
ENVIRONMENTAL ASSESSMENT

CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS AT STEWART-NEWBURGH, NEW YORK



November 2006

Prepared for:

Stewart-Newburgh, NY

Prepared by:

U.S. Army Corps of Engineers

Mobile District

P.O. Box 2288

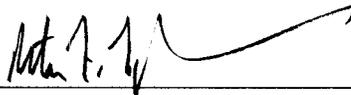
Mobile, AL 36628

ENVIRONMENTAL ASSESSMENT

**CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND
IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS AT
STEWART-NEWBURGH, NEW YORK**

Prepared by:

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT



Peter F. Taylor, Jr.
Colonel, Engineer
Commanding

Approved by:

77th Regional Readiness Command



Richard C. Ramsdell
Facility Management Officer

ENVIRONMENTAL ASSESSMENT

LEAD AGENCY: Mobile District, U.S. Army Corps of Engineers

TITLE OF PROPOSED ACTION: Environmental Assessment for Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions at Stewart-Newburgh, New York

AFFECTED JURISDICTION: Orange County

PREPARED BY: Peter F. Taylor, Jr., Colonel, U.S. Army Corps of Engineers, Mobile District, Commanding

APPROVED BY: Richard C. Ramsdell, Facility Management Officer, 77th Regional Readiness Command

ABSTRACT: On September 8, 2005, the Defense Base Closure and Realignment Commission (“BRAC Commission”) recommended that the U.S. Army close the Stewart-Newburgh U.S. Army Reserve Center building at the U.S. Army Stewart-Newburgh property, and relocate the units to a new AFRC, to be located on the Stewart-Newburgh USARC property, that could also accommodate New York Army National Guard units from the Readiness Center at Newburgh, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission’s recommendations, and on November 9, 2005, the recommendations became law.

To enable implementation of the BRAC Commission’s recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure at Stewart-Newburgh. This environmental assessment (EA) will analyze and document potential environmental impacts associated with the U.S. Army’s proposed realignment actions at Stewart-Newburgh – an installation receiving realigned missions.

None of the predicted effects of the Proposed Action would result in significant impacts at Stewart-Newburgh. Moreover, mitigation would not be necessary to offset impacts. Therefore, preparation of an Environmental Impact Statement (EIS) is not required and a Finding of No Significant Impact (FNSI) is being published in accordance with the National Environmental Policy Act.

REVIEW PERIOD: Interested parties were invited to review and comment on the EA and Draft FNSI from October 2, 2006 through November 2, 2006. The Notice of Availability was published on October 1-2, 2006 in the *Times Herald-Record* (Middletown, NY). No comments on the EA were received.

The EA is available on the World Wide Web at: http://www.hqda.army.mil/acsim/brac/env_ea_review.htm

The EA was also available for review during the public comment period at the following libraries:

Newburgh Free Library - 124 Grand Street Newburgh, NY 12550

Cornwall Public Library - 395 Hudson St, Cornwall, NY 12518

Moffat Library - 6 W Main St, Washingtonville, NY 10992

FINDING OF NO SIGNIFICANT IMPACT

CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS AT STEWART-NEWBURGH, NEW YORK

On September 8, 2005, the Defense Base Closure and Realignment Commission (“BRAC Commission”) recommended that certain realignment actions occur at Stewart-Newburgh, New York. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. Congress did not alter any of the BRAC Commission’s recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The U.S. Army Corps of Engineers, Mobile District, has prepared an Environmental Assessment (EA) which identifies, documents, and evaluates environmental effects of the BRAC Commission’s recommended realignment of Stewart-Newburgh U.S. Army Reserve Center in Orange County, New York. The EA has been developed in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) and implementing regulations issued by the President’s Council on Environmental Quality (CEQ)¹. The 2006 Base Realignment Closure Manual for Compliance with the National Environmental Policy Act was used for guidance in preparing the EA. The purpose of the EA is to inform decision makers and the public of the likely environmental consequences of the proposed action and alternatives.

1.0 PROPOSED ACTION

The proposed action is to implement the BRAC Commission’s recommendation, as mandated by BRAC law, Public Law 101-510, by constructing new facilities to accommodate the personnel and functions of organizations realigning and relocating to the Stewart-Newburgh U.S. Army Reserve Center (USARC) property, located in the Town of New Windsor, NY.

Specific BRAC Commission recommendations include:

- Close the U.S. Army Reserve Center Stewart-Newburgh, NY and relocate units to a new AFRC [Armed Forces Reserve Center] on Stewart Army Sub Post adjacent to Stewart Air National Guard Base, NY.² The new AFRC shall have the capability to accommodate New York National Guard units from the Readiness Center at Newburgh, NY, if the State of New York decides to relocate those National Guard units.

To implement these recommendations, the following new facilities are proposed for construction:

Armed Forces Reserve Center and supporting facilities. The AFRC will be an approximately 80,000 square foot (ft²), two-story structure. The AFRC will provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, vault, weapons simulator, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four U.S. Army Reserve units currently at the Stewart-Newburgh USARC and two New York Army National Guard (NY ARNG) units.

¹ Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR Parts 1500–1508; and Environmental Analysis of Army Actions, 32 CFR Part 651.

² Note: The exact BRAC language is quoted, which refers to the “Stewart Army Sub Post adjacent to Stewart Air National Guard Base”. However, the Army property referred to is technically known as the Stewart-Newburgh U.S. Army Reserve Center (USARC), and the remainder of the former Stewart Army Sub Post was excised in 1999. The current Army property includes the actual USARC building and other adjacent facilities and property. In addition, the Stewart-Newburgh USARC is not adjacent to the NY ANGB, but is located in the same general area. The EA and FNSI use the generic term “Stewart-Newburgh” when referring to the overall Stewart-Newburgh USARC property.

Associated support facilities proposed include an approximately 14,000 ft² Area Maintenance Support Activity (AMSA)/Organizational Maintenance Shop (OMS), an approximately 850 ft² unheated storage facility, an open Military Equipment Parking (MEP) area, privately-owned vehicle (POV) parking lots, and supporting infrastructure improvements. Approximately 135,000 ft² of paving will be required for the POV, MEP, and access road modifications.

The Proposed Action site is located on the U.S. Army Stewart-Newburgh property, on a parcel of land just north of the existing USARC building.

2.0 ALTERNATIVES CONSIDERED

Under the no action alternative, the U.S. Army Reserve would not implement the proposed action at Stewart-Newburgh USARC. Although the President's Council on Environmental Quality (CEQ) regulations require consideration of the no action alternative, implementation of the no action alternative is not viable under BRAC law. Therefore, the no action alternative was included in the analysis to serve as a baseline for comparison.

The Army considered and analyzed one other alternative, the realignment, or "preferred" alternative. Under the preferred alternative, the facilities will be constructed as described in the proposed action. All facilities will be located within an integrated complex on U.S. Army Stewart-Newburgh property.

Other alternatives were considered, but not analyzed. These included (1) use of existing facilities at Stewart-Newburgh, (2) acquisition of new property; (3) leasing existing space off-post; and (4) new construction in locations other than those identified in the preferred alternative. These other alternatives were considered not feasible to implement the proposed action and were therefore dismissed from further analysis.

3.0 FACTORS CONSIDERED IN DETERMINING THAT AN ENVIRONMENTAL IMPACT STATEMENT IS NOT REQUIRED

The Environmental Assessment (EA), which is incorporated by reference into this Finding of No Significant Impact (FNSI), examined potential effects of the proposed action and the no action alternative. The EA evaluated 12 resource areas and areas of environmental and socioeconomic concern: land use, aesthetic and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice), transportation, utilities, and hazardous and toxic substances.

Implementation of the proposed realignment actions would not have any significant adverse effects or impacts on any of the environmental or related resource areas at Stewart-Newburgh or on areas surrounding the property. Potential effects associated with the realignment (preferred) alternative are expected to be minor. These impacts would be experienced in the following areas: geology and soils, water resources, socioeconomics, and utilities.

None of the predicted effects of the proposed realignment actions would result in significant impacts; therefore, mitigation is not needed, and implementation of the proposed action will not require the preparation of an Environmental Impact Statement. Preparation of a FNSI is appropriate.

4.0 CONCLUSION

Based on the EA, it has been determined that implementation of the proposed action will have no significant direct, indirect, or cumulative adverse effects on the quality of the natural or human environment. Because no significant environmental impacts will result from implementation of the proposed action, an Environmental Impact Statement is not required and will not be prepared.

5.0 PUBLIC COMMENT

Interested parties were invited to review and comment on the EA and Draft FNSI from October 2, 2006 through November 2, 2006. The Notice of Availability was published on October 1-2, 2006 in the *Times Herald-Record* (Middletown, NY). No comments on the EA were received.

The EA is available on the World Wide Web at:

http://www.hqda.army.mil/acsim/brac/env_ea_review.htm

The EA was also available for review during the public comment period at the following libraries:

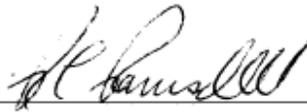
Newburgh Free Library
124 Grand Street
Newburgh, NY 12550

Cornwall Public Library
395 Hudson Street
Cornwall, NY 12518

Moffat Library
6 West Main Street
Washingtonville, NY 10992

Date: _____

11/9/06



Richard C. Ramsdell
Facility Management Officer
77th Regional Readiness Command

TIMES HERALD-RECORD

40 Mulberry Street, Middletown, NY 10940

State of New York:

County of Orange: ss:

Patricia Foddrill

Being duly sworn deposes and says that the ORANGE COUNTY PUBLICATIONS Division of Ottaway Newspapers-Radio, Inc. is a corporation organized under the laws of the State of New York and is, at all the times hereinafter mentioned, was the printer and publisher of The Times Herald-Record, a daily newspaper distributed in the Orange, Ulster, Rockland, Dutchess, Pike, PA, Delaware and Sullivan Counties, published in the English language in the City of Middletown, County of Orange, State of New York, that deponent is the

Legal Advertising Rep.

of said The Times Herald-Record acquainted with the facts hereinafter stated, and duly authorized by said Corporation to make this affidavit; that the

Public Notice

a true printed copy of which is hereunto annexed, has been duly and regularly published in the manner required by law in said The Times Herald-Record in each of its issues published upon each of the following dates, to wit:
In its issues of

10/1/06, 10/2/06

Signature of Representative:

Patricia Foddrill

Sworn in before me this

3

Day of

Oct.

2006

Gretchen Pina Breedy

Notary Public, Orange County

**GRETCHEN PINA BREEDY
NOTARY PUBLIC FOR THE STATE
OF NEW YORK, ORANGE COUNTY
OATH / SIGNATURE IS ON FILE
COMMISSION EXPIRES 11/29/2009**

Legal Notice

**PUBLIC NOTICE OF AVAILABILITY
ENVIRONMENTAL ASSESSMENT AND
DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR
THE BRAC-05 REALIGNMENT ACTIONS
AT STEWART-NEWBURGH, NEW YORK**

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1500), and 32 CFR 651 Environmental Analysis of Army Actions, the U.S. Army conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with implementing the Defense Base Closure and Realignment (BRAC) Commission's recommendations at the Stewart-Newburgh U.S. Army Reserve Center (Stewart-Newburgh) in the town of New Windsor, New York. The new facilities included in the proposed action implementing the BRAC Commission's recommendations analyzed in the EA include:

- Armed Forces Reserve Center (AFRC) to accommodate the four U.S. Army Reserve units currently at Stewart-Newburgh and two New York Army National Guard (NY ARNG) units from the NY ARNG Readiness Center in Newburgh, New York.
- Area Maintenance Support Activity (AMSA) and Organizational Maintenance Shop (OMS) to replace the existing facilities in order to co-locate them with the AFRC and to accommodate the additional incoming maintenance requirements associated with the NY ARNG units.
- Military Equipment Parking (MEP) area to replace the existing MEP in order to co-locate it with the AFRC and to accommodate the additional incoming vehicles associated with the NY ARNG units.

The EA and Draft Finding of No Significant Impact (FNSI) will undergo a 30-day public comment period, from October 2, 2006 through November 2, 2006. This is in accordance with requirements specified in 32 CFR Part 651.14 Environmental Analysis of Army Actions. Throughout this process, the public may submit written comments on the proposed action and the EA through the 77th Regional Readiness Command, at the following address or fax:

77th Regional Readiness Command
ATTN: AFRC-CNY-EN, Bldg 200
Ft. Totten, NY 11359-1016
Fax: (718) 352-5674

Comments may also be submitted by electronic mail to: Joseph.hand1@us.army.mil

The EA is available for review on the World Wide Web at: http://www.hqda.army.mil/acstn/brac/env_ea_review.htm

and at the following libraries:

Newburgh Free Library
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395 Hudson Street
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Moffat Library
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Washingtonville, NY 10992

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Edward
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Project Mgr.



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PUBLIC NOTICE

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Town of Wawayanda PLANNING BOARD ORANGE COUNTY, NEW YORK

PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN of a Public Hearing to be held by the Town of Wawayanda Planning Board at the Wawayanda Town Hall, Ridgebury Hill Road, Town of Wawayanda, Slate Hill, Orange County, New York on October 11, 2006 at 7:30 P.M. or soon thereafter to consider the following:

Owner / Applicant: **Thomas E. & Denise Cooper**
2999 Rte 6
Slate Hill, N.Y. 10973

Applicant is proposing a two-(2) lot subdivision and Site Plan for a commercial garage for a paving business. Property is located on Route 6 in a TC/Town Commercial Zone. Section 11, Block 1 Lot 22 on the Tax Map of the Town of Wawayanda.

All interested parties wishing to be heard shall be heard at that time. Maps and other documentation may be reviewed at the Town Hall Monday through Friday between the hours of 9:00 and 12:30, and 1:30 to 4:00.
The Planning Board has classified this project as an Unlisted Action under SEQOR.

**HON. ANN E. YATES,
CHAIRPERSON**

Date: September 28, 2006
**TOWN OF WAWAYANDA
PLANNING BOARD**

Town of Walkkill

NOTICE OF PUBLIC HEARING

PLEASE TAKE NOTICE that a public hearing will be held by the Town Board of the Town of Walkkill on October 12, 2006, at 7:25 p.m. at Walkkill Town Hall regarding the adoption of a Local Law of the Town of Walkkill for the year 2006 which would amend Chapter 233 of the Town Code of the Town of Walkkill, in order to designate a No Parking Zone on Mayer Drive in the Town of Walkkill.

Any resident of the Town of Walkkill is entitled to be heard at a public hearing held in accordance with Local Law at such public hearing.

To place your ad call 343-7000 today

Notice to Bidders

Sealed bids for Contract No. D003446, Primary Switch Gear Replacement-Lake Welch, Harriman State Park, Town of Stony Point, Rockland County, NY will be received by Office of Parks, Recreation & Historic Preservation, Palisades Region, at the Palisades Interstate Park Commission, at the Administration Building, Bear Mountain, NY until 2:30 P.M., E.S.D.T., on Tuesday, October 24, 2006 when they will be publicly opened and read. Each bid must be prepared and submitted in accordance with the Instructions to Bidders and must be accompanied by Bid Security in the form of a certified check/bank check/bid bond in the amount of \$1,500.00.

The Office encourages the use of minority and women's business enterprises on this contract through a good faith effort. The successful bidder may be required to furnish an EEO policy statement and staffing plan.

The successful bidder may be required to furnish a Performance Bond and a Labor and Material Bond in the statutory form of public bonds required by Sections 836 and 137 of the State Finance Law each for 100% of the amount of the Contract.

The completion date for this project is one hundred fifty (150) days after the contract is approved by the Office of State Comptroller, otherwise liquidated damages in the amount of \$500/day shall be imposed.

A prebid site visit is tentatively scheduled for Tuesday, October 17, 2006 at 10:00 A.M. Attendance at this meeting is not required but is strongly suggested. Call 845-786-2701, Ext. 225 to confirm.

The Bidding and Contract Documents may be examined free of charge at the Palisades Interstate Park Commission, Administration Building, Bear Mountain, NY. The bidding and contract documents may be obtained for \$49.00 per set, in person, from Cheryl Garzzone in the Office of Design and Construction, or by overnight mail from the same office. If mailing is requested, there will be an additional charge.

In accordance with State Finance Law Section 139-j, the following agency staff has been designated as contacts for this contract:

Name	Title	Phone #
Michael Tesik	Cap. Facilities Regional Mgr I	845-786-2701 x228
Larry Soeller	Senior Park Engineer	845-786-2701 x227
Cheryl Garzzone	Administrative Aide	845-786-2701 x225

Please note that contacting any other agency staff regarding this contract may be a violation of State Finance Law Section 139-j resulting in a determination of contractor non-responsibility.

Make checks payable to the Office of Parks, Recreation & Historic Preservation (OPRHP).
Additional information may be obtained from Larry Soeller, Senior Park Engineer, 845-786-2701, Ext. 227.

BY: **MICHAEL TESIK**
CAPITAL FACILITIES REGIONAL MANAGER I

Town of Wawayanda
ZONING BOARD OF APPEALS

Legal Notice

PUBLIC NOTICE OF AVAILABILITY ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE BRAC-05 REALIGNMENT ACTIONS AT STEWART-NEWBURGH, NEW YORK

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1500), and 32 CFR 651 Environmental Analysis of Army Actions, the U.S. Army conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with implementing the Defense Base Closure and Realignment (BRAC) Commission's recommendations at the Stewart-Newburgh U.S. Army Reserve Center (Stewart-Newburgh) in the town of New Windsor, New York. The new facilities included in the proposed action implementing the BRAC Commission's recommendations analyzed in the EA include:

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77th Regional Readiness Command
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Ft. Totten, NY 13359-1016
Fax: (718) 352-5674

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- Cornwall Public Library
395 Hudson Street
Cornwall, NY 12518
- Moffat Library
6 W Main Street
Washingtonville, NY 10992

EXECUTIVE SUMMARY

ES.1 INTRODUCTION

On September 8, 2005, the Defense Base Closure and Realignment Commission (“BRAC Commission”) recommended that certain realignment actions occur at Stewart-Newburgh, New York. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission’s recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission’s recommendations must now be implemented as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The following highlights the BRAC Commission’s recommendations for Stewart-Newburgh:

- Close the U.S. Army Reserve Center Stewart-Newburgh, NY and relocate units to a new Armed Forces Reserve Center (AFRC) on Stewart Army Sub Post adjacent to Stewart Air National Guard Base, NY¹. The new AFRC shall have the capability to accommodate New York National Guard Units from the Readiness Center at Newburgh, NY, if the State of New York decides to relocate those National Guard Units.

These actions are part of the decision to realign and transform Reserve Component facilities throughout New York State by collapsing facilities in three geographically separated areas into three modern AFRCs.

To enable implementation of this recommendation, the U.S. Army proposes to construct a new AFRC and related facilities to support the changes in force structure at Stewart-Newburgh. This EA analyzes potential environmental impacts associated with the U.S. Army’s Proposed Action at Stewart-Newburgh.

The BRAC law exempts consideration of the need for the action or alternative installations in preparing environmental documentation pursuant to the National Environmental Policy Act (NEPA). However, an appropriate level of NEPA analysis and documentation is required to analyze how the BRAC actions will be implemented for concurrent actions, both BRAC-directed and discretionary, at each installation that is receiving realigned missions. A NEPA document is not required for those installations that are only losing activities. Table ES-1 lists major environmental statutes, regulations, and Executive Orders applicable to federal projects.

¹ Note: The exact BRAC language is quoted above, which refers to the “Stewart Army Sub Post adjacent to Stewart Air National Guard Base”. However, the Army property referred to is technically known as the Stewart-Newburgh U.S. Army Reserve Center (USARC). This property includes the actual USARC building and other adjacent facilities and property. In addition, the Stewart-Newburgh USARC is not adjacent to the NY ANGB, but is located in the same general area. This EA will use the generic term “Stewart-Newburgh” when referring to the overall Stewart-Newburgh USARC property; and “current Stewart-Newburgh USARC building” when referring to the specific, existing USARC structure.

**Table ES-1: Major Environmental Statutes, Regulations, and
Executive Orders Applicable to Federal Projects**

Environmental Resources	Statute, Regulation, or Executive Order
Air	Clean Air Act (CAA) of 1970 (PL 95-95), as amended in 1977 and 1990 (PL 91-604); U.S. Environmental Protection Agency (USEPA), Subchapter C-Air Programs (40 CFR 52-99)
Noise	Noise Control Act of 1972 (PL 92-574) and Amendments of 1978 (PL 95-609); USEPA, Subchapter G-Noise Abatement Programs (40 CFR 201-211)
Water	Federal Water Pollution Control Act (FWPCA) of 1972 (PL 92-500) and Amendments; Clean Water Act (CWA) of 1977 (PL 95-217); USEPA, Subchapter D-Water Programs (40 CFR 100-145); Water Quality Act of 1987 (PL 100-4); USEPA, Subchapter N-Effluent Guidelines and Standards (40 CFR 401-471); Safe Drinking Water Act (SDWA) of 1972 (PL 95-923) and Amendments of 1986 (PL 99-339); USEPA, National Drinking Water Regulations and Underground Injection Control Program (40 CFR 141-149)
Biological Resources	Migratory Bird Treaty Act of 1918; Fish and Wildlife Coordination Act of 1958 (PL 85-654); Sikes Act of 1960 (PL 86-97) and Amendments of 1986 (PL 99-561) and 1997 (PL 105-85 Title XXIX); Endangered Species Act of 1973 (PL 93-205) and Amendments of 1988 (PL 100-478); Fish and Wildlife Conservation Act of 1980 (PL 96-366); Lacey Act Amendments of 1981 (PL 97-79); Responsibilities of Federal Agencies to Protect Migratory Birds (EO 13186)
Wetlands and Floodplains	Section 401 and 404 of the Federal Water Pollution Control Act of 1972 (PL 92-500); USEPA, Subchapter D-Water Programs 40 CFR 100-149 (105 ref); Floodplain Management-1977 (EO 11988); Protection of Wetlands-1977 (EO 11990); Emergency Wetlands Resources Act of 1986 (PL 99-645); North American Wetlands Conservation Act of 1989 (PL 101-233)
Cultural Resources	NHPA (16 USC 470 et seq.) (PL 89-865) and Amendments of 1980 (PL 96-515) and 1992 (PL 102-575); Protection and Enhancement of the Cultural Environment-1971 (EO 11593); Indian Sacred Sites-1966 (EO 13007); American Indian Religious Freedom Act (AIRFA) of 1978 (PL 94-341); Antiquities Act of 1906; Archaeological Resources Protection Act (ARPA) of 1979 (PL 96-95); Native American Graves Protection and Repatriation Act (NAGPRA) of 1990 (PL 101-601); Protection of Historic and Cultural Properties (36 CFR 800)
Solid Waste/Hazardous Materials and Waste/ Health and Safety	Resource Conservation and Recovery Act (RCRA) of 1976 (PL 94-5800), as Amended by PL 100-582; USEPA, subchapter I-Solid Wastes (40 CFR 240-280); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 USC 9601) (PL 96-510); Toxic Substances Control Act (TSCA) (PL 94-496); USEPA, Subchapter R-Toxic Substances Control Act (40 CFR 702-799); Federal Insecticide, Fungicide, and Rodenticide Control Act (40 CFR 162-180); Emergency Planning and Community Right-to-Know Act (40 CFR 300-399); Federal Compliance with Pollution Control Standards-1978 (EO 12088); Superfund Implementation (EO 12580); Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition (EO 13101); Greening the Government Through Efficient Energy Management (EO 13123); Greening the Government Through Leadership in Environmental Management (EO 13148); Occupational Safety and Health Act of 1970 (29 CFR 1926)
Environmental Justice	Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898); Protection of Children from

Environmental Resources	Statute, Regulation, or Executive Order
	Environmental Health Risks and Safety Risks (EO 13045)

ES.2 BACKGROUND AND SETTING

The Stewart-Newburgh U.S. Army Reserve Center (USARC) property is located close to Stewart International Airport (SIA) in the Town of New Windsor, New York in Orange County. It is approximately 60 miles north of New York City off Interstate 87 Exit 17 of the New York State Thruway near the City of Newburgh.

