air National Guard, Adirondack Range 48 at Fort Drum Jefferson County, New York. C&S Engineers, Inc. November 2009.

US Army, 2010. *Integrated Cultural Resources Management Plan (ICRMP) 2011-2015, Fort Drum, New York*. Prepared by the Directorate of Public Works Environmental Division Cultural Resources Section, Fort Drum, NY 13602. October 2010.

US Army, 2011a. *Environmental Assessment (EA) for Stationing Actions to Support the Grow the Army Initiative at Fort Drum, NY*. Prepared by the Environmental Planning Branch Environmental Quality Programs Division US Army Environmental Command, San Antonio TX, for the Directorate of Public Works

Environmental Division Natural Resources Branch, Fort Drum, NY. February 2011.

US Army, 2011b. *Integrated Natural Resources Management Plan (INRMP) 2011-2015, Fort Drum, New York*. Prepared by Natural Resources Branch of the Directorate of Public Works Environmental Division and the Integrated Training Area Program of the Directorate of Planning Training, Mobilization & Security, Fort Drum, NY. April 2011.

US Army, 2011c. *Fort Drum Economic Impact Statement, Fiscal Year 2010, October 1, 2009 - September 30, 2010*. United States Department of the Army. April 2011.

US Army, 2011d. *Environmental Assessment for Implementing the Integrated Cultural Resources Management Plan (ICRMP) 2011-2015, Fort Drum, NY*. Prepared by Directorate of Public Works Environmental Division Natural Resources Branch, Fort Drum, NY. August 2011.

US Army, 2011e. *Environmental Assessment for Implementing the Integrated Natural Resources Management Plan (ICRMP) 2011-2015*. Prepared by Directorate of Public Works Environmental Division Natural Resources Branch, Fort Drum, NY. September 2011

USFWS, 2012. *Biological Opinion on the Effect of Proposed Activities on the Fort Drum Military Installation (2012-2014) in the Towns of Antwerp, Champion, LeRay, Philadelphia, and Wilna, Jefferson County, and the Town of Diana, Lewis County, New York on the Federally-Endangered Indiana bat (Myotis sodalis)*. Available: <[http://www.fws.gov/midwest/endangered/mammals/inba/bos/12_NY_FortDrum.p
df](http://www.fws.gov/midwest/endangered/mammals/inba/bos/12_NY_FortDrum.pdf)>. U.S. Fish and Wildlife Service (USFWS), New York Field Office, Cortland, New York. February 6, 2012.

Appendix A

Figures of Proposed R-48 Improvements

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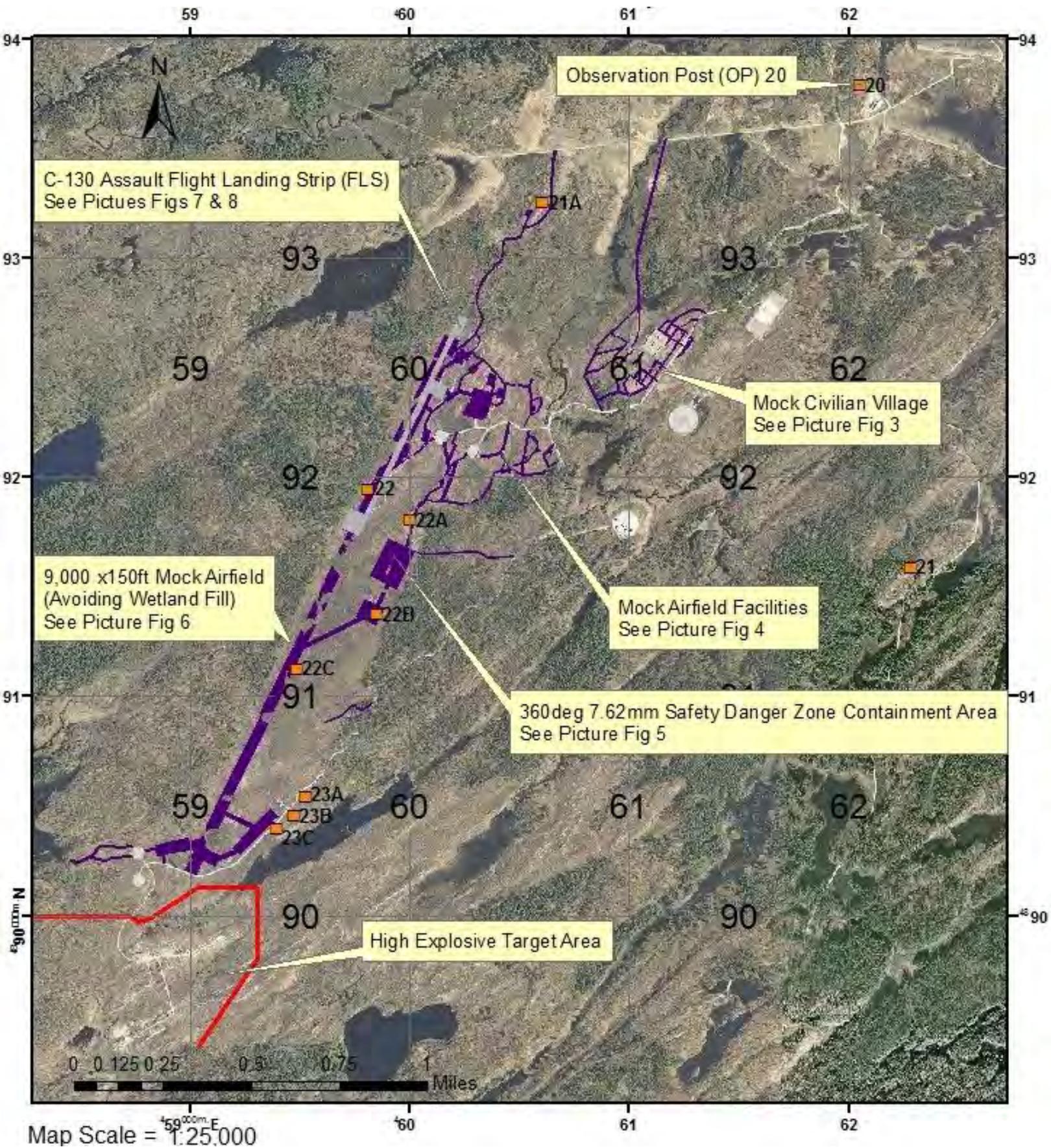


