

## **DEPARTMENT OF DEFENSE**

Department of the Army

### **Notice of Availability of the Final Environmental Assessment for the Community Activities Center (CAC) Complex at the United States Army Garrison, West Point, Orange County, New York**

**AGENCY:** U.S. Army Garrison West Point

**ACTION:** Notice of Availability (NOA) of Final Environmental Assessment (FEA)

**SUMMARY:** This announces the availability of the FEA that addresses the potential environmental impacts of the construction and operation of the Community Activities Center Complex at the United States Army Garrison, West Point (West Point), Orange County, New York.

**FOR FURTHER INFORMATION CONTACT:** Mr. Alan B. Bjornsen, CEP, NEPA Coordinator, U.S. Army Garrison, West Point, MAEN-E-I, Building 667, Ruger Road, West Point, NY 10996, or by phone at (845) 938-4129, by fax at (845) 938-7046, by email at [Al.Bjornsen@USMA.edu](mailto:Al.Bjornsen@USMA.edu).

**SUPPLEMENTARY INFORMATION:** The purpose of this FEA is to analyze significant issues and information relevant to potential environmental effects regarding the proposed and alternative actions related to construction of the CAC Complex at West Point. The CAC Complex would include a basketball court, roller hockey rink, tot-lot, outdoor pool, wading pool, volleyball court, multi-purpose athletic field, picnicking area, gym, indoor running track, racquetball court, support spaces (lockers, showers, and toilets), children's organization room, community rooms, youth services, snack bar/small restaurants, and office space. The proposed project is necessary to centralize the Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. Four project alternatives were considered including (1) the No Action Alternative, (2) the Old PX Site Alternative (the recommended alternative), (3) the Lot H Alternative, and (4) the Lot J Alternative.

Potential environmental consequences of the proposed project addressed in this FEA, include minor construction related impacts to geology, soils, vegetative communities, wildlife and habitat, traffic, air quality, health and safety and hazardous waste. Mitigation measures have been developed and would be implemented to offset potentially significant long-term impacts to cultural resources, land use, visual resources, and noise. Cumulative impacts were also evaluated for the project, but determined to be insignificant. The analyses indicate that environmental consequences incurred during construction would be outweighed by long-term beneficial effects of the project to community services at West Point and short-term economic benefits to the local community.

The Draft EA and Draft FNSI were made available for a 30-day public review period from June 24, 2005 through July 25, 2005. One comment letter was received during the public review and comment period. This letter was from the USEPA and recommended the use of alternative/green building materials throughout the project. The EPA stated they did not anticipate the implementation of the project to result in significant adverse impacts, and therefore, did not object to the project.

A copy of the FEA is available for review at the following locations:

West Point Community Library  
Building 622, Swift Road  
U.S. Army Garrison  
West Point, New York;

Town of Highland  
Town Clerk's Office  
254 Main Street  
Highland Falls, New York

Highland Falls Public Library  
298 Main Street  
Highland Falls, New York

Village Clerk  
Village of Highlands  
303 Main Street  
Highland Falls, New York.



**US Army Corps  
of Engineers®**  
New York District

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**Environmental Assessment  
Community Activities Center Complex  
United States Army Garrison  
West Point, Orange County, New York**

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**Prepared By:  
U.S. Army Corps of Engineers  
Planning Division  
New York District  
26 Federal Plaza  
New York, New York 10278-0090**

**October 2005**

DIRECTORATE OF PUBLIC WORKS  
UNITED STATES ARMY GARRISON  
WEST POINT, NEW YORK

ENVIRONMENTAL ASSESSMENT  
APPROVAL SHEET

COMMUNITY ACTIVITIES CENTER  
WEST POINT, NEW YORK

August 2005



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# FINDING OF NO SIGNIFICANT IMPACT (FONSI)

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## I. NAME OF ACTION

Community Activities Center (CAC) Complex – The United States Army Garrison, West Point (West Point), Orange County, New York

## II. DESCRIPTION OF ACTION

**Proposed Action:** The proposed action would create a new Community Activities Center (CAC) Complex that would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. Director of Morale Welfare and Recreation (DMWR) programs to be included as part of the CAC Complex include a Community Activity Center, Community Athletic Facilities, and a Physical Fitness Center.

**Alternatives:** Four alternatives are considered including: (1) the No Action Alternative, (2) the Old Post Exchange (PX) Site Alternative (the recommended alternative), (3) Building Area H Alternative, and (4) Building Area J Alternative. The No Action Alternative would require no changes to the existing recreational/community facilities but would not resolve the need for larger, more efficient and centralized facilities. The recommended alternative would locate the new CAC Complex on the site of the existing Old PX (Building 683) and adjacent areas. The Other Building Sites Alternatives (H and J) are similar to the Old PX Site Alternative except that the CAC Complex would be located in one of two different potential locations called Buildable Areas "H" and "J." These alternative sites are less desirable because Buildable Area H has limited room for the Complex; is not located near the major residential/school facilities at West Point; and is being considered for a rugby facility. Buildable Area J has insufficient parking, is not located adjacent to the major residential/school facilities at West Point, is located within the Cadet Support Zone, and has potential for impacts to adjacent historic structures.

## III. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATIONS

Long-term positive impacts to community services at West Point including consolidated recreational facilities that are easily accessible to the majority of the housing at West Point and short-term economic benefits to the local community from construction employment opportunities would occur from the project. These beneficial impacts would be greatest for the Old PX Alternative (recommended alternative) compared to Buildable Areas J or H because it is centrally located to the major residential areas on post, whereas Buildable Areas J or H are not. The recommended alternative has the potential to create minor adverse impacts to geology, soils, vegetative communities, wildlife and habitat, traffic, air quality, health and safety, and hazardous waste and potentially significant adverse impacts to coastal resources, land use, visual resources, cultural resources, and noise. Mitigation measures for these potentially significant impacts have been developed and would be implemented to minimize adverse impacts below the significant level.

**Soils:** Potential impacts to soils from earth moving/excavation activities and sedimentation/erosion. Mitigation measures include:

- Use of Best Management Practices (BMPs) for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence).
- Preparation of and adherence to a Stormwater Pollution Prevention Plan (SWPPP); and
- Application for a New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed.

**Surface Water Resources:** Potential indirect impacts from storm water runoff, sedimentation or erosion. Mitigation measures would include:

- Preparation of and adherence to a SWPPP;
- Application for a NYSDEC SPDES General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed; and
- Use of BMPs for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence).

**Coastal Resources:** Potential impacts to coastal resources should new CAC complex not comply with NYS Department of State (NYSDOS) Coastal Policies 23 (Cultural Resources) and 24 (Scenic Resources of Statewide Significance). Mitigation measures would include:

- The CAC Complex would be designed according to the guidelines in Coastal Policy #23 to protect the significant cultural resources of West Point;
- The CAC Complex would be designed according to the guidelines in Coastal Policy #24 to avoid disrupting the scenic beauty of West Point and its designation as a subunit within the Hudson Highlands Scenic Area of Statewide Significance (SASS); and
- At final design, West Point would submit coastal policies consistency determination for review and concurrence by the NYSDOS.

**Land Use:** Potentially significant impacts to the cemetery located adjacent to the preferred site. Mitigation measures would include:

- West Point would construct noise and visual barriers between the new complex and the cemetery. These barriers would include a grassed berm, dense hedgerow of juniper shrubs or similar plantings, and/or a wall. The type of barrier would be designed with input from the NYSHPO and DHPW agronomist.

**Visual Resources:** Potentially significant impacts to visual resources if the CAC Complex is not constructed in harmony with the existing structures or landscapes or if important viewsheds at West Point are hindered. Mitigation measures would include:

- West Point would consult with the New York State Historic Preservation Office (NYSHPO) to develop a Memorandum of Agreement (MOA) that would provide stipulations for siting, constructing and operating the new CAC Complex that would require the architectural design and building materials to blend in with the surrounding structures and ensure that important viewsheds to the Hudson River, adjacent cemetery, and Washington Road were not obstructed; and

- A physical barrier would be constructed between the CAC Complex and the adjacent cemetery to screen visual impacts. The barrier may consist of an evergreen hedgerow, grassed berm, or wall and would be designed with input from the NYSHPO and the DPW agronomist.

**Cultural Resources:** Potentially significant impacts to significant cultural resources on and nearby the preferred site. Mitigation measures would include:

- West Point would formally consult with the NYSHPO to develop a MOA that would provide stipulations for sighting, constructing and operating the new CAC Complex to avoid any significant impacts to cultural resources or West Point's designation as a National Historic Landmark District (NHL); and
- If required, historic documentation as specified by the NYSHPO and National Park Service would be prepared in accordance with the Historic American Building Survey for the historic buildings that would be demolished on the site.

**Noise:** Potentially significant noise impacts to land uses adjacent to the preferred site. Mitigation measures would include:

- During construction noise abatement controls such as careful staging of noise intensive construction, limiting simultaneous loud work activities, and minimizing noise level below the New York Noise Regulation guidelines; and avoiding loud construction activities during funerals;
- West Point would construct a noise barrier between the new complex and the cemetery. These barriers would include a grassed berm, dense hedgerow of juniper shrubs or similar plantings, and/or a wall. The type of barrier would be designed with input from the NYSHPO and DPW agronomist; and
- Outdoor CAC activities would be shut down and monitored during funerals to avoid noise conflicts.

**Hazardous Materials and Wastes:** Potential impacts from demolition of structures containing lead based paint/asbestos, or from construction over the inactive landfill below the PX parking lot. Mitigation measures would include:

- A survey for lead and asbestos for buildings proposed for demolition. Lead based paint and asbestos would be removed or managed in accordance with applicable regulations and by EPA-certified firm/workers prior to demolition; and
- All New York State applicable regulations for construction over closed landfills would be adhered to if any construction would occur on the inactive landfill below the old PX parking lot.

**Alternative Construction Materials and Energy Sources:** To the extent practicable, alternative/"green" building materials would be used to improve the facility's visibility and operational efficiency. In addition, the use of alternative (renewable) energy sources would be evaluated for use in the facility.

#### IV. CONCLUSION

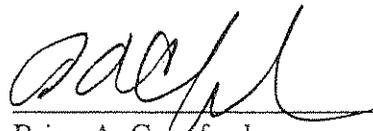
The activities, as proposed, would improve community services at West Point by consolidating the Community Activity Center and Community Fitness Center into a new facility that would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. The greatest benefit would occur if the Old PX Site Alternative (recommended alternative) were selected since it is located near the major residential facilities at West Point, whereas the other alternatives are not. Potential environmental impacts associated with the proposed action would be minor or mitigation measures would be implemented to minimize any potentially significant environmental impacts mitigated below the significance level. Therefore, an Environmental Impact Statement is not required.

#### V. PUBLIC REVIEW

There was a 30-day review and comment period conducted, with the list of recipients listed in Appendix D of the EA. One comment letter was received during the review period. This letter was from the US Environmental Protection Agency (EPA) and recommended the use of alternative/green building materials throughout the project. The EPA stated they did not anticipate the implementation of the project to result in significant adverse impacts, and therefore, did not object to the project.

Date: \_\_\_\_\_

28 SEP 05



\_\_\_\_\_  
Brian A. Crawford  
Colonel, FA  
Garrison Commander



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JUL 22 2005

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Dear Mr. Bjornsen:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Assessment (DR/EA) for the Community Activities Center Complex, United States Army Garrison West Point, West Point, Orange County, New York. This review was conducted in accordance with Section 309 of the Clean Air Act, as amended (42 U.S.C. 7609, PL 91-604 12(a), 84 Stat. 1709), and the National Environmental Policy Act (NEPA).

The proposed action would involve the construction of a new Community Activities Center (CAC) Complex. The Complex would include an Activity Center, Athletic Facilities, and a Physical Fitness Center. The purpose of this project is centralizing a variety of recreational and fitness activities into a single core, therefore improving its visibility and operational efficiency to engage more of the West Point community.

Four options were originally considered in developing the preferred alternative:

- Option 1, the No Action Alternative, would leave existing conditions as is.
- Option 2, the Old Post Exchange (PX) Site Alternative, would seat the new CAC facilities on the location of the existing Old PX (building 683) and contiguous areas.
- Option 3, H Lot Alternative, has limited area for the Complex. This lot is located away from residential and school facilities at West Point, and is being contemplated for a rugby facility.
- Option 4, J Lot Alternative, is near the Cadet Support Zone and has inadequate parking space. Major residential and school facilities are not located next to Lot J.

Comments:

To assist in improving the facility's visibility and operational efficiency we recommend the use of alternative/green building materials throughout the project. Materials such as, *plastic lumber*, *plastic-wood*, *porous concrete*, *cinder gravel*, *modular blocks*, and *crushed granite* are widely available and their use in any aspect of the project should be evaluated. The use of these materials is well established (see internet sites on alternative/green materials), particularly as a method to reduce stormwater runoff (the number one cause of stream channel degradation and a major factor in ground water contamination) due to permeability features. By using these alternative building materials the structures' life expectancy increases, the maintenance needs are

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enormously reduced, and they are weather, insect and vandalism resistant without increasing the cost in relation to conventional materials. Additionally, the creation of rain gardens, ponding basins and green roofs or eco-roofs might help to harvest rainwater for other uses.

In the DR/EA's Air Quality section, the recommended alternative anticipated that the newly constructed buildings will be heated with natural gas if available, and a diesel generator would provide back-up; however, oil will be used if gas is not available. You might want to consider solar, geothermal or waste heat recovery. Further, Mechanical Systems (active renewable energy design; 90% or higher efficiency furnace or boiler with sealed combustion) should also be considered. For more information on green/efficient resources visit: <http://p2rx.org/>.

Based on our review, we do not anticipate that the implementation of this project as proposed, would result in significant adverse impacts and, therefore, do not object to its implementation. Thank you for the opportunity to comment. Should you have any questions please call Maria Clark, of my staff, at (212) 637-3789.