ES.3 PROPOSED ACTION

The purpose of the Proposed Action is to implement the BRAC Commission's recommendations pertaining to Stewart-Newburgh, NY.

The Proposed Action is to construct a new AFRC and associated support facilities at Stewart-Newburgh to support units from the closing Stewart-Newburgh USARC facility and NY Army National Guard (ARNG) units from the Readiness Center in Newburgh, NY, which the State of New York intends to relocate to the new AFRC (Ajodah, 2006c). Associated support facilities proposed include privately-owned vehicle (POV) parking lots, a new Area Maintenance Support Activity (AMSA)/Organizational Maintenance Shop (OMS), an unheated storage facility, and assorted infrastructure improvements. The Proposed Action site is located on the current Stewart-Newburgh property, on a parcel of land just north of the existing USARC building.

Facilities – The AFRC would be an approximately 80,000 square feet (ft²), 2-story structure located at the existing U.S. Army-owned Stewart-Newburgh property, immediately north of the existing USARC building. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, vault, weapons simulator, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four U.S. Army Reserve units currently at the Stewart-Newburgh USARC and two NY ARNG units. The AFRC site would also include a new POV lot and security fencing. Additional facilities include an approximately 14,000 ft² AMSA/OMS, an approximately 850 ft² unheated storage building and an open military equipment parking (MEP) area. Approximately 135,000 ft² of paving will be required for the POV, MEP, and access road modifications.

The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; masonry veneer walls; standing seam metal roofs; heating, ventilation and air conditioning (HVAC) systems; plumbing; mechanical; electrical; and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements. Anti-Terrorism/Force Protection (AT/FP) safety and security regulations will be incorporated into the facility designs and siting.

Equipment – The realignment of reserve units from the closing USARC facility to the proposed AFRC will not increase the number of associated unit vehicles, equipment, and materials, because those materials are already on-post. A maximum of approximately 45 light wheeled vehicles (e.g. high mobility multi-purpose wheeled vehicles (HMMWV or Humvee) and commercial utility combat vehicles (CUCV)) and 80 trailers are anticipated as a result of the realignment of NY ARNG units to the new AFRC. A key need for the new AMSA/OMS/MEP and storage area is that significant portions of the current AMSA/OMS parcel, including the AMSA building itself, encroach on a SIA Object Free Area (a taxiway), and therefore present a potential safety and security hazard to aviation.

Personnel – The realignment of reserve units from the existing Stewart-Newburgh USARC facility will not increase the number of personnel at Stewart-Newburgh, as the personnel from the existing USARC are already on-site. The current workforce population of Stewart-Newburgh includes approximately 25 full-time military personnel, and 150-200 part-time military personnel.

The relocation of personnel from the NY ARNG Readiness Center will result in the arrival of approximately 50 additional full-time personnel and approximately 200 part-time personnel (weekend drill reservists). The potential direct and/or cumulative impacts to the environment from the increase in personnel will be considered in the EA.

ES.4 REALIGNMENT PROCESS

The timeline for implementing the BRAC action at Stewart-Newburgh began in late 2005 with Congressional and Presidential approval of the BRAC law followed by the initiation of this NEPA process and related planning activities at Stewart-Newburgh. New BRAC facilities at Stewart-Newburgh are programmed through fiscal year 2010 with realignment moves scheduled to occur by 2011. Under the BRAC law, the Army must initiate all realignments not later than September 15, 2007, and complete all realignments not later than September 15, 2011.² This BRAC EA examines the environmental impact from efforts that will take place within the BRAC implementation window.

ES.5 ALTERNATIVES

No Action Alternative – Under the No Action Alternative, reserve units presently assigned to the Stewart-Newburgh USARC would continue to train at and operate from their current facility. The New York Army National Guard units would not relocate to the new AFRC and would continue to train at and operate from their current facility. Implementation of this alternative is not possible; however, due to the BRAC Commission's realignment recommendations having the force of law. Inclusion of the No Action Alternative is prescribed by

² Section 2904(a), Public Law 101-510, as amended, provides that the Army must "... initiate all closures and realignments no later than two years after the date on which the President transmits a report [by the BRAC Commission] to the Congress ... containing the recommendations for such closures or realignments; and ... complete all such closures and realignments no later than the end of the six year period beginning on the date on which the President transmits the report ..." The President took the specified action on September 15, 2005.

CEQ regulations and serves as a baseline against which the impacts of the Proposed Action and alternatives can be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

Realignment (Preferred) Alternative – The Preferred Alternative site is just north of the current USARC building. This site can support the size and footprint of the proposed AFRC, associated parking and AMSA/OMS facilities. The site can meet AT/FP stand-off buffer requirements and is currently utilized by U.S. Army Reserve units.

ES.6 ENVIRONMENTAL CONSEQUENCES

The Proposed Action would not have any significant adverse impacts on any of the environmental or related resource areas at the proposed Stewart-Newburgh AFRC site or to surrounding areas.

The potential impacts associated with the realignment (preferred) alternative are anticipated to be minor and not significant. These impacts would be experienced in the following resource areas:

- Soils
- Surface Waters (Water Resources)
- Hydrology/Groundwater (Water Resources)
- Economic Development (Socioeconomics)
- Storm Water (Utilities)

A summary of impacts by resource area for the no action alternative and the realignment (preferred) alternative is provided in Table ES-2.

ES.7 MITIGATION RESPONSIBILITY AND PERMIT REQUIREMENTS

None of the predicted effects of the Proposed Action would result in significant impacts; therefore, mitigation is not needed, although the U.S. Army may consider the use of Best Management Practices (BMPs) in the construction and operation of these facilities. The following permits would be required in implementing the projects identified in this analysis:

- A storm water, soil erosion, and sediment control plan for the construction phase of the project may be necessary under Clean Water Act (CWA) Section 402 requirements.
- The NY State Pollutant Discharge Elimination System (NYSPDES) permit for the current AMSA/OMS may need to be updated or amended.

**Table ES-2: Summary of Impacts of the No Action Alternative
and the Realignment (Preferred) Alternative**

Resource	No Action Alternative	Realignment (Preferred) Alternative
Land Use		
<i>Regional Geographic Setting and Location</i>	None. No significant impact.	None. No significant impact.
<i>Installation Land</i>	None. No significant impact.	None. No significant impact.
<i>Surrounding Land/Airspace Use</i>	None. No significant impact.	Minor Beneficial. No significant impact.
<i>State Coastal Management Program</i>	None. No significant impact.	None. No significant impact.
<i>Current and Future Development in the Region of Influence</i>	None. No significant impact.	None. No significant impact.
Aesthetic and Visual Resources	None. No significant impact.	Negligible Adverse. No significant impact.
Air Quality		
<i>Ambient Air Quality Conditions</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Air Pollutant Emissions at Installation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Regional Air Pollutant Emissions Summary</i>	None. No significant impact.	Negligible Adverse. No significant impact.
Noise	None. No significant impact.	Negligible Adverse short-term impacts due to construction activities. No significant impact.
Geology and Soils		
<i>Geologic and Topographic Conditions</i>	None. No significant impact.	None. No significant impact.
<i>Soils</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Prime Farmland</i>	None. No significant impact.	None. No significant impact.
Water Resources		
<i>Surface Water</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Wetlands</i>	None. No significant impact.	None. No significant impact.
<i>Hydrogeology/Groundwater</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Floodplains</i>	None. No significant impact.	None. No significant impact.
<i>Coastal Zone</i>	None. No significant impact.	None. No significant impact.
Biological Resources		
<i>Vegetation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Wildlife</i>	None. No significant impact.	None. No significant impact.
<i>Sensitive Species</i>	None. No significant impact.	None. No significant impact.

Resource	No Action Alternative	Realignment (Preferred) Alternative
<i>Wetlands</i>	None. No significant impact.	None. No significant impact.
Cultural Resources		
<i>Archaeological</i>	None. No significant impact.	None to Minor Adverse impacts if archaeological resources found during construction. No significant impact.
<i>Historical Architecture</i>	None. No significant impact.	None. No significant impact.
<i>Native American Resources</i>	None. No significant impact.	None. No significant impact.
Socioeconomics		
<i>Economic Development</i>	None. No significant impact.	Minor beneficial impacts as a result of temporary construction jobs. No significant impact.
<i>Environmental Justice</i>	None. No significant impact.	None. No significant impact.
Transportation		
<i>Roadways and Traffic</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Installation Transportation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Public Transportation</i>	None. No significant impact.	None. No significant impact.
Utilities		
<i>Potable Water Supply</i>	None. No significant impact.	None. No significant impact.
<i>Wastewater System</i>	None. No significant impact.	None. No significant impact.
<i>Stormwater System</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Energy Sources</i>	None. No significant impact.	None. No significant impact.
<i>Communications</i>	None. No significant impact.	None. No significant impact.
<i>Solid Waste</i>	None. No significant impact.	None. No significant impact.
Hazardous and Toxic Substances		
<i>Uses of Hazardous Materials</i>	None. No significant impact.	None to Negligible. No significant impact.
<i>Storage and Handling Areas</i>	None. No significant impact.	None. No significant impact.
<i>Hazardous Waste Disposal</i>	None. No significant impact.	None to Negligible. No significant impact.
<i>Site Contamination and Cleanup</i>	None. No significant impact.	None. No significant impact.

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1.0 PURPOSE, NEED, AND SCOPE

1.1 INTRODUCTION

The U.S. Army's mission is to defend the United States and territories, support national policies and objectives, and defeat nations responsible for aggression that endangers the peace and security of the U.S. To carry out these tasks, the U.S. Army must adapt to changing world conditions and must improve its capabilities to respond to a variety of circumstances across the full spectrum of military operations. A key part of this adaptation is to realign and reorganize U.S. Army organizational structures and properly align facilities and infrastructure to support the changing conditions and threats that the U.S. Army must respond to worldwide. This Environmental Assessment (EA) addresses proposed Base Realignment and Closure (BRAC) actions at the U.S. Army Stewart-Newburgh property located in the Town of New Windsor, New York, as part of the overall U.S. Army restructuring and realignment.

On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at Stewart-Newburgh, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. The BRAC Commission recommendations must now be implemented as provided for in the Defense Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

The BRAC law exempts consideration of the need for the action or alternative installations in preparing environmental documentation pursuant to the National Environmental Policy Act of 1969 (NEPA). However, an appropriate level of NEPA analysis and documentation is required to analyze how the BRAC actions will be implemented for concurrent actions, both BRAC-directed and discretionary, at each installation that is receiving realigned missions.

The following highlights the BRAC Commission's recommendations for Stewart-Newburgh:

- Close the U.S. Army Reserve Center Stewart-Newburgh, NY and relocate units to a new Armed Forces Reserve Center (AFRC) on Stewart Army Sub Post adjacent to Stewart Air National Guard Base, NY³. The new AFRC shall have the capability to accommodate New York National Guard Units from the

³ Note: The exact BRAC language is quoted above, which refers to the "Stewart Army Sub Post adjacent to Stewart Air National Guard Base". However, the U.S. Army property referred to is technically known as the Stewart-Newburgh U.S. Army Reserve Center (USARC). This property includes the actual USARC building and other adjacent facilities and property. In addition, the Stewart-Newburgh USARC is not adjacent to the NY ANGB, but is located in the same general area. This EA will use the generic term "Stewart-Newburgh" when referring to the overall Stewart-Newburgh USARC property; and "current Stewart-Newburgh USARC building" when referring to the specific, existing USARC structure.

Readiness Center at Newburgh, NY, if the State of New York decides to relocate those National Guard Units.

These actions are part of the decision to realign and transform Reserve Component facilities throughout New York State by collapsing facilities in three geographically separated areas into three modern AFRCs.

To enable implementation of this recommendation, the U.S. Army proposes to construct a new AFRC and related facilities at the Army's Stewart-Newburgh property, to support the changes in force structure at Stewart-Newburgh. The closing U.S. Army Reserve Center (USARC) is also located at the Army's Stewart-Newburgh property. This EA analyzes potential environmental impacts associated with the U.S. Army's Proposed Action at Stewart-Newburgh.

Details on the Proposed Action are provided in Section 2.0.

1.2 PURPOSE AND NEED

The purpose of the Proposed Action is to implement the BRAC Commission's recommendations pertaining to Stewart-Newburgh located in the Town of New Windsor, NY; specifically, to provide for a new AFRC at Stewart-Newburgh. The AFRC is needed to ensure that adequate training and administrative space is available to support the combined requirements of the current USARC reserve units and the addition of NY Army National Guard (ARNG) units, which the State of New York has decided to relocate to the new AFRC (Ajodah, 2006c).

These BRAC actions will significantly enhance training, mobilization, equipment readiness, and deployment by creating joint use facilities which consolidate activities that were previously located at multiple facilities into one location. At the same time, these actions will reduce manpower and associated operating costs for maintaining existing facilities (BRAC Commission, 2005). The new AFRC and associated Organizational Maintenance Shop (OMS) and Area Maintenance Support Activity (AMSA) will provide adequate spaces for classrooms, training areas, vehicle storage and maintenance, and administrative support spaces (U.S. Army, 2005).

The need for the Proposed Action is to improve the ability of the Nation to respond rapidly to challenges of the 21st century. The U.S. Army is legally bound to defend the United States and its territories, support national policies and objectives, and defeat nations responsible for aggression that endangers the peace and security of the United States. To carry out these tasks, the U.S. Army must adapt to changing world conditions and must improve its capabilities to respond to a variety of circumstances across the full spectrum of military operations. The following discusses three major initiatives that contribute to the U.S. Army's need for the Proposed Action.

Base Realignment and Closure. In previous rounds of BRAC, the explicit goal was to save money and downsize the military to reap a "peace dividend." In the 2005 BRAC round, the Department of Defense (DoD) sought to reorganize its installation infrastructure to more efficiently support its forces, increase operational readiness, and facilitate new ways of doing business. Thus, BRAC represents more than cost savings; it supports advancing the

goals of transformation, improving military capabilities, and enhancing military value. The U.S. Army needs to carry out the BRAC recommendations at Stewart-Newburgh to achieve the objectives for which Congress established the BRAC process.

The following provides excerpts from the Secretary of Defense's justification for the BRAC recommendations in the State of New York overall (BRAC Commission, 2005).

This recommendation transforms Reserve Component facilities throughout the State of New York. The implementation of this recommendation will enhance military value, improve homeland defense capability, greatly improve training and deployment capability, create significant efficiencies and cost savings, and is consistent with the Army's force structure plans and Army transformational objectives.

This recommendation closes four Army Reserve centers and constructs three multicomponent, multifunctional Armed Forces Reserve Centers (AFRCs), throughout the State of New York, capable of accommodating National Guard and Reserve units. This recommendation reduces military manpower and associated costs for maintaining existing facilities by collapsing three geographically separated facilities into three modern Armed Forces Reserve Centers. These joint-use facilities will significantly reduce operating costs and create improved business processes.

This recommendation provides the opportunity for other Local, State, or Federal organizations to partner with the Reserve Components to enhance homeland security and homeland defense at a reduced cost to those agencies.

Although not captured in the COBRA [cost operational benefits requirements analysis] analysis, this recommendation avoids an estimated \$81.6M in mission facility renovation costs and procurement avoidances associated with meeting AT/FP [anti-terrorism/force protection] construction standards and altering existing facilities to meet unit training and communications requirements. Consideration of these avoided costs would reduce costs and increase the net savings to the Department of Defense in the 6-year BRAC implementation period and in the 20-year period used to calculate NPV [net present value].

U.S. Army Transformation and the U.S. Army Modular Force. On October 12, 1999, the Secretary of the Army and the Chief of Staff articulated a vision about people, readiness, and transformation of the U.S. Army to meet challenges emerging in the 21st century, and the need to be able to respond more rapidly to different types of operations requiring military action. The strategic significance of land forces continues to lie in their ability to fight and win the Nation's wars and in their providing options to shape the global environment to the benefit of the United States and its allies. Transformation responds to the U.S. Army's need to become more strategically responsive and dominant at every point on the spectrum of operations. In March 2002, the U.S. Army published

its Programmatic Environmental Impact Statement for Army Transformation for its proposal to conduct a multiyear, phased, and synchronized program of transformation. Over a 30-year period, the U.S. Army will conduct a series of transformation activities affecting virtually all aspects of U.S. Army doctrine, training, leader development, organizations, installations, materiel, and Soldiers. On April 11, 2002, the U.S. Army issued a Record of Decision reflecting its intent to transform the U.S. Army. This EA evaluates a proposed action that comports with the transformation process, which is designed to provide the Nation with combat forces that are more responsive, deployable, agile, versatile, lethal, survivable, and sustainable.

Installation Sustainability. On October 1, 2004, the Secretary of the Army and the Chief of Staff issued The Army Strategy for the Environment. The strategy focuses on the interrelationships of mission, environment, and community. A sustainable installation simultaneously meets current and future mission requirements, safeguards human health, improves quality of life, and enhances the natural environment. A sustained natural environment is necessary to allow the U.S. Army to train and maintain military readiness.

1.3 SCOPE

This EA identifies, documents, and evaluates the potential environmental impacts of proposed realignment actions at Stewart-Newburgh in Orange County, New York. The EA has been developed in accordance with NEPA and implementing regulations issued by the President's Council on Environmental Quality (CEQ) and the U.S. Army.⁴ The *2006 Base Realignment Closure Manual for Compliance with the National Environmental Policy Act* was used for guidance in preparing the EA (U.S. Army, 2006). The purpose of the EA is to inform decision makers and the public of the likely environmental consequences of the Proposed Action and alternatives.

The Defense Base Closure and Realignment Act of 1990 specifies that NEPA does not apply to actions of the President, the Commission, or the DoD, except "(i) during the process of property disposal, and (ii) during the process of relocating functions from a military installation being closed or realigned to another military installation after the receiving installation has been selected but before the functions are relocated" (Sec. 2905(c)(2)(A), Public Law 101-510, as amended). The law further specifies that in applying the provisions of NEPA to the process, the Secretary of Defense and the secretaries of the military departments concerned do not have to consider "(i) the need for closing or realigning the military installation which has been recommended for closure or realignment by the Commission, (ii) the need for transferring functions to any military installation which has been selected as the receiving installation, or (iii) military installations alternative to those recommended or selected" (Sec. 2905(c)(2)(B)). The Commission's deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from NEPA. Accordingly, this EA does not address the need for realignment.

⁴ Council on Environmental Quality *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*, 40 *Code of Federal Regulations* (CFR) Parts 1500–1508, and *Environmental Analysis of Army Actions*, 32 CFR Part 651.

1.4 PUBLIC INVOLVEMENT

The U.S. Army invited public participation in the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision making. All agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, were urged to participate in the decision making process.

Public participation opportunities with respect to this EA and decision making on the Proposed Action are guided by 32 Code of Federal Regulations (CFR) Part 651. Interested parties were invited to review and comment on the EA and Draft Finding of No Significant Impact (FNSI) for 30 days from October 2, 2006 through November 2, 2006. The Notice of Availability was published on October 1-2, 2006 in the *Times Herald-Record* (Middletown, NY). No comments on the EA were received. The EA is available on the World Wide Web at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm, and was also made available during the public comment period at the following local libraries:

Newburgh Free Library – 124 Grand Street, Newburgh, NY 12550;
Cornwall Public Library – 395 Hudson Street, Cornwall, NY 12518;
Moffat Library – 6 West Main Street, Washingtonville, NY 10992.

1.5 IMPACT ANALYSIS PERFORMED

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians has analyzed the Proposed Action and alternatives in light of existing conditions and has identified relevant beneficial and adverse impacts associated with the action. Section 1.0 of the EA provides the purpose, need, and scope. The Proposed Action is described in Section 2.0, and alternatives, including the no action alternative, are described in Section 3.0. Conditions existing as of November 2005, considered to be the “baseline” conditions, are described in Section 4.0, Affected Environment and Environmental Consequences. The expected impacts of the Proposed Action, also described in Section 4.0, are presented immediately following the description of baseline conditions for each environmental resource addressed in the EA. Section 4.0 also addresses the potential for cumulative effects, and mitigation measures are identified where appropriate. Section 5.0 presents the findings and conclusions.

The impacts of the Proposed Action on socioeconomics were assessed using the Economic Impact Forecast System (EIFS) developed by the U.S. Army Construction Engineering Research Laboratory (CERL). This model allows all base closure and realignment actions to be evaluated in the same way.

1.6 FRAMEWORK FOR ANALYSIS

A decision on whether to proceed with the Proposed Action rests on numerous factors such as mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, Stewart-Newburgh is guided by relevant statutes (and their implementing regulations) and Executive Orders that establish standards and provide guidance on environmental and natural resources management and planning.

1.6.1 Relevant Statutes and Executive Orders

Relevant statutes include the Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), Resource Conservation and Recovery Act (RCRA), and Toxic Substances Control Act (TSCA). Executive Orders bearing on the Proposed Action include Executive Order (EO) 11988 (*Floodplain Management*), EO 11990 (*Protection of Wetlands*), EO 12088 (*Federal Compliance with Pollution Control Standards*), EO 12580 (*Superfund Implementation*), EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*), EO 13101 (*Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*), EO 13123 (*Greening the Government Through Efficient Energy Management*), EO 13148 (*Greening the Government Through Leadership in Environmental Management*), EO 13175 (*Consultation and Coordination with Indian Tribal Governments*), and EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*). These authorities are addressed in various sections throughout this EA when relevant to environmental resources and conditions. The full text of the laws, regulations, and EOs is available on the Defense Environmental Network & Information Exchange Web site at <http://www.denix.osd.mil>.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 INTRODUCTION

The Proposed Action is to implement the BRAC Commission's recommendation as mandated by the BRAC legislation, Public Law 101-510. This section describes the U.S. Army's preferred alternative for carrying out the BRAC Commission's recommendations for Stewart-Newburgh.

The following highlights the BRAC Commission's recommendations for Stewart-Newburgh:

- Close the U.S. Army Reserve Center Stewart-Newburgh, NY and relocate units to a new AFRC on Stewart Army Sub Post adjacent to Stewart Air National Guard Base, NY. The new AFRC shall have the capability to accommodate NY ARNG units from the Readiness Center at Newburgh, NY, if the State of New York decides to relocate those National Guard units.

These actions are part of the decision to realign and transform Reserve Component facilities throughout New York State by restructuring facilities in three geographically separated areas into three modern AFRCs.

2.2 CRITERIA FOR IDENTIFICATION OF PROPOSED BRAC ACTIONS

The DoD applied 8 major criteria when evaluating individual facility BRAC actions.

MILITARY VALUE (HIGHER PRIORITY):

1. The current and future mission capabilities and the impact on operational readiness of the total force of the Department of Defense, including the impact on joint war-fighting, training, and readiness.
2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.
4. The cost of operations and the manpower implications.

OTHER CONSIDERATIONS:

1. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.
2. The economic impact on existing communities in the vicinity of military installations.
3. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel.

4. The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance (BRAC Commission, 2005).

The application of these criteria to the need to realign and restructure reserve forces and facilities in the Northeast and New York State yielded a number of proposed facility changes, among them the proposed actions at Stewart-Newburgh.

This BRAC EA will examine the environmental impact from efforts that will take place within the 6-year BRAC implementation window. The site-specific BRAC related projects are defined by existing Defense Department (DD) Form 1391s. The DD Form 1391 is used by the Department of Defense to submit requirements and justifications in support of funding requests for military construction to Congress.

2.3 PROPOSED ACTION/IMPLEMENTATION PROPOSED

The Proposed Action is to construct a new AFRC and associated support facilities at Stewart-Newburgh to support units from the closing Stewart-Newburgh USARC facility and NY ARNG units from the Readiness Center in Newburgh, NY. Associated support facilities proposed include privately-owned vehicle (POV) parking lots, a new AMSA/OMS, an unheated storage facility, and assorted infrastructure improvements. The Proposed Action site is located within the current Stewart-Newburgh property on a parcel of land just north of the existing USARC building.