FIGURE 2



**Additional Acreage For Mock
Village Development**

**Existing West Strafe Pit Mock
Village (Both Single and Two
Story Sea/Land Container
Buildings**

**20 Foot Long X 8.5 Foot
Sea/Land Containers Used
For Inert Ordnance Target
Construction**

**Photo taken looking North at Current
West Strafe Pit Mock Village Site**

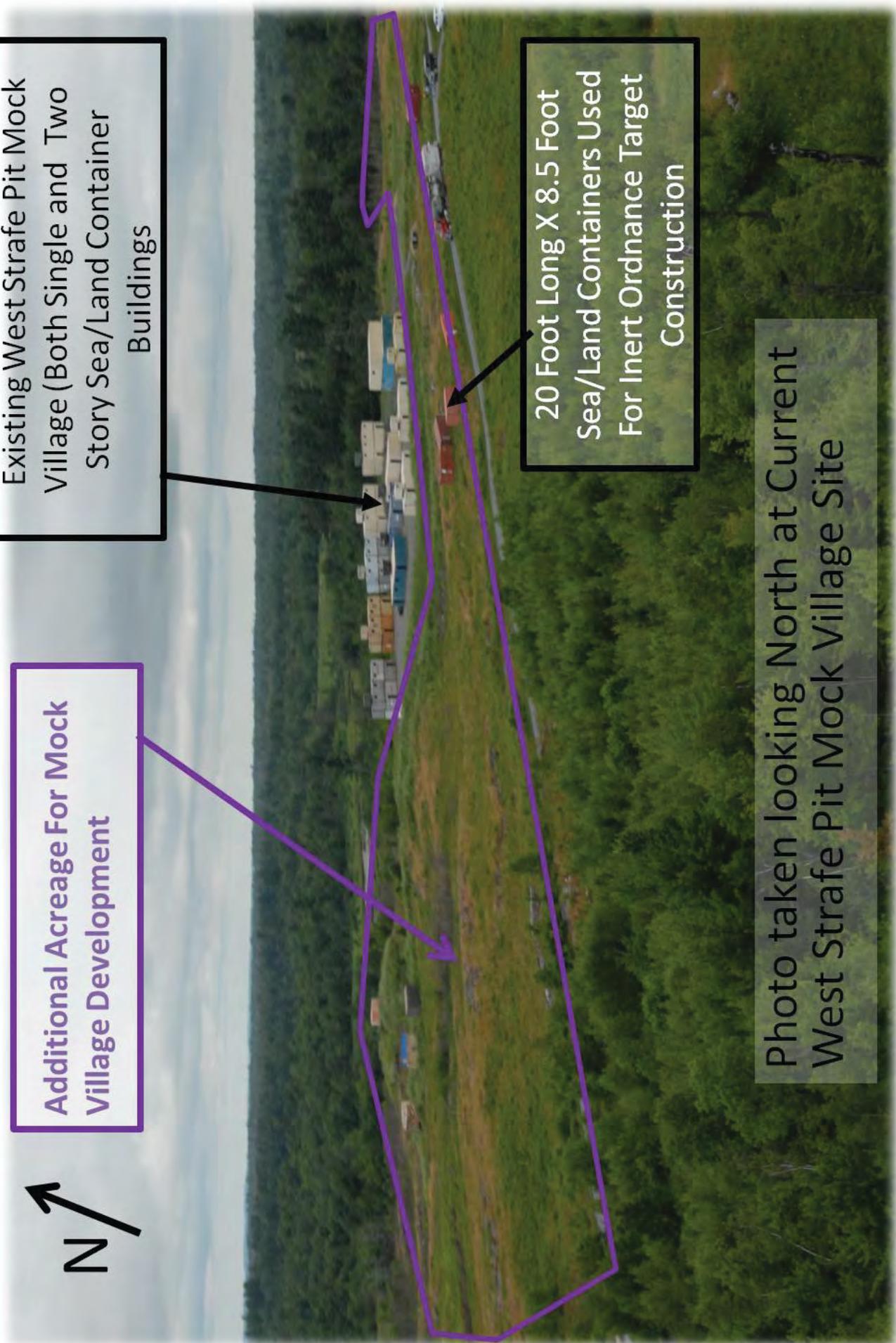
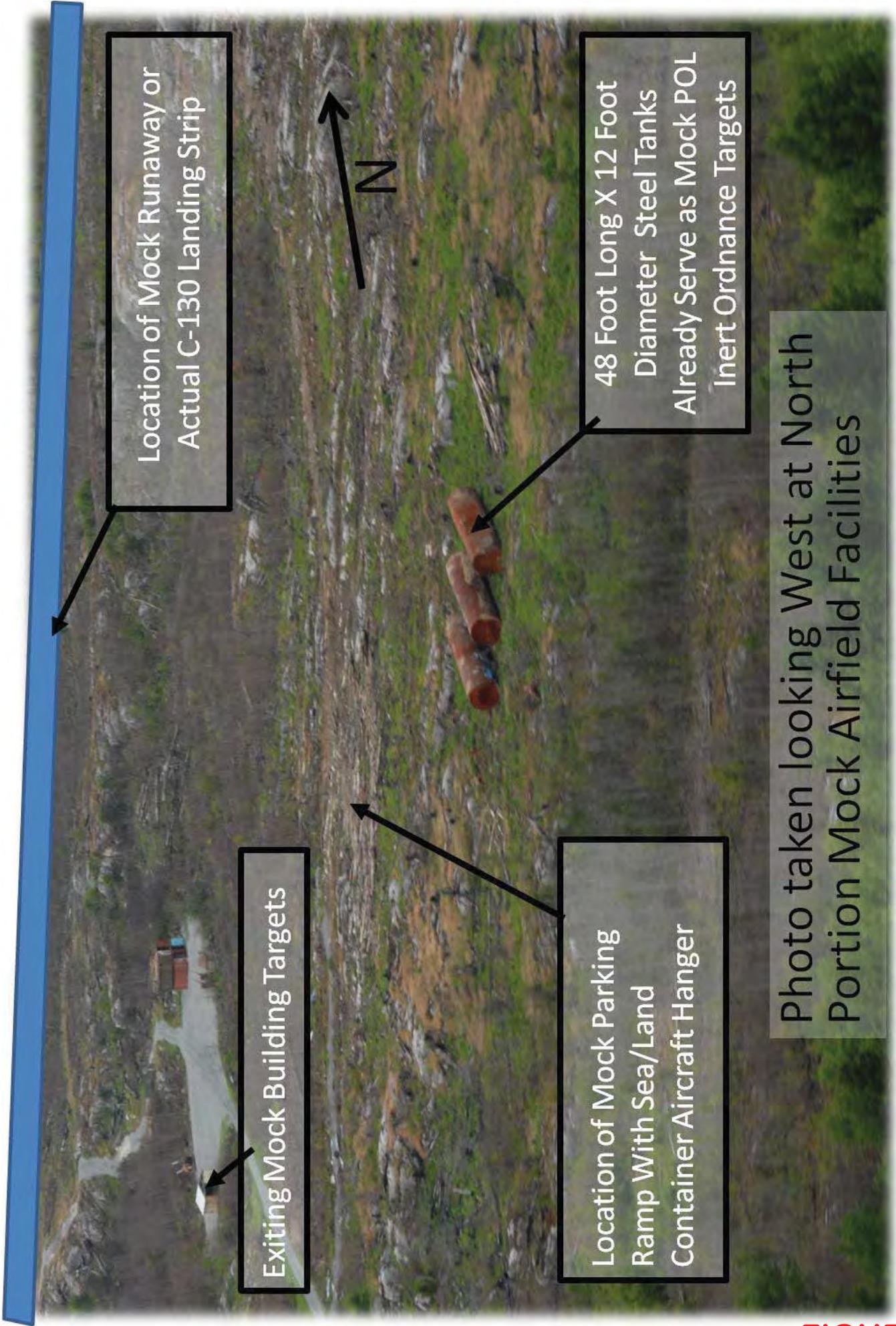