Sincerely yours,



Grace Musumeci, Chief  
Environmental Review Section  
Strategic Planning and Multi-Media Programs Branch

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## ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
BMP	Best Management Practices
CAC	Community Activity Center
CAF	Outdoor Community Athletic Facilities
CMP	Coastal Management Program
CPO	Civilian Personnel Office
DPW	Directorate of Public Works
DMWR	Directorate Morale, Welfare and Recreation
DOL	Directorate of Logistics
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
FWA	Freshwater Wetlands Act
HA	Hectares
HABS	Historic American Building Survey
HVAQCR	Hudson Valley Air Quality Control Region
ICRMP	Integrated Cultural Resources Management Plan
INRMP	Final Integrated Natural Resources and Management Plan 2003-2007
KACH	Keller Army Community Hospital
LBP	Lead-Based Paint
m	Meters
MG	million gallons
MGD	million gallons per day
MOA	Memorandum of Agreement
NAAQS	National Ambient Air Quality Standards
NCO	Noncommissioned Officers
NEA	Northern Ecological Associates
NEPA	National Environmental Policy Act
NHL	National Historic Landmark District
NHP	Natural Heritage Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
NYSDEC	New York State Department of Environmental Conservation
NYSDOL	New York State Department of Labor
NYSDOS	New York State Department of State
NYSECL	New York State Environmental Conservation Law
NYSHPO	New York State Office of Parks, Recreation and Historic Preservation
PCB	Polychlorinated biphenyls
PFC	Physical Fitness Center
ppt	parts per thousand
PX	Post Exchange
REC	Record of Environmental Consideration



RFFA	Reasonably Foreseeable Future Actions
SASS	Scenic Area of Statewide Significance
SHPO	State Historic Preservation Office
SOP	Standard Operating Procedures
SPDES	State Pollutant Discharge Elimination System
SWPPP	Storm Water Pollution Prevention Plan
USMA	United States Military Academy
TPY	tons per year
USACE	United State Army Corps of Engineers
USDI	United States Department of the Interior
USDOA	United States Department of the Army
USDOC	United States Department of Commerce, Economics and Statistics Administration
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USMA	United States Military Academy
West Point	United States Army Garrison at West Point
UST	Underground Storage Tank



## **1.0 Introduction**

### **1.1 Background**

The United States Military Academy (USMA) at West Point is a renowned and historic service academy that graduates and commissions over 900 officers each year. Since 1778, the United States Army has stationed soldiers and maintained structures at West Point, the longest continuously occupied U.S. Army Installation. The academy was established in 1802, with the mission to educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character. This mission ensures that each graduate is committed to the values of duty, honor, country, and professional growth throughout a career as an officer of the U.S. Army, and a lifetime of selfless service to the nation.

The United States Army Garrison at West Point (West Point) conducts base operations and mission support for USMA and its tenant activities. These operations contribute to the cadet developmental experience and provide services, property, and materials for those who live, work and play at West Point. Activities at West Point occur primarily to serve the needs of the Corps of Cadets. In that respect, West Point has many elements similar to those of a college campus, including classrooms, housing laboratories, and recreation and athletic facilities. West Point is unique in that, along with its primary function of education and training, it also incorporates functions of a military base and contains a 2,500-acre (1,012 hectares (ha)) National Historic Landmark District (NHL). This historic aspect of West Point and its scenic surroundings attracts thousands of visitors each year. In fact, West Point is the third most visited tourist site in the State of New York, behind Niagara Falls and the Empire State Building.

Currently, there are approximately 7,900 residents at West Point including cadets, military personnel, and their dependents (family members). In addition to those residing on-post, there are approximately 2,800 civilians, 1,100 tenants (e.g., elementary school) and 400 commercial service providers (e.g., laundry, pest control) employed there.



## 1.2 West Point Location

West Point is located 45 miles (72 kilometers) north of New York City, on the shores of the Hudson River, in Orange and Putnam Counties, New York; it is approximately 16,000 acres (6,500 ha) in size. The installation generally consists of three parts including: the main post, the outlying reservation, and Constitution Island. The main post and outlying reservation are located in Orange County, on the west bank of the Hudson River and Constitution Island is located on the east bank of the Hudson River, in Putnam County. The 2,500-acre (1,012 ha) area known as the main post contains the majority of West Point's academic residential and support facilities and has been designated a NHL since 1960. Figure 1-1 depicts the location of the main post.

## 1.3 Purpose and Need

West Point supports a large military and civilian community consisting of 5,300 military service members, and 2,600 family members. During duty hours, 2,800 civilians, 1,100 tenants (e.g., elementary school) and 400 commercial service providers (e.g., laundry, pest control) are employed at West Point. Additionally, West Point supports nearly 77,900 military retirees living in adjacent communities. West Point provides a range of community, family, and fitness support services to its military, civilian, and retired members. Currently, the recreational facilities and amenities found at West Point are inadequate for accommodating its military and civilian community. The existing programs offered by the Community Recreation Division of Directorate of Morale, Welfare and Recreation (DMWR) are currently dispersed in several locations throughout the post at West Point, and in some cases, the programs are located in obsolete or substandard space that is not large enough or not located to meet the program goals. As such, West Point needs a modern, consolidated community activity center and community fitness center to continue providing acceptable standards of community, family, and fitness services to its military, civilian, and retired members.

The purpose of the proposed project would be to construct a new, consolidated community activity center and community fitness center to fulfill the needs of the West Point community. The new facility would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community.

## **2.0 Proposed Action**

### **2.1 Description of Action**

DMWR programs to be included as part of the Community Activities Center Complex (CAC Complex or Complex) include a Community Activity Center (CAC), Community Athletic Facilities (CAF) and a Physical Fitness Center (PFC). The concept for the CAC Complex involves a central spine along which the program components are organized. The central spine concept emphasizes the idea of ‘one stop shopping’ for recreational and community activity needs by allowing each component of the CAC Complex to be accessed from a common corridor. The proposed CAC Complex would include a basketball court, roller hockey rink, tot-lot, outdoor pool, wading pool, volleyball court, multi-purpose athletic field, picnicking area, gym, indoor running track, racquetball court, support spaces (lockers, showers, and toilets), children’s organization room, community rooms, youth services, snack bar/small restaurants, and office space. Figure 2-1 depicts the existing conditions of the preferred site for the new CAC Complex and Figure 2-2 depicts the general design of the new CAC Complex.

The site program consists of circulation and parking support for the Complex. Buckner Loop would become the circulation spine for the Complex and parking would be located on either side of and off from the road. Approximately 257 parking spaces would be provided at various spots around the Complex – providing a well-distributed and dispersed amount of parking convenient to most activities throughout the Complex.

In the preferred location for the Complex, several buildings would need to be demolished to accommodate the new facilities. Current buildings onsite include Buildings 134, 136, 138, 139, 142, 683, 695, and 1050. Building 801, which was originally a Range Maintenance Facility and was subsequently used as the Old Post Exchange (PX) Warehouse, was formerly located at the preferred site; however this building was demolished in the Winter 2003/2004, independently of the CAC Complex. Buildings 134,

136, 138, 139, 142 and 1050 are Unaccompanied Personnel Housing (currently known as the Dunover Court area) along Buckner Loop and are also slated for replacement and demolition to accommodate the CAC. Building 695 is being used as the self help supply center. Building 697, the PX Service Station located south of the PX parking lot, would not be affected by the proposed undertaking. The canopy of the PX service station has been removed.

## **2.2 Alternatives**

Four alternatives have been generated with respect to the proposed centralization of the Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. These alternatives include the No Action Alternative, the Old PX Site Alternative (the recommended alternative), H Lot Alternative, and J Lot Alternative. Figure 2-3 shows the locations of the alternative site locations.

### **No Action Alternative**

The No Action Alternative is used to serve as the benchmark against which changes or effects on environmental parameters associated with each of the project alternatives would be assessed. The No Action Alternative would keep all recreational activities located throughout the installation as they currently are. This alternative would avoid both the minor temporary and permanent impacts to environmental resources that would result from construction and operation of the CAC Complex. However, this alternative would not resolve the need for larger, more efficient and centralized facilities.

### **Old PX Site Alternative (Recommended Alternative)**

The preferred project site for the new CAC Complex is located on the main post, at the Old Post Exchange site. It is bordered by Buckner Loop to the west, with housing farther west and north; the cemetery to the south; and steep slopes leading down to the Hudson River to the east. The proposed site contains approximately 6-acres (2.4 ha), most of which is relatively flat, and includes a small area of

terraced land that juts out toward the Hudson River. There is an inactive landfill below the parking lot in the southern portion of the proposed site.

The existing Old PX (Building 683) is not big enough to house the entire program; however, the site in which the Old PX is located is adequate for the CAC Complex. As such, all but one (Building 695) of the existing buildings would be demolished and the empty site would be used to construct a new facility that would be built to satisfy the needs of the program. Currently, there are several existing buildings on the proposed site. They include Buildings 134, 136, 138, 139, 142, 683 (the Old PX), 695, and 1050.

Buildings 134, 136, 138, 139, 142 and 1050 are military housing along Buckner Loop. Building 683 currently serves as a temporary location for the Community Fitness Center with a small portion dedicated to commercial food operations. It is a one-story structure and contains approximately 33,200 square feet (3,084 square meters). Building 695 serves as the self help supply center and would not be demolished. The remaining space is primarily dedicated to parking. As part of this alternative, it may be necessary to relocate several services at West Point including the education center, post library, and/or self help services. The location of these services would be determined at a future date. Also, a 300-foot segment of an existing natural gas pipeline would need to be upgraded to 4-inch diameter or greater to accommodate the CAC at this site.

In addition to its size, this site is desirable for the new CAC Complex as it is located within walking distance of the major residential facilities and schools at West Point.

### **H Lot Alternative**

This option is similar to the Old PX Site alternative; however, this alternative would move the proposed recreational facilities to another potential building site located on West Point, called H Lot. H Lot is located southwest of the preferred site, and is a 6.5-acre (2.63 ha) lot that lies between the PX parking lot and Patrick Trail. The site was formerly used as a landfill and over time has experienced differential



settling due to the unconsolidated landfill material of its base making it less desirable for construction purposes. There are no buildings on this site, and it is currently an undeveloped grassed lot used as a rugby field. The site is being considered as an alternative for use as a permanent rugby facility. In addition, this site has limited room for the CAC Complex and has inadequate space for parking.

Although, parking could be shared with adjacent uses (PX), it would create competition for those parking spaces. Also, this location is less desirable as it is not located near the major residential facilities at West Point, and would not be accessible to children by foot. Furthermore, safety considerations at the intersection with Stony Lonesome Road would need to be considered in designing the facility as the Child Development Center and PX are also located nearby. However, the proximity of these existing community facilities enhances the suitability of this area. The site is located near Stony Lonesome Gate with good access on and off the post via Route 9W.

### **J Lot Alternative**

This option is similar to the Old PX Site alternative; however, this alternative would move the proposed recreational facilities to another potential building site located on West Point, called J Lot. J Lot is located south of the preferred site, between Fenton Place and Mills Road. It is about 3 acres (1.2 ha) in size and is triangular shaped. The site was formerly used as the Civilian Personnel Office (CPO), but the building was demolished more than 10 years ago. Currently there are no buildings onsite; it is primarily paved with some grassy areas. The site meets the minimum requirements for the facility, has some utilities available, and is readily accessible to the Buffalo Soldier Field and Thayer Gate area. Parking may not fit directly on the site, but this may be alleviated by sharing spaces with nearby uses. Site preparation costs and environmental considerations would be minimal as this was a previously developed area. However, similar to H Lot, this site is also located away from the major residential facilities at West Point, which decreases its accessibility to children that would be limited to walking. In addition, it is within the Cadet

Support Zone and may be more appropriate for a facility that belongs within that zone, and has potential for impacts to adjacent historic structures.

### **3.0 National Environmental Policy Act Process**

The National Environmental Policy Act (NEPA) of 1969 requires Federal agencies to evaluate the effect of proposed actions on the environment, typically through the preparation of an initial Environmental Assessment (EA) document. As stated in 32 CFR Part 651, an EA is required when the proposed action:

- is not an emergency,
- is not exempt or an exception to NEPA,
- does not qualify as a categorical exclusion,
- is not adequately covered by existing NEPA analysis and documentation; and
- does not normally require an Environmental Impact Statement (EIS).

If impacts of the proposed action are found to be not significant, a Finding of No Significant Impact (FNSI) is prepared for the activity. On the other hand, if the identified effects are expected to be significant, a more detailed EIS must be prepared.

## 4.0 Existing Environment

A baseline description of the environmental resources at West Point is provided in this section. More attention is given to those resources that have the most potential to be affected by the proposed action. The USMA Integrated Natural Resources Management Plan: 2003 through 2007 (INRMP) is a comprehensive guide to all of the natural resources found within the West Point military installation and was used as a reference tool in documenting the existing state of natural resources on-site. Other major references used include the Integrated Cultural Resources Management Plan (ICRMP) (USMA, 2001) and Historic Landscape Management Plan for the U.S. Military Academy at West Point, New York (USACE, 2002).

### 4.1 Geology

Precambrian-age granite, diorite, gneiss and schist compose the majority of the crystalline bedrock underlying West Point (USMA, 1996). Granite is the most prevalent rock type in the bedrock and is typically medium grained, composed of quartz, feldspar and mica. Granite and pegmatite are igneous rocks and occur as dikes and sills within the gneiss. Igneous rocks on the installation consist of plagioclase feldspar, hornblende, pyroxene and biotite, mica, and quartz (USMA, 1996).

The metamorphic rocks of West Point exist in sequences. These sequences are composed of a hard layered, banded rock, gneiss, which is sometimes intruded by igneous rocks (Curran and Justis, 1970; Engineer Intelligence Study, 1958). Marble, quartzite, schist and amphibolite are other metamorphic rocks present in the Highlands area. The metamorphic rocks were deposited as marine sediments, volcanic ashes and volcanic rocks (Helenek, 1971; Jaffe and Jaffe, 1973; Offield, 1967). During the Precambrian period, these sediments and rocks were possibly subject to three phases of folding, extensive regional metamorphism, partial melting, and magmatic intrusion.

## 4.2 Soils

According to the Orange County Soil Survey (Olsson, 1981), the soil mapping units underlying or in the vicinity of the preferred site location include Swartswood gravelly loam 15 to 25 percent slopes (SwD); Hollis soils, sloping hills (HLC); and Rock Outcrop-Hollis Complex, sloping (ROC). Figure 4-1 depicts the soils at West Point. The Swartswood soils series consists of well drained to moderately well drained, nonhydryc soils that occur on hilltops, sides, and ridges in uplands; these soils have high erosion potential when exposed. Hollis soils consists of shallow soils that are well to somewhat excessively drained, nonhydryc, and occur over bedrock on hillcrests/tops, valley sides, and ridges of mountainous uplands; when exposed these soils have a serious erosion potential. The Rock Outcrop-Hollis Complex is comprised of soils that are well drained to somewhat excessively drained, nonhydryc, and occur on very steep hillsides and valley sides of mountainous uplands; it has a very serious erosion hazard potential when exposed. Also, there is an inactive landfill below the parking lot in the southern portion of the preferred site. The landfill is discussed in more detail in Section 4.14 (Hazardous Wastes and Materials).

Soils underlying and in the vicinity of J Lot include Hollis soils, sloping hills (HLC); and Swartswood - Mardin, very stony soils, sloping (SXC). The Swartswood - Mardin complex consists of stony soils that are well drained to moderately well drained, nonhydryc, and occur on hilltops/crests and ridges in uplands; it has a moderate erosion potential.

Soils underlying and in the vicinity of H Lot include Udorthents, smoothed (UH); Hoosic gravelly sandy loam, 8-15% slopes (HoC), and Rock Outcrop - Hollis Complex, sloping (ROC). The Udorthents, smoothed complex (UH) consists of excessively to moderately well drained, nonhydryc soils that occur in man-made cut and fill areas. The Hoosic soils complex consists of somewhat excessively drained, nonhydryc soils that occur on low rounded hills, ridges, and along the fronts of terraces on valleys and on

lowland plains; they have the potential for erosion. There is also an inactive landfill beneath the land surface at this location.

### **4.3 Water Resources**

The major uses of West Point's water resources are potable water supply, recreation, training and aquatic habitat. There are a variety of water resources at West Point, including both groundwater and surface water.