The Proposed Action is further detailed below, in the Facilities (Section 2.3.1), Equipment (Section 2.3.2), and Personnel (Section 2.3.3) sub-sections.

Figure 2-1 is a general area aerial photo. Figure 2-2 is an aerial photo with an overlay of the proposed AFRC facilities.

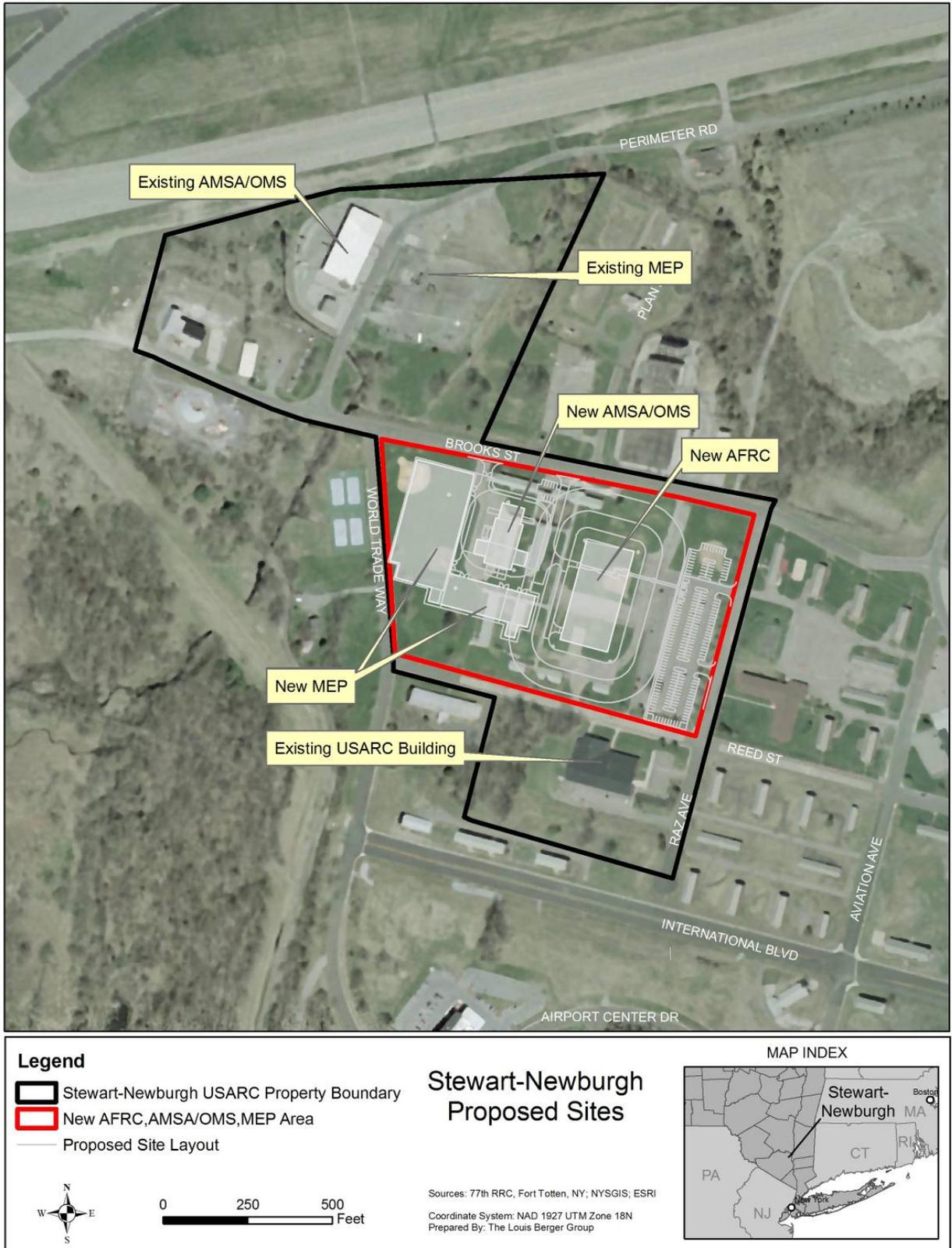
Figure 2-1: Area Aerial Photo



2.3.1 Facilities

The AFRC would be an approximately 80,000 square feet (ft²), 2-story structure located on existing U.S. Army-owned land. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, vault, weapons simulator, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four U.S. Army Reserve units currently at the Stewart-Newburgh USARC and two NY ARNG units. The AFRC site would also include a new POV lot and security fencing. Additional facilities include an approximately 14,000 ft² AMSA/OMS, an approximately 850 ft² unheated storage building, and an open military equipment parking (MEP) area. Approximately 135,000 ft² of paving will be required for the POV, MEP area, and access road modifications (Ajodah, 2006c and U.S. Army, 2005).

Figure 2-2: Stewart-Newburgh Proposed AFRC and Associated Facilities



The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; masonry veneer walls; standing seam metal roofs; heating, ventilation, and air conditioning (HVAC) systems; and plumbing, mechanical, electrical, and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements (U.S. Army, 2005). AT/FP safety and security regulations will be incorporated into the facility designs and siting.

2.3.2 Equipment

The realignment of reserve units from the closing USARC facility to the proposed AFRC will not increase the number of associated unit vehicles, equipment, and materials, because those materials are already on-post. A maximum of approximately 45 light wheeled vehicles (e.g. high mobility multi-purpose wheeled vehicles (HMMWV or Humvee) and commercial utility combat vehicles (CUCV)) and 80 trailers are anticipated as a result of the realignment of NY ARNG units to the new AFRC. A key need for the new AMSA/OMS/MEP and storage area is that significant portions of the current AMSA/OMS parcel, including the AMSA building itself, encroach on a Stewart International Airport (SIA) Object Free Area (a taxiway), and therefore present a potential safety and security hazard to aviation.

2.3.3 Personnel

The realignment of reserve units from the existing Stewart-Newburgh USARC facility will not increase the number of personnel at Stewart-Newburgh, as the personnel from the existing USARC are already on-site. The current workforce population of Stewart-Newburgh includes approximately 25 full-time military personnel, and 150-200 part-time military personnel.

The relocation of personnel from the NY ARNG Readiness Center will result in the arrival of approximately 50 additional full-time personnel, and approximately 200 part-time personnel (weekend drill reservists). The potential direct and/or cumulative impacts to the environment from the increase in personnel will be considered in the EA. Table 2-1 details the total personnel changes:

Table 2-1: Stewart-Newburgh, NY 2005 BRAC Actions: Personnel Changes

Action	Organization	From	Total Number of Unit Personnel	Total Estimated Change in Personnel at Stewart-Newburgh
On-Base	Stewart-Newburgh USARC	New Windsor, NY	25 full-time 150-200 reservists	0
Incoming	NY ARNG	Newburgh, NY	50 full-time	+50
Incoming	NY ARNG	Newburgh, NY	200 reservists	+200
			TOTAL	+250

2.3.4 Schedule

Under the BRAC law, the U.S. Army must initiate all realignments not later than September 15, 2007, and complete all realignments not later than September 15, 2011.⁵

Facilities construction would be synchronized to meet the needs, on a priority basis, of units being relocated in the near-term, and to address priority space needs for reserve units. Establishment of new units would occur as facilities for their operations and support become available.

⁵ Section 2904(a), Public Law 101-510, as amended, provides that the Army must "... initiate all closures and realignments no later than 2 years after the date on which the President transmits a report [by the BRAC Commission] to the Congress ... containing the recommendations for such closures or realignments; and ... complete all such closures and realignments no later than the end of the 6-year period beginning on the date on which the President transmits the report ... " The President took the specified action on September 15, 2005.

3.0 ALTERNATIVES

3.1 INTRODUCTION

A key principle of NEPA is that an agency should consider reasonable alternatives to a proposed action. Considering alternatives helps to avoid unnecessary impacts and allows analysis of reasonable ways to achieve the stated purpose. To warrant detailed evaluation, an alternative must be reasonable. To be considered reasonable, an alternative must be affordable, capable of implementation, and satisfactory with respect to meeting the purpose of and need for the action. The following discussion identifies alternatives considered by the U.S. Army and identifies whether they are feasible and, hence, subject to detailed evaluation in this EA.

Alternatives to the Proposed Action have been examined according to three variables: means to physically accommodate realigned units, siting of new construction, and schedule. This section presents the U.S. Army's development of alternatives and addresses alternatives available for the Proposed Action. This section also describes the No Action Alternative, in which neither the Proposed Action nor an alternative is undertaken.

3.2 DEVELOPMENT OF ALTERNATIVES

Means to Accommodate Realigned Units. Relocation of units and establishment of new units involves ensuring that the installation has adequate physical accommodations for personnel and their operational requirements. The U.S. Army considers four means of meeting increased space requirements:

- Use of existing facilities
- Modernization or renovation of existing facilities
- Leasing of off-post facilities
- Construction of new facilities

U.S. Army Regulation 210-20, *Master Planning for Army Installations*, establishes U.S. Army policy to maximize use of existing facilities. The regulation directs that new construction will not be authorized to meet a mission that can be supported by existing underutilized adequate facilities, provided that the use of such facilities does not degrade operational efficiency. Under this policy, selection and use of facilities to support mission requirements adheres to the foregoing four choices in the order that they are listed. That is, if there are adequate existing facilities to accommodate requirements, and absent other overriding considerations, further examination of renovation, leasing, or construction alternatives is not required. Similarly, if a combination of use of existing facilities and renovation satisfies the U.S. Army's needs, leasing or new construction need not be addressed. New construction may proceed only when use of existing facilities, renovation, leasing, or a combination of such measures are inadequate to meet mission requirements.

Siting of New Construction. The U.S. Army considers new construction of facilities when use of existing facilities, renovation, or leasing would fail to provide for adequate accommodations of realigned functions. The U.S. Army considers both general and specific siting criteria for construction of new facilities.

General siting criteria include consideration of compatibility between the functions to be performed and the installation land use designation for the site, adequacy of the site for the function required, proximity to related activities, distance from incompatible activities, availability and capacity of roads, efficient use of property, development density, potential future mission requirements, and special site characteristics, including environmental incompatibilities.

Specific siting criteria include consideration of location of the workforce and efficient, streamlined management of functions. Collocation of similar types of functions, as opposed to dispersion, permits more efficient use of equipment, vehicles, and other assets.

Schedule. Alternatives for scheduling of proposed realignment actions are principally affected by three factors: the availability of facilities to house realigned personnel and functions, efforts to minimize potential disruption of mission activities based on the number of personnel involved in the relocation or the amount of work to be performed, and early realization of benefits to be gained by completion of the realignments. In most cases, minor shifts in schedule would not produce different environmental results.

3.3 ALTERNATIVES TO THE PROPOSED ACTION

3.3.1 Use of Off-Post Leased Space

Use of off-post leased space to meet the requirements of the proposed Stewart-Newburgh AFRC is not permitted under the BRAC action as authorized by the U.S. Congress and the President, and would involve several major drawbacks. Force protection policies specify certain facilities characteristics, such as physical security features, set-back from roadways, and “hardened” construction. Use of leased space in the private sector – having personnel and equipment both on-post and off-post – would adversely affect command and control functions, result in higher operational costs, and impair efficient use of resources. In addition, BRAC language directs that the new AFRC be constructed on the existing Stewart-Newburgh property. For these reasons, use of leased space is not feasible and is not further evaluated in this EA.

3.3.2 Acquisition of New Property

This alternative is not permitted under the BRAC action as authorized by the U.S. Congress and the President, and would likely substantially undermine the cost savings realized through the closure of multiple USARCs.

3.3.3 Existing Stewart-Newburgh Facilities

Stewart-Newburgh’s existing facilities are fully utilized for current mission requirements, and the USARC building, as currently configured, is inadequate to accommodate the incoming NY ARNG units. Accordingly,

new construction is necessary. In addition, BRAC language directs that the existing Stewart-Newburgh USARC facility be closed.

3.3.4 New Construction Alternative Sites

The U.S. Army identified and evaluated potential sites at or near the current Stewart-Newburgh USARC property. Each is briefly discussed below:

- *Site 1:* Preferred site, just north of the current USARC building, as illustrated in Figure 2-2. This site can support the size and footprint of the proposed AFRC, associated parking and AMSA/OMS facilities. The site can meet AT/FP stand-off buffer requirements and is currently utilized by U.S. Army Reserve units.
- *Site 2:* Adjacent to the current NY Air National Guard Base (ANGB) at SIA. The Stewart ANGB occupies property at the eastern end of the primary SIA runway. This site was evaluated, but it was determined that the site has inadequate space to accommodate both the closing USARC units and the NY ARNG units. In addition, BRAC language directs that the new AFRC be constructed on the existing Stewart-Newburgh property. Accordingly, this site was found to not meet the purpose and need and therefore is not a viable alternative to the preferred AFRC site.
- *Other Nearby Sites:* The U.S. Army evaluated other nearby sites that were presented to the U.S. Army by SIA. None of the sites were found to be a viable alternative to the preferred site, for a variety of reasons, listed below. In addition, BRAC language directs that the new AFRC be constructed on the existing Stewart-Newburgh property.
 - Environmental constraints or potential impacts. Two of the sites would likely impact wetlands and/or are located near protected habitat or designate conservation areas. The buildable portions of these sites were evaluated to be inadequate to meet the requirements of the proposed AFRC and associated facilities.
 - Separation from current Stewart-Newburgh facilities. Separation of the AFRC from the existing developed U.S. Army property, as well as potential separation from the AMSA/OMS and MEP areas would impose a number of costly impacts on training, operations, and maintenance that would undermine the purpose of the AFRC. Off-post sites could also impose transportation impacts as a result of this separation from the main post.
 - Lack of infrastructure. Undeveloped sites lack any existing infrastructure, such as access roads, utilities, and security and would be substantially more costly, unlikely to be able to meet mandated BRAC schedules for implementation, and would also increase likely environmental impacts.
 - Parcel unavailability. One potential site proposed proved to be unavailable.

- Land use conflicts. One potential site is currently planned for a proposed new Interstate exchange and is unavailable and incompatible with the proposed AFRC.

3.3.5 Scheduling Alternatives

The schedule for implementation of the Proposed Action must balance facilities construction timeframes and planned arrival dates of inbound units and stand-up dates of newly-established units, all within the 6-year limitation of the BRAC law. Realignment earlier than that shown in the schedule in Section 2.3.4 is not feasible in light of the time required to build facilities. Shifting of schedules to accomplish realignment at a later date would unnecessarily delay realization of benefits to be gained. Since earlier implementation is not possible, and since delay is avoidable and unnecessary, alternative schedules are not further evaluated in this EA.

3.4 NO ACTION ALTERNATIVE

Under the No Action Alternative reserve units presently assigned to the USARC at Stewart-Newburgh would continue to train at and operate from their current facility. The NY ARNG units would not relocate to the new AFRC and would continue to train at and operate from their current facility. Implementation of this alternative is not possible due to the BRAC Commission's realignment recommendations having the force of law. Inclusion of the No Action Alternative is prescribed by CEQ regulations and serves as a baseline against which the impacts of the Proposed Action and alternatives can be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

4.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

4.1 INTRODUCTION

This section contains a description of the current environmental conditions of the areas that would be affected should the Proposed Action be implemented. It also includes analysis of potential impacts arising from the implementation of the Proposed Action and the no action alternative. The description of environmental conditions represents baseline conditions, or the “as is” or “before the action” conditions at the installation. The baseline is further defined as the level of operations and environmental conditions at the time of the BRAC Commission’s fall 2005 decision. The baseline facilitates subsequent identification of changes in conditions that would result from realignment. The environmental consequences portion represents the culmination of scientific and analytic analysis of potential impacts arising from the implementation of the Proposed Action. Direct, indirect, and cumulative effects of the Proposed Action are also addressed.

Baseline existing environmental conditions are presented first for each environmental resource or condition, followed immediately by evaluation of the potential impacts of the no action and the Proposed Action, or realignment (preferred) alternative.

4.2 LAND USE

4.2.1 Affected Environment

The Region of Influence (ROI) for land use is defined as Orange County, New York.

4.2.1.1 Regional Geographic Setting and Location

Stewart-Newburgh is located adjacent to SIA in the Town of New Windsor, New York in Orange County. It is approximately 60 miles north of New York City off Interstate 87 Exit 17 off of the New York State Thruway near the City of Newburgh.

4.2.1.2 Climate

The climate in the Hudson Valley varies seasonally, but is regulated to an extent by the Hudson River. The mean temperature in Orange County is 55 degrees Fahrenheit (F). The summer season in the Hudson Valley ranges from the high 70s to the low 80s, whereas during the winter months, the average temperature is 26 degrees F. Major floods, hurricanes, tropical storms, and tornados are rare in this area. The minimum seasonal snowfall is 40-50 inches in Orange County. The average rainfall in this region is 42.1 inches (NYSCO, 2006).

4.2.1.3 Installation Land Use

The general land use of the current U.S. Army Stewart-Newburgh property has remained essentially unchanged since the 1940s. As the project area has historically changed operations from an Army Air Corps facility, to an Air Force Base, to the Stewart Army Subpost, to the current Stewart-Newburgh USARC, the facilities have been primarily used for barracks, administration, and storage Space. In 1999 the U.S. Military Academy (USMA) divested the Stewart Army Subpost, and the U.S. Army Reserve (USAR) obtained approximately 41 acres for the current Stewart-Newburgh USARC. Current land use of the property is urban in nature and reflects the mission of Stewart-Newburgh USARC to provide administrative support and operator-level vehicle maintenance to the army reserve units located at Stewart- Newburgh and in the surrounding area. The Stewart-Newburgh property has a fenced perimeter and consists of 16 buildings and a MEP area, with the landscape consisting of primarily mowed lawns.

4.2.1.4 Surrounding Land/Airspace Use

Stewart-Newburgh is located just south of SIA, and portions of the current U.S. Army property are directly adjacent to SIA. Stewart-Newburgh also lies entirely within the airport (AP) zoning classification of the Town of New Windsor that encompasses the SIA (TNW, 2006). The zoning code permits a variety of land uses including airports and heliports, agricultural activities, light industrial and commercial uses, parks, and other land uses (Northern Ecological Associates, 1998). Associated with the SIA runways and taxiways are Object Free Areas in which the area should be clear of all objects except those objects that are needed for air navigation or aircraft ground maneuvering purposes (FAA, 1999). Currently, portions of the existing AMSA and MEP area at Stewart-Newburgh are located within the Object Free Area associated with the Runway 27 taxiway.

4.2.1.5 Current and Future Development in the Region of Influence

Orange County has been under a Comprehensive Development Plan (CDP) since 1980. The plan was updated in 1985 and again in 1987. In 2003 the Orange County Planning Department developed a new Comprehensive Plan, *Strategies for Quality Communities*. This plan builds upon the 1987 CDP and the 2001 Draft Comprehensive Plan, *Strategies for Quality Communities* to face the 21st century challenges of the increased pace at which the area is being developed and integrated into the larger NY metropolitan region (OCPD, 2003). Central to the new comprehensive plan is the Urban-Rural concept that recommends that further growth in housing, business, and industry be focused in and around existing cities, villages, and urbanizing areas. Further developments should be planned in locations where existing major highways are nearby and central water and sewer services are available. The Urban-Rural concept also suggests that a major portion of Orange County be maintained as open, or green space, and that public services not be developed in these areas. Stewart-Newburgh is located within an area of Orange County defined as a Priority Growth Area. Priority Growth Areas are defined as general areas of preference for future development to maximize efficiency of infrastructure and services and to minimize the losses of open space. The primary function of the Priority Growth Areas is to serve as centers for future growth (OCPD, 2003).

A project to provide new access from I-84 via a new interchange at Drury Lane west of Stewart-Newburgh has been developed, but is currently the subject of litigation.

Following the implementation of the Proposed Action, the USAR has preliminary plans to excess the parcels of land that are not used in the construction of the new facilities (Ajodah, 2006a); however, there are no planned development projects related to these parcels of land at this time. Subsequent NEPA compliance documentation will be prepared, if necessary, to address any issues related to the potential excessing of buildings and/or property. Such documentation will be prepared when a formal proposal or plan for the excessing and future use of the land has been identified.

4.2.2 Environmental Consequences

4.2.2.1 No Action Alternative

Under the No Action Alternative, there would be no changes in land use at the Proposed Action site.

4.2.2.2 Realignment (Preferred) Alternative

Minor beneficial impacts would be expected under the preferred alternative, as there would be no change to the current land use, and the AMSA and MEP area would be removed from the existing Object Free Area associated with the SIA taxiway (Figure 4-1). The projects under the Proposed Action would be located within the Stewart-Newburgh boundary and would be sited to locate facilities in a way to support mission goals and objectives as efficiently and effectively as possible.

4.3 AESTHETICS AND VISUAL RESOURCES

4.3.1 Affected Environment

The majority of the viewshed at Stewart-Newburgh consists of military buildings on the property and supporting structures for SIA (e.g. aircraft, taxiways, runways, hangar buildings, service buildings, control tower). The surrounding countryside; however, maintains a rural farm-like quality representative of current and historic land uses.

4.3.2 Environmental Consequences

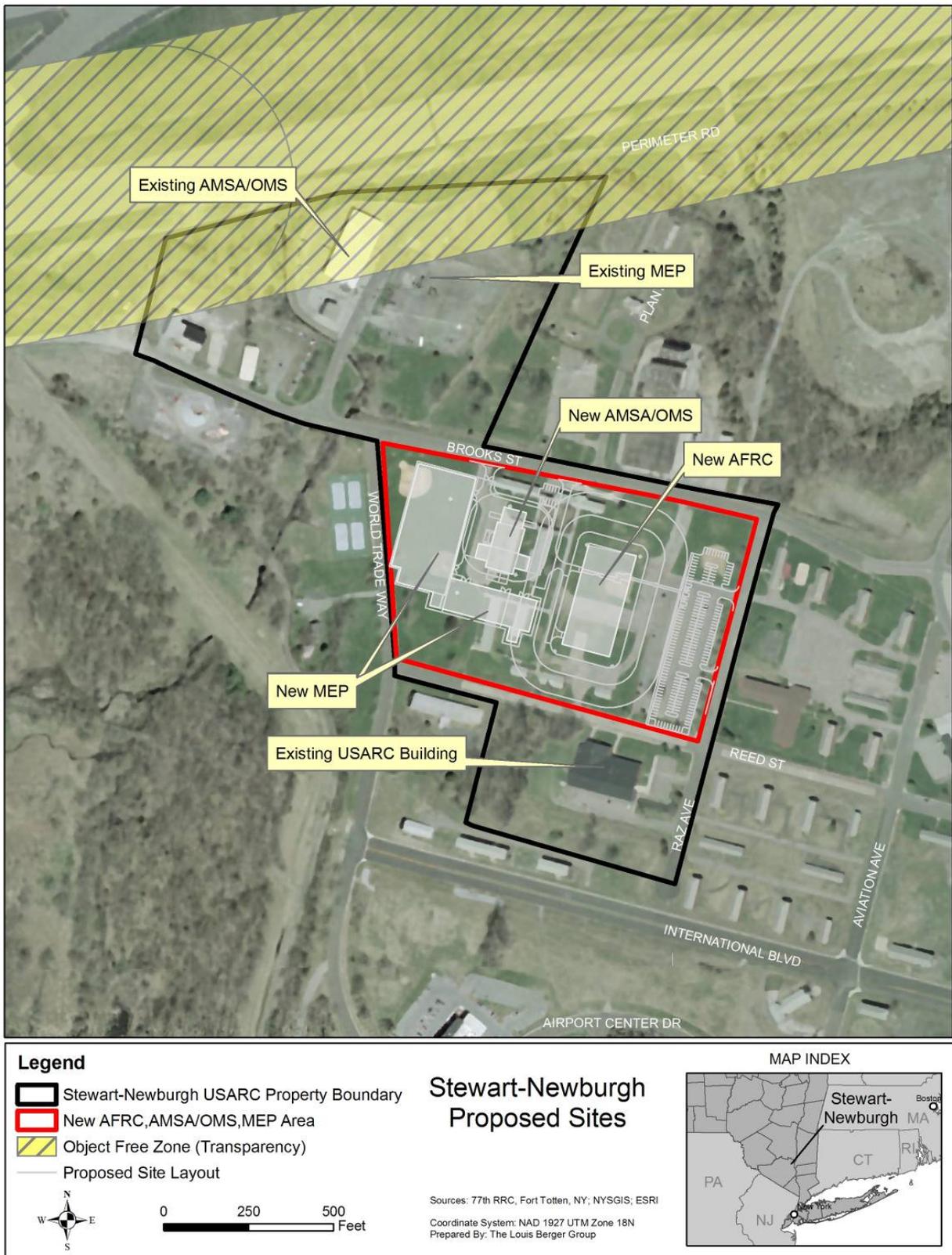
4.3.2.1 No Action Alternative

Under the No Action Alternative, there would be no impacts on the viewshed or on the aesthetic values of the region.