FIGURE 3



Location of Mock Runway or Actual C-130 Landing Strip

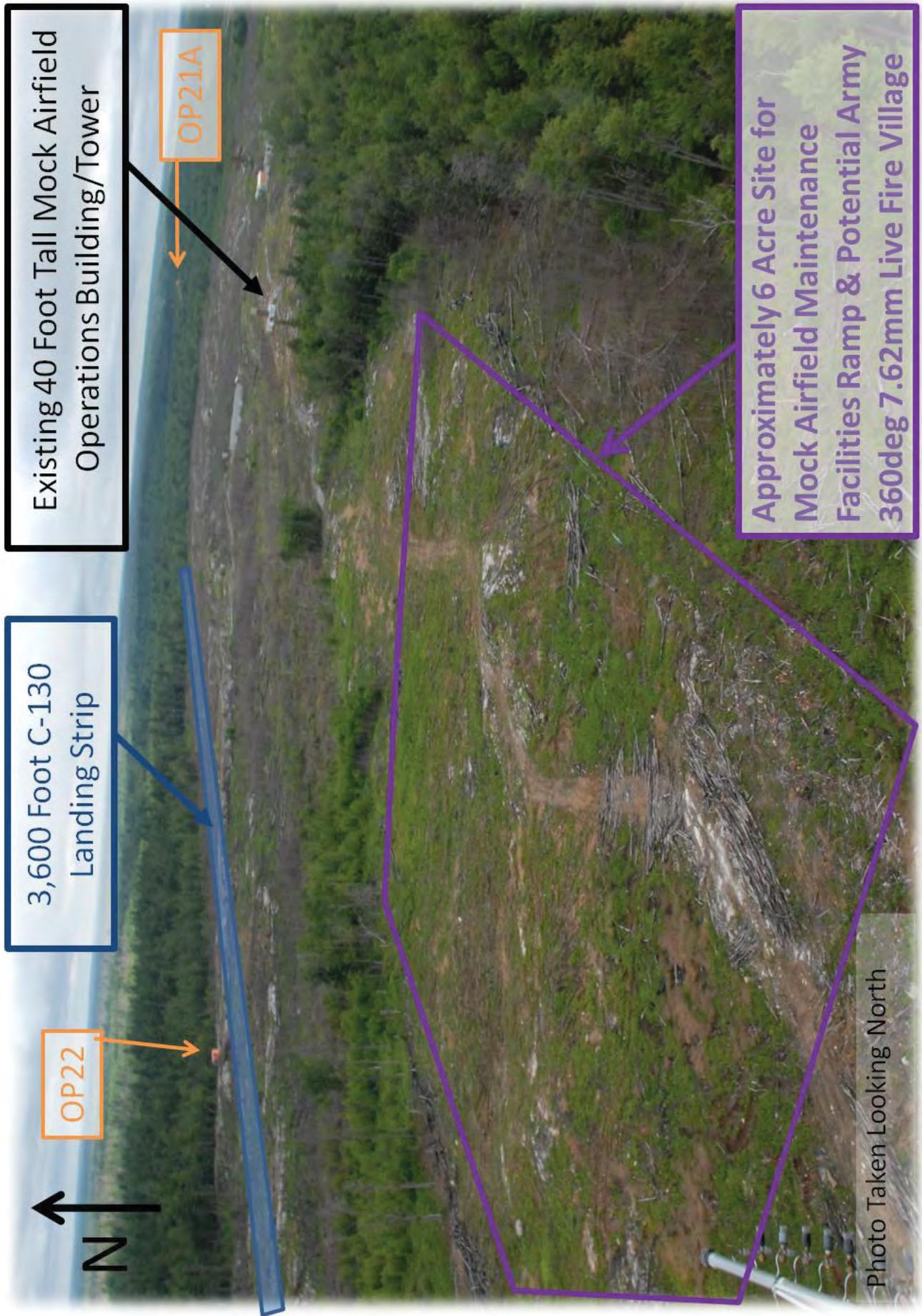
Exiting Mock Building Targets

Location of Mock Parking Ramp With Sea/Land Container Aircraft Hanger

48 Foot Long X 12 Foot Diameter Steel Tanks Already Serve as Mock POL Inert Ordnance Targets

Photo taken looking West at North Portion Mock Airfield Facilities

FIGURE 4



Existing 40 Foot Tall Mock Airfield Operations Building/Tower

OP21A

3,600 Foot C-130 Landing Strip

OP22

N ↑

Approximately 6 Acre Site for Mock Airfield Maintenance Facilities Ramp & Potential Army 360deg 7.62mm Live Fire Village