#### **4.3.1 Groundwater Resources**

Groundwater at West Point occurs in an unconsolidated aquifer consisting of alluvial deposits and a consolidated bedrock aquifer (USMA, 2002a). A Sole Source Aquifer, as designated by the United States Environmental Protection Agency (USEPA), is an aquifer that supplies 50% or more of the drinking water for a given area where there are no reasonably available alternative sources should the aquifer become contaminated. Four Sole Source Aquifers have been designated by USEPA in upstate New York. There are no Federally-designated Sole Source Aquifers located near the proposed project area. Additionally, there are no State-designated Primary or Principal Aquifers located in the vicinity of the project area (Stegville 1999). No public or private water supply wells are located within the immediate vicinity of the project area (Stegville 1999).

#### **4.3.2 Surface Water Resources**

There are numerous surface water resources at West Point that consist of ponds, lakes, and reservoirs; streams and rivers and their associated floodplains; wetlands, and vernal pools. Figure 4-2 depicts the drainage network and Figure 4-3 depicts surface waters at West Point. Most potable water at West Point is supplied by these surface water sources (USMA, 2002a). The majority of the surface waters found at West Point are classified as Class A by the New York State Department of Environmental Conservation (NYSDEC), according to Title 6 New York Codes, Rules, and Regulations Part 862.



#### **4.3.2.1 Streams, Brooks, Ponds, Reservoirs**

Crow's Nest Brook and an unnamed intermittent stream are the closest surface water bodies to the preferred project site. Crow's Nest Brook is located approximately 200 feet (61 m) to the north of the northern part of the preferred site for the CAC Complex. Crow's Nest Brook originates from several small tributaries draining Crow's Nest Mountain, and forms the Crow's Nest Watershed that drains the northeastern portion of the West Point property into the Hudson River. According to the NYSDEC, Crow's Nest Brook is classified as a Class C stream, Water Index No. H-81 (Kassin, 2003). Class C waters are suitable for fishing, fish and wildlife propagation, secondary contact recreation, and all other uses except as a source of water supply for drinking, culinary or food processing purposes, and primary contact recreation (USMA, 2002a). The portion of Crows Nest Brook downstream of the Lee Road Culvert to the Hudson River is classified as C by New York State but is considered as C(ts) by USAG because there are known occurrences of spawning trout in that part of the stream.

The unnamed intermittent stream is small and located east of the preferred site. It flows from near the east side of Building 683 downhill past the Target Hill Wastewater Treatment Plant and into the Hudson River.

The closest surface water bodies to the alternative building sites include Stony Lonesome Brook (Area H), Lusk Reservoir (Area J), and Kinsley Farm Brook (Area J). Kinsley Farm Brook lies east of J Lot and flows along Mills Road. Lusk Reservoir is located about 700 feet (213 m) north of J Lot; it is man-made and located on the main post within the Kinsley Farm Brook Watershed. It was dammed in 1895 to support upgrades to West Point, and currently serves as one of the primary sources of potable water for West Point. The reservoir is fed via a direct pipeline from an intake structure on Popolopen Brook in the southeast section of West Point. Discharge from Lusk Reservoir as well as storm water from the Stony Lonesome and Michie areas flows into Kinsley Farm Brook, a Class B stream. The reservoir covers an

area of 13 acres (5.26 ha) and has a maximum depth of 28 ft (8.5 m). Although its usable capacity is about 33 million gallons (MG), the reservoir has a total capacity of approximately 63 MG (USMA, 1980b; USMA, 2002).

Stony Lonesome Brook originates in an unnamed federal wetland area, flows to a wetland along part of the north edge of H Lot and flows south to join Highland Brook. It occasionally floods; floodwater drains in a southwest direction through a wetland (USMA, 1996). The brook has not been given a water quality classification; therefore it assumes the classification of Highland Brook, a Class A(t) stream, to which it is a tributary. Class A waters are defined as the highest usage waters suitable as a source for drinking water supply, food processing, and any other usages. When subjected to approved treatment, these waters will meet New York State Department of Health Drinking Water Standards. An 'AT' classification is a very high classification in terms of water quality (USMA, 2002a).

#### **4.3.2.2 Wetlands**

Wetlands are transitional habitats between aquatic and terrestrial ecosystems. Wetlands are an important natural system and habitat because of the diverse biologic and hydrologic functions they perform. These functions include water quality improvement, groundwater recharge and discharge, pollution mitigation, nutrient cycling, wildlife habitat provision, unique flora and fauna niche provision, storm water attenuation and storage, sediment detention, and erosion protection.

The New York State Freshwater Wetlands Act (FWA), Article 24 of the Environmental Conservation Law, protects those wetlands larger than 12.4 acres (5 ha) in size, and certain smaller wetlands of unusual local importance.

There are no wetlands located on or immediately adjacent to the preferred site or Buildable Area J. There is a wetland to the north of H Lot, below the headwaters to Stony Lonesome Brook. Development of H

Lot to a more impervious surface would impact the wetland as this would be the destination for increased run-off from the site. The USMA Integrated Natural Resources Management Plan (USMA, 2002a) contains a documented list of all wetlands and their location as observed on West Point grounds.

#### **4.3.2.3 Floodplains**

Floodplains are areas of low-level ground present along a river or stream channel. Floodplains are subject to periodic or infrequent inundation from elevated water levels in the stream/river due to rain or melting snow. Risk of flooding typically hinges on local topography, the frequency of precipitation events and the size of the watershed above the floodplain. Flood potential is evaluated by the Federal Emergency Management Agency (FEMA), which evaluates the floodplain for 100 and 500-year flood events. Federal, state, and local regulations often limit floodplain development to passive uses such as recreational and preservation activities in order to reduce the risks to human health and safety. The proposed project sites lie in Zone X, delineated as areas outside of the 500-year flood plain of the Hudson River (FEMA, 1987).

#### **4.3.2.4 Navigable Waterways**

There are no navigable waterways on any the proposed sites for the new CAC Complex. The closest navigable waterway is the Hudson River, which runs along the eastern shore of West Point, approximately 1,300 feet (396 m) from the proposed project site. The Hudson River flows approximately 304 miles from its source at Lake Tear of the Clouds in the Adirondack Mountains to its mouth in Upper New York Bay. In the vicinity of West Point, its depth ranges from 49 to 197 ft. The entire river system drains a watershed of approximately 13,514 square miles. The Hudson River is tidally influenced to Troy, New York, about 150 miles upstream of the Battery in New York Harbor, with measured tidal amplitudes of 4.6 ft. Near West Point/Constitution Island, the river flow characteristics are predominantly tidal, with tides on average of 2.6 ft (Boyce Thompson Institute, 1977). Peak magnitudes of average flood and ebb currents are 1.0 knots and 1.1 knots respectively (USMA, 1980b). The Hudson

River, flowing between the main post and Constitution Island, is an oligohaline estuarine reach characterized by rapidly changing salinities between 1 to 5 parts per thousand (PPT).

The Hudson River meets NYSDEC's water quality standards with respect to toxic and hazardous materials and no contaminants attributable to West Point activities have been detected in the river. Data acquired through the national STORET database indicated that trace metals, pesticides, polychlorinated biphenyls (PCBs) and phenols are present in the Hudson River (McMaster et al., 1984).

#### **4.4 Vegetation Communities and Special Natural Areas**

##### **4.4.1 Vegetation Communities**

The proposed project site occurs in an area within vegetation communities classified as cultural and successional hardwoods (USMA, 2002a). Figure 4-4 depicts the vegetation communities at West Point. The cultural classification includes ecological communities that have been created by anthropogenic forces and includes, but is not limited to, mowed lawns, paved roads and highways, mowed roadsides, and military facilities. On site, this community consists of mowed lawns and trees. The successional hardwood vegetation community is comprised of a composite of northern and southern hardwood species that vary in growth stages from saplings to mature trees. At West Point, this community is found on old fields and disturbed lands such as construction sites and burns. H Lot is comprised of the cultural vegetation communities. It is almost entirely mowed lawn with a margin of uncut trees along the northern edge of the site. There is Appalachian oak/hickory forest to the north and east of H Lot. J Lot is also comprised of cultural vegetation communities consisting of grassed fields and landscape trees (INRMP, 2002).

##### **4.4.2 Special Natural Areas**

West Point has identified 12 sites that are to be specially managed because of their ecological or geological significance, unique geological structure, and/or aesthetic and educational value to the



reservation. These natural areas are shown on Figure 4-5. According to the INRMP (USMA, 2002a), no special natural areas are designated on or immediately adjacent to the proposed project sites.

## **4.5 Wildlife, Fisheries and Habitat**

### **4.5.1 Wildlife**

Various field surveys, checklists, and programs have been implemented in an on-going effort to develop long-term census information and determine the extent of biodiversity found on the reservation. The USMA INRMP (USMA, 2002a) contains a documented species list of all wildlife observed on West Point grounds including mammals, birds, reptiles and amphibians, fish, invertebrates, as well as invasive species.

A written request was sent to NYSDEC Region 3 Division of Fish, Wildlife, and Marine Resources on July 23, 2003 to verify if there are any New York State wildlife refuges or management areas in the immediate vicinity of the proposed project site. The NYSDEC response does not indicate any wildlife refuges or management areas in the vicinity of the project sites. However, the Hudson River adjacent to the site has been designated as a Significant Coastal Fish and Wildlife Habitat, which is administered by the New York State Department of State (NYSDOS) (Houle 2003).

Existing habitat in the immediate vicinity of the proposed projects is limited to maintained lawn adjacent to the Old PX and military housing units. Common species that primarily utilize these areas include, but are not limited to, blue jays (*Cyanocitta cristata*), gray squirrels (*Sciurus carolinensis*), eastern chipmunks (*Tamias striatus*), and white-tailed deer (*Odocoileus virginianus*).

### **4.5.2 Fisheries**

Fish from Crow's Nest Brook were sampled in independent fisheries investigations during the mid to late 1990s (USMA, 2002a). Fish sampled during that time frame include American eel (*Anguilla rostrata*),



brown trout (*Salmo trutta*), and killifish (*Fundulus* sp.). Eastern black nosed dace (*Rhinichthys atratulus*) and creek chubs (*Semotilus atromaculatus*) have also been reported from the brook (Beemer, 2002a). West Point has implemented a fisheries management program for the streams, lakes, ponds, and reservoirs at West Point which is designed to enhance the fishing opportunities while promoting sustainable populations of the species most suitable for each water body (USMA, 2002a).

#### **4.5.3 Threatened, Endangered and Rare Species**

Pursuant to USDOA (1988) and the Endangered Species Act of 1973, a survey of threatened and endangered fauna and flora was conducted by the Biological Survey Unit of the New York State Museum (USMA, 1993). The survey concluded that no Federally-listed species are permanent residents of, or breed on West Point. The survey also found that suitable habitat exists at West Point for the Indiana bat (*Myotis sodalists*) (Federally-endangered). The golden eagle (*Aguila chrysaetos*), red-shouldered hawk (*Buteo lineatus*), and osprey (*Pandion haliaetus*) are all State-listed and were observed during the survey, but are not considered residents. The timber rattlesnake (*Crotalus horridus*) is the only State-listed species noted to be a permanent resident of West Point (USMA 2003).

The bald eagle (*Haliaeetus leucocephalus*) is a Federally-listed threatened species. Eagles have been seen using part of the slope east of the preferred site, but they much prefer to use the shores of Constitution Island, and eagle use on the west side of the Hudson River is sporadic (Beemer, 2002b).

Currently, there are 62 special status rare plant species monitored at West Point, 25 of which are listed as threatened or endangered by New York State. None of these known occurrences are in the vicinity of the preferred site or alternate sites for the new CAC Complex. There are no Federally-listed plant species known to occur at West Point.

Letters were sent to the United States Fish and Wildlife Service (USFWS) and the NYSDEC Natural Heritage Program (NHP) on July 23, 2003, requesting any information or concerns regarding potential impacts of the proposed activities on significant biological resources. The USFWS indicates that except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species under USFWS jurisdiction are known to exist in the project impact area. Additionally, no habitat in the project impact area is currently designated or proposed “critical habitat” in accordance with the provisions of the Endangered Species Act [87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.] (Stilwell, 2003; Kassin, 2003).

The NYSDEC NHP reported that West Point is within, or adjacent to, a designated Significant Coastal Fish and Wildlife Habitat. This habitat is part of New York State’s Coastal Management Program (CMP) (Houle, 2003). Shortnose sturgeon (*Acipenser brevirostrum*), mead’s sedge (*Carex meadii*), and rattlebox (*Crotalaria sagittalis*) are all classified as endangered and are known to occur within or adjacent to West Point. Timber rattlesnake (*C. horridus*) and large twayblade (*Liparis lilifolia*) are listed as threatened and are also known to occur within or adjacent to West Point. Although these species are incorporated in the NHP database for the West Point region, rattlebox, mead’s sedge, and large twayblade have not been discovered on the installation during the past ten years of floristic survey.

To ensure compliance with applicable endangered species regulations, West Point has coordinated with the NYSDEC and USFWS to develop a programmatic *Endangered Species Management Plan for the Bald Eagle* (Beemer, 2002b). The programmatic management plan requires that West Point consult informally and formally with USFWS pursuant to Section 7 of the Endangered Species Act, and the NYSDEC pursuant to the New York State Environmental Conservation Law (NYSECL), regarding any construction activity that may disrupt bald eagle activity at West Point.

#### 4.6 Coastal Resources

West Point lies within the New York State coastal zone, associated with the Hudson River. In addition, the West Point lies within the Hudson Highlands, which has been designated a Scenic Area of Statewide Significance (SASS). The coastal zone boundaries and scenic area subunits are shown on Figure 4-6. The designation of an area as a SASS depends on the quality of its design in relationship to the coastal landscape, its uniqueness in the region, its accessibility to the public, and its recognition in terms of the public's appreciation for the resource. According to the Coastal Policies of the State of New York, significant impacts to sites with a SASS designation must be avoided.

Pursuant to CFR Part 930.33(a), West Point is required to make a determination regarding the effects, if any, of the proposed activities on the land and water uses and natural resources of New York's coastal zone. In addition, pursuant to CFR Part 930.34(b), if West Point determines that the proposed activities will have no effect on the land and water uses and natural resources of New York's coastal zone, West Point is required to notify the NYSDOS at least 90 days before final project approval.

#### 4.7 Land Use

Although West Point does not have specific zoning regulations or guidelines, the existing land uses are consistent with uses identified in the *USMA Master Plan for the Year 2007* (USMA, 2002a). For planning purposes, West Point lands have been divided into four land use zones (Figure 4-7) based on functional categories which reflect the missions (Galloway, 1988). The preferred project site and H Lot are located in the "Community Support Zone" while J Lot is located within the "Cadet Support Zone"; both zones are within the main post land use zone. The main post of West Point is the developed portion of the installation and contains the majority of buildings and structures. It generally encompasses the area bounded by the Hudson River on the east, Route 218 on the north, Route 9W on the west and the Village of Highland Falls on the south. Land uses on the main post include academic, administrative, limited

military field training, recreation, facility support and residential. The golf course and ski area are also located on the main post.