4.3.2.2 Realignment (Preferred) Alternative

Visual resource quality is affected by the size of key objects, such as height, similarity to surroundings, and visual “fit.” In addition, the value of a viewshed is affected by the number and type of viewers and viewer expectations.

Figure 4-1: Object Free Area Associated with the SIA Taxiway



These visual elements help to determine the potential impacts of the Proposed Action on existing visual resources. For example, the introduction of a man-made structure into an entirely natural environment could significantly impact visual resources, while the same structure introduced into a developed area might go largely unnoticed by viewers. The addition of the proposed AFRC and supporting AMSA and MEP facilities would have negligible impacts on the area viewshed due to the existing military functions and context of the site, and the existence of a number of institutional buildings in the vicinity.

4.4 AIR QUALITY

The U.S. Environmental Protection Agency (EPA) defines ambient air in 40 CFR Part 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the 1970 CAA and the 1977 and 1990 Clean Air Act Amendments (CAAA), the EPA has promulgated ambient air quality standards and regulations. The National Ambient Air Quality Standards (NAAQS) were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the EPA has issued NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter (PM) (the EPA breaks PM down into particles with a diameter less than or equal to a nominal 10 micrometers (PM₁₀) and particles with a diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5})), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb). Areas that do not meet NAAQS are called non-attainment areas.

4.4.1 Affected Environment

The ROI for the Proposed Action is Orange County, NY. The Newburgh area, which includes the site of the Proposed Action, is part of the Mid-Hudson Ozone Non-Attainment Area, and has been classified by the EPA as being in moderate non-attainment for the criteria pollutant ozone, and in non-attainment for the criteria pollutant PM_{2.5}. The NAAQS for both pollutants are presented in Table 4-1.

Table 4-1: Ambient Air Quality Standards for Ozone and Particulate Matter (PM_{2.5})

Pollutant	Federal Standard	New York Standard ²
Ozone (O ₃) ¹ 8-Hour Average	0.08 ppm	0.08 ppm
Particulate Matter (PM _{2.5}) ¹ 24-Hour Average	65 µg/m ³	250 µg/m ³
Annual Arithmetic Mean	15 µg/m ³	45 µg/m ³

ppm = parts per million; µg/m³ = micrograms per cubic meter

¹ Federal primary and secondary standards for this pollutant are identical.

² New York standards are for suspended particulates, including PM₁₀

Source: EPA, 2002; NYSDEC 2004

To regulate the emission levels resulting from a project, federal actions located in non-attainment areas are required to demonstrate compliance with the general conformity guidelines established in 40 CFR Part 93 Determining Conformity of Federal Actions to State or Federal Implementation Plans (the Rule). The Proposed

Action is located within an area designated by the EPA as a PM_{2.5} non-attainment area and a moderate ozone non-attainment area; therefore, a General Conformity Rule applicability analysis is required.

Section 93.153 of the Rule sets the applicability requirements for projects subject to the Rule through the establishment of *de minimis* levels for annual criteria pollutant emissions. These *de minimis* levels are set according to criteria pollutant non-attainment area designations. Projects below the *de minimis* levels are not subject to the Rule. Those at or above the levels are required to perform a conformity analysis as established in the Rule. The *de minimis* levels apply to direct and indirect sources of emissions that can occur during the construction and operational phases of the action.

To determine the applicability of the Rule to the Proposed Action, emissions were estimated for PM_{2.5} and the ozone precursor pollutants NO_x and volatile organic compounds (VOC). Annual emissions for these compounds were estimated for each of the project actions (construction and operation) to determine if they would be below or above the *de minimis* levels established in the Rule. The *de minimis* levels for moderate ozone non-attainment areas are 100 tons per year (TPY) for NO_x and 50 TPY for VOCs. Sources of NO_x and VOC associated with the Proposed Action include emissions from construction equipment, vehicles used by construction crews commuting to and from the site, the painting of interior building surfaces and parking spaces (VOC only), and from stationary heating units (boilers and water heaters). Under the Proposed Action, there would be no increase in employment in the ROI (see Section 4.10 Socioeconomics); therefore, there would be no corresponding increase in daily commuter traffic.

The EPA is in the process of promulgating the *de minimis* levels and the rules governing an applicability analysis for PM_{2.5}. During the interim period, EPA believes it is appropriate for Federal agencies to use the PM₁₀ *de minimis* level of 100 TPY as a surrogate for PM_{2.5} *de minimis* levels in their General Conformity applicability analysis. Since PM_{2.5} emissions are a subset of PM₁₀ emissions, PM_{2.5} emissions will always be less than PM₁₀ emissions. Under the EPA's guidance, if an action causes direct or indirect emissions of PM_{2.5}, a General Conformity determination would be required if the annual emissions exceed the 100 TPY threshold.

In addition to the evaluation of air emissions against *de minimis* levels, emissions are also evaluated for regional significance. A federal action that does not exceed the threshold emission rates of criteria pollutants may still be subject to a general conformity determination if the direct and indirect emissions from the action exceed 10% of the total emissions inventory for a particular criteria pollutant in a non-attainment or maintenance area. If the emissions exceed this 10% threshold, the federal action is considered to be a "regionally significant" activity, and thus, the general conformity rules apply.

4.4.1.1 Ambient Air Quality Conditions

Ozone and PM_{2.5} are monitored in Orange County by two monitoring sites. The ozone monitor is located at 55 Broadway while the PM_{2.5} monitor is located at 1175 Route 17k. The ozone monitor exceeded the ozone standard 12 times in 2001, but has averaged only 4 exceedences per year since. The PM_{2.5} monitors were not above the

PM_{2.5} standard because up until 2005, no standard existed. Table 4-2 shows the existing monitoring data within Orange County, New York.

Table 4-2: Existing 8-hour Ozone and 24-hour Particulate Matter Monitoring Data within Orange County, NY

Monitoring Station	Year				
	2001	2002	2003	2004	2005
# 360710002 55 Broadway	34/31	71/32	44/40	37/36	46/36
# 360715001 1175 Route 17k	0.098/0.097	0.117/0.089	0.091/0.088	0.099/0.092	0.095/0.090

Ozone values are in ppm; 1st/2nd highest data

PM values are in µg/m³ 1st/2nd highest data

NAAQS: Eight-hour average = 0.08 ppm (0.085 is an exceedance)

Source: U.S. EPA, AIRS Data, April, 2006

4.4.1.2 Meteorology/Climate

Temperature is a parameter used in calculations of emissions for air quality applicability. The climate in the Hudson Valley varies seasonally, but is regulated to an extent by the Hudson River. The mean temperature in Orange County is 55 degrees F (NSYCO, 2006).

4.4.1.3 Regional Air Pollutant Emissions Summary

The EPA calculates the Air Quality Index (AQI) for five major air pollutants regulated by the CAA: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. Data collected for Orange County, NY are released in the form of the AQI, which ranges from zero to 300, with zero indicating no air pollution, and 300 representing severely unhealthy air pollution levels. An AQI value between 101 and 150 indicates that air quality is unhealthy for sensitive groups who may be subject to negative health effects. Sensitive groups may include those with lung or heart disease who will be negatively affected by lower levels of ground level ozone and particulate matter than the rest of the general public. An AQI value between 151 and 200 is considered to be unhealthy, and may result in negative health effects for the general public, with more severe effects possible for those in sensitive groups. AQI values above 200 are considered to be very unhealthy (Air Watch, 2006).

According to the EPA's AQI Report for Orange County, NY, in 2000 the county experienced 1 day where air quality was considered "unhealthy for sensitive groups". In 2001, the area experienced 12 days that were considered unhealthy for sensitive groups. In 2002, the area experienced 3 days that were considered unhealthy for sensitive groups, and 2 days that were classified as unhealthy for the general public. In 2003, the area experienced 5 days that were unhealthy for sensitive groups, and in 2004, the area experienced 3 days that were unhealthy for sensitive groups. In 2005, the area experienced 8 days that were considered unhealthy for sensitive groups, indicating that, although air quality appears to be improving in the region, there are significant

fluctuations seen from year to year, leaving the overall picture of air quality somewhat inconsistent (USEPA, 2006).

Stewart-Newburgh is located in the northeast part of Orange County, NY, central to the Mid-Hudson Non-Attainment Region. Therefore, it is likely to be directly affected by regional changes in air quality, although it will be less subject to the air quality issues faced in southern Orange County, which is in much closer proximity to New York City, and the accompanying industry and density of development.

4.4.2 Environmental Consequences

4.4.2.1 No Action Alternative

Implementation of the No Action Alternative would not change current conditions and also is not expected to significantly impact the current air quality conditions in the region.

4.4.2.2 Realignment (Preferred) Alternative

A project construction and operations-related General Conformity Applicability Analysis was performed for the Proposed Action. The General Conformity applicability analysis estimated the level of potential air emissions (PM₁₀, VOC and NO_x) for the Proposed Action. The No-Action Alternative would not impact air quality beyond existing conditions; therefore, it was not included in the analysis. Appendix C contains a detailed description of the assumptions and methodology used to estimate potential emissions for the construction and operation phases of the Proposed Action at Stewart-Newburgh.

Table 4-3 summarizes the total emissions associated with the construction and operation phases of the Proposed Action at Stewart-Newburgh. Construction related emissions would be temporary and only occur during the 36-month construction period for all of the buildings. A conservative approach was initially employed in the applicability analysis to assure that construction scheduling would not result in more severe results than predicted. The analysis first assumed that the construction emissions for all three buildings would occur concurrently over the same one-year period. These results were further added to a year of operations, bounding the potential emissions that might result for any overlap between construction and operations emissions.

The data in Table 4-3 shows that the emissions associated with constructing and operating the new AFRC and associated facilities, when compared to the *de minimis* values for this ozone and PM non-attainment area fall well below the *de minimis* values of 50 TPY for VOC and 100 TPY for NO_x and PM₁₀ even under the initial conservative assumptions that were employed. As a result, further analysis employing less severe assumptions was not needed, nor performed. The Proposed Action is not subject to the General Conformity Rule requirements.

Air emissions were also evaluated to determine regional significance. The *Air Quality Conformity Determination Statement for the Poughkeepsie Non-Attainment Area* (PDCTC & OCTC, 2005) sets forth daily target levels under the Transportation Improvement Plan (TIP), which are less than the total amount of emissions allowed under the

State Implementation Plan (SIP) for the region; 7.45 tons per day of VOC and 14.33 tons per day of NO_x for the Poughkeepsie 8-Hour Ozone Non-Attainment Area, which includes Orange County, NY. The increase in annual emissions from the construction and operational activities would not make up 10% or more of the available TIP, and would therefore not be regionally significant. Air quality impacts are therefore not considered to be significant.

Table 4-3: Summary of Annual Emissions - Proposed Action

Activity	Construction Emissions (TPY)			Operation Emissions (TPY)			Combined Emissions (TPY)		
	NO _x	VOC	PM ₁₀	NO _x	VOC	PM ₁₀	NO _x	VOC	PM ₁₀
Heavy Equipment (building/parking)	5.30	0.59	0.86				5.30	0.59	0.86
Construction Crew Commuting Vehicles ¹	0.40	0.39	0.01				0.40	0.39	0.01
Painting	NA	2.03	NA				NA	2.03	NA
Stationary Heating Unit (boiler and water heater)				0.26	0.014	0.019	0.26	0.014	0.019
Totals							5.96	3.02	0.89

¹ Construction Crew Commuting Vehicles represent only the emissions increase associated with the implementation of the Proposed Action

4.5 NOISE

Noise is generally defined as unwanted sound. Sound is all around us; it becomes noise when it interferes with normal activities such as speech, concentration, or sleep. Noise associated with military installations is a factor in land use planning both on- and off-post. In addition, noise can emanate from vehicular traffic associated with new facilities and from project sites during construction. Ambient noise (the existing background noise environment) can be generated by a number of noise sources, including mobile sources, such as automobiles, trucks, trains, and airplanes; and stationary sources such as construction sites, machinery, or industrial operations. Often “background” noise sources can contribute substantially to an ambient noise environment. Background noise sources can include birds chirping, vehicles passing by, “white noise” generated by the wind, and other background noise sources. These background sources can determine the ambient noise environment in areas not dominated by a single major noise source.

4.5.1 Affected Environment

On-site sources of noise are negligible, and are largely limited to minor traffic noise from personnel entering and exiting the area, and routine installation and maintenance activities. No weapons firing occurs within Stewart-

Newburgh. On-site sources of noise are negligible in comparison to off-site sources, which are dominated by aircraft operations at SIA. Other off-site sources of noise include road traffic on Bruenig Road and NYS Route 207.

4.5.2 Environmental Consequences

4.5.2.1 No Action Alternative

No impacts would be expected. Implementation of the no action alternative would not alter the existing noise at the site being considered under the Proposed Action, nor at any additional locations.

4.5.2.2 Realignment (Preferred) Alternative

Negligible adverse, but temporary and short-duration noise impacts would occur under the preferred alternative during construction activities. These impacts could be mitigated by confining construction activities to normal working hours and employing noise-controlled construction equipment to the extent possible. Additionally, the arrival and staging of heavy equipment and materials would be scheduled to occur during normal work hours to the greatest extent possible to avoid disturbing personnel on post and the surrounding communities.

After construction, the day-to-day operations of the new AFRC and associated facilities are not expected to increase by more than negligible levels over current operations and vehicle traffic levels. Therefore, negligible long-term or cumulative noise impacts are anticipated. Upon completion of construction, noise levels would be expected to return to normal, ambient levels for the area.

4.6 GEOLOGY AND SOILS

4.6.1 Affected Environment

4.6.1.1 Geologic and Topographic Conditions

Stewart-Newburgh is located in northeastern Orange County, New York, near the boundary of two physiographic provinces, the Hudson Mohawk lowland to the west and north, and the New England Uplands on the south and east (Northern Ecological Associates, 1998). The surrounding landscape consists of generally rolling hills and valleys typically created by the differential erosion of soft shales and carbonate sediment and erosion-resistant sandstone. Bedrock in this area is characterized as sedimentary rock (limestone, shale, sandstone, dolostone) formed during the Middle Ordovician period (438-505 million years ago) of the Paleozoic era, of the Phanerozoic eon (Northern Ecological Associates, 1998). The surficial sediments associated with the Stewart-Newburgh are composed entirely of glacial till deposited from the late Wisconsinian (Woofordian) glaciation roughly 28,000 years ago (Northern Ecological Associates, 1998). These sediments are characterized as having variable texture (e.g. clay, silt-clay, boulder-clay) and thickness (1-50 meters), and are relatively impermeable due to a loamy matrix. The geological foundation of the Stewart-Newburgh area consists of sedimentary rocks (including shale,

argillite, and siltstone) of the Normanskill formation within the Trenton Group (Northern Ecological Associates, 1998).

4.6.1.2 Soils

The proposed site for the new AFRC, AMSA/OMS, and MEP area is completely underlain by Mardin gravelly silt loam (MdB). The Mardin series consists of deep, moderately well drained soils on uplands that are formed in glacial till deposits and has been classified as farmland of State-wide importance by the Natural Resources Conservation Service (USDA, 2006a). Table 4-4 summarizes the properties of the Mardin soil series.

Table 4-4: Properties of Soils Found at the Proposed Site

Mapping Unit	Soil Series Name	Frost Action	Flooding	Water Table (feet)	Hydrologic Group ¹	Hydric Soil	Important Farmland ²
MdB	Mardin Gravelly Silt Loam, 3-8% slopes	Moderate	None	1.5-2.0	C	No	S

¹ A = low runoff potential; B = moderate infiltration rate; C = slow infiltration rate; D = high runoff potential

² U = unique farmland; P = prime farmland; S = farmland of State-wide importance; L = farmland of local importance

Source: U.S. Department of Agriculture, Natural Resources Conservation Service
<http://soildatamart.nrcs.usda.gov/Metadata.aspx?Survey=NY07&UseState=NY>

4.6.1.3 Prime Farmland

The Farmland Protection Policy Act (FPPA) was passed to minimize the amount of land irreversibly converted from farmland due to Federal actions. “For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land” (USDA, 2006b). Projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency.

MdB, which underlays the proposed ARFC site is classified as farmland of State-wide importance; however, the site already exists in an urban development.

4.6.2 Environmental Consequences

4.6.2.1 No Action Alternative

No impacts would be expected. Implementation of the No Action Alternative would not alter the existing geology or soils at the project site.

4.6.2.2 Realignment (Preferred) Alternative

Geologic and Topographic Conditions – No impacts would be expected. The proposed AFRC site is primarily flat, and would likely require only minor leveling and grading. No major alterations of the general topographic character of the site would occur.

Soils – Minor adverse direct impacts would be expected. Some soils at the proposed AFRC site would likely be adversely affected by the minor leveling and grading of the site. Vegetative cover would be removed, soils would be compacted, and soil layer structure would be disturbed and modified. These impacts are considered minor, given that the majority of soils at the proposed site have been previously disturbed or modified.

Soil productivity (the capacity of the soil to produce vegetative biomass) would decline in disturbed areas and be eliminated in those areas within the footprint of the building structures or parking facilities. Disturbed areas outside of the building and parking facility footprints would be reseeded following construction activities, and soil productivity on these sites would return.

Soil erosion and sediment production would be minimized for all construction operations as a result of following an approved sediment and erosion control plan. All sites would be re-graded and re-vegetated (as necessary) following construction activities, and soil erosion and sediment control measures would be included in site plans to minimize long term erosion and sediment production at the site. The AFRC site would be constructed with storm water controls favoring methods that allow for storm water to reenter the groundwater system rather than leaving the site as surface flow. Use of storm water control measures that favor infiltration in this way would minimize the potential for erosion and sediment production as a result of future storm events.

The majority of the soils underlying the proposed AFRC site have limited shrink-swell potential, indicating that there would be low potential for uneven or problematic settling of any newly constructed buildings or parking facilities.

Prime Farmland – No impacts would be expected, and some federal activities are exempt from the FPPA requirements, including projects on land already in an urban development and construction projects for national defense purposes. Accordingly, the FPPA does not apply to the site for the proposed AFRC because the land has already been converted to non-farm, urban use.

4.7 WATER RESOURCES

4.7.1 Affected Environment

4.7.1.1 Surface Water

Stewart-Newburgh is located within the Moodna Creek sub-basin of the Lower Hudson River Basin, which is located within the North Atlantic Slope Basin. Most surface drainage at Stewart-Newburgh is artificially controlled and the runoff is disposed of through storm drains and catch basins that discharge into an unnamed

stream west of the installation. This stream enters and exits the northwest corner of Stewart-Newburgh and begins as a man-made channel west and south of the current AMSA facility (Figure 4-2). This unnamed stream also receives runoff from the SIA runways (Northern Ecological Associates, 1998). After exiting the Stewart-Newburgh property, this stream flows southward and joins with Gillick Brook before passing under NYS Route 207 and flowing into Beaver Dam Lake, 4 miles south of Stewart-Newburgh. Water from Beaverdam Lake flows into Moodna Creek and eventually, into the Hudson River. This unnamed stream is a non-protected Class C tributary of Beaverdam Lake and is identified as DEC Water Index # H-89-12-P234 (NYSDEC, 2006b). Class C waters are defined as suitable for fish propagation and survival. There are no other surface waters within the boundaries of the Stewart-Newburgh property.

Wetlands – The National Wetland Inventory (NWI) map does not indicate any wetlands within the boundaries of Stewart-Newburgh (Figure 4-2). The NWI does indicate several wetlands to the southwest of the installation, including three Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated wetlands totaling approximately 20.2 acres; five Palustrine, Forested, Broad-Leaved Deciduous wetlands of various flood regimes totaling approximately 16.0 acres; and one Palustrine, Scrub-Shrub, Broad-Leaved Deciduous/Emergent, Persistent, Semi-permanently Flooded, excavated wetland covering approximately 12.3 acres. The nearest wetland to the project site is located approximately 750 feet to the southwest.

By letter dated July 5, 2006, the NY State Department of Environmental Conservation (NYSDEC) indicated the proposed AFRC site is not within or near any state-designated wetlands (see Appendix A).

4.7.1.2 Hydrogeology/Groundwater

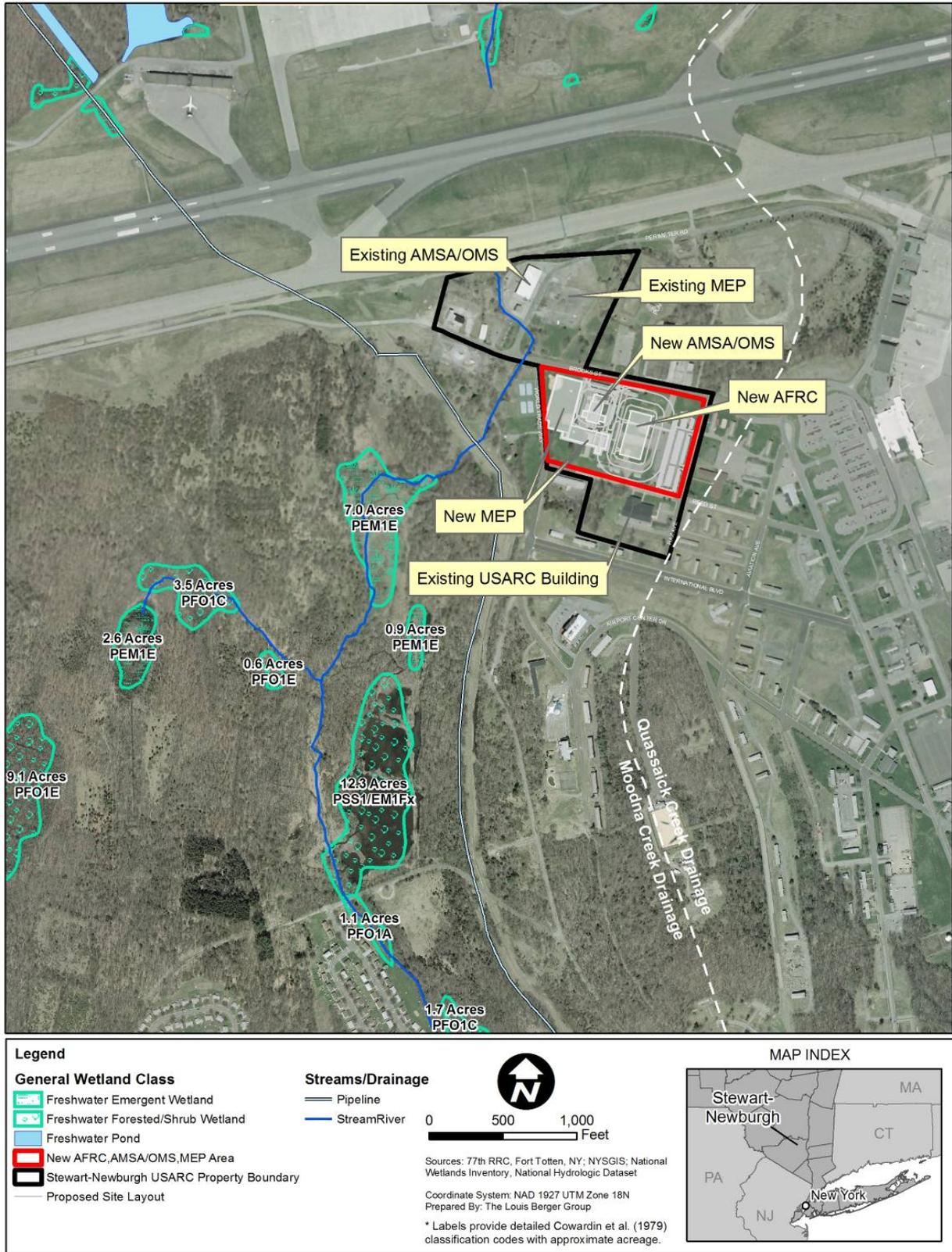
There are no nationally-designated Sole Source Aquifers located near Stewart-Newburgh. Additionally no state-designated Primary or Principal Aquifers are located in the vicinity of the Stewart-Newburgh property. The closest such aquifer is the *Fishkill and Sprout Creeks Area* approximately 10 miles east of Stewart-Newburgh (Northern Ecological Associates, 1998).