Photo Taken Looking North

FIGURE 5

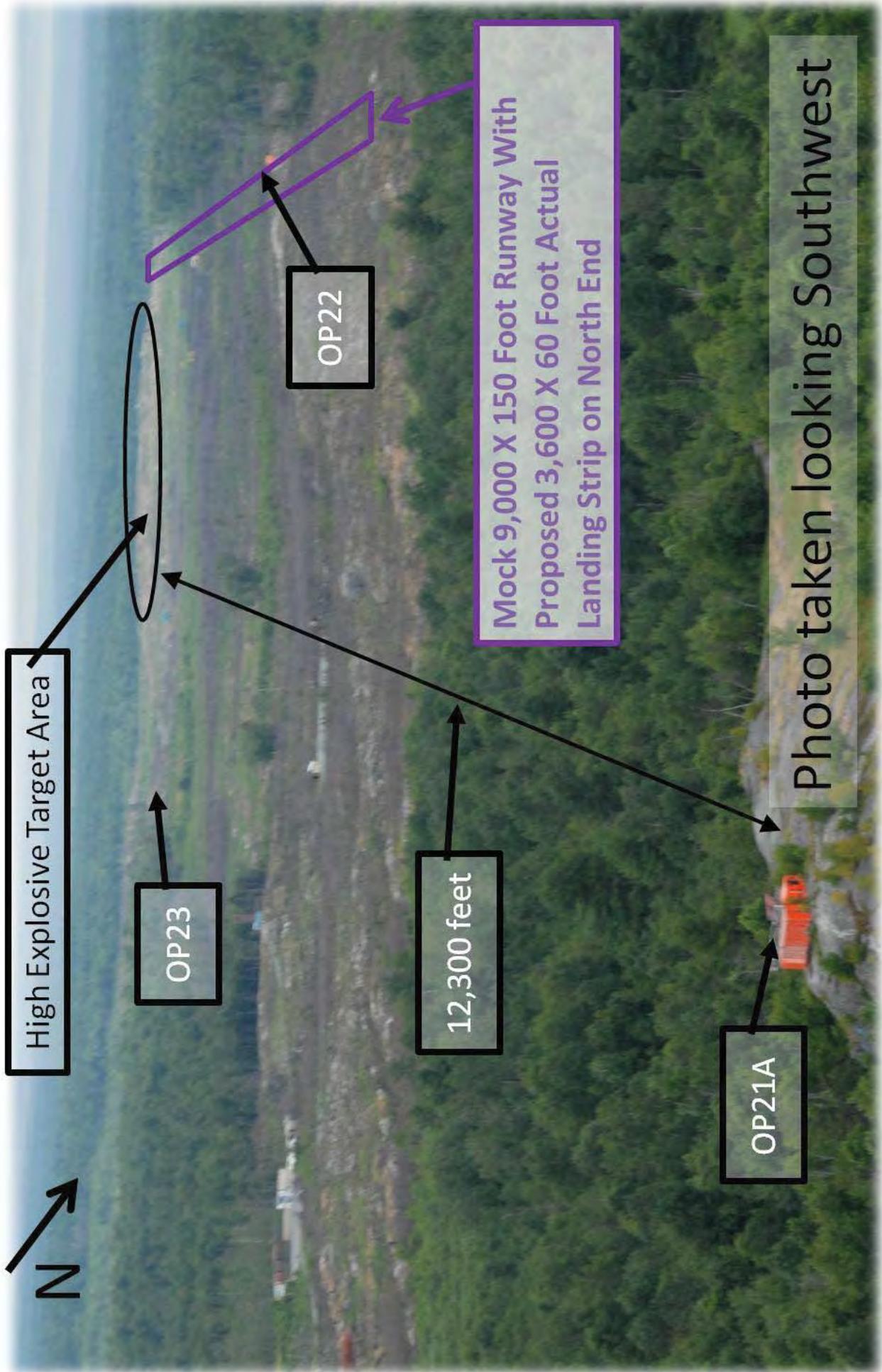
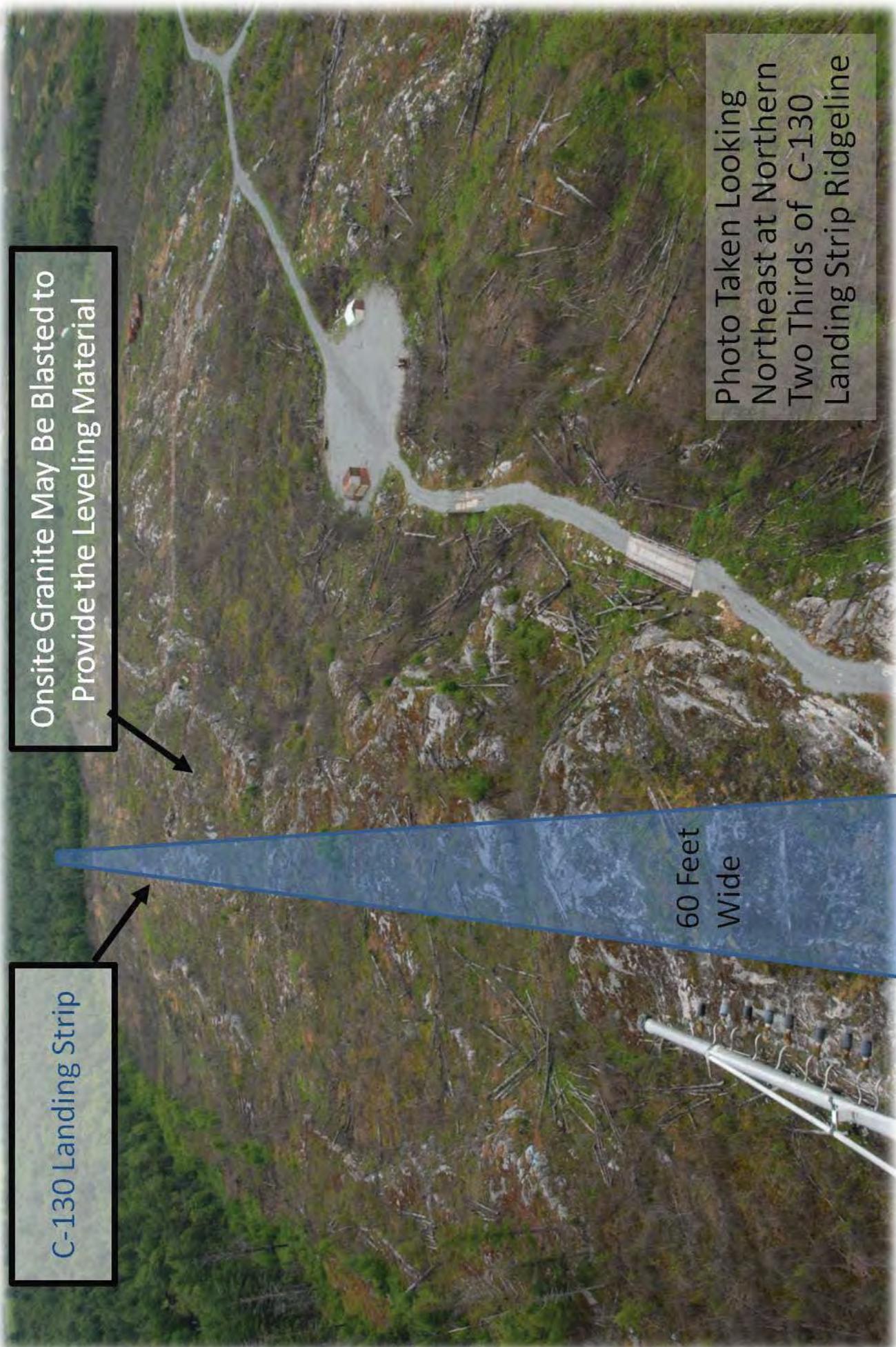


FIGURE 6



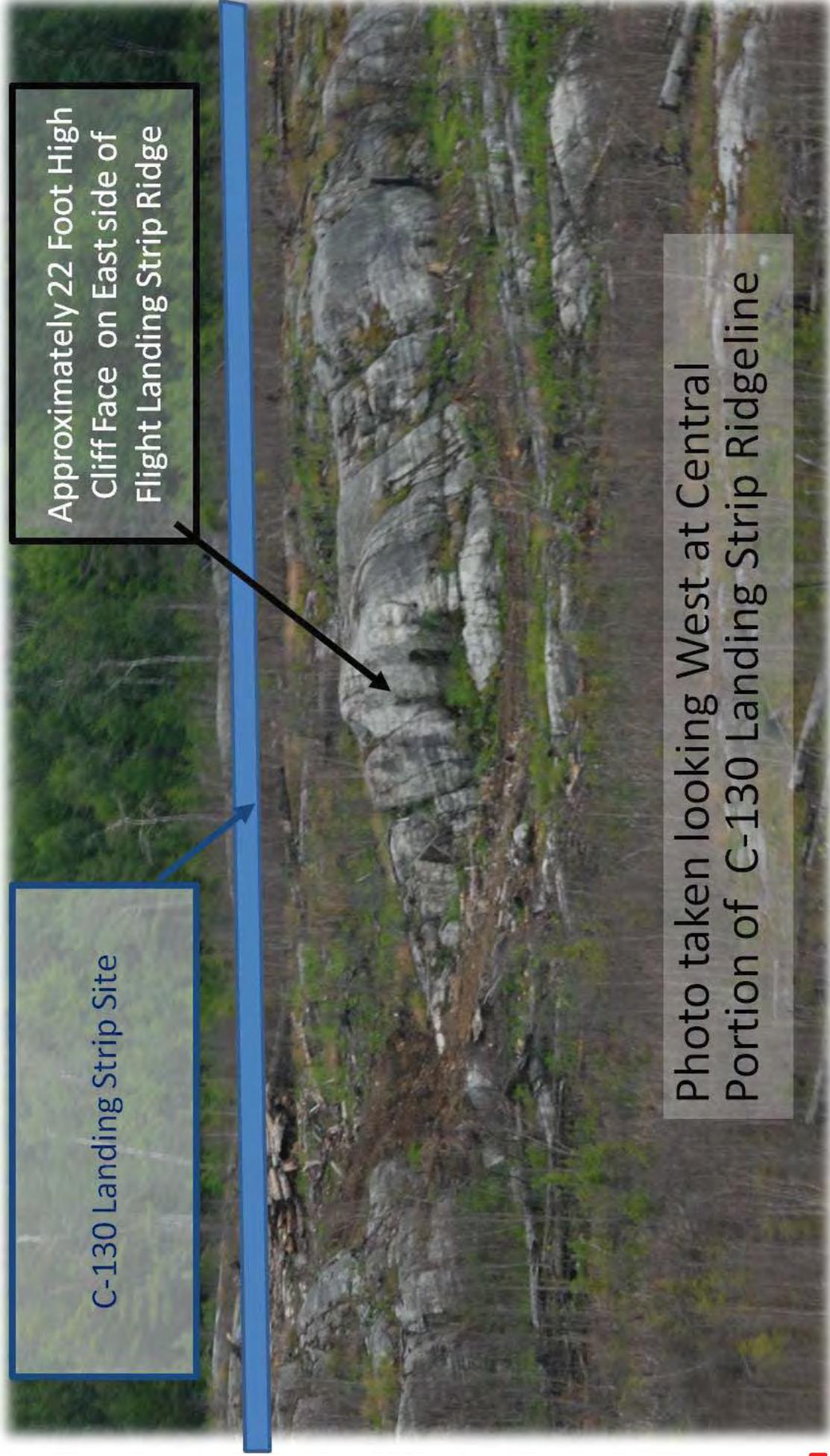
Onsite Granite May Be Blasted to Provide the Leveling Material