Land uses on the preferred site currently include residential, commercial, and recreation. The old PX site is being used as a temporary location for the Communities Activities Center. There are military housing buildings in the northern part of the site, and parking in the south. Adjacent land uses include Buckner Loop, with housing to the west and to the north; the cemetery to the south; and steep slopes leading to the Hudson River on the east.

Land uses adjacent to H Lot include the new PX and parking to the west, undeveloped forest to the north, child development center to the east, and Stony Lonesome Access Road to the south. J Lot comprises a site that previously developed and used for the old Information Technology Building, which has since been removed. Land uses adjacent to J Lot include family housing to the east; transformers to the south; and storage tanks, storage houses, a water pump, and a water storage tank scattered to the north, east, and west.

#### **4.8 Visual Resources**

As mentioned in the Coastal Zone section, West Point, including the proposed CAC Complex sites, is located within the Hudson Highlands SASS. This designation is reserved for those areas that are of high visual quality, unique in the region, visually and/or publicly accessible, and have public recognition. In addition, portions of West Point are registered as a NHL that embodies a historic visual landscape. The portion of West Point identified as a landmark includes Constitution Island and the main post area, which is bound to the east by the Hudson River, to the west by Routes 218/9W, to the north by Route 218, and to the south by the southern boundary of West Point within the Town of Highlands. This visual landscape within the main post is important because of its natural vistas, including Constitution Island and Crow's

Nest; its numerous historic structures; and its particularly prominent academic “military gothic” buildings (Adams 1997).

The majority of the campus area involves cultural and historic resources that contribute to the critical view shed. The critical view sheds from the Hudson River, surrounding areas, and from West Point are integral parts of West Point as a cultural and historic resource. Important view points from which West Point is highly visible include Routes 218 and 9W (both New York State Scenic Highways), Black Rock Forest, Storm King State Park, Hudson River, Boscobel Plantation, Garrison, Cold Springs, and other sites on the East Bank of the Hudson River.

The West Point Cemetery is about 14 acres (5.7 ha) and is situated in the northwestern part of the post, just south of the proposed preferred location for the CAC Complex (see Figures 2-1 and 2-2). The cemetery has been identified as a Historic Landscape with Significant Views, with a number of contributing elements including: the remaining historic views, monuments, style and variety of plants, layout of the original and 1902 sections of the cemetery, gates, and the original cadet chapel (Timlin and Loechl, 2001). Significant viewsheds to and from the cemetery are from the Hudson River and Hudson River Valley to the east. These viewsheds have been compromised in the past by overgrown vegetation. However recent thinning of the vegetation has restored these views (US Army, 2002).

In addition, the Washington Road corridor, located west of the preferred site, is a contributing element to West Point’s designation as a NHL as it is both historically and visually significant.

#### **4.9 Cultural Resources**

The National Historic Preservation Act (NHPA) of 1966, as amended through 1999 [16 U.S.C. § 470 et seq.], is the cornerstone of Federal cultural resources management law. It establishes a national historic preservation program that includes elements for identification, evaluation, and protection of cultural

resources. The NHPA presents a policy of supporting and encouraging the conservation of *historic properties* or *historic resources*—the terms used to refer to “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) including artifacts, records, and material remains related to such a property or resource” [16 U.S.C. § 470w(5)]—by directing Federal agencies to assume responsibility for those cultural resources under Federal jurisdiction judged to be significant.

Section 106 [16 U.S.C. § 470f] of the NHPA ensures that cultural resources are properly considered in the planning stage of any Federal agency activity. Federal agencies are required to consider the effects of their undertakings on any properties eligible for inclusion, or listed, on the NRHP during the planning stage and to provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment. This process is detailed in implementing regulation 36 CFR Part 800 (Protection of Historic Properties).

#### **4.9.1 Prehistoric and Historical Overview of West Point**

Before European settlement, Native Americans occupied the Hudson River Valley for 10,000 years. Paleo-Indians were the earliest occupants of the valley but evidence of their hunter-gatherer existence on their preferred elevated, well-drained sites has been rarely recorded in Orange County (O’Brien, 2001). During the Archaic Period (ca. 8,000-1,000 B.C.), hunters and gathers adapted over time to exploit a variety of resources. However, evidence of Early Archaic habitation is particularly scarce along the Hudson River. Rock shelters comprise the most frequent Middle Archaic site type identified to date in the lower Hudson Valley. The majority of known Archaic sites in the Hudson Valley date to the Late and Terminal Archaic Periods (ca 4000 to 700 B.C.). Woodland Period Indians (ca 700 B.C. to 1600 A.D.) increasingly shifted their activities to estuarine eco-zones, enjoying the introduction of a new array of tools (bow and arrow and ceramic vessels) and resources (agricultural). At the time of European contact, or the Contact Period (ca. 1600 to 1650 A.D.), the West Point area was occupied by the Algonkian

Delaware Esopus, a subgroup of the Delaware Valley Munsee. The nearest known village site was a Munsee Delaware village located near the present Cornwall, New York. The West Point vicinity was also used by members of the Mohegan and Mohawk nations for resource exploitation at the time of European contact (Cubbison, 2003).

Portions of the West Point reservation supported Native American life to some degree. The extent of any such exploitation on a specific parcel within West Point is, however, dependent upon site-specific physical characteristics before the 1700s and the changes introduced by colonists. Land that was not particularly well drained and had shallow soil cover over bedrock outcroppings probably would not support such activity (O'Brien, 2001).

The local geographic setting of the West Point area had its greatest influence during the Revolutionary War. Control of the Hudson River by the Continental Army was vital to maintaining the artery between New England colonies and the “bread basket” colonies of the Middle Atlantic. British control of the river as well as Lake Champlain would have effectively severed the link and weakened, if not defeated, the Colonial Army. The narrow width of the Hudson River at West Point, coupled with its sharp bend and swift currents, made this an ideal spot for fortifications (Curran and Justus, 1970).

Beginning in the spring of 1778, defensive construction of West Point commenced. This construction included the erection of Fort Putnam on a hill above the Plain. Fort Putnam was built as a large redoubt to take advantage of the high rocky outcrop. Defensible against infantry assault, it was vulnerable to an artillery attack from the hills to the west. As a result, the walls that face west were designed to withstand greater firepower and relatively long siege until the militia or Continental Army arrived.

A series of redoubts, or enclosed defensive works, Redoubts No 1 through 4, were built on the hills to its northwest, west and southwest, to protect Fort Putnam from attack from that direction. Fort Clinton,



originally named Fort Arnold, was built on the Plain to the east of Fort Putnam. Access from the south was covered by Forts Wyllys and Webb and by Meigs, which was a series of connecting works and a battery. Attack from the north was prevented by the artillery battery Sherburne's Redoubt. The Great Chain spanned the river from West Point to Constitution Island to prevent British ships from sailing up river. The chain was protected by redoubts on both Constitution Island and West Point as well as Fort Clinton {Panamerican Consultants, Inc. (PCI), 2000}.

By 1780, the defensive system that had been built at West Point consisted of a series of concentric circles. Any attack on these fortifications would be potentially time-consuming and deadly as each feature of the system was designed to defend itself as well as assist in the defense of nearby elements (PCI, 2000).

At the end of the Revolutionary War, many of the fortifications were dismantled, sold or left to deteriorate with only a small military presence maintained at Fort Putnam by the end of the 18th century. Fort Putnam was substantially replaced and expanded in 1794, with the installation of casemates, and the entire fort was re-constructed of stone. Throughout the remainder of the 19th century, fortifications were left to deteriorate. From 1906 through 1910, both Fort Putnam and "other Revolutionary War sites at West Point" were restored to some extent. Fort Putnam's most recent renovation occurred in 1976, which provided the fort with much of its current appearance. Despite these reconstruction activities, the fort has maintained the same general configuration since 1794, even though its appearance has changed (PCI, 2000).

In 1802, the United States government established a formal military academy at West Point for the purpose of training the corps of engineers and military leaders. Originally clustered on the Plain, the government purchased tracts of land around the initial military reservation to permit the academy to expand (PCI, 2000). Expansion of the academy to accommodate the increased number of cadets and

faculty there by the 1890s, made it apparent that the installation's facilities were no longer adequate. In 1902, West Point invited ten architectural firms to participate in a design competition for the improvement of the Academy's buildings and grounds. An ever-increasing number of cadets, as well as a desire to develop a cohesive architectural plan rather than continuing with the use of a variety of architectural styles, inspired the need for a competition. The firm of Cram, Goodhue and Ferguson, working in association with the Olmstead Brothers, of Brookline, Massachusetts, won the competition. As part of the overall architectural plan for West Point, the Olmsted Brothers provided a general plan for building location and landscape improvement that included details on planning, creating vista, as well as designing roads that followed the contours of the hills and emphasized the views as seen from the roads. The upper portion of Mills Road, which runs between Michie Stadium and Lusk Reservoir, was originally in the Olmsteads' plan. It is unclear how much, if any, of the Olmstead plan was actually implemented.

#### **4.9.2 Cultural Resource Surveys**

Archaeological excavations and surveys have been conducted within the boundaries of West Point since the late 19<sup>th</sup> century, and a number of prehistoric and historic sites have been identified (Reith et. al, 1995). As of 2001, 150 sites were identified at West Point. This number includes 29 prehistoric sites, 46 revolutionary war sites, 32 Early Settlement Period sites, Early Industrial Sites, 26 multicomponent sites (including sites with both prehistoric and historic components), and 12 unidentified historic sites (Geo-Marine, Inc., 2001). A total of 65 sites have been identified as eligible for listing on the NRHP. Sixty-two sites are potentially eligible and 23 sites are identified as ineligible (Geo-Marine, Inc., 2001). The Integrated Cultural Resources Management Plan was completed for West Point in 2001 (Geo-Marine, Inc., 2001). The five-year plan (FY 2001 to 2006) serves to manage historic properties and cultural resources contained within the limits of West Point. The ICRMP includes Standard Operating Procedures (SOPs) as guidelines to manage the historic resources within West Point and includes a list of all West Point buildings and structures with their NRHP eligibility status.

### 4.9.3 Architectural Resources

According to the ICRMP, six of the nine buildings (134, 136, 138, 139, 142, and 695) included in the recommended alternative are eligible for listing on the National Register of Historic Places and are contributing elements to the West Point NHL. Building 801, which was demolished as of March 2004 independently of the CAC Complex, was not a contributing element to the West Point NHL and was not individually eligible for the NRHP as determined through consultation with the New York State Historic Preservation Office (NYSHPO) (Donofrio, 2001). In addition, Buildings 683 and 1050 were also deemed ineligible for listing and are not contributing elements to the NHL.

There are no buildings located on the J Lot. However, there are nine buildings in the vicinity of this site that could be affected by the project. Five of the nine buildings (378, 379, 644, 734, and 736) are either eligible or potentially eligible for listing on the NRHP and are contributing or potentially contributing to West Point's designation as a NHL.

Pan American Consultants performed a Phase One Cultural Resources survey of the areas adjacent to H Lot in the summer 2003, and no historic properties were found. No buildings would be involved if the H Lot Alternative were selected.

Table 4-1 provides a characterization of each building potentially involved in the project. NYSHPO was consulted; however, they have not formally commented on demolition of the structures proposed for demolition in this project.

**Table 4-1. Characterization of Buildings Potentially Involved in the CAC Complex by Alternative**

<b>Building #</b>	<b>Current Use</b>	<b>Date of Construction</b>	<b>Original Use</b>	<b>Period</b>	<b>NRHP Status</b>	<b>West Point NHL Status</b>
<b>Recommended Site (Old PX)</b>						
134	Family housing-company grade and warrant officer	1947	Enlisted men's barracks without mess hall	Housing expansion	Eligible	Contributing
136	Family housing-company grade and warrant officer	1947	Enlisted men's barracks without mess hall	Housing expansion	Eligible	Contributing
138	Family housing-company grade and warrant officer	1947	Enlisted men's barracks without mess hall	Housing expansion	Eligible	Contributing
139	Family housing-company grade and warrant officer	1947	Enlisted person's mess hall	Housing expansion	Eligible	Contributing
142	Family housing-company grade and warrant officer	1947	Recreation building	Housing expansion	Eligible	Contributing
683	Main exchange	1973	Main exchange	Modern	Ineligible	Non-contributing
695	Self help supply center	1918	General supply warehouse		Eligible	Contributing
1050*	Family housing DIA	1951	Residence	Housing expansion	Ineligible	Non-contributing
<b>J Lot</b>						
24*	Family housing quarters	1960	Family housing quarters		Ineligible	Status undetermined
378	Family housing quarters	1901	Married enlisted men's quarters	Delafield	Eligible	Contributing
379	Detached garage	1931	Garage	Housing expansion	Eligible	Contributing
644	Army Education Center	1943	Administration	Housing expansion	Potentially Eligible	Potentially Contributing
734	General Storehouse	1942	Vehicle Storage	Housing expansion	Potentially Eligible	Potentially Contributing

<b>Building #</b>	<b>Current Use</b>	<b>Date of Construction</b>	<b>Original Use</b>	<b>Period</b>	<b>NRHP Status</b>	<b>West Point NHL Status</b>
736	General Storehouse	1935	General Storehouse	Housing expansion	Potentially Eligible	Potentially Contributing
826	District Transformer	1947	District Transformer	Housing expansion	Ineligible	Non-contributing
832	Switch Station	1960	Switch Station	Housing expansion	Ineligible	Non-contributing
836	District Transformer	Un-known	District Transformer	Unknown	Ineligible	Non-contributing
<b>H Lot</b>						
None						

Source: Geo-Marine, Inc ICRMP Report 2001.

\* Buildings 24 and 1050 are “Capehart-Wherry” housing structures, and are addressed in a Programmatic Agreement between the Advisory Council on Historic Preservation and the Department of the Army on their demolition.

#### **4.10 Socioeconomics**

Socioeconomics are defined as the basic attributes and resources associated with the human environment, particularly population and economic activity. Socioeconomic data at county, state and national levels permits characterization of baseline conditions in the context of regional, state and national trends.

##### **4.10.1 Population and Employment**

Currently, there are approximately 7,900 residents at West Point. Military personnel make up the majority of the residents, with about 5,300 people, while their family members comprise the rest of the residents. In addition to those residing on-post, there are approximately 2,800 civilians, 1,100 tenants (e.g., elementary school) and 400 commercial service providers (e.g., laundry, pest control) employed there. The ethnicity of West Point changes annually.

West Point is located in Orange County in the Newburgh-Middletown Standard Metropolitan Statistical Area. The most developed portions of Orange County include the cities of Newburgh and Middletown, located north and west of West Point respectively. The areas immediately surrounding West Point are relatively rural in nature and not densely populated. Since the census taken in 1990, the Orange County population increased 11% [U.S. Department of Commerce (USDOC), 1990a, 2000a]. The population density for the county was 418 persons per square mile (USDOC, 2000b). In 2000, 83.7% of the county's population was white, 11.6% were of Hispanic or Latino origin, 8.1% was Black African American, and all other racial groups combined totaled 8.2% of the population (USDOC, 2000b).