There is very low potential for water well yields from unconsolidated deposits in the area of Stewart-Newburgh. One area to the east of the Catskill Aqueduct has been identified with a limited potential yield of less than 10 gallons per minute (Northern Ecological Associates, 1998).

4.7.1.3 Floodplain

The Federal Emergency Management Agency (FEMA) prepares Flood Insurance Rate Maps (FIRM) to establish actuarial rates for structures, based upon the risk of flooding. Stewart-Newburgh is not located in a floodplain or flood hazard zone. The Stewart-Newburgh property, including the proposed AFRC site, lies entirely within a FEMA designated flood-zone designation of X, meaning it is outside the limits of both the 100 and 500 year flood zones and has a less than 1 percent chance of flooding each year.

Figure 4-2: Water Resources in the Project Area



4.7.1.4 Coastal Zone

The New York State Waterfront Revitalization of Coastal Areas and Inland Waterways Act established direction for the appropriate use and protection of the state's coasts and waterways. The New York State Coastal Policies, which are derived from the Act, are used to guide the State's efforts to create and maintain clean, accessible, and prosperous coastal areas and inland waterways for present and future generations. They are used to guide local governments in the preparation of Local Waterfront Revitalization Programs, to determine the appropriateness of public agency decisions that affect the use and protection of coastal areas and inland waterways, to help set priorities for public and private investment along our coasts and waterways, and they are used by anyone who seeks to improve the management of the coast and inland waterways. New York State's Coastal Area has been divided into four geographic regions: Long Island, New York City, Great Lakes, and Hudson Valley. Stewart-Newburgh is not located in any coastal zone area designated by the New York State Coastal Management Program (NYS DOS, 2006).

4.7.2 Environmental Consequences

4.7.2.1 No Action Alternative

No impacts would be expected. Implementation of the no action alternative would not alter the existing water resources at the sites being considered under the Proposed Action,

4.7.2.2 Realignment (Preferred) Alternative

All of the proposed construction projects would fall under the permitting and regulatory requirements of the New York State Standards and Specifications for Erosion and Sediment Control. Prior to construction at any site, a Soil Erosion and Sediment Control Plan and a Storm water permit will be prepared, submitted, and reviewed for approval by the NYSDEC. The following describes the impacts of the Proposed Action on each of the water resource areas described in the preceding section.

Surface Water – Minor adverse impacts would be expected as a result of the construction and operation of the AFRC, AMSA/OMS, MEP area, and the associated POV parking areas. During site preparation, earthworks, and construction activities at the AFRC site, appropriate Best Management Practices (BMP) would be followed to ensure that storm water runoff would not cause or exacerbate erosion or cause sediments to be deposited into nearby water bodies. The new AFRC and associated facilities would increase the amount of impervious surfaces on the proposed site, potentially causing a greater amount of storm water to be discharged into the unnamed stream to the west of the property. The unnamed stream is classified as a non-protected stream (NYSDEC, 2006b; Also see NYSDEC letter in Appendix A). The new facilities would tie into the existing storm water conveyance system, and it is anticipated that the existing system will be able to accommodate the new facilities. There would also be two oil-water separators installed at the new AFRC to minimize the likelihood of pollutants entering the storm water; one associated with the OMS and one associated with the vehicle wash rack. The current AMSA/OMS has a New York State Pollutant Discharge Elimination (NYSPDES) permit, and this permit would

be reapplied for, or modified, as appropriate with the state of New York. Implementation of both storm water controls as necessary under an approved storm water management plan and pollution prevention measures as necessary under an approved pollution prevention plan, would ensure that any potential impacts from an increase in storm water runoff would be minor.

Wetlands – No impacts on wetlands are expected. There are no wetlands located on Stewart-Newburgh. The nearest wetlands are located 750 feet to the southwest of the proposed AFRC site and are not expected to be impacted by site construction or operations. As a result, a permit under Section 404 of the CWA is not required.

Hydrology/Groundwater – Minor adverse impacts would be expected. Oil and antifreeze spills and leaks from vehicle maintenance operations could pose a threat to ground water sources at Stewart-Newburgh. Spills and leaks will be minimized by adherence to safety procedures for vehicle maintenance and the operation of equipment and paving the MEP area will allow for easier detection of any leaks from parked vehicles. Any construction and operation of facilities at the proposed AFRC site would continue to adhere to existing groundwater protection protocols as required under the Safe Drinking Water Act (1974, with amendments 1986) and described in the Guidance for Providing Safe Drinking Water at Army Installations (USACHPPM, 1995). No impacts would be expected as a result of these protocols for the proposed construction and operations under the Proposed Action.

Floodplain – No impacts would be expected. The proposed AFRC site is located within an area of minimal flood hazard and is outside the limits of both the 100 and 500 year flood zones.

Coastal Zone – No impacts would be expected. The proposed AFRC site is not within a Coastal Zone Management Area, and therefore coastal management measures do not apply.

4.8 BIOLOGICAL RESOURCES

4.8.1 Affected Environment

The Stewart-Newburgh property does not contain any sensitive or significant wildlife habitat or resources of federal or state significance or concern. Vegetative resources on Stewart-Newburgh generally support common wildlife species that have adapted to an urban environment (Northern Ecological Associates, 1998).

4.8.1.1 Vegetation

The proposed AFRC site is an urban/industrial setting whose vegetation consists primarily of mowed lawns and ornamental bushes and trees (e.g. maple and oak).

4.8.1.2 Wildlife

The urban/industrial habitat provides limited cover and food for wildlife. A variety of birds adapted to urban settings such as sparrows, starlings, goldfinches can be expected to frequent the site as can mammals such as mice and rabbits. Deer are also known to frequently visit the grounds of Stewart-Newburgh (USAR, 2001).

4.8.1.3 Sensitive Species

The U.S. Fish and Wildlife Service (USFWS) has responsibility for the listing of threatened and endangered species, and they make determinations as to whether formal Section 7 consultations under the ESA are necessary in regards to a Proposed Action. Formal Section 7 consultations are required in the event that there is a possibility of an adverse impact on threatened or endangered species. During the environmental assessment for the divestiture of Stewart Army Subpost in 1999, the USFWS determined that except for occasional transient individuals, no federally-listed or proposed endangered or threatened species were known to exist on the installation, and no federally designated critical and/or significant wildlife habitats were known to exist in the vicinity of the Post (Northern Ecological Associates, 1998). The USFWS was contacted by letter dated June 27, 2006 (see Appendix A) to obtain confirmation that the Proposed Action would not adversely impact any listed species, and that no additional or formal consultation is required under Section 7 of the ESA. The USFWS responded by letter dated July 6, 2006 (see Appendix A) stating that due to staffing shortages "...there would likely be significant delays in our response to your request." In a second correspondence dated October 5, 2006 (see Appendix A) the USFWS indicated that there is potential for the federally- and state-listed endangered Indiana bat (*Myotis sodalis*) to occur within the proposed project area, for there are known roosts and hibernacula approximately 5 and 25 miles from the project area respectively. The USFWS also noted that there is a known bog turtle (*Clemmys muhlenbergii*) site within 10 miles of the proposed project area. The bog turtle is a federally-listed threatened and state-listed endangered species.

The Indiana bat is a medium sized bat that feeds upon insects. Females and juveniles forage in the airspace near the foliage of riparian and floodplain trees, while males forage over floodplain ridges and hillside forests. The bats use limestone caves for winter hibernation, and while summer records are scarce, the bats have been found under bridges, in old buildings, under loose bark, in the hollows of trees and in caves (USFWS, 2006).

The bog turtle is New York's smallest turtle, reaching a maximum size of 4.5 inches. It is semi-aquatic and prefers habitats with cool, shallow, slow moving water, deep soft muck soils, and tussock-forming herbaceous vegetation. In New York, the bog turtle is generally found in open, early successional types of habitats such as wet meadows or open calcareous boggy areas dominated by sedges or sphagnum moss (NYSDEC, 2006a).

For the divestiture of the Stewart Army Subpost in 1999, the NYSDEC also made the determination that there were no known occurrences of New York State designated rare, threatened, endangered, or species of concern in the vicinity of the Post, and that there was no New York State designated critical and/or significant wildlife habitats known to exist in the vicinity of the Post (Northern Ecological Associates, 1998). The NYSDEC was

contacted via letter dated June 27, 2006 (see Appendix A) to obtain confirmation that the Proposed Action would not adversely affect any state listed rare, threatened, or endangered species. The NYSDEC responded by letter dated July 5, 2006 (see Appendix A) indicating that the Proposed Action was within or near records of the upland sand piper (*Bartramia longicauda*), a species listed as threatened by the State of New York. During a follow-up conversation with the NYSDEC (Joule, 2006), it was discussed that given the upland sandpiper's habitat requirements (see below) it is likely that the records of the upland sandpiper in the State's Master Habitat Databank were associated with the open grassy areas of the SIA and not the Stewart-Newburgh property, which is an urban setting with no large expanses of grassy fields.

The upland sandpiper is a slender, moderate-sized shorebird (overall length 280-320 millimeters; mass 97-22 grams) with a small head; large eyes; short and thick dark brown bill; long thin neck; long, yellowish legs; and a relatively long tail. They feed on both insects and grass grain associated with large, open grassy fields. The upland sandpiper inhabits open expanses of grassy fields, hay fields, and mown grassy strips adjacent to runways and taxiways of airports and military bases.

4.8.1.4 Wetlands

The NWI map does not indicate any wetlands within the boundaries of Stewart-Newburgh (Figure 4-2). The NWI does indicate several wetlands to the southwest of the property, including three Palustrine, Emergent, Persistent, Seasonally Flooded/Saturated wetlands totally approximately 20.2 acres; five Palustrine, Forested, Broad-Leaved Deciduous wetlands of various flood regimes totaling approximately 16.0 acres; and one Palustrine, Scrub-Shrub, Broad-Leaved Deciduous/Emergent, Persistent, Semi-permanently Flooded, excavated wetland covering approximately 12.3 acres. The nearest wetland is located 750 feet to the southwest of the proposed AFRC site.

By letter dated July 5, 2006, the NYSDEC indicated the proposed AFRC site is not within or near any state-designated wetlands (see Appendix A).

4.8.2 Environmental Consequences

4.8.2.1 No Action Alternative

Under the No Action Alternative, no impacts on biological resources would occur.

4.8.2.2 Realignment (Preferred) Alternative

Vegetation - Negligible adverse impacts would be expected. The footprint of the AFRC, AMSA, MEP area, and associated POV parking areas would require the removal of a few scattered mature trees.

Wildlife – No adverse impacts would be expected. Diversity of wildlife on-site is limited; species that utilize the Stewart-Newburgh property have adapted to living conditions in urban habitats and are tolerant to human disturbances.

Sensitive Species – No impacts would be expected. No federal or state-listed threatened or endangered species are known to occur within the boundaries of Stewart-Newburgh.

Under the preferred alternative the new AMSA/OMS and MEP area, which are currently located adjacent to the SIA Runway 27 taxiway, would be relocated to the south away from the airport. While the nearby open, grassy fields associated with SIA may provide suitable habitat for the state threatened upland sandpiper, as discussed with the NYSDEC (Joule, 2006), there is no suitable habitat within or adjacent to the preferred site for the new AFRC, AMSA/OMS, MEP area and associated facilities. Given the lack of suitable habitat and the urbanized nature of Stewart-Newburgh as a whole, no impacts on the state listed upland sandpiper would be expected as a result of the preferred alternative to the Proposed Action.

In addition, there is no suitable habitat for the federally-listed Indiana bat or bog turtle on or adjacent to the preferred location for the Proposed Action. The preferred site is previously disturbed with no suitable trees, old buildings, or waterways on or adjacent to it for these species. The nearest known occurrence of the bog turtle is approximately 10 miles away and the nearest known roost of an Indiana bat is approximately 5 miles away. While transient Indiana bats feeding at night might occur in the project area, as discussed with the USFWS (Niver, 2006) the Proposed Action would have no impact on this behavior. Per Section 7 of the ESA, due to the fact that the Department of the Army has determined that the Proposed Action would have no effect on any federally-listed species, no consultation with the USFWS is necessary.

Wetlands – No impacts would be expected. There are no wetlands under federal or state jurisdiction located on or in close proximity to the proposed AFRC construction site.

4.9 CULTURAL RESOURCES

4.9.1 Affected Environment

4.9.1.1 Prehistoric and Historic Background

Prehistoric occupation of New York covers ca. 15,000 B.C. to ca. A.D. 1600 and is divided into three major periods: the Paleo-Indian Period (ca. 15,000 B.C. to ca. 8,000 B.C.), the Archaic Period (ca. 8,000 B.C. to 1,000 B.C.), and the Woodland Period (ca. 1,000 B.C. to A.D. 1600). The Paleo-Indian Period is characterized by small groups of nomadic hunters and gatherers who resided in seasonal or base camps in a cold, dry environment who subsisted on wild plants and animals. Diagnostic fluted projectile points and the exploitation of Pleistocene megafauna are other notable aspects of the period. The Archaic Period was warmer and wetter than the previous period, which resulted in an increasingly forested environment. In response to these climatic changes, stone axes and fishing paraphernalia were used. Late Archaic sites are more common, which indicates an increase in population towards the end of the period. During the Woodland Period there was a shift from nomadic life to one that was more settled. Large villages were settled and sometimes fortified with wood palisades. Domesticated

plants, including corn and bean species, and true fired ceramics are found at Woodland archaeological sites. The Woodland marked the last period before European occupation of the area.

Stewart-Newburgh represents the remnants of a facility initially constructed in the World War II period to provide flight instruction for cadets at the USMA. This training was aimed at addressing the critical shortage of commissioned officer pilots faced by the Army Air Corps (later Army Air Forces) during World War II. The program at Stewart added only a small number of new combat pilots to the Army Air Forces and was perceived to compromise the integrity of the West Point curriculum. As a result, flight training was discontinued at West Point following the war. Several years later, the airfield became Stewart Air Force Base. With this transition, West Point maintained only a small presence at the installation. Initially, the USMA Preparatory School was located there, as were aircraft and facilities of the 2nd Aviation Detachment. With removal of the preparatory school to Fort Belvoir in 1957, West Point presence was limited to the aviation detachment. Following the closure of Stewart Air Force Base in 1969, ownership of the tract reverted to West Point. Most of the property has been leased to tenants, most notably the Metropolitan Transportation Administration. The original barracks and administrative area, as well as post-war housing, were retained by West Point and were used for officer and enlisted personnel housing and a variety of office and administrative functions (Meyer, 1998). In 1999 the USMA disposed of the 402.5 acre Stewart Army Subpost with approximately 260 acres going to the Town of New Windsor, approximately 90 acres to the U.S. Marine Corps, approximately 10 acres to the State of New York, and approximately 41 acres going to the U.S. Army Reserve and becoming the present Stewart-Newburgh USARC.

4.9.1.2 Archaeological Investigations and Historic Architectural Studies

A review of archaeological investigations and historic architectural studies was conducted for the *Stewart-Newburgh USARC: Resource Profile* dated February 2001. The following has been excerpted from the Cultural Resource section of that document (USAR, 2001).

Archaeological Investigations - Site records and cultural resource reports for the Stewart-Newburgh USARC were collected at the Office of Parks, Recreation, and Historic Preservation (OPRHP), New York State. The literature search was conducted by Science Applications International Corporation (SAIC) archeologists Craig Woodman and Laurie Pfeiffer, and included all areas within one-half mile of the facility. Review of these materials indicates that (1) the Stewart-Newburgh USARC has not been surveyed for cultural resources, (2) there have been two surveys and one site excavation performed within one-half mile, and (3) one prehistoric archeological site has been recorded within one-half mile of the 37-acre facility.

Previous Studies. Two surveys and one site excavation have been performed within one-half mile of the Stewart-Newburgh USARC. In 1989, a Stage 1 survey was performed for properties associated with the Stewart Airport. The survey area included a plot of land extending 2500 feet along Perimeter Road, ranging from 100 to 400 feet in width. Ninety-one 40 by 40-centimeter square shovel test units were excavated at 100-foot intervals within the survey area. No cultural materials were observed (Ross, 1989). In 1986, a Stage 1A literature review and

“windshield survey” was performed for 8000 acres of the Stewart Airport Property within the Town of Newburgh, Orange County, New York. According to the literature review, two prehistoric sites have been documented within the survey area. Artifacts recovered from the small encampments date to the Middle Archaic Period. There are 43 historic cultural resources on the airport property including 11 structures from the 18th and 19th centuries, 10 cemeteries, 2 railroads, 1 canal/pond, and 1 aqueduct. There are also 18 historic archeological sites including house sites and farm complexes (Curtin, 1986). Only one of the historic sites listed in the survey report, the Belkap-Montgomery site, is within one-half mile of the Stewart-Newburgh USARC. The site is part of an 18th/19th-century farm complex owned by the Belknap family. Eight 1 by 1 meter test units and an unknown number of shovel test pits were excavated in the south locus of the site. Historically significant and intact deposits were encountered during these excavations. The site is described in more detail below (Leeper & Beauregard, 1987).

Recorded Sites. There is one historically significant archeological site recorded approximately 1700 feet west of the Stewart-Newburgh USARC. The site, A071-15-0120, is the south locus of the Belknap-Montgomery Site. There are surface and subsurface traces of this 18th/19th-century farmstead, owned and operated by the Belknap family. The site that remains in the southern locus includes the foundation of a house, a well, a stone-lined drain, and a trash midden deposit. Excavations at the site revealed mortared and unmortared stone faced with cement and painted plaster along with concrete bricks, a furnace foundation, a metal grate, and a stone-lined terrace (Leeper & Beauregard, 1987).

Historic Architectural Studies - In November 1998, SAIC’s architectural historian, Alexandra C. Cole, conducted archival research at the OPRHP, Peebles Island, NY, to determine if any of the buildings at the U.S. Army Stewart-Newburgh property or within a one-mile radius were eligible for, or listed on, the National Register of Historic Places (NRHP) or the New York State Register of Historic Places.

A 1998 *Draft Environmental Assessment* for divestiture of real estate at the Stewart Army Subpost determined that no architectural resources at the Stewart Newburgh USARC were recommended as eligible for the NRHP. The State Historic Preservation Office (SHPO) concurred with this recommendation (Northern Ecological Associates, Inc., 1998). According to the information at the OPRHP, either no surveys have been undertaken for the larger New Windsor area, or if a survey has been undertaken, no National Register-eligible properties were found within a one-mile radius. In November 1998, the architectural historian also conducted archival research at the repository for real estate at Fort Totten, NY. Real property forms, architectural drawings, site plans, and reports concerning the Stewart-Newburgh USARC/AMSA were collected.

In March 2000, SAIC’s historian, Lex Palmer, conducted field work at the Stewart-Newburgh USARC/AMSA, photographing and describing the buildings and preparing New York State “Building-Structure Inventory Forms” for each. According to his survey, the Stewart-Newburgh property contains 16 buildings and/or structures. The facility is part of the former Stewart Army Subpost of the United States Military Academy at West Point. The buildings are: the USARC (Building 2008), the Hospital Garage (Building 2100), the Heating Plant (Building

2102), the Day Room (Building 2104), the Barracks and Hospital for WAF (Buildings 2106 and 2108), the Barracks for WAF (Building 2122), the Medical Ward for WAF (Building 2124), the Surgical Ward for WAF (Building 2126), the Administration Building for WAF Hospital Complex (Building 2128), the Maintenance Building (2218), the Defueling and Repair Shop (Building 2219), the Warehouse and Vehicle Maintenance Building (Building 2220), the Vehicle Maintenance Building (Building 2221), the Maintenance Building (Building 2228), and Storage for the USAF (Building 2229). The 2100 series buildings were constructed as an Army hospital in 1942. Building 2228 was built in 1942 as well, No. 2220 in 1945, No. 2229 in 1955, No. 2219 in 1965, No. 2221 in 1977, and No. 2008 in 1988.

4.9.1.3 Status of Cultural Resource Inventories and NHPA Section 106 Consultations

In accordance with Section 106 of the NHPA the NYSHPO was contacted via letter dated June 27, 2006 seeking confirmation that the Proposed Action would not significantly impact any cultural resources. By letter dated August 21, 2006 the NYSHPO concurred that the Proposed Action would have “**No Adverse Effect** upon properties in or eligible for inclusion in the National Register of Historic Places.” (see Appendix A)

4.9.1.4 Native American Resources

Stewart-Newburgh is located in the historic territory of the Delaware Indians (USAR, 2001). The nearest Indian reservation is the Poospatuck Reservation, located approximately 80 miles to the southeast (USAR, 2001).

4.9.2 Environmental Consequences

4.9.2.1 No Action Alternative

There would be no impact to cultural resources under the No Action Alternative.

4.9.2.2 Realignment (Preferred) Alternative

Archaeological Resources – None to minor adverse impacts would be expected as a result of the Realignment (Preferred) Alternative. There are no known archaeological resources on Stewart-Newburgh property. However, the property could contain unrecorded archaeological resources in open areas or under paved surfaces, for archaeological resources have been recorded within one-half mile to the west of the Stewart-Newburgh property. If any archaeological resources are found during the construction of the new AFRC facilities it would potentially result in minor adverse impacts. By letter dated August 21, 2006 the NYSHPO indicated that the Proposed action would have no adverse impact on cultural resources (see Appendix A).

Historical Architecture – No impacts would be expected as a result of the Realignment (Preferred Alternative). The majority of the buildings at Stewart-Newburgh were built as an Army hospital during World War II and have been previously determined to be not eligible for the NRHP. By letter dated August 21, 2006 the NYSHPO indicated that the Proposed action would have no adverse impact on cultural resources (see Appendix A).

4.10 SOCIOECONOMICS

Stewart-Newburgh is located in the Town of New Windsor, NY and the socioeconomic ROI encompasses Orange County, New York. This ROI comprises the area in which the predominant socioeconomic impacts of the Proposed Action would take place. The geographical extent of the ROI is based on residential distribution of the installation's military, civilian, and contracting personnel and the location of businesses that provide goods and services to the installation and its employees. Stewart-Newburgh does not provide for housing or temporary billeting of personnel or their dependents.

The baseline year for the socioeconomic analysis is 2006, although much of the economic and demographic data for the ROI are only available through the years 2004 and 2005. The descriptions of affected environment are based on the most recent data available to accurately reflect the current economic and social conditions of the ROI.

The Affected Environment and Environmental Consequences sections for the Socioeconomics resource area of this EA are presented in limited detail. This is due to the fact that the majority of the estimated incoming personnel are reservists that will only report to the new AFRC periodically and they are relocating from facilities already at Stewart-Newburgh or facilities located in the City of Newburgh, which borders the Town of New Windsor, both of which are within the ROI. Topics which are normally addressed under a Socioeconomics resource area which are not being discussed in this EA due to no impact include *Demographics, Housing, Quality of Life* and *Protection of Children*.