C-130 Landing Strip

Photo Taken Looking Northeast at Northern Two Thirds of C-130 Landing Strip Ridgeline

60 Feet Wide

FIGURE 7

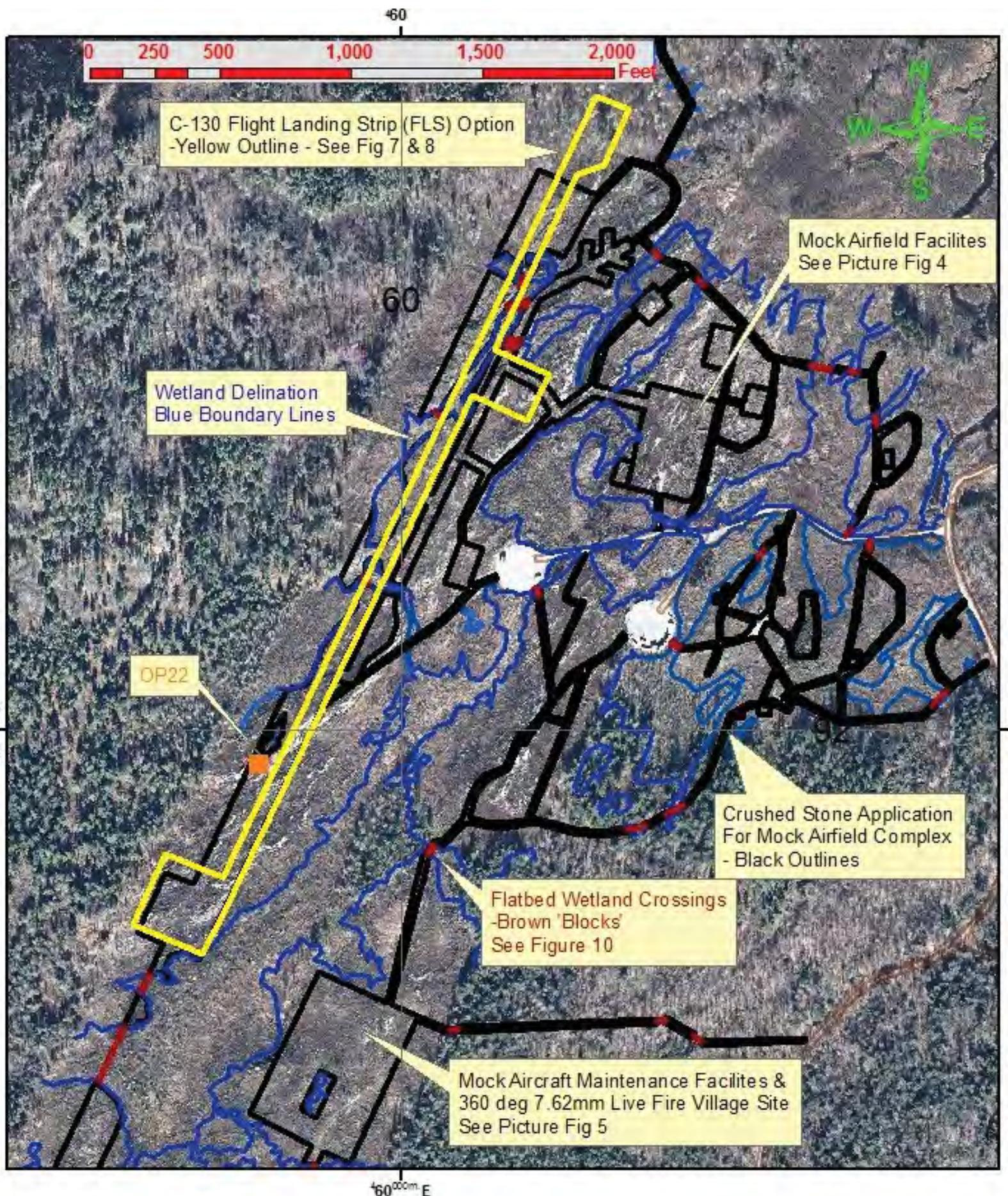


Approximately 22 Foot High
Cliff Face on East side of
Flight Landing Strip Ridge

C-130 Landing Strip Site

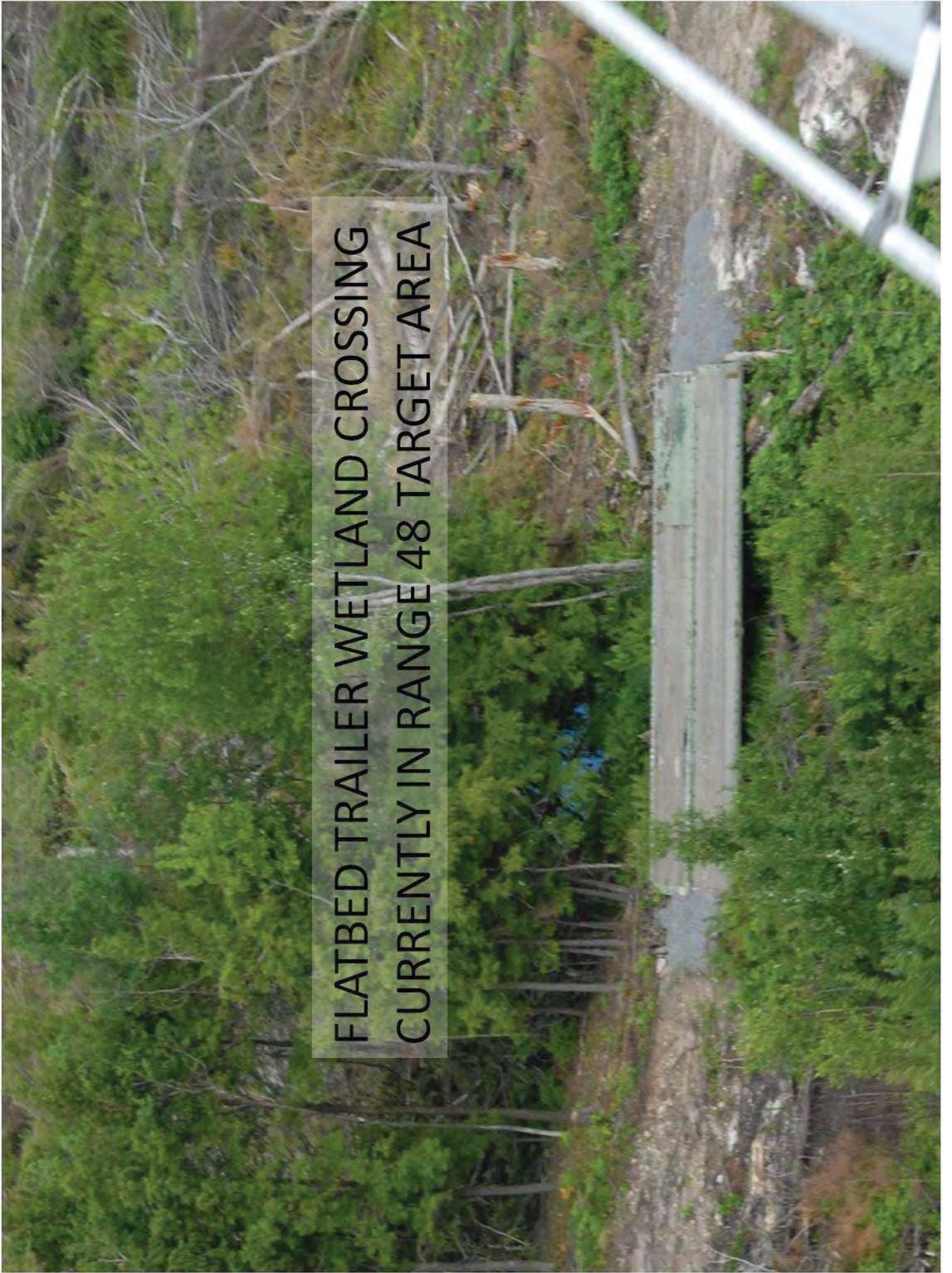
Photo taken looking West at Central
Portion of C-130 Landing Strip Ridgeline