All industry sectors in Orange County experienced growth in earning from 1990 to 2000 (USDOC, 2002a). The top three dominant industry sectors in Orange County are government, services, and retail trade (USDOC, 2002a). Employment also increased in all industry sectors between 1990 and 2000, with the exception of farming, manufacturing, and mining (USDOC, 2002a). In 2000, services, government, retail trade, and manufacturing were the four largest employers in Orange County (USDOC, 2002a). The unemployment rate decreased from 4.3% in 1990 to 3.3% in 2000 which was lower than the entire state's unemployment rate of 4.6% [New York State Department of Labor (NYSDOL), 2002]. Although Orange County's per capita personal income increased by 37.8% between 1990 and 2000, it is still below the State and national levels (USDOC, 2002a).

#### **4.10.2 Community Services**

West Point provides quality of life and community services for those who reside on post or are employed by West Point. These services include childcare facilities, a chapel, recreational facilities, community club, fire department, and security services. Children of military personnel that reside on post are eligible to attend the West Point Elementary and Middle Schools. West Point also provides athletic and physical recreational opportunities for cadets, such as football, baseball, track and field, gymnastics, soccer,

volleyball, tennis, swimming, cycling, golf, hockey, basketball, lacrosse, wrestling, boxing, rugby, and crew and sailing. Many of these services also are available to the surrounding community and general public.

#### **4.10.3 Traffic Circulation and Parking**

West Point is accessible primarily from U.S. Route 9W and New York State Routes 218 and 293. These roads are currently used to access West Point for academic services, sporting events, and miscellaneous activities. Roadways on the installation are maintained by the West Point Directorate of Public Works (DPW) and traffic is controlled by the Military Police (USMA, 1996). The proposed project site is accessed by Buckner Loop to the West. There are currently about 217 parking spaces in the Old PX parking lot, which is used for overflow and special events parking. Metro North provides passenger rail service to the east bank of the Hudson River, with adjacent stations located at Peekskill, Garrison, Cold Spring, and Beacon. Conrail provides freight services that run along the west bank of the Hudson River, including passing directly through West Point.

#### **4.11 Air Quality**

West Point, including the proposed CAC Complex, is located in the southern portion of the Hudson Valley Air Quality Control Region (HVAQCR) (USMA, 1980a, 1980b). USEPA and NYSDEC have classified Southern Orange County as an attainment area for all but one National Ambient Air Quality Standards (NAAQS) criteria pollutants including carbon monoxide, nitrogen dioxide, total suspended particulates and sulfur dioxide, and is classified as a non-attainment area for ozone (Ralston, personal communication, 1997; USMA, 1980a, 1980b). Sources of stationary air pollution emissions at West Point include five industrial oil-fired boilers, two incinerators, a restricted burn site, and nuclear, biological, and chemical training activities (USMA, 2002). Mobile sources of air pollution emissions at

West Point include vehicular traffic from light-duty gasoline powered trucks and automobiles, heavy duty diesel powered vehicles, and air craft (USMA, 2002).

#### **4.12 Noise**

The primary sources of noise originating from West Point are helicopter missions and firing exercises. Helicopter noise levels are 67.7 dB at the Lake Frederick Drop Zone, which is slightly above noise guidelines (65dB). This drop zone is located in an area remote from main post but close to a golf course and housing area on the western side of the reservation. In terms of firing noise, sound exposure contours for artillery training have been developed. These contours lie almost entirely within the boundaries of West Point. Surrounding areas where sound exposure contours may extend beyond the site's boundaries are characterized as being rural with an extremely low population density (USMA, 2002a). Other sources of noise at West Point include vehicular traffic from passenger vehicles, railroad and boat traffic on the Hudson River. Although the cemetery is located near the Old PX, which is being used as a temporary location for the community athletic center, the cemetery adjacent to the preferred site location is still maintained as a quiet park-like setting.

#### **4.13 Utility Infrastructure**

##### **4.13.1 Energy**

Currently, electricity at West Point including the proposed CAC Complex is provided by Orange and Rockland Utilities, Inc. through West Point's electric distribution system (USMA, 2002a). Another separate gas-fired steam plant consisting of two 40,000-pound-per-hour water tube boilers is located in Building 845. This facility serves the Washington's Gate and Keller Army Hospital areas. Central Hudson Gas & Electric Co. supplies natural gas to West Point; gas is used for all boilers, cooking, hot

water generation, heating, and the laundry plant. Natural gas is distributed through West Point's distribution system.

There are electric lines and a 500 kVA transformer that tie into the western side of the Old PX at the preferred site. Also, Building 683 and the Dunover Court buildings to the north are serviced by existing 2-inch low pressure natural gas lines. There is an existing 4-inch gas line that runs along Washington Road, to the west of the preferred site.

#### **4.13.2 Telecommunications**

Telecommunication services at West Point include telephone, fire alarm, security, and cable television services. Telephone service is provided by Verizon, but all infrastructure is owned by the Army. Fiber optic cables connect many of the Main Post buildings and provide telephone, fire alarm, and security services. Cable television is provided through three services operated by a local cable company. There are existing telecommunication lines (100-pair copper) at the preferred site that remain from when the site was used for the old PX. There is also adequate telecommunications infrastructure in the vicinity of both alternative sites that could be extended to the alternative sites along existing roadways or in other upland areas.

#### **4.13.3 Public and Private Water Supply Sources**

There are no public or private water supply wells located in the immediate vicinity of the project area (Stegville 1999). Rather, potable water is supplied to the entire project area from the water treatment plants at West Point. There are three such plants including the Lusk Water Plant, Stony Lonesome Plant, and Camp Buckner Plant. These plants are supplied from lakes and reservoirs within the West Point watershed. West Point's total usable volume of water is 850 MG; however, the safe yield of the entire system under normal circumstances is 5 million gallons per day (MGD). Peak water use at the West Point is around 5 MGD during summer months. There is a six-inch water line on the west side of the Old

PX, at the preferred site location. The water line is adequate to handle the building's normal loads but is not adequate to provide fire protection.

#### **4.14 Hazardous Materials and Wastes**

##### **4.14.1 Hazardous Waste**

There are no USEPA-designated hazardous waste sites on or in the immediate vicinity of the proposed CAC Complex site or West Point as a whole (USEPA, 1999). Additionally, there are no NYSDEC-designated active or inactive hazardous waste sites, or contaminated water or soil resources (NYSDEC 1995). No lethal chemical-biological agents have been manufactured, stored, or used on or in the immediate vicinity of the proposed CAC Complex site or West Point as a whole (USMA, 1984).

##### **4.14.2 Solid Waste**

There are inactive landfills under the old PX parking lot at the preferred site (Figure 4-8) and under H Lot; neither landfill is in use today. Rather, solid waste generated at West Point, is hauled by a contractor to the West Point-owned, contractor-operated transfer station on the installation. Dewatered sludge from the sewage treatment facilities is transported directly to a permitted landfill of the solid waste contractor's choice. Remaining solid waste is then hauled to an approved state-permitted landfill facility.

Approximately 6,561 tons of solid waste is generated annually for the entire installation.

The inactive landfill (WSTPT-01) located at the preferred site for the CAC Complex is beneath the Old PX parking lot, east of Buckner Loop between the Old PX and the cemetery. The Old PX Landfill is an Installation Restoration Program (IRP) Site. The IRP is a comprehensive program to identify, investigate and clean up contamination associated with past Army activities at active Army installations. The goals of the program are; (1) to protect the health and safety of installation personnel and the public, and (2) to restore the quality of the environment. The landfill is about 2-3 acres (0.9 – 1.2 ha) in size and was used for domestic and sanitary waste during the 1940s and 1950s. The landfill was covered with an asphalt

parking lot in the 1980s (USMA 1994a). Leachate seeps observed at this site triggered a request by the NYSDEC for additional sampling in March 1998. Sampling was performed and a supplemental report prepared that recommended No Further Action at the landfill based on the sample results. The landfill is included in West Point's Sampling and Analysis Plan for Long Term Monitoring and Maintenance and groundwater sampling is conducted at this site. Of the six on-site monitoring wells at this location (Figure 4-8), well PXMW-01 is the only well monitored annually for metals (filtered and unfiltered). West Point has just completed a monitoring round for which the results have not yet been received.

#### **4.14.3 Wastewater**

Two wastewater treatment systems serve West Point including Target Field Wastewater Treatment Plant and the Camp Buckner Wastewater Treatment Plant. The Target Field Wastewater Treatment plant serves most of West Point, operates year round, and is rated at 2.06 MGD. It has a New York State Pollutant Discharge Elimination System Permit (SPDES) (No. NY-0023761) to discharge into the Hudson River and relies on an auxiliary generator for power during power outages. The Camp Buckner Wastewater Treatment Plant services both Camp Buckner and Camp Natural Bridge on a seasonal basis, approximately eight months a year. It is a 0.25 MGD extended aeration activated sludge plant.

Additionally, wastewater generated at the Visitor's Center is discharged into the Highland Falls sanitary sewer system and is treated at Highlands Falls Treatment Plant rather than at West Point. There are two eight-inch ductile iron sewage lines that tie the old PX building into the Target Hill WWTP. They are located one each on the north and south side. These pipes are large enough to accommodate the proposed CAC Complex. In addition, there are storm sewer lines on the north, south, and west sides of the Old PX building that serve the parking lot and other surrounding areas.

#### **4.14.4 Lead-Based Paint (LBP) and Asbestos**

A limited lead and asbestos inspection was conducted for Building 683 to facilitate its renovation to a fitness facility. In addition, a lead inspection was conducted in quarters 134D and 136B in 1995; lead was detected in a window and door components throughout these buildings. Asbestos was removed from the basements of Buildings 139, 134, and 142. No other information is available regarding the presence of asbestos or LBP for structures associated with the recommended alternative; however it is likely that the historic structures contain LBP and/or asbestos containing materials. There are no buildings or structures on H Lot.

## 5.0 Environmental Consequences

As part of the NEPA process, the proposed activity must be evaluated to determine if it would significantly affect the environment. Effects can be classified as beneficial or adverse, long term or short term, and significant or not. According to the USDOA(1998), effects are significant if they violate existing pollution standards; cause water, air, noise, soil, or underground pollution; impair visibility for substantial periods of any day; cause interference with the reasonable peaceful enjoyment of property or use of property; create an interference with visual or auditory amenities; limit multiple use management programs for an area; cause danger to the health, safety or welfare of human life; or cause irreparable harm to animal or plant life in an area.

In this section, the potential for impacts to the environment at West Point are analyzed for the four proposed alternatives and where applicable, the impacts are described in the context of beneficial versus adverse, long term versus short term, and significant versus insignificant. For resources where there is potential for significant adverse impacts to result, mitigation measures have been developed to offset the impact to below significant levels. Table 5-1 summarizes the potential environmental consequences of the CAC Complex by alternative.

**Table 5-1 Potential Environmental Consequences of CAC Complex\***

ALTERNATIVES	Physical Resources		Water Resources		Biological Resources			Coastal Resources	Land Use	Visual Resources	Cultural Resources		Socio-economics			Air Quality	Noise	Utility Infrastructure	Hazardous Materials and Waste	Health and Safety	Environmental Justice	Overall Evaluation
	Geology	Soils	Ground Water	Surface Water	Vegetation	Wildlife	T/E Species				Historic	Archaeological	Population /employment	Community Services	Traffic Circulation/parking							
No Build	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	<b>4</b>
Old PX Site**	0	1	0	1	1	0	0	2	3	3	3	0	0	0	1	1	3	1	1	1	0	<b>22</b>
Site H	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	<b>18</b>
Site J	1	1	0	1	1	1	0	1	2	3	2	0	0	1	2	1	2	2	1	1	0	<b>23</b>

Note: 0=No impact 1=Minor adverse impact 2=Moderate adverse impact 3=Significant adverse impact

\*Mitigation measures have been developed to offset potentially moderate or significant environmental consequences to below the significance level

\*\* Preferred Alternative



## 5.1 Geology

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

The proposed action would not cause significant impacts to geological formations underlying the project site. There is the potential for minor long-term impacts to the subsurface bedrock and topography from construction and excavation for the proposed CAC Complex. This impact is considered minor because the existing subsurface geologic formation does not have a specific economic or other structural use, and use of this formation as structural support for the building foundation would be consistent with adjacent land uses. Therefore, no significant adverse impacts would result from the recommended alternative.

### **Other Building Sites Alternative**

Impacts to geology for the H Lot or J Lot Alternatives would be the similar to those of the Old PX Site Alternative (recommended alternative) except that some rock removal would also be required if one of these sites were selected.

## 5.2 Soils

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

Construction for the proposed CAC Complex would cause minor impacts to surficial soils as a result of earth moving and excavation in the construction work area due to equipment movement and material storage. To minimize impacts, the West Point would prepare a Storm Water Pollution Prevention Plan (SWPPP) and obtain NYSDEC State Pollutant Discharge Elimination System (SPDES) General Construction Permit (GP-02-01) for Storm Water Discharges from Construction Activities prior to start of construction (6NYCRR 750-1.21). All permit conditions would be adhered to during construction. In addition, Best Management Practices (BMPs) for erosion and sedimentation as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence) would be implemented to mitigate the potential for soil erosion during land clearing and foundation excavation. With these mitigation practices in place, there would be no significant impacts to soils as a result of the recommended alternative.

### **Other Building Sites Alternative**

Impacts to soils under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative).

## **5.3 Water Resources**

### **5.3.1 Groundwater**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There would be no impacts to groundwater resources from the preferred alternative. There are no public water supply wells, nor any sole source, primary, principal or important aquifers occurring at or in the immediate vicinity of the Old PX building site, so no direct or indirect impacts would occur as a result of construction or operation of the new CAC Complex.

### **Other Building Sites Alternative**

Impacts to groundwater resources under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative).

## **5.3.2 Surface Water**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There would be no significant impacts to surface waters from the recommended alternative. There are no surface water resources located on the preferred site for the CAC Complex. The closest surface water to the site is an intermittent stream to the east of the site and Crow's Nest Brook, located about 300 feet (90 m) to the north. No fill or excavation would take place in or near either waterway so no direct impacts would occur to these resources. Since more than one acre of soil disturbance is proposed at the site, West Point would apply for a NYSDEC SPDES General Construction Permit (GP-02-01) for Storm Water Discharges from Construction Activities and prepare a SWPPP prior to start of construction. The SWPPP would ensure that storm water would be directed away from Crows Nest Brook so that impacts to the reproducing trout in that brook would not be affected. In addition, BMPs for erosion and sediment

control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence) would be implemented during construction to prevent secondary impacts such as sedimentation or erosion and subsequent turbidity in the streams. These practices would ensure there would be no significant adverse impacts to surface water resources as a result of the recommended alternative.