4.10.1 Affected Environment

4.10.1.1 Economic Development

Regional Economic Activity – Stewart-Newburgh is situated in the Hudson Valley, a developed regional economy approximately one hour North of New York City. The ROI's regional economy is dominated by non-farm industries such as retail, health care and social services, and government and government enterprises. These sectors provide just over 48 percent of jobs in the region. The construction, manufacturing, public administration, accommodation and food services, and technical and professional services sectors represent moderate contributions to the local economy, or 26 percent of jobs in the ROI. Farm jobs in Orange County contributed only 676 out of the 172,416 jobs recorded in 2004 (USBFA, 2004a).

At 4.2 percent in 2005, the unemployment rate for the ROI is below that of the national unemployment rate of 5.1 percent. It is also below New York State's unemployment rate of 5.0 percent. The ROI annual unemployment rate has increased by more than 23 percent from a low of 3.4 percent in 2000. (USBLS, 2005 and Stats Indiana, 2006a).

4.10.1.2 Environmental Justice

On February 11, 1994, President Clinton issued Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. The Executive Order is designed to focus the attention of federal agencies on the human health and environmental conditions in minority communities and low-income communities. Environmental justice analyses are performed to identify potential disproportionately high and adverse impacts from proposed actions and to identify alternatives that might mitigate these impacts. Data from the U.S Department of Commerce 2000 Census of Population and Housing were used for this environmental justice analysis. Minority populations included in the census are identified as Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, Hispanic, of two or more races, and other. Poverty status, used in this EA to define low-income status, is reported as the number of persons with income below poverty level. The 2000 Census defines the poverty level as \$8,794 of annual income, or less, for an individual, and \$17,603 of annual income, or less, for a family of four.

In 2004, the median household income was \$30,208 for Orange County residents compared to \$38,264 for the State of New York. The poverty rate for Orange County in 2003 was 10.5 percent, less than the national poverty rate of 12.5 percent, and less than New York State's poverty rate of 14.3 percent. In 2000, the total population of Orange County was 341,367 and was comprised of the following ethnic groups: 86.1 percent white, 9.8 percent black, and 14.4 percent Hispanic. The elderly accounted for 12.4 percent of the population (Stats Indiana, 2006b).

4.10.2 Environmental Consequences

EIFS Model Methodology – The economic impacts of implementing the Proposed Action are estimated using the EIFS model, a computer-based economic tool that calculates multipliers to estimate the direct and indirect impacts resulting from a given action. Changes in spending and employment associated with the renovation of housing represent the direct impacts of the action. Based on the input data and calculated multipliers, the model estimates changes in sales volume, income, employment, and population in the ROI, accounting for the direct and indirect impacts of the action.

For purposes of this analysis, a change is considered significant if it falls outside the historical range of ROI economic variation. To determine the historical range of economic variation, the EIFS model calculates a rational threshold value (RTV) profile for the ROI. This analytical process uses historical data for the ROI and calculates fluctuations in sales volume, income, employment, and population patterns. The historical extremes for the ROI become the thresholds of significance (i.e., the RTVs) for social and economic change. If the estimated impact of an action falls above the positive RTV or below the negative RTV, the impact is considered to be significant. Appendix B discusses this methodology in more detail and presents the model input and output tables developed for this analysis.

4.10.2.1 No Action Alternative

Economic Development – No direct or indirect impacts would be expected. Under the No Action Alternative, the installation working population and installation expenditures would remain unchanged from baseline levels. No new construction would take place. Therefore, economic activity levels would be the same as under the baseline conditions.

Environmental Justice – No impacts would be expected. The No Action Alternative would not result in significant adverse impacts to any demographic group residing or working in the economic ROI. Therefore, there would be no disproportionately high and adverse impacts to minority populations or low income populations.

4.10.2.2 Realignment (Preferred) Alternative

Economic Development – Minor direct and indirect beneficial impacts would be expected. The incoming personnel to the Stewart-Newburgh AFRC as a result of the Proposed Action will not be coming from areas outside the ROI; therefore, the construction of the new AFRC facilities on the installation will be the sole contributor to short term increased economic activity due to the associated increase in expenditures on labor and materials during the building period. Described below are the expected impacts that construction under the Proposed Action would generate.

The Proposed Action would generate 152 direct and 328 induced jobs for a total of 480 jobs in the Stewart-Newburgh economic ROI. This increase in employment would represent a 0.33 percent increase in the region's employment levels and would fall far short of the positive RTV of 2.97 percent to make any significant positive difference. It should be noted that the employment associated with construction would be temporary and would only extend through the year 2011. The Proposed Action would also generate positive changes in the other economic indicators estimated by the EIFS model, including a 1.16 percent increase in sales volume, and a 0.24 percent increase in regional personal income. However, once again, these increases are very minor, and do not exceed the positive RTVs for their respective categories.

Environmental Justice – No impacts would be expected. The Proposed Action would not result in significant adverse impacts to any demographic group residing or working in the economic ROI. Therefore, there would be no disproportionately high and adverse impacts to minority populations or low income populations.

4.11 TRANSPORTATION

4.11.1 Affected Environment

4.11.1.1 Roadways and Traffic

The primary access to Stewart-Newburgh is along Bruenig Road, which intersects with NYS Route 207 south of the Stewart-Newburgh property. Bruenig Road is a three-lane, two-way road that originates at the signalized intersection with NYS Route 207. NYS Route 207 is a two-lane rural highway running east-west south of

Stewart-Newburgh. A project to provide new access from I-84 via a new interchange at Drury Lane west of Stewart-Newburgh has been developed, but is currently the subject of litigation. There are no railway facilities, airfields, or helipads at Stewart-Newburgh, though the SIA borders the property and shares access via Bruenig Road.

4.11.1.2 Installation Transportation

Current roadways and POV parking on-site are adequate to meet the existing requirements of 25 full-time employees during weekdays and a peak of approximately 150 to 200 reservists on any given weekend.

4.11.1.3 Public Transportation

The Town of New Windsor has a program that services the Town of New Windsor, the Town of Cornwall and the City of Newburgh. If a resident of these towns makes a reservation one day in advance, they can pay a one dollar fare and travel within these locations. Bus travel is also available by coach service. Five bus companies service the area: Shortline, NJ Transit Line, Leprechaun Lines, Adirondack Travel Lines and Main Line Trolley Bus. The New York Transit Authority also offers several commuter line options, including the Port Jervis Line and the Hudson Valley Line. Amtrak also services the region and has several stops in the area.

4.11.2 Environmental Consequences

4.11.2.1 No Action Alternative

Under the No Action Alternative, no changes as a result of the Proposed Action would occur and current traffic levels and patterns would continue.

4.11.2.2 Realignment (Preferred) Alternative

Implementation of the Proposed Action is expected to result in negligible adverse impacts on traffic levels. With the construction of new POV parking areas, it is projected that the existing infrastructure at Stewart-Newburgh and the surrounding area would be able to accommodate the increase of 50 full-time employees during the week. As a reserve facility, training personnel reporting for reserve duty primarily access the site on drill weekends once a month. However, not all personnel report for duty on the same weekend; rather drill weekends are spread over an entire month. A total of approximately 200 additional reservists will be reporting to the new AFRC for weekend duty under the Proposed Action. Since reservists will not all be reporting on a given weekend, the peak population on the installation is anticipated to only increase to approximately 225 personnel on any given weekend. At most this would represent an increase of approximately 75 personnel from current conditions, and it is projected that with the construction of the proposed POV parking areas the impact on the existing infrastructure would be negligible. Current roads are adequate to accommodate these minor increases without modification.

4.12 UTILITIES

4.12.1 Affected Environment

Local municipal and commercial utility companies provide all utilities for Stewart-Newburgh. Neither the condition nor the capability of the utility infrastructure currently poses a constraint on the installation's operations.

Water, sanitary sewer, and natural gas lines are located along Brooks Street. Water lines are also located on adjacent perimeter streets. There are four transformers on the installation and overhead electric, phone, and cable lines are located on all perimeter streets. The installation is completely served by natural gas. There is no oil heat or underground storage tanks (UST)/above ground storage tanks (AST).

Storm Water System – Stewart-Newburgh has a current Storm Water Pollution Prevention Plan (SWPPP), updated in April 2006, for the Stewart AMSA 8 BMA facility (USAR, 2006). The current AMSA facilities are addressed under the U.S. Army Reserve Group Permit Application No. 383. Site drainage is by overland flow from the AMSA building toward the perimeter of the site, which is curbed, and from the AMSA building toward Perimeter Road. There are a series of seven catch basins located along the perimeter of the area beside and behind the AMSA that are connected in series and discharge into the small unnamed stream that flows along the western and southern perimeter of the site. The unnamed stream eventually conveys the storm water to Beaverdam Lake 4 miles south of the AMSA.

The USEPA General Permit (Part IV.C) requires identification of areas having a high potential for significant soil erosion and selection of measures (BMPs) to remediate those sites. As part of the updated SWPPP it was recommended that the MEP area located to the east of the AMSA be paved because of the high potential for soil contamination from the vehicles and possible erosion and sediment problems (USAR, 2006).

4.12.2 Environmental Consequences

4.12.2.1 No Action Alternative

Under the No Action Alternative, no impacts on utilities would be expected.

4.12.2.2 Realignment (Preferred) Alternative

Negligible impacts would be expected. Utility extensions from existing lines would be required to provide service to the proposed AFRC site. These would result in short-term minor adverse impacts caused by trenching and burial along and potentially in/across roadways; however, no significant utility impacts are expected. System capacities are adequate and distribution is convenient to the site.

Storm Water System – Minor adverse impacts would be expected. The proposed MEP area would be paved, and in combination with the proposed AMSA, AFRC and the associated POV parking areas could cause an increase in the amount of storm water runoff from the site. The new facilities would tie into the existing storm water conveyance system and discharge into the unnamed stream west of the site in the same location as currently

occurs. It is expected that the existing storm water system will be able to accommodate any increase in storm water from the new facilities. Implementation of controls necessary to comply with storm water permits from the state during both construction and operation of these facilities would ensure that any impacts from the increased storm water runoff would be minor.

4.13 HAZARDOUS AND TOXIC SUBSTANCES

4.13.1 Affected Environment

4.13.1.1 Use of Hazardous Materials

The current storage and use of hazardous and toxic materials on Stewart-Newburgh property includes activities carried out by the AMSA vehicle and equipment maintenance shops, which are currently located in Building 2220. Hazardous and toxic materials include vehicle maintenance liquids, painting supplies, cleaning solvents, kerosene, and gasoline. An Installation Spill Contingency Plan (ISCP), and a Hazardous Communication Plan (HAZCOM) discuss and provide guidance on the handling and disposal of hazardous wastes at Stewart-Newburgh.

Activities at the AMSA generate negligible amounts of hazardous wastes (USAR, 2006). In May 1993 a hydraulic lift reservoir leaked approximately 50 gallons of oil in the AMSA. The soil was excavated and landfilled and the tank was replaced (USAR, 2006). The AMSA (designated AMSA 8 BMA) is considered a Resource Conservation and Recovery Act (RCRA) small-quantity hazardous waste generator by the NYSDEC and has been issued a generator identification number of NY4210412553.

There are no USTs or ASTs located on the Stewart-Newburgh property.

4.13.1.2 Storage and Handling Areas

The April 2006 update of the SWPPP included on-site evaluations of waste streams at the AMSA. Observed baseline BMPs included good housekeeping, preventive maintenance, visual inspections, the use of spill kits and other supplies located close to the work area and areas where hazardous materials are stored, a parts cleaning station, and a limited number of areas where hazardous materials are stored.

4.13.1.3 Hazardous Waste Disposal

Minor amounts of hazardous materials are disposed of as a result of routine vehicle maintenance activities at the AMSA. A licensed local hauler is used for transport and disposal of regulated hazardous waste.

4.13.1.4 Site Contamination Cleanup

There are no known contamination sites within the boundaries of Stewart-Newburgh. Prior to, and as a separate action from the Proposed Action, buildings located on the proposed AFRC site (Buildings 2100, 2102, 2104,

2106, 2108, 2222, 2224, 2226, 2228) have been demolished. This action was addressed with a Categorical Exclusion and documented in a Record of Decision.

4.13.2 Environmental Consequences

4.13.2.1 No Action Alternative

No impacts are expected under the No Action Alternative.

4.13.2.2 Realignment (Preferred) Alternative

None to negligible impacts would be expected as a result of the Preferred Alternative. Under the Proposed Action there would likely be no or negligible increases in the amounts of hazardous materials that would be expected to be used, stored, and disposed of at Stewart-Newburgh. Any negligible increase would be due to routine operations at the new AFRC, AMSA/OMS, and MEP area. The small increases would be in operations and with materials that are currently in use at Stewart-Newburgh. However, the new AMSA would be smaller than the current facilities. The current facilities are larger than required, and many of the vehicles that would be relocating from the NY ARNG under the Proposed Action would only be stored at the MEP area and would not necessarily have maintenance performed on them at the AMSA. Depending on operations at the AMSA, the number of waste streams and the amounts of hazardous materials used, stored, or disposed of could be slightly reduced due to greater efficiencies and functional improvements that the AMSA could introduce for vehicle maintenance activities under the overall realignment of units at Stewart-Newburgh. No known contaminated areas are located in proximity to the Preferred Alternative site.

4.14 CUMULATIVE EFFECTS SUMMARY

A cumulative impact is defined as “the impacts on the environment that result from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertake such other actions” (40 CFR 1508.7). The section goes on to note: “such impacts can result from individually minor but collectively significant actions taking place over a period of time.” Cumulative impacts associated with implementation of the realignment (preferred) alternative would include any impacts from other on-going actions that would be incremental to the impacts of constructing the proposed AFRC and realigning units to Stewart-Newburgh.

No additional potential future projects have been identified for Stewart-Newburgh. Upon completion of the Proposed Action the USAR has preliminary plans to excess the property not used for this construction project (Ajodah, 2006a). However, any future use of the property after it is excessed is not known at this time. Subsequent NEPA compliance documentation will be prepared, if necessary, to address any issues related to the potential excessing of buildings and/or property. Such documentation will be prepared when a formal proposal or plan for the excessing and future use of the parcels has been identified.

The SIA is updating its Master Plan to provide a vision for the airport over the next 20 years. Major projects anticipated during the timeframe include passenger terminal improvements, roadway improvements, passenger rail extensions to the airport, a rail layover yard, extension of the runway and new taxiways. However, none of these projects are considered as contributing to possible cumulative effects because they are not in a planning phase yet. In order for these projects to occur, financing would need to be obtained; federal, state and local planning processes would need to be followed; and in some instances land purchases would need to be made.

Another proposed action in the general area is a new interchange for Interstate Highway 84 off of Drury Lane to the west of Stewart-Newburgh. The project is currently being held up in litigation and the outcome is not known.

4.14.1 No Action Alternative

Implementation of the No Action Alternative would avoid new impacts that could interact with the impacts of other past, present, or reasonably foreseeable actions. Therefore, there would be no cumulative impacts associated with the No Action Alternative.

4.14.2 Realignment (Preferred) Alternative

There are currently no known additional projects being undertaken at Stewart-Newburgh or in the surrounding community in the foreseeable future. Therefore there would be no cumulative impacts associated with the Preferred Alternative.

4.15 MITIGATION SUMMARY

None of the predicted effects of the Proposed Action would result in significant impacts; therefore, mitigation is not needed. However, the U.S. Army may consider the use of BMPs in the construction and operation of the AFRC, AMSA/OMS and MEP area, including specific measures to reduce potential erosion, storm water runoff, and sediment transport during site preparation and construction activities.

5.0 FINDING AND CONCLUSIONS

5.1 FINDINGS

5.1.1 Consequences of No Action Alternative

Under the No Action Alternative, the proposed new AFRC and associated facilities would not be constructed, and no environmental impacts would occur.

5.1.2 Consequences of Realignment (Preferred) Alternative

The Proposed Action would not have any significant adverse impacts on any of the environmental or related resource areas at the proposed Stewart-Newburgh AFRC site or to surrounding areas.

The potential impacts associated with the realignment (preferred) alternative are anticipated to be minor and not significant. These impacts would be experienced in the following resource areas:

- Soils
- Surface Waters (Water Resources)
- Hydrology/Groundwater (Water Resources)
- Economic Development (Socioeconomics)
- Storm Water (Utilities)

A summary of impacts by resource area for the no action alternative and the realignment (preferred) alternative is provided in Table 5-1.

5.2 CONCLUSIONS

None of the predicted effects of the Proposed Action would result in significant impacts. Moreover, mitigation would not be necessary to offset impacts. Therefore, the results of the analyses warrant issuance of a Finding of No Significant Impact.

**Table 5-1: Summary of Impacts of
the Proposed Action and the No Action Alternative**

Resource	No Action Alternative	Realignment (Preferred) Alternative
Land Use		
<i>Regional Geographic Setting and Location</i>	None. No significant impact.	None. No significant impact.
<i>Installation Land</i>	None. No significant impact.	None. No significant impact.
<i>Surrounding Land/Airspace Use</i>	None. No significant impact.	Minor Beneficial. No significant impact.
<i>State Coastal Management Program</i>	None. No significant impact.	None. No significant impact.
<i>Current and Future Development in the Region of Influence</i>	None. No significant impact.	None. No significant impact.
Aesthetic and Visual Resources	None. No significant impact.	Negligible Adverse. No significant impact.
Air Quality		
<i>Ambient Air Quality Conditions</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Air Pollutant Emissions at Installation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Regional Air Pollutant Emissions Summary</i>	None. No significant impact.	Negligible Adverse. No significant impact.
Noise	None. No significant impact.	Negligible Adverse short-term impacts due to construction activities. No significant impact.
Geology and Soils		
<i>Geologic and Topographic Conditions</i>	None. No significant impact.	None. No significant impact.
<i>Soils</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Prime Farmland</i>	None. No significant impact.	None. No significant impact.
Water Resources		
<i>Surface Water</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Wetlands</i>	None. No significant impact.	None. No significant impact.
<i>Hydrogeology/Groundwater</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Floodplains</i>	None. No significant impact.	None. No significant impact.
<i>Coastal Zone</i>	None. No significant impact.	None. No significant impact.
Biological Resources		
<i>Vegetation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Wildlife</i>	None. No significant impact.	None. No significant impact.
<i>Sensitive Species</i>	None. No significant impact.	None. No significant impact.
<i>Wetlands</i>	None. No significant impact.	None. No significant impact.

Resource	No Action Alternative	Realignment (Preferred) Alternative
Cultural Resources		
<i>Archaeological</i>	None. No significant impact.	None to Minor Adverse if archaeological resources found during construction. No significant impact.
<i>Historical Architecture</i>	None. No significant impact.	None. No significant impact.
<i>Native American Resources</i>	None. No significant impact.	None. No significant impact.
Socioeconomics		
<i>Economic Development</i>	None. No significant impact.	Minor beneficial impacts as a result of temporary construction jobs. No significant impact.
<i>Environmental Justice</i>	None. No significant impact.	None. No significant impact.
Transportation		
<i>Roadways and Traffic</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Installation Transportation</i>	None. No significant impact.	Negligible Adverse. No significant impact.
<i>Public Transportation</i>	None. No significant impact.	None. No significant impact.
Utilities		
<i>Potable Water Supply</i>	None. No significant impact.	None. No significant impact.
<i>Wastewater System</i>	None. No significant impact.	None. No significant impact.
<i>Storm water System</i>	None. No significant impact.	Minor Adverse. No significant impact.
<i>Energy Sources</i>	None. No significant impact.	None. No significant impact.
<i>Communications</i>	None. No significant impact.	None. No significant impact.
<i>Solid Waste</i>	None. No significant impact.	None. No significant impact.
Hazardous and Toxic Substances		
<i>Uses of Hazardous Materials</i>	None. No significant impact.	None to Negligible Adverse. No significant impact.
<i>Storage and Handling Areas</i>	None. No significant impact.	None. No significant impact.
<i>Hazardous Waste Disposal</i>	None. No significant impact.	None to Negligible Adverse. No significant impact.
<i>Site Contamination and Cleanup</i>	None. No significant impact.	None. No significant impact.

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6.0 LIST OF PREPARERS

U.S. Army Corps of Engineers, Mobile District

Name	Title	Education/Responsibility	Experience
Joseph Hand	BRAC NST Project Manager	B.S.C.E. Civil Engineering. Responsible for the overall management of the BRAC NEPA document preparation.	20 years

U.S. Army 77th Regional Readiness Command

Name	Title	Education/Responsibility	Experience
Ravi Ajodah	Fort Totten Environmental Division	B.S. Environmental Studies M.S. Environmental Technology. Sr. Environmental Scientist responsible for management of the BRAC NEPA document preparation.	8 years

The Louis Berger Group, Inc.

Name	Title	Education/Responsibility	Experience
Erin Andersen	Production Specialist	B.A. Sociology	7 years
Najja Bracey	Economist	M.A. International Relations and Economics. Responsible for Socioeconomic sections and EIFS modeling	4 years
Rebecca Byron	Environmental Scientist	B.S. Environmental Science and Policy. Responsible for Air Quality and Administrative Record.	1 year
Timothy Canan, AICP	Program Manager and Senior Planner	M.U.R.P. Urban and Regional Planning. Responsible for project management and all sections prepared by Louis Berger staff.	17 years
Edward J. Cherian	Project Manager and Senior Planner	M.P.A Public Administration B.A. Public Policy. Responsible for project management and all sections prepared by Louis Berger staff.	19 years
Jess Commerford, AICP	Senior Vice President	B.G.S. Political Science. M.S. Urban and Regional Planning. Responsible for all sections prepared by Louis Berger staff.	17 years
Tim Gaul	Senior Environmental Scientist/GIS Specialist	B.S. Environmental and Forest Biology, M.S. Biology. Responsible for all Geographic Information System analysis and mapping.	7 years
Amanda Goebel	Urban and Regional Planner	B.A. Environmental Science and Biology, M.S. Urban and Regional Planning. Responsible for Air Quality.	6 years
Alan Karnovitz	Senior Economist	B.S. Natural Resource Science, M.P.P. Public Policy. Responsible for all sections prepared by Louis Berger staff.	24 years

Name	Title	Education/Responsibility	Experience
Spence Smith	Marine Scientist	B.A. Zoology. M.A. Biology. Responsible for task management and all sections prepared by Louis Berger staff.	9 years

7.0 AGENCIES CONTACTED

This section identifies local, state and federal agencies that were contacted or consulted during the EA process..