FIGURE 8



Map Scale = 1:6,486

FIGURE 9



FLATBED TRAILER WETLAND CROSSING
CURRENTLY IN RANGE 48 TARGET AREA

FIGURE 10

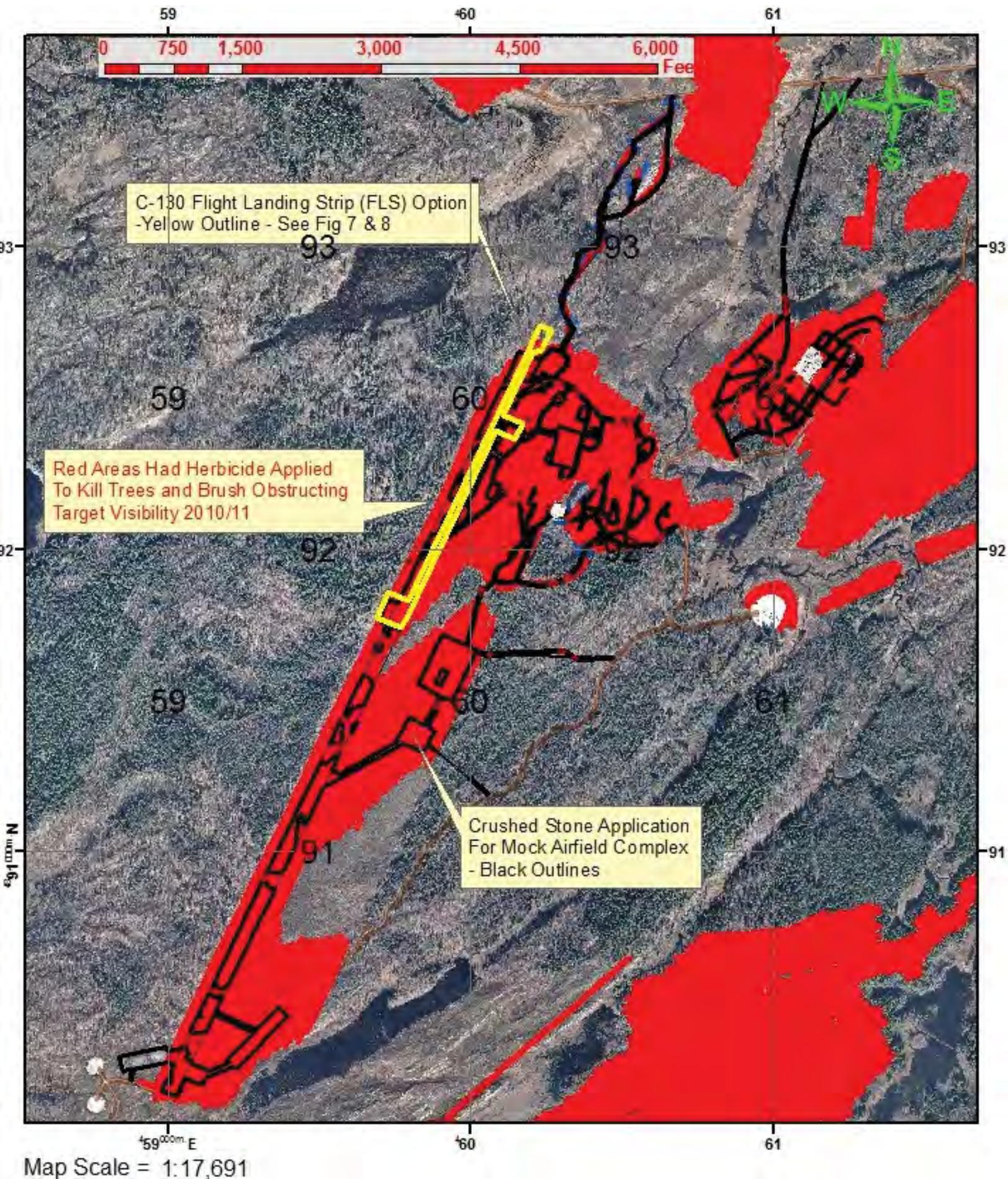


FIGURE 11



Sea/Land Container Inert
Ordnance Target Buildings

Corduroy Log Base With
Minimal Crushed Stone
Road Leveling Rough
Terrain In R48 Target Area
Constructed In 2008