### **Other Building Sites Alternative**

No surface water impacts are expected for Building Area H. The closest surface water bodies located in the vicinity of the other building sites, but not directly impacted, include Stony Lonesome Brook, Lusk Reservoir and Kinsley Farm Brook. Kinsley Farm Brook is just east of Buildable site J, while the other two are located further from the proposed building sites (i.e. between 700-2,500 feet (213-762 m)). No fill or excavation would take place in or near these surface water bodies so no direct impacts would result. Secondary or indirect impacts would be minimized by developing a SWPPP to manage the storm water flow from either site during and after construction. Also, since more than one acre of disturbance is proposed for either site, West Point would apply for a NYSDEC SPDES GP-02-01 permit for Storm Water Discharges from Construction Activities prior to start of construction. In addition, BMPs for erosion and sediment control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence) would be implemented during construction to prevent secondary impacts such as sedimentation or erosion and subsequent turbidity in these surface water resources. These measures would ensure that significant adverse impacts to surface water resources would not occur from the Other Building Sites Alternative.

## **5.4 Vegetation Communities and Special Natural Areas**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There would be no significant impacts to vegetation or special natural areas as a result of the recommended alternative. No special natural areas, unique vegetation communities, or plant species of Federal or State concern or significance occur on or in the immediate vicinity of the proposed CAC Complex, so no impacts to such areas, communities, or species would occur. There would be some impact to the existing maintained lawn, ornamental plantings, and successional vegetation communities during construction. Most of the impact would be temporary, and since these areas are common throughout West Point, do not have significant ecological value, and where possible, would be restored immediately upon completion of earthwork activities, the proposed impacts to these vegetation communities are considered only minor. Furthermore, maintenance of new ball fields would be handled similar to other athletic fields by West Point. They would be routinely mowed and approved fertilizer would be applied seasonally as needed. There will be no significant impacts to vegetation communities or special natural areas as a result of the recommended alternative.

### **Other Building Sites Alternative**

There would be no significant impacts to vegetation or special natural areas as a result of either the H Lot or J Lot Alternatives. There are no special natural areas on or near either location, so no impacts would result. There would be more vegetation clearing required for either site compared to the Old PX site, if they were developed for the new Complex. However the vegetation communities comprising both sites

are common throughout the Post and do not provide unique ecological value. Therefore a loss of several acres of these vegetation communities would not cause significant impacts to the vegetation communities as a whole at West Point. Maintenance of the new ball fields would be handled the same as for the recommended alternative.

## **5.5 Wildlife, Fisheries, and Habitat**

### **5.5.1 Wildlife and Habitat**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

#### **Old PX Site Alternative (Recommended Alternative)**

There would be no significant impacts to wildlife species or habitat as a result of the recommended alternative. There would be some inevitable losses to nonmobile species during construction, but larger mobile species such as birds and small mammals would be able to relocate during the construction activities. In addition, there may be in permanent but minor loss of common avian and mammalian habitat (i.e., maintained lawn) located within the proposed project site. These impacts are considered minor because there is other suitable foraging sites of similar habitat that exist immediately adjacent to the proposed project site. No significant impacts to wildlife or wildlife habitat would occur from the recommended alternative.

### **Other Building Sites Alternative**

Impacts to wildlife and habitat under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative) except that more vegetation clearing and, therefore, habitat removal would be required.

## **5.5.2 Fisheries**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

The activities as proposed would not have a significant impact on fisheries or surface waters provided a storm water plan is developed and adhered to, and the storm water is not directed to Crow's Nest Brook. Therefore, no potential environmental impacts to fisheries are expected.

### **Other Building Sites Alternative**

Impacts to fisheries under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative).

## **5.6 Coastal Resources**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact to coastal resources would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

West Point is located within the New York State Coastal Zone and designated as a SASS (Hudson Highlands). Under the recommended alternative, there is potential for significant impacts to the coastal resources to occur should new facilities be constructed or significant modifications made to existing facilities that are not consistent with the State's 44 Coastal Policies. Most of the State's Coastal Policies are not relevant to the recommended alternative. However, there are two policies (23 and 24) that could be affected by the proposed undertaking, thus posing a potential impact to coastal use and its resources. Policy 23 seeks to protect significant cultural resources and Policy 24 seeks to prevent impairment of Scenic Resources of Statewide Significance. There are historic structures on, and adjacent to, the preferred site, and West Point is located in a SASS, as described in Sections 4.9 and 5.9, respectively. West Point would consult with the NYSHPO regarding potential effects of the project to significant cultural resources. If an adverse effect was determined, West Point would work with NYSHPO to develop a Memorandum of Agreement (MOA). Any new structures would be designed to be compatible in terms of visual and locational relationship to significant cultural resources on and near the site. Compatibility between the proposed action and the significant cultural resource means that the general appearance of the new CAC Complex would reflect the architectural style, design material, scale, proportion, composition, mass, line, color, texture, detail, setback, and landscaping of the significant cultural resources in the area. In addition, since West Point is a NHL, compatibility would extend to infrastructure improvements/changes such as street and sidewalk paving and street furniture and lighting. To ensure there are no adverse impacts to the West Point designation as a SASS, the project would be designed to ensure there are no impacts to the scenic beauty of West Point. Impacts could constitute irreversible modification of geologic forms; destruction or removal of vegetation that contributes to West Point's designation as a SASS; modification, destruction, or removal of structures that are significant to the scenic quality of West Point; or the addition of structures that could reduce scenic views or otherwise

diminish the scenic quality of West Point. Specific siting and facility-related guidelines outlined in Policy 24 would be followed when finalizing the design of the new CAC Complex.

Once the final design is complete and prior to construction of the project, West Point would make a final assessment of its compliance with the NYS Coastal Policies using the Federal Coastal Consistency Assessment Form that would be submitted for review and concurrence by the New York State Department of State Coastal Management Program. If it is determined that the proposed activities would have no effect on the land and water uses and natural resources of New York's Coastal Zone, West Point would be required to notify the New York Department of State at least 90 days before final project approval. Since any work proposed in the coastal zone would adhere to the State's Coastal Policies and would be reviewed by the NYSDOS, no significant adverse effects should result from the proposed action.

#### **Other Building Sites Alternative**

Since there are no historic structures on H Lot, State Coastal Policy 23 would not be adversely affected by this alternative. Otherwise, impacts to coastal resources under the H Lot or J Lot Alternatives would be the same as those of the Old PX Site Alternative (recommended alternative).

### **5.7 Land Use**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There is a potential for significant impacts to an existing land use (cemetery) adjacent to the preferred site. The cemetery is used for solemn activities such as funerals, grave visitation, and reflection. These types of activities require a quiet and respectful atmosphere. Disruptions to the ambiance of the cemetery that disturb its intended usage would be considered significant. The new CAC Complex poses such disruptions, including noise from increased traffic, ball field cheering/shouting, and loud speaker announcements; or visual distraction from the movement and liveliness associated with sporting activities.

To alleviate the potentially significant effects to the land use of the adjacent cemetery, West Point would construct a barrier between the cemetery and new CAC Complex to minimize noise and visual distractions. To effectively screen both noise and visual distractions, the barrier would consist of a combination of a wall or berm and appropriate landscaping. As proposed in the Historic Landscape Management Plan for West Point at West Point (2002), an evergreen screen between the cemetery and the CAC Complex would be planted to form a perennial visual screen of the CAC Complex from the cemetery. The landscaping would be of an adequate height to block the line-of-sight from the cemetery year round. The evergreen, red cedar (*Juniperus virginiana*), was suggested as a preferred landscaping plant in the Historic Landscape Management Plan for West Point at West Point (2002) and would be appropriate for this project as it grows densely and rapidly, reaches heights of 40 to 50 feet, and can be trimmed/manicured to maintain an aesthetically pleasing look. All landscaping and vegetation plantings would be coordinated with the DPW Agronomist. In addition to the evergreen buffer, a dense acoustical buffer would be constructed to act as a noise barrier between the CAC Complex and the cemetery. This buffer would either be a retaining wall or an earthen berm, with the latter being preferred as the vegetated visual screen could be planted directly on it allowing for a more coordinated look. The barrier

features would be constructed within the footprint of the new CAC Complex rather than at the cemetery to avoid disrupting access, operations, or maintenance at the cemetery. Furthermore, any barrier feature would be designed to fit in with the surrounding landscape and architectural features, would be in compliance with the Historic Landscape Management Plan for West Point at West Point (2002), and reviewed by the NYSHPO during the final design phase of the project. These mitigation efforts should effectively improve the viewshed from the cemetery to the northwest over what is currently there (PX parking lot) and be sufficient to maintain a somber and respectful atmosphere within the cemetery.

Despite the proximity of the cemetery, the proposed CAC Complex is consistent with the current zoning and land use of the Main Post Zone and the site has been presented to and approved by the West Point Real Property Planning Board. Given the proposed mitigations and the approval of the Real Property Planning Board, impacts to the land use of the site and adjacent areas from the recommended alternative are expected to be below the significant threshold.

### **Other Building Sites Alternative**

The proposed activities would not modify the land usage at the proposed alternative H Lot or J Lot. However, there is potential for minor impacts if the J Lot were selected, as it is located within the Cadet Support Zone rather than the Community Support Zone. Although the construction of a CAC Complex would not be completely inconsistent with the designated land usage of the Cadet Support Zone, it would be better suited if constructed in the Community Support Zone, thus preserving cadet-related activities for the Cadet Support Zone. Since the CAC Complex is not considered inconsistent with the land use of the Cadet Support Zone, the proposed project would not cause significant impacts if constructed at Building Area J. There would be no land use impacts associated with H Lot, as this site is within the Community Support Zone, the preferred zone for the project.

## 5.8 Visual Resources

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There is the potential for significant impacts to occur to the visual resources at West Point, if the CAC Complex is not constructed in harmony with the existing structures or landscapes, or if important view sheds were hindered by the new Complex. Significant impacts are those that would detract from visual resources onsite or in the surrounding areas such as Washington Road, the Post cemetery, or the Hudson River. To avoid potential impacts, West Point would consult with the NYSHPO to develop a MOA that would provide stipulations that would require the architectural design and building materials to blend with the surrounding structures; and ensure that important viewsheds to significant features such as the Hudson River, adjacent cemetery, or Washington Road were not impaired. Specifically, flashy or reflective materials would be avoided and materials similar to those of surrounding buildings would be used. Surrounding architectural features primarily reflect the 30's era, using brick and simple architectural style. A physical barrier would be installed between the new CAC Complex and the adjacent cemetery to screen visual impacts. This barrier may consist of an evergreen hedgerow, grassed berm, and/or physical barrier such as a wall. Design details would be worked out during the design process of the project and would include stipulations developed through consultation with the NYSHPO that would be laid out in a MOA. As long as the stipulations are followed no significant impacts should occur to visual resources at West Point from the proposed action.

### **Other Building Sites Alternative**

There are no significant viewsheds on, or near, H Lot, so there would be no visual impacts associated with this alternative.

For J Lot, there is the potential for significant impacts to occur to the visual resources at West Point, if the CAC Complex is not constructed in harmony with the existing structures or landscapes, or if important view sheds were hindered by the new Complex. Significant impacts are those that would detract from visual resources associated with the adjacent historic structures (Buildings 378, 379, 644, 734, and 736).

To avoid potential impacts, the architecture and landscaping of the new CAC Complex would be designed to blend in with its surroundings and the dimensions of the Complex would be designed to avoid disrupting existing views. Design details would be worked out during the design process of the project and would include stipulations developed through consultation with the NYSHPO that would be laid out in a MOA. So long as these stipulations are followed no significant impacts should occur to visual resources at West Point from the proposed action.

## **5.9 Cultural Resources**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no additional impact would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There is potential for significant impacts to cultural resources to result from the Recommend Alternative. According to the ICRMP (2001), six of the eight buildings (134, 136, 138, 139, 142, and 695) that would be affected by the proposed project are eligible for listing on the NRHP and are contributing factors to the West Point NHL. These buildings would be demolished as part of the recommended alternative. A

formal evaluation of the structures with the NYSHPO would be necessary prior to demolition of any of the structures to determine whether significant impacts would result. Significant impacts are those that would detract from West Point's designation as a NHL or those that would impair a structure individually listed on the NRHP. West Point would consult with the NYSHPO in accordance with Section 106 of the NHPA and implementing regulations, including AR 200-4 - Cultural Resources Management, to develop a MOA between West Point and the NYSHPO to mitigate any adverse effects to cultural resources. The MOA would provide stipulations regarding demolition of the structures eligible for designation on the NRHP and contributing to the NHL designation, and for construction of the new CAC Complex to ensure that significant impacts to cultural resources do not result from the recommended alternative. These stipulations would require the architectural design and building materials to blend with the surrounding structures; and ensure that important viewsheds to significant features such as the Hudson River, adjacent cemetery, or Washington Road were not impaired. In addition, Historic Documentation as specified by the NYSHPO and the National Park Service would be prepared in accordance with the Historic American Building Survey (HABS) for the historic buildings that may be demolished as part of the project, prior to any demolition. As long as these stipulations are abided by, significant impacts to cultural resources should not occur.

Previous consultation with the NYSHPO regarding demolition of the Building 801, which was listed as potentially eligible for NRHP and potentially contributing to the NHL, was undertaken, and the NYSHPO determined that No Adverse Effect would result from the activity (Donofrio, 2001). Building 801 has been demolished as of March 2004.

### **Other Building Sites Alternative**

For H Lot, there are no historic structures that would be affected by the proposed undertaking. As such, the activities as proposed would not modify the existing cultural resources of West Point. Nonetheless,



West Point would still consult with the NYSHPO and develop an MOA to ensure significant impacts to cultural resources at West Point would not occur as a result of the proposed action.

There is potential for significant impacts to cultural resources to result from the proposed undertaking if J Lot is selected. According to the ICRMP (2001), five of the nine buildings (378, 379, 644, 734, and 736) in the vicinity of the proposed project are eligible for listing on the NRHP and are contributing factors to the West Point NHL. A formal evaluation of the structures with the NYSHPO would be necessary prior to demolition of any of the structures to determine whether significant impacts would result. Significant impacts are those that would detract from West Point's designation as a NHL or those that would impair a structure individually listed on the NRHP. In accordance with Section 106 of the NHPA, a Memorandum of Agreement between West Point and the NYSHPO would be developed to mitigate any adverse effects to cultural resources. The MOA would provide stipulations regarding demolition of the structures eligible for designation on the NRHP and contributing to the NHL designation, and for construction of the new CAC Complex to ensure that significant impacts to cultural resources do not result from the recommended alternative. These stipulations would require the architectural design and building materials to blend with the surrounding structures; and ensure that important viewsheds to significant features such as the Hudson River or Washington Road were not impaired. In addition, Historic Documentation as specified by the NYSHPO and the National Park Service would be prepared in accordance with the HABS for the historic buildings that may be demolished as part of the project, prior to any demolition. As long as these stipulations are abided by, significant impacts to cultural resources should not occur.

## **5.10 Socioeconomics**

### **5.10.1 Population and Employment**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact on population and employment would be incurred as a result of the proposed action.

#### **Old PX Site Alternative (Recommended Alternative)**

The activities as proposed would have no affect on the population at the West Point. Changes in community demographics, socioeconomic diversity, economic diversity, or age distribution are not anticipated to change as a result of the proposed action. There could be a minor temporary beneficial impact to socioeconomic resources within Orange County. The construction of the proposed CAC Complex would require the temporary employment of qualified contractors to perform the work. The increase in paid personnel could also temporarily increase State sales tax revenue on goods and services purchased in the surrounding municipalities. These increases to the local economy would provide a temporary positive impact; no adverse impacts would be expected to occur.