Federal Officials and Agencies

U.S. Fish and Wildlife Service, New York Field Office

State Officials and Agencies

New York State Department of Environmental Conservation, Division of Environmental Permits, Region 3

New York State Department of Environmental Conservation, Threatened and Endangered Species Division

New York State Natural Heritage Program

New York State Office of Parks, Recreation, and Historic Preservation, Historic Preservation Field Services Bureau

Libraries

Newburgh Free Library - 124 Grand Street Newburgh, NY 12550

Cornwall Public Library - 395 Hudson St, Cornwall, NY 12518

Moffat Library - 6 W Main St, Washingtonville, NY 10992

Media

Times Herald-Record (Newburgh, NY)

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9.0 ACRONYMS AND ABBREVIATIONS

ACBM	Asbestos Containing Building Material
AD	anno Domini (in the year of the Lord)
AEPI	Army Environmental Policy Institute
AFRC	Armed Forces Reserve Center
AIRFA	American Indian Religions Freedom Act
AMSA	Area Maintenance Support Activity
ANGB	Air National Guard Base
AQI	Air Quality Index
ARNG	Army National Guard
ARPA	Archaeological Resources Protection Act
AST	Above Ground Storage Tank
AT/FP	Anti-Terrorism/Force Protection
BC	Before Christ
BMP	Best Management Practice
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDP	Comprehensive Development Plan
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERL	U.S. Army Construction Engineering Research Laboratory
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COBRA	Cost Operational Benefits and Requirements Analysis
CUCV	Commercial Utility Combat Vehicle
CWA	Clean Water Act
\$	Dollars
DD	Defense Department
DoD	Department of Defense
DOPAA	Description of Proposed Action and Alternatives

EA	Environmental Assessment
EIFS	Economic Impact Forecast System
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
F	Fahrenheit
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FNSI	Finding of No Significant Impact
FPPA	Farm Protection Policy Act
ft ²	Square Feet
FWPCA	Federal Water Pollution Control Act
FY04	Fiscal Year 2004
HAZCOM	Hazardous Communication Plan
HMMWV	High Mobility Multi-Purpose Wheeled Vehicles
HR	Hour
HVAC	Heating, Ventilation, and Air Conditioning
ISCP	Installation Spill Contingency Plan
km	Kilometer
lb	Pound
lbs	Pounds
m ³	Cubic Meters
MEP	Military Equipment Parking
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxide

NOI	Notice of Intent
NPV	Net Present Value
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
O ₃	Ozone
OMS	Organizational Maintenance Shop
OPRHP	Office of Parks, Recreation, and Historic Preservation
%	Percent
Pb	Lead
PM	Particulate Matter
PM ₁₀	Particulate Matter (particles with a diameter less than or equal to a nominal 10 micrometers)
PM _{2.5}	Particulate Matter (particles with a diameter less than or equal to a nominal 2.50 micrometers)
POV	Privately-Owned Vehicle
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
RRC	Regional Readiness Command
RTV	Rational Threshold Value
SAIC	Science Applications International Corporation
SCF	Standard Cubic Feet
SDWA	Safe Drinking Water Act
Sec.	Section
SHPO	State Historic Preservation Office(r)
SIA	Stewart International Airport
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SWPPP	Storm Water Pollution Prevention Plan
TIP	Transportation Improvement Plan
TSCA	Toxic Substances Control Act
TPY	Tons Per Year

ug	Micrograms
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USMA	U.S. Military Academy
UST	Underground Storage Tank
VOC	Volatile Organic Compound

APPENDIX A — FEDERAL AND STATE COORDINATION LETTERS



The Louis Berger Group Inc.

1001 Elm Street, Suite 203, Manchester, New Hampshire 03101 USA
Tel: (603) 644 - 5200 Fax: (603) 644 - 5220 www.louisberger.com

June 27, 2006

Margaret Duke, Regional Permit Administrator
New York State Department of Environmental Conservation
Division of Environmental Permits
21 South Putt Corners Road
New Paltz, NY 12561-1620

Dear Ms. Duke:

On behalf of the Department of the Army (DA), The Louis Berger Group Inc. is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) at the US Army Reserve (USAR) owned property at Stewart International Airport in New Windsor, NY. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the USAR close the Stewart-Newburgh U.S. Army Reserve Center and relocate the units to a new AFRC on the Stewart Army Sub-Post that could also accommodate New York Army National Guard units from the Readiness Center at Newburgh, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To enable implementation of these recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure at Stewart-Newburgh.

The EA will analyze and document potential environmental effects associated with the U.S. Army's proposed realignment actions at Stewart-Newburgh. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Army Regulation (AR) 200-2; and the Army 2006 Base Realignment and Closure Manual for Compliance with the National Environmental Policy Act.

The proposed AFRC and privately-owned vehicle (POV) parking area would be located on the 2100 block of the Sub-Post. The AFRC would be an approximately 98,000 square feet (ft²) structure located on existing Army-owned land. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four Army Reserve units currently at the Stewart-Newburgh USARC and two NY Army National Guard units. The AFRC site would also include a new civilian vehicle parking lot and security fencing. Additional facilities include an approximately 18,600 ft² Area Maintenance Support Activity (AMSA)/Operational Maintenance Shop (OMS), an approximately 761 ft² unheated storage building and an open military equipment parking (MEP) area. The proposed AMSA/OMS would be located on a parcel of land bounded by Brooks Street to the south and Perimeter Road to the west. This new AMSA/OMS location is immediately to the east of the current AMSA/OMS. Approximately 26,955 ft² of paving will be required for the POV, MEP, and access road modifications.

The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations, concrete floor slabs, structural steel frames, masonry veneer walls, standing seam metal



The Louis Berger Group Inc.

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Tel: (603) 644 - 5200 Fax: (603) 644 - 5220 www.louisberger.com

roofs, HVAC systems, plumbing, mechanical, electrical, and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements. Anti-Terrorism/Force Protection (AT/FP) safety and security regulations will be incorporated into the facility designs and siting.

The DA is initiating this consultation in accordance with NEPA, Endangered Species Act (ESA), and Fish and Wildlife Coordination Act in order to evaluate the potential effects (both beneficial and adverse) associated with implementing this proposed action. The affected areas where the construction of the AFRC and associated parking lot will occur are shown in Enclosures 1 and 2, and we request that your office send us a current listing of state rare, threatened, or endangered species that may occur in the project area. Construction activities will be conducted in accordance with local practices and standards, and based upon information we currently have it is anticipated that the project will not impact any state or federally listed rare, threatened or endangered species or any jurisdictional wetlands. We seek confirmation from the NYS DEC that this BRAC-related action at Stewart-Newburgh does not impact any of the trust resources of the State of New York.

I would like to thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at 603-644-5220. If you have any questions concerning this request, please do not hesitate to contact me at 603-440-3127.

Sincerely,

Edward Cherian
Senior Environmental Planner
The Louis Berger Group Inc.
Manchester, NH

cc Ravi Ajodah

Enclosures

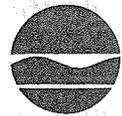
New York State Department of Environmental Conservation

Division of Environmental Permits, Region 3

21 South Putt Corners Road, New Paltz, New York 12561-1620

Phone: (845) 256-3054 • FAX: (845) 255-3042

Website: www.dec.state.ny.us



Denise M. Sheehan
Commissioner

EDWARD CHERIAN.

Date: July 5, 2006

THE LOUIS BERGER GROUP, INC.

1001 ELM STREET, SUITE 203

MANCHESTER NEW HAMPSHIRE 03101

RE: ARMED FORCES RESERVE CENTER - STEWART AIRPORT (SEE ATTACHED MAP)

Location: T/ NEWBURGH, ORANGE County

Dear MR. CHERIAN:

Based upon our review of your inquiry dated JUNE 27, 2006, we offer the following comments:

PROTECTION OF WATERS

The following stream(s)/pond(s)/waterbody(ies) is(are) located within or near the site you indicated:

Name	Class	DEC Water Index Number	Status
<u>TRIB. OF BEAVERDAM LAKE</u>	<u>[C]</u>	<u>H-89-12-9234</u>	[Protected, <u>non-protected</u> , navigable]
	[]		[Protected, non-protected, navigable]

A Protection of Waters permit is required to physically disturb the bed or banks (up to 50 feet from stream) of any streams identified above as "protected." A permit is not required to disturb the bed or banks of "non-protected" streams.

A Protection of Waters permit is required for any excavation or filling below the mean high water line of any waterbodies identified above as "navigable."

There are no waterbodies that appear on our regulatory maps at the location/project site you identified. Therefore, if there is a stream or pond outlet present at the site with year-round flow, it assumes the classification of the watercourse into which it feeds, _____, Class " _____ ", and a Protection of Waters permit is/is not required. If there is a stream or pond outlet present at the site that runs intermittently (seasonally), it is not protected, and a Protection of Waters permit is not required.

If a permit is not required, please note, however, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

FRESHWATER WETLANDS

Your project/site is near or in Freshwater Wetland _____, Class _____. Be aware that a Freshwater Wetlands permit is required for any physical disturbance within these boundaries or within the 100 foot adjacent area. To have the boundary delineated, please read the attached notice.

Your project/site is not within a New York State protected Freshwater Wetland. However, please contact your town officials and the United States Army Corps of Engineers in New York City, telephone (917) 790-8511 (Westchester/Rockland Counties), or (917) 790-8411 (other counties), for any permitting they might require.

STATE-LISTED SPECIES

DEC has reviewed the State's Master Habitat Databank (MHDB) records. We have determined that the site is located within or near record(s) of the following state-listed species: UPLAND SAND PIPER (THREATENED). If your inquiry is related to a specific development project, additional evaluation of the potential impacts of this project related to the sensitive resource(s) identified by this review, may be required. Please contact the person noted below.

MR. STEVE JOULE AT 845-256-3089

No records of sensitive resources were identified by this review.

OTHER: _____

Please note that this letter only addresses the requirements for the following permits from the Department:

- Freshwater Wetlands
- Master Habitat Databank
- Other: _____
- Protection of Waters

and that other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and you should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year unless you are otherwise notified. Applications may be downloaded from our website at www.dec.state.ny.us under "Programs" then "Division of Environmental Permits."

Please contact this office if you have questions regarding the above information. Thank you.

Sincerely,

Scott E. Sheeley
SCOTT E. SHEELEY

Division of Environmental Permits
Region 3, Telephone No. 845/256-3050

- Information/Permit Materials/Regulations/Map (NEWBURGH AND CORNWALL Quadrangle) Attached.
- Web page information
- NYC DEP Contact Information (this site is within the NYC Watershed).

cc: _____

NOTE: Regarding erosion/sedimentation control requirements:

Stormwater discharges now require a SPDES Stormwater permit from this Department if they either:

- occur at industrial facilities and contain either toxic contaminants or priority pollutants OR
- result from construction projects involving the disturbance of one (1) or more acres of land.

Your project may be covered under one of two Statewide General Permits or may require an individual permit. If you believe your project would be covered under one of the General Permits and does not require any other DEC permits you may apply for coverage by filing a Notice of Intent with NYSDEC, Division of Water, 625 Broadway, Albany NY 12233-3505, (forms & permits available from this office or DEC Website at www.dec.state.ny.us or call 518-402-8109). If your project involves other DEC permits, please contact the regional Division of Environmental Permits office (see above).



Newburgh Quad
 Cornwall Quad

FINAL FRESHWATER WETLANDS MAP
 Orange COUNTY

Prepared pursuant to Article 24 of the
 Environmental Conservation Law

NYS Department of Environmental Conservation

FILED DATE: 8/25/88, 3/25/87

(LAST REVISED: _____)

APPROXIMATE SCALE: 1 INCH EQUALS 2000 FEET

(All Wetland Boundaries Are Approximate)



The Louis Berger Group Inc.

1001 Elm Street, Suite 203, Manchester, New Hampshire 03101 USA
Tel: (603) 644 - 5200 Fax: (603) 644 - 5220 www.louisberger.com

June 27, 2006

Robyn Niver
U.S. Fish and Wildlife Service
New York Field Office
3817 Luker Road
Cortland, NY 13045-9349

Dear Ms. Niver:

On behalf of the Department of the Army (DA), The Louis Berger Group Inc. is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) at the US Army Reserve (USAR) owned property at Stewart International Airport in New Windsor, NY. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the USAR close the Stewart-Newburgh U.S. Army Reserve Center and relocate the units to a new AFRC on the Stewart Army Sub-Post that could also accommodate New York Army National Guard units from the Readiness Center at Newburgh, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To enable implementation of these recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure at Stewart-Newburgh.

The EA will analyze and document potential environmental effects associated with the U.S. Army's proposed realignment actions at Stewart-Newburgh. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Army Regulation (AR) 200-2; and the Army 2006 Base Realignment and Closure Manual for Compliance with the National Environmental Policy Act.

The proposed AFRC and privately-owned vehicle (POV) parking area would be located on the 2100 block of the Sub-Post. The AFRC would be an approximately 98,000 square feet (ft²) structure located on existing Army-owned land. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four Army Reserve units currently at the Stewart-Newburgh USARC and two NY Army National Guard units. The AFRC site would also include a new civilian vehicle parking lot and security fencing. Additional facilities include an approximately 18,600 ft² Area Maintenance Support Activity (AMSA)/Operational Maintenance Shop (OMS), an approximately 761 ft² unheated storage building and an open military equipment parking (MEP) area. The proposed AMSA/OMS would be located on a parcel of land bounded by Brooks Street to the south and Perimeter Road to the west. This new AMSA/OMS location is immediately to the east of the current AMSA/OMS. Approximately 26,955 ft² of paving will be required for the POV, MEP, and access road modifications.

The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations, concrete floor slabs, structural steel frames, masonry veneer walls, standing seam metal roofs, HVAC systems, plumbing, mechanical, electrical, and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment



The Louis Berger Group Inc.

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the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements. Anti-Terrorism/Force Protection (AT/FP) safety and security regulations will be incorporated into the facility designs and siting.

The DA is initiating this consultation in accordance with Section 7 of the Endangered Species Act (ESA) in order to evaluate the potential effects (both beneficial and adverse) associated with implementing this proposed action. The affected areas where the construction of the AFRC and associated parking lot will occur are shown in Enclosures 1 and 2, and we request that your office send us a current listing of federally threatened or endangered species that may occur in the project area. Construction activities will be conducted in accordance with local practices and standards, and based upon information we currently have it is anticipated that the project will not impact any federally listed threatened or endangered species. We seek confirmation from the USFWS that no additional or formal consultation under Section 7 of the ESA is required for the proposed BRAC-related action at Stewart-Newburgh.

I would like to thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at 603-644-5220. If you have any questions concerning this request, please do not hesitate to contact me at 603-440-3127.

Sincerely,

Edward Cherian
Senior Environmental Planner
The Louis Berger Group Inc.
Manchester, NH

cc Ravi Ajodah

Enclosures



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office

3817 Luker Road

Cortland, NY 13045

Phone: (607) 753-9334 Fax: (607) 753-9699



July 6, 2006

We have received your request to review your project for potential presence of Federally-listed threatened or endangered species or critical habitat. Due to the loss of two-thirds of our endangered species staff to retirement, there will likely be significant delays in our response to your request. We are presently unable to determine the length of this delay and appreciate your patience and understanding during this time. For additional information on Federally-listed species, please visit our website at <http://www.fws.gov/northeast/nyfo/es/esdesc.htm>. We are planning to update our endangered species pages to provide additional technical assistance to applicants, consultants, and other Federal agencies in the near future.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

October 5, 2006

Mr. Edward Cherian
Senior Environmental Planner
The Louis Berger Group Inc.
1001 Elm Street, Suite 203
Manchester, NH 03101

Dear Mr. Cherian:

This responds to your June 27, 2006, letter requesting information on the presence of endangered or threatened species within the vicinity of proposed construction of an Armed Forces Reserve Center located at the Stewart International Airport in the Town of New Windsor, Orange County, New York. As you are aware, Federal agencies, including the Department of the Army (DA) have responsibilities under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) to consult with the U.S. Fish and Wildlife Service (Service) regarding projects that may affect Federally-listed species or "critical habitat," and confer with the Service regarding projects that may affect Federally-proposed species or proposed "critical habitat." Should the DA wish to have The Louis Berger Group Inc. consult directly with the FWS on their behalf, the DA should designate The Louis Berger Group Inc. as their non-Federal representative in writing (See 50 CFR Part 402.08).

There is potential for the Federally- and State-listed endangered Indiana bat (*Myotis sodalis*) to occur within the proposed project area, which is approximately 5 miles from known roosts and approximately 25 miles from known hibernacula in Ulster County. In addition, there is potential for the Federally-listed threatened and State-listed endangered bog turtle (*Clemmys muhlenbergii*) to occur within the proposed project area, which is within 10 miles of a known bog turtle site. Please visit our website for more information on Indiana bats and bog turtles.*

Except for the potential for Indiana bat, bog turtle, and occasional transient individuals, no other Federally-listed or proposed endangered or threatened species or candidate species under our jurisdiction are known to exist in the project action area. In addition, no habitat in the project area is currently designated or proposed "critical habitat" in accordance with provisions of the ESA. Should project plans change, or if additional information on listed or proposed species or critical habitat becomes available, this determination may be reconsidered. The most recent compilation of Federally-listed and proposed endangered and threatened species in New York is available for your information.* Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.*

The above comments pertaining to endangered species under our jurisdiction are provided as technical assistance pursuant to the ESA and do not constitute consultation. This response does not preclude additional Service comments under other legislation.

As stated above, the Indiana bat and bog turtle are listed as endangered by the State of New York. Any additional information regarding the project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC contact for the Endangered Species Program is Mr. Peter Nye, Endangered Species Unit, 625 Broadway, Albany, NY 12233 (telephone: [518] 402-8859).

For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate NYSDEC regional office(s) and the New York Natural Heritage Program Information Services.*

Since wetlands, ponds, and/or streams may be present, you may want to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool.* However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act, the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

Thank you for your time. If you require additional information please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this project should reference project file 61397.

Sincerely,



David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at:
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

cc: NYSDEC, New Paltz, NY (Attn: S. Joule/A. Ciesluk)
NYSDEC, Albany, NY (Endangered Species; Attn: P. Nye)
NYSDEC, Albany, NY (Natural Heritage)
COE, New York, NY

The Historic Preservation Review Process in New York State

In order to insure that historic preservation is carefully considered in publicly-funded or permitted undertakings*, there are laws at each level of government that require projects to be reviewed for their potential impact/effect on historic properties. At the federal level, Section 106 of the National Historic Preservation Act of 1966 (NHPA) directs the review of federally funded, licensed or permitted projects. At the state level, Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law of 1980 performs a comparable function. Local environmental review for municipalities is carried out under the State Environmental Quality Review Act (SEQRA) of 1978.

regulations on line at:

<http://nysparks.com> then select **HISTORIC PRESERVATION** then select **Environmental Review**

Project review is conducted in two stages. First, the Field Services Bureau assesses affected properties to determine whether or not they are listed or eligible for listing in the New York State or National Registers of Historic Places. If so, it is deemed "historic" and worthy of protection and the second stage of review is undertaken. The project is reviewed to evaluate its impact on the properties significant materials and character. Where adverse effects are identified, alternatives are explored to avoid, or reduce project impacts; where this is unsuccessful, mitigation measures are developed and formal agreement documents are prepared stipulating these measures.

ALL PROJECTS SUBMITTED FOR REVIEW SHOULD INCLUDE THE FOLLOWING MATERIAL(S).

Project Description

Attach a full description of the nature and extent of the work to be undertaken as part of this project. Relevant portions of the project applications or environmental statements may be submitted.

Maps Locating Project

Include a map locating the project in the community. The map must clearly show street and road names surrounding the project area as well as the location of all portions of the project. Appropriate maps include tax maps, Sanborn Insurance maps, and/or USGS quadrangle maps.

Photographs

Photographs may be black and white prints, color prints, or color laser/photo copies; standard (black and white) photocopies are NOT acceptable.

-If the project involves rehabilitation, include photographs of the building(s) involved. Label each exterior view to a site map and label all interior views.

-If the project involves new construction, include photographs of the surrounding area looking out from the project site. Include photographs of any buildings (more than 50 years old) that are located on the project property or on adjoining property.

NOTE: Projects submissions will not be accepted via facsimile or e-mail.

***Undertaking** is defined as an agency's purchase, lease or sale of a property, assistance through grants, loans or guarantees, issuing of licenses, permits or approvals, and work performed pursuant to delegation or mandate.



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June 27, 2006

Mr. John Bonafide, Historic Preservation Services Coordinator
New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island State Park
PO Box 189
Waterford, New York 12188-0189

Dear Mr. Bonafide:

On behalf of the Department of the Army (DA), The Louis Berger Group Inc. is preparing an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center (AFRC) at the US Army Reserve (USAR) owned property at Stewart International Airport in New Windsor, NY. On September 8, 2005, the Defense Base Realignment and Closure Commission ("BRAC Commission") recommended that the USAR close the Stewart-Newburgh U.S. Army Reserve Center and relocate the units to a new AFRC on the Stewart Army Sub-Post that could also accommodate New York Army National Guard units from the Readiness Center at Newburgh, NY. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. To enable implementation of these recommendations, the U.S. Army proposes to provide the necessary facilities to support the changes in force structure at Stewart-Newburgh.

The EA will analyze and document potential environmental effects associated with the U.S. Army's proposed realignment actions at Stewart-Newburgh. The EA is being prepared in strict accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508); Army Regulation (AR) 200-2; and the Army 2006 Base Realignment and Closure Manual for Compliance with the National Environmental Policy Act.

The proposed AFRC and privately-owned vehicle (POV) parking area would be located on the 2100 block of the Sub-Post. The AFRC would be an approximately 98,000 square feet (ft²) structure located on existing Army-owned land. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four Army Reserve units currently at the Stewart-Newburgh USARC and two NY Army National Guard units. The AFRC site would also include a new civilian vehicle parking lot and security fencing. Additional facilities include an approximately 18,600 ft² Area Maintenance Support Activity (AMSA)/Operational Maintenance Shop (OMS), an approximately 761 ft² unheated storage building and an open military equipment parking (MEP) area. The proposed AMSA/OMS would be located on a parcel of land bounded by Brooks Street to the south and Perimeter Road to the west. This new AMSA/OMS location is immediately to the east of the current AMSA/OMS. Approximately 26,955 ft² of paving will be required for the POV, MEP, and access road modifications.

The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations, concrete floor slabs, structural steel frames, masonry veneer walls, standing seam metal



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roofs, HVAC systems, plumbing, mechanical, electrical, and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements. Anti-Terrorism/Force Protection (AT/FP) safety and security regulations will be incorporated into the facility designs and siting.

A previous Cultural Resources Study at the Stewart Army Sub-Post that was reviewed and approved by the New York State Historic Preservation Office (SHPO) indicated that the proposed construction site (Enclosures 1 and 2) did not contain cultural resources that were eligible for listing on the National Register. This was evaluated under Project #: 97PR0561 and re-evaluated under Project #: 04PR01453 (Enclosure 3). Based on the conclusions of these previous projects, it is believed that the proposed undertaking will not have significant effects on cultural resources. In accordance with NEPA and Section 106 of the National Historic Preservation Act (NHPA), an evaluation of the potential impacts associated with implementing this action is required. We are requesting your further input concerning this action with regard to any cultural resource concerns.

I would like to thank you in advance for your cooperation in this matter. Please provide any comments to me at the address listed above or fax your response to my attention at 603-644-5220. If you have any questions concerning this request, please do not hesitate to contact me at 603-440-3127.

Sincerely,

Edward Cherian
Senior Environmental Planner
The Louis Berger Group Inc.
Manchester, NH

cc Ravi Ajodah

Enclosures



New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Pebbles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

August 21, 2006

Edward Cherian
Senior Environmental Planner
Louis Berger Group Inc.
1001 Elm Street, Suite 203
Manchester, NH 03101

Re: **ARMY/DEC**
Reserve Center/Army
BRAC 200 (new construction)
New Windsor, Orange County
06PR04489

Dear Mr. Cherian:

Thank you for requesting the comment of the State Historic Preservation Office (SHPO). We have had an opportunity to review the project in accordance with Section 106 of the National Historic Preservation Act of 1966 and relevant implementing regulations.

Based upon our review, it is the SHPO's opinion that the project will have **No Adverse Effect** upon properties in or eligible for inclusion in the National Register of Historic Places.

If you have any questions regarding this letter, please feel free to contact me at your convenience. Ext. 3273.

Sincerely,

Kenneth Markunas
Historic Sites
Restoration Coordinator

Cc: Ravi Ajodah, 77th Army Reserve Installation Management
DEC, Region 3

**APPENDIX B— ECONOMIC IMPACT
FORECAST SYSTEM (EIFS) MODEL**

ECONOMIC IMPACT FORECAST SYSTEM (EIFS) MODEL

SOCIOECONOMIC IMPACT ASSESSMENT

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls and local procurement contribute to the economic base for the region of influence (ROI). In this regard, the BRAC realignment actions proposed for Stewart-Newburgh would have a multiplier effect on the local and regional economy. With the Proposed Action, direct jobs would be created, generating new income and increasing personal spending. This spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services.