FIGURE 12

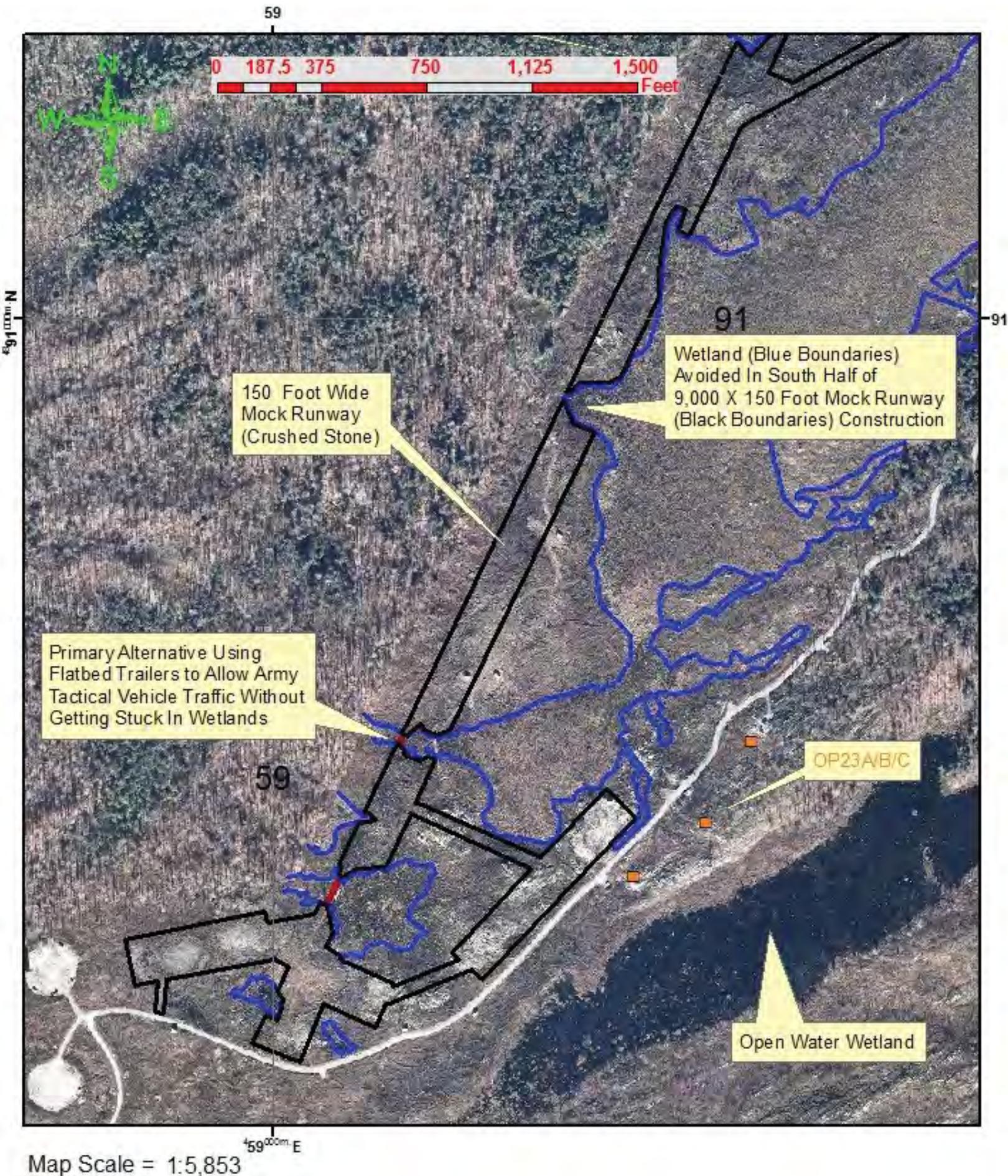


FIGURE 13

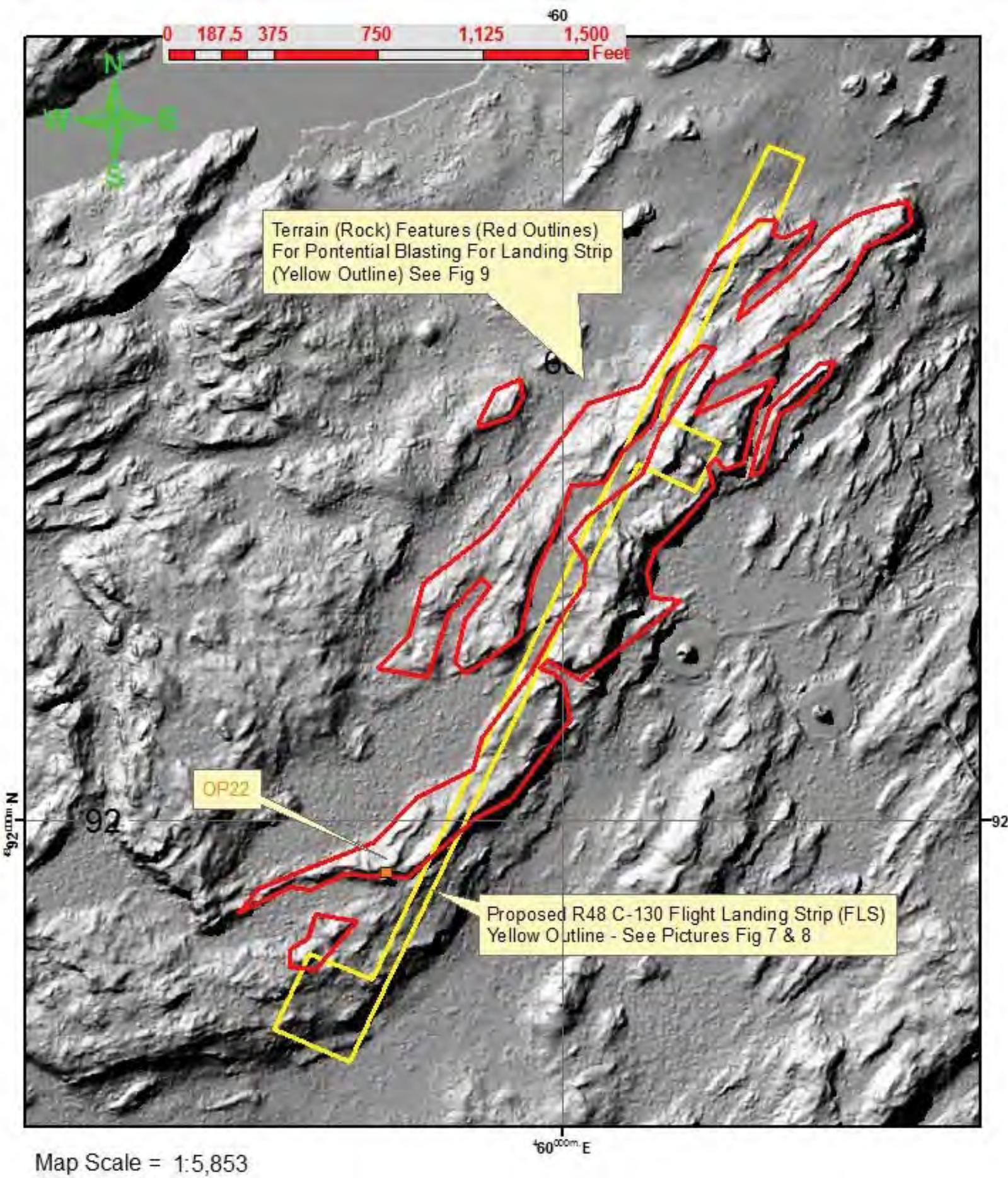


FIGURE 14

Appendix B
Correspondence

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT DRUM
10000 10TH MOUNTAIN DIVISION DRIVE
FORT DRUM, NEW YORK 13602-5046

IMDR-PWE

21 February 2013

SUBJECT: Proposed Construction/Operation of a Tactical Urban Target and Maneuver Area at Range 48

1. The Fort Drum Cultural Resources Program completed a walkover survey of portions of Range 48 in 1997, and in 1999 the New York State Office of Historic Preservation issued a letter of no effect for proposed improvements at Range 48. In addition, documentation of disturbance was submitted with a recommendation for no adverse effect for any future development within the Range 48 footprint to the NYSHPO in February of 2003. The SHPO chose not to comment resulting in concurrence.
2. It is not Cultural Resource policy to perform sub surface survey within range footprints due to the high degree danger concerning unexploded ordnance. However, the Cultural Resources Manager, Survey Director, and members of the archaeology field team have completed additional field reconnaissance for Range 48 from the safe vantage point of the road that has been cleared for UXO.
3. It is the determination of the Fort Drum Cultural Resources program that the proposed project will have no effect on any cultural resources at Fort Drum.
4. Fort Drum maintains continuous consultation with the three Native American consultation partners. They had no comment on these recommendations.
5. POC for this action is Dr. Laurie Rush, Cultural Resources Program Manager (315) 772-4165.