#### **Other Building Sites Alternative**

Impacts to population and employment under the H Lot or J Lot Alternatives would be the same as those of the Old PX Site Alternative (recommended alternative).

### **5.10.2 Community Services**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. The purpose and need for this project would not be fulfilled if this alternative were implemented as community activities would continue to be scattered and inadequate.



### **Old PX Site Alternative (Recommended Alternative)**

The activities, as proposed, would improve community services at the West Point by consolidating the community activity center and community fitness center to fulfill the needs of the West Point community. The new facility would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. Therefore, there would be a long-term positive impact to the West Point.

### **Other Building Sites Alternative**

H Lot and J Lot are removed geographically from the major residential areas at West Point, thus limiting resident's accessibility to and convenience of using the CAC Complex. The intent of the project is to not only consolidate the various community activities into one location, but to also locate the facility in an easily accessible area to the major residential communities.

## **5.10.3 Traffic Circulation and Parking**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are, thus creating increased traffic volume by causing more vehicles to circulate around the post to get to various activity venues. Consolidating the CAC Complex into one location would minimize traffic flow around the post.

### **Old PX Site Alternative (Recommended Alternative)**

Under this alternative, there is the potential for minor increases to traffic during construction and operation of the CAC Complex. During construction, there may be an increase in the number of vehicles (e.g., construction contractors) entering West Point on a daily basis. These vehicles may require

inspection and thus cause traffic delays at the gates. Additional delays may be caused by a lack of familiarity with West Point's road system. Some delays may also be experienced along roadways leading to/from the site during the construction period (i.e., Washington Road, Buckner Loop). Overall, these impacts are expected to be minor. During operation traffic flow may be slightly heavier than at present. However, since this area was formerly the PX, it is accustomed to heavy traffic flow and should accommodate additional traffic without a problem. Also, the new CAC Complex design incorporates 257 parking spaces, which includes approximately 40 additional spaces over what is currently at the Old PX site. The number of parking spaces should be more than adequate for the CAC Complex and will not impede the use of the parking lot for overflow parking or special events. No long-term or significant impacts to transportation or parking are anticipated.

#### **Other Building Sites Alternative**

Impacts to transportation under this alternative would be the same as those of the Old PX Site Alternative (recommended alternative). However, adverse impacts associated with parking could be incurred in H Lot and J Lot. For the J Lot, parking would not fit directly onto the site and for H Lot, competition with the PX for parking could occur. For both alternative sites, difficulties could be accommodated by sharing spaces with nearby uses. No significant impacts would be expected to occur from the proposed action.

#### **5.11 Air Quality**

##### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact on air quality would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

Minor and temporary impacts to air quality are anticipated during the construction period. These impacts would result from elevated emissions associated with heavy construction equipment used in demolition activities and construction of the new CAC Complex. Conformity under the Clean Air Act, Section 176, for the proposed project has been evaluated in accordance with 40 CFR Part 51. Total direct and indirect emissions from the project have been estimated at < 5.0 tons per year (TPY) and are below the de minimis threshold established in 40 CFR Part 51.853(b) at 25 TPY; the project is not considered “regionally significant” under 40 CFR Part 51.853(I). Construction related air quality impacts would be temporary; as they would be confined to the time required to construct the proposed improvements and would not continue during the operational phase. Construction related air pollution is not anticipated to pose a significant or long-term environmental impact to the surrounding area. However, West Point will file a General Air Quality Confirmation Determination and submit it to its Environmental Management Division for review and concurrence. It is anticipated that newly constructed buildings will be heated with natural gas if available, with a diesel generator used for back-up. If natural gas is not available, heating oil would be used instead. Specifications of the boiler (i.e. size, capacity, heat output values) would be worked out at the final design phase of the project. Additional air quality controls would be instituted throughout the life of the proposed action to minimize any potential adverse effects.

### **Other Building Sites Alternative**

Impacts to air quality under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative).

## 5.12 Noise

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact on noise would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

Construction of the CAC Complex has the potential for significant noise impacts to adjacent land uses, including the cemetery, which is a sensitive noise receptor located just south of the site. Noise impacts would be considered significant if they impaired the primary use of the adjacent land uses. Both construction and operation-related noise impacts are expected from the new CAC Complex. During construction, there would be a temporary increase in noise due to heavy equipment operation. Noise abatement controls would be instituted to minimize potential adverse effects of construction related to noise. Such controls may include careful staging of noise intensive construction activities during daylight hours, use of less noise intensive construction practices where possible, and limiting simultaneous loud work activities. The projected maximum construction noise levels would not exceed the New York Noise Regulation limits applicable to daytime construction. Equipment noise limits, which specify the use of mufflers and temporary noise barriers/curtains, would also be used if necessary. Furthermore, to avoid potential conflicts with funerals at the adjacent cemetery, contracts with construction contractors would specify that work must stop during sensitive events such as funerals. Construction-related noise impacts would be temporary; as they would be confined to the time required to construct the proposed improvements and would not continue during the operational phase.

During operation of the CAC Complex, the primary source of noise generation would be from ball field cheering/shouting and loud speaker announcements or from increased traffic along Washington Road. As

previously described in Section 5.7 (Land Use), acoustical buffers including a combination of evergreen landscaping and a vegetated earthen berm or retaining wall would be installed between the new CAC Complex and the cemetery to minimize noise. The berm or retaining wall would be designed with the appropriate materials and dimensions to absorb sufficient noise from the new CAC Complex to maintain a somber and respectful atmosphere within the cemetery. The final design of the acoustical barriers would be compliance with the Historic Landscape Management Plan for USMA at West Point (2002) and would be reviewed by the NYSHPO. In addition, outdoor CAC Complex activities would be shut down and monitored during funerals to avoid noise conflicts. The shut-down of CAC Complex activities would be coordinated through effective communication by the Mortuary Affairs Division of the Directorate of Logistics and the Building Commandant. These mitigation measures should limit impacts to below the significant threshold.

#### **Other Building Sites Alternative**

The proposed construction of the CAC Complex at either H Lot or J Lot would not involve significant noise generating facilities relative to the existing land uses; however, minor, yet temporary environmental noise impacts are projected to occur during construction. Two sensitive noise receptors are located in the immediate vicinity of H Lot including the Child Development Center and a residential area. J Lot also has a sensitive noise receptor (residences) located nearby. The primary source of noise generation would be construction equipment. Noise abatement controls would be instituted throughout the life of the proposed action to minimize potential adverse effects of construction related noise. Construction related noise impacts would be temporary; as they would be confined to the time required to construct the proposed improvements and would not continue during the operational phase. Although there would be operational noise such as ballpark screaming/cheering and loudspeaker announcements, the adjacent land

uses are not ones that require a solemn atmosphere and thus would not be impacted by the noise. No significant impacts would occur as a result of the proposed undertaking.

### **5.13 Utility Infrastructure**

#### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact on utilities would be incurred as a result of the proposed action.

#### **Old PX Site Alternative (Recommended Alternative)**

The CAC Complex would be heated using natural gas. Natural gas lines are already in place at the CAC Complex site, but a 300-foot segment would have to be upgraded from a 2-inch line to a 4-inch line to meet the proposed demands of the CAC Complex. Electrical use for the new CAC Complex has been estimated to be 270 kW. Building 683 is currently served with a 13.8kV feed and has an existing (480/277volt) 500kVA pad-mounted transformer outside that would be able to handle the entire estimated load. Sufficient telecommunication lines already in place from when site was used for the old PX. In addition, the existing water supply network is adequate for the normal daily supply requirement, although it would have to be upgraded for fire protection. West Point will design a fire protection system for the building. The sewage network is adequate to handle projected flows from the new CAC Complex. No significant long-term environmental impacts to utilities are anticipated as a result of the proposed action.

#### **Other Building Sites Alternative**

New or upgraded utility infrastructure for water, sewer, gas, electric, and telecommunications would have to be installed for both the H Lot and J Lot alternatives. It is not anticipated that adding this infrastructure and utility demand would cause a significant impact to the utility systems at West Point.

## **5.14 Hazardous Materials and Waste**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact to hazardous materials and waste would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

The Contractor is responsible for the development of a Construction and Demolition Waste Management Plan. All building product purchases will comply with West Point's Affirmative Procurement Policy. A lead and asbestos survey would be performed on the buildings proposed for demolition. EPA Certified firms and workers would remove all friable asbestos and manage lead-based paint prior to the commencement of any demolition activities. Upon proper EPA notification, asbestos would be removed from the structure; after the removal is complete, demolition would begin. All asbestos would be handled in accordance with 40 CFR 61 Subpart M and 29 CFR 1926.1101, so no significant impacts would occur. All construction activities that would disturb lead would be in compliance with 29 CFR 1926.62.

Disposal of lead waste would be coordinated with the Environmental Management Division.

Accumulation and disposal would be in accordance with 40 CFR 260-265, 6 NYCRR 370-373 and West Point regulation 200-3. So long as the applicable regulations are complied with, there should be no significant impacts from the proposed undertaking.

In addition, all New York State applicable regulations (6NYCRR Part 360-2.15(k)(9) and Part 373-2.7(g)) for construction over closed landfills would be adhered to if any construction would occur on the inactive landfill below the old PX parking lot. Also, chemical bulk storage for the pool would be stored in

accordance with New York State regulations (6 NYCRR Parts 595-599). As such, no significant long-term environmental impacts to hazardous wastes or materials are anticipated.

### **Other Building Sites Alternative**

There are no affected structures at H Lot. Structures to be used within J Lot must be inspected by EPA certified inspectors to determine if asbestos or lead-based paint is present. Removal of these materials and agency notification would be the same as that for the recommended alternative. In addition, construction activities proposed over the landfill in H Lot would follow the same New York State applicable regulations as the recommended alternative. Therefore, no significant environmental impacts are anticipated.

## **5.15 Health and Safety**

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no health and safety impacts would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There is the potential for temporary minor impacts related to security to occur as the increase in the number of contractors working at West Point increases the potential for criminal activity. However, West Point has security policies including gate checks to minimize criminal behavior. The same safety regulations and policies currently in effect for government workers would remain in place and crime protection would continue to be provided by Military Police. The contractor would be required to

develop a Health and Safety Plan to identify potential hazards and protective measures for its employees while working at West Point.

Similar to West Point personnel, contractors at West Point would receive emergency medical treatment at Keller Army Community Hospital (KACH) on base, but would have to go off-post for all other medical treatments. The same safety regulations and policies would remain in place. Overall, no significant effects to public health and safety are expected to occur from the proposed action.

### **Other Building Sites Alternative**

The increase in the number of contractors working at West Point would also be a potential security issue as it was under the Old PX Site Alternative (recommended alternative).

### **5.16 Environmental Justice**

On February 11, 1994, President Clinton issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The purpose of this EO is to ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Consideration of environmental justice concerns includes race, ethnicity, and the poverty status of populations in the vicinity of where a proposed action would occur. Such information aids in evaluating whether a proposed action would render any of the groups targeted for protection vulnerable.

### **No Action Alternative**

Under the No Action Alternative, all recreational activities would be kept throughout the installation as they currently are. As such, no impact relative to Environmental Justice would be incurred as a result of the proposed action.

### **Old PX Site Alternative (Recommended Alternative)**

There should be no impacts relating to Environmental Justice as a result of the recommended alternative. Construction of the CAC Complex would benefit the surrounding communities by centralizing recreational and community activities into a single center which would provide greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. The new CAC Complex would be used by civilian employee personnel, cadets, active and retired military personnel, and military families and guests. The proposed action would not cause disproportionate environmental effects to low income or minority populations; therefore no significant effects would occur as a result of the recommended alternative.

### **Other Building Sites Alternative**

Impacts to Environmental Justice under the H Lot or J Lot Alternatives would be similar to those of the Old PX Site Alternative (recommended alternative).

## **6.0 Past, Present and Reasonably Foreseeable Future Actions**

In addition to the proposed action, there are recent activities that have been completed or are in progress and there are other Reasonably Foreseeable Future Actions (RFFA) planned at West Point that may influence, or be influenced by, the CAC project. A description of these projects is presented in this section and a summary of their potential environmental consequences is provided in Table 6-1.

Individually, each action is not considered to have a significant impact; however, taken cumulatively, they could present a significant impact.

**Table 6-1 Summary of Potential Environmental Consequences of Associated Projects**

Potential Environmental Consequences	West Point School Upgrades	Post Chapel Parking Lot	Natural Gas Pipeline	Masonry Walls Repair	Demolition of Canopy (Bldg 697)	Demolition of Greenhouse	Rehab of Historic Quarters	Demolition of Building 801	Self Help Center	UST Removal	Gates/Perimeter Fence	Michie Stadium Improvements	Arvin Cadet Phy Education Center	Housing Upgrades	Washington Road Firehouse	Cemetery Annex	Cemetery Gates	Library & Academic Center	Rehab Building 693	Rehab Building 689	Catholic Chapel HVAC	KACH Upgrades
<b>Physical Resources</b>																						
Geology	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Soils	1	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<b>Water Resources</b>																						
Ground Water	1	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
Surface Water	1	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
<b>Biological Resources</b>																						
Vegetation	2	0	2	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0
Wildlife	2	0	1	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0
T/E Species	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
<b>Coastal Resources</b>	0	0	1	0	0	0	0	0	0	0	3	0	1	0	0	1	0	3	0	0	1	1
<b>Land Use</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
<b>Visual Resources</b>	2	0	3	3	0	0	0	0	1	0	3	0	2	0	3	0	1	3	0	0	3	3
<b>Cultural Resources</b>																						
Historic	0	0	1	3	0	0	3	0	1	0	3	2	3	3	3	0	1	3	3	3	3	1
Archaeological	1	0	1	0	0	0	2	0	0	0	1	0	0	1	0	1	0	3	0	0	1	1
<b>Socioeconomics</b>																						
Pop/Employ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Community	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Potential Environmental Consequences	West Point School Upgrades	Post Chapel Parking Lot	Natural Gas Pipeline	Masonry Walls Repair	Demolition of Canopy (Bldg 697)	Demolition of Greenhouse	Rehab of Historic Quarters	Demolition of Building 801	Self Help Center	UST Removal	Gates/Perimeter Fence	Michie Stadium Improvements	Arvin Cadet Phy Education Center	Housing Upgrades	Washington Road Firehouse	Cemetery Annex	Cemetery Gates	Library & Academic Center	Rehab Building 693	Rehab Building 689	Catholic Chapel HVAC	KACH Upgrades	
Services																							
Traffic/Parking	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
<b>Air Quality</b>	1	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0
<b>Noise</b>	1	1	0	0	1	1	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	1	
<b>Utility Infrastructure</b>	0	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Hazardous Materials/Waste</b>	1	0	1	1	0	2	2	2	1	3	2	1	1	1	1	1	1	1	2	2	1	1	1
<b>Health/Safety</b>	2	1	1	1	1	1	2	2	1	1	2	1	1	2	2	1	0	1	1	1	1	1	1
<b>Environmental Justice</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overall Evaluation</b>	<b>17</b>	<b>3</b>	<b>18</b>	<b>8</b>	<b>2</b>	<b>4</b>	<b>10</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>24</b>	<b>9</b>	<b>13</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>4</b>	<b>18</b>	<b>7</b>	<b>7</b>	<b>11</b>	<b>8</b>	

Note: 1=Minor Impact 2=Moderate Impact 3=Significant Impact



## **6.1 Recently Completed Projects**

### **6.1.1 West Point School Complex Upgrades**

In order to comply with Department of Defense standards, the West Point recently completed several upgrades at the West Point School Complex. The upgrades included an addition of classroom space to Building 705A, the construction of a 152-space surface parking lot, new and modified sidewalk crossings on the east side of Barry Road, the creation of a busing staging area, the demolition of existing Building 1000, and the removal of two existing temporary modular classrooms. In addition, a new two-story, 13,000 square-foot multipurpose gymnasium, that is housed under a separate roof in the north-central portion of the West Point School Complex was constructed to replace the current gym housed within the West Point Middle School building, which in turn may be converted to classroom space as part of a possible future project. The gym will also house physical and occupational therapy facilities, currently housed in the auditorium of the West Point Elementary School. Construction of the gym was completed as of March 2004.