THE ECONOMIC IMPACT FORECAST SYSTEM

The U.S. Army, with the assistance of many academic and professional economists and regional scientists, developed the Economic Impact Forecast System (EIFS) to address the economic impacts of NEPA-requiring actions and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS should be used in NEPA assessments for RCI. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in the EIFS model are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS is developed under a joint project of the U.S Army Corps of Engineers (USACE), the U.S. Army Environmental Policy Institute (AEPI), and the Computer and Information Science Department of Clark Atlanta University, Georgia. EIFS is an on-line system, and the EIFS Web application is hosted by the USACE, Mobile District. The system is available to anyone with an approved user-id and password. University staff and the staff of USACE, Mobile District are available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to define an economic ROI by identifying the counties, parishes, or cities to be analyzed. Once the ROI is defined, the system aggregates the data, calculates multipliers and other variables used in the various models in EIFS, and prompts the user for forecast input data.

THE EIFS MODEL

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to basic economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future

changes in economic activity can be forecast. This technique is especially appropriate for estimating aggregate impacts and makes the economic base model ideal for the EA and EIS process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its base sector; for example, a dollar increase in local expenditures due to an expansion of its military installation. EIFS estimates its multipliers using a location quotient approach based on the concentration of industries within the region relative to the industrial concentrations for the nation.

The user inputs into the model the data elements which describe the Army action: the change in expenditures, or dollar volume of the construction project(s); change in civilian or military employment; average annual income of affected civilian or military employees; the percent of civilians expected to relocate due to the Army’s action; and the percent of military living on-post. Once these are entered into the EIFS model, a projection of changes in the local economy is provided. These are projected changes in sales volume, income, employment, and population. These four indicator variables are used to measure and evaluate socioeconomic impacts. Sales volume is the direct and indirect change in local business activity and sales (total retail and wholesale trade sales, total selected service receipts, and value-added by manufacturing). Employment is the total change in local employment due to the Proposed Action, including not only the direct and secondary changes in local employment, but also those personnel who are initially affected by the military action. Income is the total change in local wages and salaries due to the Proposed Action, which includes the sum of the direct and indirect wages and salaries, plus the income of the civilian and military personnel affected by the Proposed Action. Population is the increase or decrease in the local population as a result of the Proposed Action.

THE SIGNIFICANCE OF SOCIOECONOMIC IMPACTS

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the significance of the impacts. This analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, income, employment, and population. These evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that provide a basis for comparing an action’s impact on the historical fluctuation in a particular area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

		Increase	Decrease
Sales Volume	X	100%	75%
Income	X	100%	67%
Employment	X	100%	67%
Population	X	100%	50%

These boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary, but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although the zero-growth concept is being accepted by many local planning groups, military base reductions and closures generally are more injurious to local economics than are expansion.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS impact model, in combination with the RTV, has proven successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

The following are the EIFS inputs and output data and the RTVs for the ROI. These data form the basis for the socioeconomic impact analysis presented in Section 4.10

EIFS REPORT STEWART-NEWBURG

FORECAST INPUT

Change In Local Expenditures	\$42,611,000
Change In Civilian Employment	0
Average Income of Affected Civilian	\$0
Percent Expected to Relocate	0
Change In Military Employment	0
Average Income of Affected Military	\$0
Percent of Military Living On-post	0

FORECAST OUTPUT

Employment Multiplier	3.15	
Income Multiplier	3.15	
Sales Volume – Direct	\$29,083,700	
Sales Volume – Induced	\$62,529,960	
Sales Volume – Total	\$91,613,660	1.16%
Income – Direct	\$5,874,582	
Income - Induced)	\$12,630,350	
Income – Total (place of work)	\$18,504,940	0.24%
Employment – Direct	152	
Employment – Induced	328	
Employment – Total	480	0.33%
Local Population	0	
Local Off-base Population	0	0%

RTV SUMMARY

	Sales Volume	Income	Employment	Population
Positive RTV	13.14 %	11.4 %	2.97 %	1.01 %
Negative RTV	-6.02 %	-4.58 %	-3.64 %	-0.69 %

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APPENDIX C— AIR QUALITY APPLICABILITY ANALYSIS

AIR QUALITY APPLICABILITY ANALYSIS

This air quality applicability analysis was conducted to identify potential increases or decreases in criteria air pollutant emissions associated with the proposed realignment of Stewart-Newburgh, New York. Since the Proposed Action will occur within a U.S. Environmental Protection Agency (EPA) designated ozone and particulate matter (2.5 microns [PM_{2.5}]) non-attainment area, it is subject to the federal conformity requirements. The purpose of the analysis is to further determine the applicability of the Federal General Conformity Rule established in 40 CFR, Part 93 entitled: *Determining Conformity of Federal Actions to State or Federal Implementation Plans* to the action.

The federal conformity rules were established to ensure that federal activities do not hamper local efforts to control air pollution. In particular, Section 176(c) of the Clean Air Act (CAA) prohibits federal agencies, departments or instrumentalities from engaging in, supporting, licensing, or approving any action in an area that is in non-attainment of the National Ambient Air Quality Standards (NAAQS), which does not conform to an approved state or federal implementation plan. Therefore, the agency must determine whether or not the project would interfere with the clean air goals in the State Implementation Plan (SIP).

1.0 PROJECT DESCRIPTION

The following describes the Base Realignment and Closure (BRAC)-related projects assessed in this Environmental Assessment (EA).

The Armed Forces Reserve Center (AFRC) would be an approximately 80,000 square feet (ft²) 2-story structure located on existing Army-owned land. The AFRC would provide adequate space for 400 personnel for training, classrooms, assembly, library, learning center, vault, weapons simulator, physical fitness areas, offices, administrative and other support spaces. The AFRC will be the primary facility for the four Army Reserve units currently at the Stewart-Newburgh USARC facility and two NY Army National Guard units. The AFRC site would also include a new privately-owned vehicle (POV) lot and security fencing. Additional facilities include an approximately 14,000 ft² Organizational Maintenance Shop (OMS) and Area Maintenance Support Activity (AMSA), an approximately 850 ft² unheated storage building and an open military equipment parking (MEP) area. Approximately 135,000 ft² of paving will be required for the POV, MEP area, and access road modifications.

The AFRC and AMSA/OMS structures would be permanent construction with reinforced concrete foundations, concrete floor slabs, structural steel frames, masonry veneer walls, standing seam metal roofs, HVAC systems, plumbing, mechanical, electrical, and security systems. The facilities would be located on previously disturbed land. Supporting improvements are also proposed to compliment the facilities, including walkways, grading, clearing and landscaping, extension of utility services, security fencing and gates, and general site improvements. Anti-Terrorism/Force Protection (AT/FP) safety and security regulations will be incorporated into the facility designs and siting.

2.0 METEOROLOGY/CLIMATE

Temperature is a parameter used in calculations of emissions for air quality applicability. Climate in the Hudson Valley varies seasonally, but is regulated to an extent by the Hudson River. The mean temperature in Orange County is 55 degrees Fahrenheit (F) (NSYCO 2006).

3.0 CURRENT AMBIENT AIR QUALITY CONDITIONS

The EPA has classified the Poughkeepsie area, including the area of the Proposed Action (Queens County, New York), as being in non-attainment for the criteria pollutant PM_{2.5}, and in moderate non-attainment for the criteria pollutant ozone

4.0 AIR QUALITY REGULATORY REQUIREMENTS

The EPA defines ambient air in 40 CFR Part 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the CAA and the 1977 and 1990 Clean Air Act Amendments (CAAA), the EPA has promulgated NAAQS. The NAAQS were enacted for the protection of the public health and welfare, allowing for an adequate margin of safety. To date, the EPA has issued NAAQS for six criteria pollutants: carbon monoxide (CO), sulfur dioxide (SO₂), particles with a diameter less than or equal to a nominal 10 micrometers (PM₁₀), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb). The EPA promulgated a standard for fine particulates (PM_{2.5}) in April 2005; however, PM_{2.5} *de minimis* thresholds are not yet finalized. Areas that do not meet NAAQS are called non-attainment areas.

The EPA classified the Poughkeepsie area, including the project area, as in moderate non-attainment for ozone and non-attainment for PM_{2.5}. The NAAQS for both pollutants are presented in Table C-1.

Table C-1: Ambient Air Quality Standards for Ozone and Particulate Matter (PM_{2.5})

Pollutant	Federal Standard	New York Standard ²
Ozone (O ₃) ¹ 8-Hour Average	0.08 ppm	0.08 ppm
Particulate Matter (PM _{2.5}) ¹ 24-Hour Average	65 µg/m ³	250 µg/m ³
Annual Arithmetic Mean	15 µg/m ³	45 µg/m ³

ppm = parts per million; ug/m³ = micrograms per cubic meter

¹ Federal primary and secondary standards for this pollutant are identical.

² New York standards are for suspended particulates, including PM₁₀

Source: EPA 2006; NYSDEC 2004

To regulate the emission levels resulting from a project, federal actions located in non-attainment areas are required to demonstrate compliance with the general conformity guidelines established in 40 CFR Part 93 *Determining Conformity of Federal Actions to State or Federal Implementation Plans* (the Rule). The project area is located within a PM_{2.5} non-attainment area and a moderate ozone non-attainment area; therefore, a General Conformity Rule applicability analysis is required.

Section 93.153 of the Rule sets applicability requirements for projects subject to the Rule through establishment of *de minimis* levels for annual criteria pollutant emissions. These *de minimis* levels are set according to criteria pollutant non-attainment area designations. Projects below the *de minimis* levels are not subject to the Rule. Those at or above the levels are required to perform a conformity analysis as established in the Rule. The *de minimis* levels apply to direct and indirect sources of emissions that can occur during the construction and operational phases of the action.

Direct emissions are those caused by, or initiated by, the federal action that occur at the same time and place as the action. Indirect emissions are those caused by the action, but which occur later in time and/or at a distance removed from the action itself, yet are reasonably foreseeable and the federal agency responsible for the action can maintain control as part of the actions program responsibility. To determine the applicability of the Rule to this action, emissions must be estimated for PM_{2.5} and for the ozone precursor pollutants nitrogen oxides (NO_x) and volatile organic compounds (VOC). Annual emissions for these compounds were estimated for the project to determine if it would be below or above the *de minimis* levels established in the Rule. The *de minimis* for moderate ozone areas is 50 tons per year (TPY) for VOCs and 100 TPY for NO_x.

As mentioned above, the EPA is in the process of promulgating the rules governing an applicability analysis for PM_{2.5} and the *de minimis* levels. During the interim period, the EPA believes it is appropriate for Federal agencies to use the PM₁₀ *de minimis* level of 100 TPY as a surrogate for PM_{2.5} *de minimis* levels in their General Conformity applicability analysis. Since PM_{2.5} emissions are a subset of PM₁₀ emissions, PM_{2.5} emissions will always be less than PM₁₀ emissions. Under the EPA's guidance, if an action causes direct or indirect emissions of PM_{2.5}, a General Conformity determination would be required if annual emissions exceed the 100 TPY threshold.

In addition to the evaluation of air emissions against *de minimis* levels, emissions are also evaluated for regional significance. A federal action that does not exceed the threshold emission rates of criteria pollutants may still be subject to a general conformity determination if the direct and indirect emissions from the action exceed 10% of the total emissions inventory for a particular criteria pollutant in a non-attainment or maintenance area. If the emissions exceed this 10% threshold, the federal action is considered to be a "regionally significant" activity, and thus, the general conformity rules apply.

5.0 CONFORMITY APPLICABILITY ANALYSIS

This project construction- and operations-related General Conformity analysis needs to be performed for the Proposed Action at Stewart-Newburgh. This conformity analysis and air emissions evaluation will follow the criteria regulated in *40 CFR Parts 6, 51, and 93, Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule* (November 30, 1993).

5.1 CONSTRUCTION PHASE EMISSIONS

Construction emissions would result from the operation of heavy equipment, the commuter vehicle traffic from the construction crew, and the painting of building structures and parking spaces. The project would utilize a mix of heavy equipment for construction, mainly associated with preparing the site for the building and utility relocation.

5.1.1 Emissions from Heavy Equipment

Annual emissions were calculated for various types of diesel construction vehicles using the EPA's document *Exhaust Emission Factors for Nonroad Engine Modeling—Compression-Ignition* (Report No. NR-009A, 1998). Truck emission levels were calculated using the EPA's *MOBILE6* model for an average temperature of 52 degrees F. The total annual emissions, in tons per year, were determined for each vehicle type based on the number of vehicles used and the number of operating hours per year. It was assumed that construction activities for the building would last approximately 36 months (720 workdays). Construction personnel were assumed to commute an average of 50 miles per day over the 36 months. Emissions factors used for construction vehicles, under the preferred alternative, are shown in Table C-2.

Table C-2: Emissions Factors for Construction Vehicles

Construction Vehicle Type	Emissions Factors lbs/hr-vehicle		
	PM ₁₀	NO _x	VOC
Grader	0.134	1.53	0.116
Concrete Truck	0.190	2.94	0.225
Front End Loader	0.238	3.45	0.198
Paver	0.109	1.30	0.100
Vibratory Roller	0.125	1.49	0.112
Pneumatic Tire Roller	0.122	0.94	0.097
Steel Wheel Roller	0.122	0.94	0.097
Concrete Pumper Truck	0.190	2.94	0.225
Backhoe	0.176	1.52	0.245
Crane	0.117	1.17	0.112
Pick-up Truck*	0.012	0.804	0.616
Dump Truck (heavy duty)	0.200	6.12	0.453
Excavator	0.198	3.154	0.155
Scraper	0.342	5.258	0.276
Delivery Truck (Medium)*	0.069	0.842	0.367
Delivery Truck (Heavy)*	0.095	3.75	0.283

*units are in grams/mile/vehicle

For this project, it was assumed that pick-up trucks, delivery trucks, and dump trucks would be utilized. It was assumed that delivery trucks and pick-up trucks would travel 20 miles per trip, making four trips a day, for a total of 80 miles a day traveled by pick-up truck. It was also assumed that dump trucks would travel 8 miles per trip and make 16 trips (2 trucks, 8 trips each) a day when used during trenching activities, resulting in 128 miles traveled daily.

5.1.1.1 Calculations for Construction Emissions

Using the emissions factors in Table C-2, annual construction emissions were calculated for the proposed construction at Stewart-Newburgh. Using the assumptions described above, the annual emissions in tons per year of PM₁₀, NO_x and VOC for construction emissions were calculated for each vehicle type using the appropriate equations displayed in Table C-3.

Table C-4 summarizes the total annual emissions for the heavy equipment used during construction based upon hours of usage, for each alternative.

Table C-3: Equations for Construction Emissions Calculations

Emission Source	Equation	Sample Calculation
Heavy Equipment Emissions, On-Site Activities	(# of vehicle type) (Emission factor) (Total # of days in operation) (percent usage) (hours/day) (1 ton/2000 lbs) = TPY of air emissions	(1 grader) (1.53 lbs/hr/vehicle) ((16 days in operation) (100% usage) (8 hours/day) (1 ton/2000 lbs) = 0.10 TPY of NO_x emissions
Construction Crew, Commuting	(# of vehicles) (#miles/day) (#days) (emissions factor grams/mile) (1 lb/453.59 grams) (1ton/2000 lb) = TPY of Vehicle Emissions	(50 vehicles) (50 miles/day) (240 days) (0.60 grams/mile/vehicle) (1 lb/453.59 grams) (1ton/2000 lb) = 0.39 TPY NO_x of Vehicle Emissions

Table C-4: Total Emissions from On-Site Construction Activity –Proposed Action Alternative

Construction Vehicle Type	Number of Vehicles	Length of Operation (days)	Total Annual Emissions –TPY		
			PM ₁₀	NO _x	VOC
Grader	1	16	0.009	0.10	0.05
Concrete Truck	1	28	0.021	0.33	0.03
Front End Loader	1	11	0.008	0.14	0.005
Paver	1	4	0.002	0.02	0.002
Vibratory Roller	1	25	0.012	0.15	0.016
Pneumatic Tire Roller	1	4	0.002	0.01	0.002
Steel Wheel Roller	2	2	0.007	0.05	0.003
Concrete Pumper Truck	1	115	0.087	1.35	0.10
Backhoe	1	230	0.325	1.40	0.23
Crane	1	85	0.040	0.40	0.04
Pick-up Truck*	5	1140	0.006	0.081	0.06
Dump Truck *	9	29	0.001	0.018	0.00
Excavator	1	8	0.006	0.010	0.004
Scraper	6	38	0.312	0.80	0.04
Delivery Truck	1	35	0.00	0.003	0.00
Delivery Truck (Heavy)*	1	491	0.00	0.162	0.01
Total Emissions			0.86	5.30	0.59

5.1.2 Emissions from Construction Crew Workers

Emissions from construction personnel traffic were calculated using the EPA's *MOBILE6*. It was assumed that the construction crew would consist of approximately 50 workers over a 36 month (720 workdays) time period. For a conservative analysis, it was assumed that each person would drive to the site and they would each drive approximately 50 miles per day. Based on *MOBILE6*, the emission factor for PM_{2.5} is 0.011 grams/mile/vehicle, NO_x is 0.60 grams/mile/vehicle and VOC is 0.58 grams/mile/vehicle for the average fleet in Orange County, New York. It was calculated that the total emissions associated with the commuter vehicles from the construction crew would be approximately 0.40 TPY of NO_x, 0.39 TPY of VOC, and 0.01 TPY of PM₁₀.

5.1.3 Emissions from Painting Activities

When calculating VOC emissions from painting building structures, it was assumed that water-based latex paint would be used with a VOC content of one pound per gallon and that one gallon of paint would cover approximately 300 square feet. It was assumed that three coats of paint will be applied (one primer and two finish) to approximately 153, 168 square feet of interior surfaces. Based on these assumptions approximately 1,532 gallons of paint would be needed. Interior painting would create approximately 0.77 TPY of VOC emissions.

Emissions from painting parking spaces were based on four-inch wide stripes. It was assumed that the average parking space would be 9 feet wide by 19 feet long and that every two parking spaces would share a common line. Approximately 20 square feet would be painted for every two parking spaces. For parking spaces, it was assumed that alkyd paint would be used with a VOC content of three pounds per gallon and that one gallon of paint would cover approximately 200 square feet. It was also assumed that one coat of paint would be applied to the parking surfaces. Based on the construction of 194 parking spaces at the facility, the amount of area to be painted, and the number of gallons required, the approximate VOC emission for painting parking spaces would be 1.26 TPY.

5.1.4 Summary of Construction Emissions

After the emissions analysis was performed for all aspects of construction, the totals were added together to determine the combined construction emissions. Table C-5 displays a summary of the findings for the Proposed Action compared to the *de minimis* values.

Table C-5: Total Emissions from Construction Related Activities –Proposed Action Alternative

Construction Activity	Total Emissions (TPY)			<i>De minimis</i> values –TPY		
	NO _x	VOC	PM10	NO _x	VOC	PM10
Use of Heavy Equipment (on –site construction)	5.30	0.59	0.86	100	50	100
Construction Crew Workers	0.40	0.39	0.01			
Painting	NA	2.03	NA			
Total Emissions from Construction	5.70	3.01	.087			

5.2 OPERATIONAL EMISSIONS

5.2.1 Heating Source Emissions

Given that there was no estimated energy usage given in the DD1391s provided for the projects proposed at Stewart-Newburgh, energy usage was estimated based on previously conducted environmental assessments where energy usage for similar facilities, office/administrative facilities in this case, were known. The estimate generated for the combined natural gas usage for boilers and water heaters was approximately 55 standard cubic feet (SCF) of natural gas per square foot of office space. Furthermore, using the EPA's *AP-42 Fifth Edition, Compilation of Air Pollution Emission Factors Volume I, Chapter 1: Stationary Sources, Supplement D* (EPA, 1998), the emission factors for NO_x, VOC, and PM₁₀ were determined for the facility boilers and water heaters. For NO_x emissions, the facility boilers and water heaters fall in the category of small, uncontrolled boilers that emit 100 lb NO_x /10⁶ SCF of natural gas. The emission rate for VOC was found to be 5.5 lb/10⁶ SCF of natural gas. The emission rate for PM₁₀ was found to be 7.6 lb/10⁶ SCF of natural gas. Using these emission factors and the stated natural gas demand based on 94,850 square feet of space between the three proposed facilities, the emissions of NO_x, VOC, and PM₁₀ were calculated to be 0.26 TPY, 0.014 TPY, and 0.019 TPY, respectively.

5.2.2 Vehicle Emissions from Daily Commuters

Under the Proposed Action, the ROI (Orange County) is not expected to experience an increase in the amount of commuter traffic, for all personnel relocating to the new AFRC are doing so from either the existing Stewart-Newburgh USAR building or from the NY ARNG Readiness Center in the neighboring town of Newburgh; both of which are within the ROI. Based upon this information, no change is expected in the amount of emissions from daily commuter traffic as a result of the Proposed Action.

5.3 REGIONAL SIGNIFICANCE

In addition to *de minimis* values, actions are also evaluated for regional significance. An action is considered to be regionally significant if the annual increase in emissions would make up 10 percent or more of the available regional emission inventory. As per the "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group Region for Purposes of Reducing Regional Transport of Ozone", the New York State Implementation Plan sets forth a budget of 240,289 tons of NO_x per day during the ozone season (NYDEC, 1998). Regarding VOCs, the Transportation Conformity Determination for Federal Fiscal Years 2006-2010 Transportation Improvement Program and Federal Fiscal Years 2005-2030 Regional Transportation Plan (NYMTC, 2005) sets a limit of 176.30 tons per day. The increase in annual emissions from the construction activities would not make up ten percent or more of the available regional emission target for VOC or NO_x and would not be regionally significant.

6.0 OVERALL RESULTS

Table C-6 summarizes the total emissions associated with the Proposed Action at Stewart-Newburgh. Construction related emissions would be temporary and only occur during the 36-month construction period for the facility. Operational emissions associated with the operation of boilers for heating the facility would be long-term and occur throughout the life of the facility. When compared to the *de minimis* values for this non-attainment area of 100 TPY each for NO_x and PM₁₀ and 50 TPY for VOC, the emissions associated with the implementation of the Proposed Action fall below the *de minimis* values. As a result, the Proposed Action is not subject to the General Conformity Rule requirements.

Table C-6: Total Emissions from the Proposed AFRC

Activity	Construction Emissions (TPY)			Operation Emissions (TPY)			Combined Emissions (TPY)		
	NO _x	VOC	PM ₁₀	NO _x	VOC	PM ₁₀	NO _x	VOC	PM ₁₀
Heavy Equipment (building/parking)	5.30	0.59	0.86				5.30	0.59	0.86
Construction Crew Commuting Vehicles ¹	0.40	0.39	0.01				0.40	0.39	0.01
Painting	NA	2.03	NA				NA	2.03	NA
Stationary Heating Unit (boiler and water heater)				0.26	0.014	0.019	0.26	0.014	0.019
Totals							5.96	3.02	0.89

¹ Construction Crew Commuting Vehicles represent only the emissions increase associated with the implementation of the Proposed Action

- RS Means. 2001. *Facilities Construction Cost Data*. RS Means Company Inc: Kingston, MA.
- U.S. Environmental Protection Agency. 1998a. *Compilation of Air Pollutant Emission Factors, Volume I, Chapter 1 Supplement D: Stationary Sources, AP-42, 5th edition*.
- U.S. Environmental Protection Agency. 1998b. *Exhaust Emission Factors for Nonroad Engine Modeling-Compression-Ignition, Report No. NR-009A*. February 13, 1998, revised June 15, 1998.
- U.S. Environmental Protection Agency. 1997. *MOBILE6 Emission Factor Model, for Trucks year 2002 Vehicle Emissions*.
- U.S. Environmental Protection Agency. *National Primary and Secondary Ambient Air Quality Standards*. 40 CFR Part 50.
- U.S. Environmental Protection Agency. *Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded or Approved under Title 23 U.S.C. or the Federal Transit Act*. 40 CFR Part 51, Subpart T.
- U.S. Environmental Protection Agency. *Designation of Areas for Air Quality Planning Purposes, Subpart C: Section 107 Attainment Status Designations*. 40 CFR Part 81.