A handwritten signature in blue ink that reads "Laurie W. Rush Ph.D. RPA".

Laurie Rush, Ph.D, RPA, FAAR
Cultural Resources Program Manager

Appendix C

Draft Finding of No Significant Impact

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FINDING OF NO SIGNIFICANT IMPACT

Construction and Operation of a Tactical Urban Target and Maneuver Area at Range 48, Fort Drum, New York

This Environmental Assessment (EA) documents the results of a study of the potential impacts to the natural and human environment from the construction and operation of a Tactical Urban Target and Maneuver Area at Range 48 (R-48) located at Fort Drum, New York.

The purpose of this study was to determine the extent of potential environmental impacts from the proposed action and alternatives and to decide whether or not those impacts are significant, which would require a more detailed study of possible impacts, mitigation, and alternative courses of action before decisions are made.

The analysis process involved the review of installation natural resources-related data collected by Fort Drum, a variety of other governmental agencies, and private organizational data and documentation. The process involved interviews with Fort Drum personnel involved with natural resources management, facilities master planning, cultural resource management, and range operations & maintenance.

The analysis of impacts (or consequences) of the proposed action was based on information about the affected environment on and around the Fort Drum Army Installation as well as on the multiple years of experience of the individuals involved in the preparation and review of this EA. Following this assessment effort, it is concluded that implementation of the proposed action would not have a significant adverse impact on the natural or human environment; as long as current Installation and New York State best management practices are implemented properly.

Fort Drum proposes to develop the existing air-to-ground range target area acreage to include a multi-use urban sprawl inert ordnance target and maneuver complex. The intent of this complex is to provide a realistic training environment capable of supporting a variety of individual and combined (or joint) outcome based/scenario driven training for Air Force aircrews, Joint Terminal Attack Controllers (JTACs), and Army Aviation/Ground/Support Troops.

This study was conducted pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969 [42 United States Code, 4321 et seq.], the Council on Environmental Quality (CEQ) Regulations [40 Code of Federal Regulations (CFR) 1500-1508], and 32 CFR Part 651 (a.k.a. Army Regulation (AR) 200-2), Environmental Analysis of Army Actions, Final Rule, 29 March 2002. .

This EA considered three alternatives for this study.

- Alternative 1 is the Proposed Action Alternative. The Proposed Action is to develop R-48 to accommodate a 360 degree urban sprawl training facility that resembles a real world environment. This facility would have a tactical urban sprawl target and maneuver area that replicates an urban environment and designed to support heavy and light infantry, armor, artillery, and aviation positioning and maneuver. This alternative consists of approximately 302 acres (122 ha) of urban sprawl with buildings, roads, alleys, parking areas, and command and control building, a road and trail network, a full scale mock airfield to include a 9000 x 150 foot mock runway, mock parking ramps, taxiways and support facilities. The northern end of the proposed mock runway would be upgraded to an unpaved dirt assault flight landing strip (3,600 x 60 foot) to accommodate manned and unmanned aircraft up to C-130.
- Alternative 2 is the Optional Scenarios Alternative. This alternative includes two options to consider that have varying levels of construction proposed in Alternative 1. Option A is to construct only the urban sprawl target and maneuver area leaving out the dirt assault landing strip and Option B is to construct the urban sprawl target and maneuver area with fewer access roads and trails than is currently proposed. Alternative 2 limits the ability of the meet the objective for true 'urban sprawl' training which requires, by definition, a complex urban/cultural network to challenge both the air and ground maneuver force decision making.
- Alternative 3 is the No Action Alternative. This alternative is to not construct improvements proposed for R-48 in this study. Under this alternative R-48 would continue to operate as it does today.

None of the alternatives involves major changes to the installation operations and all alternatives would be anticipated to have only very low short term and temporary impacts to air quality. Very low or low impacts are anticipated on during construction on R-48 as a result of all the alternatives. There would not be a change in the types of activities conducted on Fort Drum as a result of any of the alternatives, only a slight increase in the frequency of training activities associated with Alternatives 1 and 2. The installation would continue to manage its natural resources, ranges, and training in accordance with all applicable laws, regulations, and policy

Constructing a Tactical Urban Target and Maneuver Area will benefit the military community and enhance the quality of training required for real world environments. Changes in how battles are fought and won have shifted the military from relying on heavy equipment to using lighter equipment with increased use of state-of-the-art technologies. This fact has cause a significant decrease in use of battle tanks at the installation. In the past five years the New York Air National Guard mission changed converting A-10 and F-16 aircraft use for the MQ-9 unmanned aerial system, also known as the Reaper. Today's operations are close multi-force and highly coordinated between air and ground forces. To meet the requirements for current day conflict/battle situations it is important that the personnel train the same way they will fight. It is anticipated that the improvements proposed for R-48 will enhance the training experience to meet requirements the Soldier and Airman will find when deployed.

As a result of initial scoping for this assessment, it has been determined that the action will have no effect on certain resource areas that frequently receive attention in NEPA analyses. Resource areas that were considered but excluded from further detailed analysis in this EA include: airspace, climate, cultural resources, geology (except soils), hazardous materials / hazardous wastes infrastructure (potable water supply, electricity, wastewater treatment, steam and process heat, telecommunications, solid waste disposal, roadways), environmental justice (effects on low-income and minority populations), protection of children from environmental health and safety risks, and traffic and transportation. The proposed action will have no measurable changes in local or regional employment or other economic indicators.

This EA addresses potential impacts to environmental resources, such as air quality, soils, wetlands and water resources, biological resources, land use, and noise. The EA was prepared utilizing a systematic, interdisciplinary approach integrating the natural and social sciences with planning and decision-making.

After careful review of the potential impacts of the alternatives, it is concluded that the proposed action, alternative 1, would not have a significant impact on the quality of the human or natural environment as long as measures summarized in the EA are implemented properly. The proposed action has minimal potential for irreversible or irretrievable commitment of natural resources by either actions and or cumulative effects. Because there would be no significant environmental impacts resulting from implementation of the proposed action, an Environmental Impact Statement is not required and will not be prepared. This analysis fulfills the requirements of the NEPA and associated Council on Environmental Quality regulations, as well as requirements of 32 CFR Part 651 (AR 200-2), Environmental Analysis of Army Actions.

A public notice was published in the Watertown Daily Times newspaper 27 February through March 2013 to announce a 30-day public comment period. Copies of the EA and the Draft Finding of No Significant Impact were made available for review at the Flower Memorial Library, Watertown, New York, the Gouverneur Public Library, Gouverneur, New York, the Lowville Free Library, Lowville, New York, and the Robert C. McEwen Library, Fort Drum, New York, and online at <http://www.drum.army.mil/publicworks/pages/R48EA13.aspx>.

Insert discussion of public comments received here and attach a response to public comments report.

Gary A. Rosenberg Colonel, US Army Garrison Commander	Date	Greg A. Semmel Col, NYANG 174th Attack Wing Commander	Date
---	------	---	------