### **6.1.2 Post Chapel Parking Lot**

In the summer 2002, West Point constructed a new parking lot to serve the Post Chapel. This new parking lot is located immediately north of the Post Chapel (Building 799), at the intersection of Merritt Road and Biddle Loop. The Post Chapel was constructed in 1944 to serve as the West Point Post Chapel. This building is a contributing element to the West Point NHL. Immediately north of the proposed parking lot site is Merritt Road, with the closest structures being Family Housing for Non-Commissioned Officers (NCO) Buildings 397, 409, and 411; these buildings were constructed around 1931 as NCO Quarters, and are all considered to be contributing elements to the West Point NHL. To the northeast of the project is Biddle Loop, where the rear of NCO Family Housing Buildings 364 and 368, which were constructed in 1865, are the closest structures to the new parking lot and are considered contributing elements to the West Point NHL. The parking lot is located about 225 ft west of Washington Road, a

historic transportation and scenic corridor that is also a contributing element to the West Point NHL. Before construction, the parking lot location was an open, vacant lot which did not house any structures. The new parking lot is 120 ft in length from east to west and 70 ft in width from north to south, and provides parking for 18 automobiles.

### **6.1.3 Natural Gas Pipeline**

West Point recently constructed a new natural gas distribution pipeline. The project was constructed by Central Hudson Gas and Electric Corporation (Central Hudson), as a contractor to West Point. The new facilities consist of a new 10-inch steel pipeline, and the continued usage of the existing 6-inch natural gas pipeline currently operated by Central Hudson to feed West Point. The existing Meter and Regulating Station at West Point was upgraded as part of the project. The new system became operational in March 2004.

### **6.1.4 Masonry Walls Repair**

In the summer of 2002, West Point initiated a recurring maintenance project to West Point retaining walls that will occur annually throughout the installation. These walls have deteriorated over time and are in need of routine maintenance and repair including re-pointing. The project entails performing necessary re-pointing and reconstruction of deteriorated walls, and replacing concrete at the top of the walls with limestone capstones. Maintenance to the walls will continue as necessary.

### **6.1.5 Demolition of Canopy to Building 697 (Old PX Gas Station)**

West Point recently completed demolition of the canopy of Building 697, the old PX Gas Station. The project included removing the canopy and gas pump islands and repairing the service station roof and blacktop apron. The activity was categorically excluded under provisions for demolition of uncontaminated buildings. A Record of Environmental Consideration was prepared in August 2001.

#### **6.1.6 Demolition of Building 691 (Old Cemetery Greenhouse)**

West Point recently completed demolition of Building 691, the old cemetery greenhouse. The project included demolishing the green house structure including foundation, footings, and concrete floor. The foundation was backfilled and covered with topsoil and then hydro-seeded. The activity was categorically excluded under provisions for demolition of uncontaminated buildings. A Record of Environmental Consideration was prepared in August 2001.

#### **6.1.7 Demolition of Building 801**

West Point demolished Building 801, which was located behind the Old PX, in Winter 2003/2004. The project involved a complete demolition of the building including foundation, footings, basement floor, sidewalks, curbs, concrete pavement and concrete pads for the air conditions units. The foundation was backfilled and new curbing installed. The foundation area was covered with topsoil and then hydro-seeded. NYSHPO determined that the undertaking would have No Adverse Effect upon cultural resources in or eligible for inclusion on the National Register of Historic Places. The project was categorically excluded under provisions for disposal of uncontaminated buildings. A Record of Environmental Consideration (REC) was prepared in July 2001.

#### **6.1.8 Self Help Center (Building 695)**

West Point recently constructed a new facility immediately adjacent to the Self Help Center (Building 695), Washington Road and Biddle Loop, West Point. The new facility serves as a storage facility and annex to the Self Help Center, which was crowded and did not adequately serve the West Point community. The new facility replaced several temporary storage sheds that were inappropriate for long-term usage. The work was completed as of March 2004.

### **6.1.9 Underground Storage Tank (UST) Removal (Old PX Service Station)**

Three 10,000-gallon gasoline USTs (with all associated piping) and impacted soil were removed from the Old PX Service Station site in November 1999 in accordance with NYSDEC regulations. Subsequent Remedial Investigation activities including soil and groundwater investigations were performed in April 2003. A No Further Action determination letter was granted in June 2003. A fourth UST was removed from the Old PX Service Station and was closed without incidence in October 2002.

### **6.1.10 Repairs to Cemetery Gates**

West Point recently performed repairs to the South and West Cemetery Gates. The repairs included cutting back vegetation from the gates and replanting at least two feet (0.6 m) from edge of gate, stopping active corrosion, filling holes and gaps in the fences, repairing and replacing missing or deteriorated structural and decorative components, removing exterior paint and repainting with rust inhibiting black paint, and fabricating and replacing “spear points” at the top of the fence. The work was completed in spring 2004.

### **6.1.11 Rehabilitation of Old Cadet Chapel (Building 689)**

West Point is recently completed rehabilitation of the Old Cadet Chapel. The chapel was originally constructed in 1837 and is one of the most historic and oldest structures at West Point. It is a contributing element to the West Point NHL and is individually eligible for the NRHP. The project entailed removal of modern carpet, floor refinishing, external spot re-pointing of the structure, roof repairs, window reglazing, investigation of water infiltration and installation of humidity controls at the rear entrance of Columbarium, potential treatment of pews, and return to the original alter and painting scheme.

## **6.2 Present Actions**

### **6.2.1 Michie Stadium and Randall Hall Improvements**

West Point is currently implementing several construction projects at or in the vicinity of Michie Stadium which include the construction of the Hoffman Press Box with elevator and priority seating area; upgrading stadium lighting; electrical upgrades of the substations/transformers; scoreboard replacement; the realignment of Stony Lonesome Road; and construction of Randall Hall. Randall Hall will include meeting rooms, locker rooms, showers for the male and female basketball teams, a 230-seat auditorium, offices, lockers, kitchenette for coaches, and sky boxes for football games. In addition, an enclosed bridge that will cross Fenton Road and connect Randall Hall to Hollender Center will be constructed. These projects will improve utilization, comfort, and function of the stadium for both sport participants and spectators.

### **6.2.2 Arvin Cadet Physical Development Center**

A major three-phase renovation/reconstruction project is currently underway which consists of approximately 436,000 square feet of new construction and approximately 470,000 square feet in total. Phase I is primarily demolition of the existing facility to allow for new construction during the subsequent phases. This project is designed to bring the facility into compliance with building code, ADA, life safety, seismic, fire protection and gender equity requirements as well as to meet program requirements of the Department of Physical Education, Department of Intercollegiate Affairs and the recreational needs of the West Point community.

### **6.2.3 Housing Upgrades**

Pursuant to the West Point Housing Master Plan, upgrades to on-site residential units are underway at West Point. The whole neighborhood revitalization of 48 family quarters includes but is not limited to activities such as painting, plumbing, landscaping, roofing, siding and various exterior and interior repairs

as needed. This project is required to improve living conditions of these historic family quarters to current standards of comfort, habitability, safety, energy conservation and to extend the life of the houses commensurate with historic preservation standards. In addition, upgrades are being made to the New Brick Family Housing Area. These upgrades include improvements to the electrical distribution system, lighting, telecommunications, roads and sidewalks; building additions; building modifications; lead paint and asbestos abatement; heating and air conditioning upgrades; creation of handicap accessible quarters; and the addition of carports.

#### **6.2.4 Rehabilitation of Historic Quarters (Buildings 112, 113, 126, 127)**

West Point is in the process of rehabilitating four historic family buildings including 112, 113, 126, and 127. The rehabilitation project involves repairing or replacing the roofing and flashing; stairs, patios, porches, and window wells; exterior wood and painted surfaces; asbestos remediation; radon mitigation; and site drainage and dispensing of roof water. The four buildings were originally constructed between 1892 and 1937 and are contributing elements to West Point's designation as a NHL. A REC was prepared in December 2001 work is currently in progress.

### **6.3 Reasonably Foreseeable Future Actions**

#### **6.3.1 Security Upgrades to Gates and Perimeter Fence**

In order to increase protection for the health and safety of residents at West Point, the West Point is proposing to improve security by constructing a new perimeter security fence around the main post/academic area of West Point at every feasible location and by performing upgrades to Thayer, Washington, and Stony Lonesome Gates. Gate improvements would include construction of new wider traffic lanes; installation of traffic control measures such as traffic arms, new signage, and deployable vehicle barrier systems; new security vehicle parking area, addition of permanent lighting and canopies to

protect soldiers on duty from inclement weather; installation of more closed circuit television cameras, and a new 20,000 square feet Visitor Control Building and adjacent parking at Stony Lonesome gate.

### **6.3.2 Modernization of Washington Road Firehouse (Building 721)**

The DPW is proposing to modernize and expand its existing Fire Station to accommodate a two-company headquarters station. The rehabilitation involves exterior and interior renovations, including the construction of a second floor addition to the Washington Road Firehouse. The firehouse was constructed in 1939 and is a contributing element to West Point's designation as a NHL. An Environmental Assessment and Historic Documentation are planned for this project in Fiscal Year 2008, and construction is planned for Fiscal Year 2009.

### **6.3.3 Annex to Cemetery**

West Point is proposing to expand the limits of the cemetery to provide room for additional burial sites. The existing cemetery has approximately 30 years of space left given the current average annual number of interments. The expansion is proposed to take place on a site south of the current cemetery, on a small terrace between the extant cemetery and Buildings 685 and 687 (Hardee Place). The expansion area would accommodate about 270-full body burials sites and 200 wall niches for cremation inurnments. These additional spaces would extend the life of the cemetery by at least nine years beyond the year 2025. The cemetery is a contributing element to the NHL designation of West Point. This project is in the feasibility stage and construction is not planned to begin within the next seven years.

### **6.3.4 West Point Library and Academic Learning Center**

West Point is proposing to construct a new Cadet Library and Academic Learning Center on the Plain, starting in Fiscal Year 2005. These projects are necessary to modernize and expand teaching and research laboratories and classrooms to provide necessary floor space, information resources, and support facilities, some of which are required to maintain USMA's accreditation as a university. The existing

library would be converted to laboratory space, expanding Bartlett Science Hall into a Multipurpose Academic Building. This proposed project includes new building construction totaling approximately 119,000 square feet (11,055 square meters). An EIS with a ROD, and a MOA with the NYSHPO have been completed for the new Library project. Construction is scheduled to begin in Spring 2005.

### **6.3.5 Rehabilitation of the School Aged Services Facility (Building 693)**

West Point is proposing to demolish portions of the School Aged Services Facility, formerly the School House for Enlisted Men's Children. In 1995, the building was seriously damaged by a fire. This project is currently being revised and the level of effort reduced. The renovation would include the entire building, both interior and exterior. Construction is planned to occur late in Fiscal Year 2004.

### **6.3.6 Catholic Chapel (Building 699) HVAC Installation**

West Point is proposing to install a HVAC system into the Catholic Chapel. This project has been previously reviewed and determined to have No Adverse Effect upon the historic property by West Point, and concurrence has been provided by the NYSHPO. The project is currently at 65 percent design and construction is planned to begin in Fiscal Year 2004.

### **6.3.7 KACH Hospital Upgrades**

West Point is proposing to construct a new 49,216 square-foot clinical addition at KACH Hospital that would house a primary care clinic, ortho composite clinic, ophthalmology/optometry, tricare service center, patient administration, and miscellaneous shared support. The project is proposed for fiscal year 2007.

## **7.0 Cumulative Impacts**

Cumulative environmental effects are the result of the proposed action being added to effects of other past, present and reasonably foreseeable future actions, regardless of the agency or person responsible for such actions. The analysis contained in this section examines the potential cumulative environmental impacts from the CAC Complex in combination with the projects addressed in Section 6.0 (Past, Present and Reasonably Foreseeable Future Actions). Table 7-1 summarizes the potential cumulative impacts by resource.

**Table 7-1 Potential Cumulative Impacts of CAC Complex \***

ALTERNATIVES	Physical Resources		Water Resources		Biological Resources			Coastal Resources	Land Use	Visual Resources	Cultural Resources		Socio-economics			Air Quality	Noise	Utility Infrastructure	Hazardous Materials and Waste	Health and Safety	Environmental Justice	Irreversible /Irretrievable Commitment of Resources	Overall Evaluation
	Geology	Soils	Ground Water	Surface Water	Vegetation	Wildlife	T/E Species				Historic	Archaeological	Population /employment	Community Services	Traffic Circulation/parking								
No Build	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<b>0</b>
Old PX Site**	1	1	0	1	1	1	0	3	3	3	3	0	0	0	1	1	3	1	1	1	0	1	<b>26</b>
Site H	1	1	0	1	1	1	0	1	0	1	0	1	0	0	2	1	1	1	1	1	0	1	<b>16</b>
Site J	1	1	0	1	1	1	0	3	2	3	3	0	0	1	3	1	2	1	1	1	0	1	<b>27</b>

Note: 0=No Impact 1=Minor Impact 2=Moderate Impact 3=Significant Impact

\*Mitigation measures have been developed to offset potentially moderate or significant environmental consequences to below the significance level.

\*\*Proposed Action



## **7.1 Geology/Soils**

The CAC Complex project would have minor construction-related impacts on soils. Although this project in combination with the past, present and reasonably foreseeable future development in the project area would account for a significant amount of earth movement, use of mitigation measures for each project would or has minimized impacts below the significant level and thus cumulative impacts to soils/geology have not and would not occur. Mitigation measures that are used include the use of site-specific erosion control measures and BMPs specified in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence) during construction activities. These measures help to reduce potential erosion and sedimentation effects to a level that is not undue or significant.

## **7.2 Water Resources**

The CAC Complex project would have no impacts to ground water resources and only minor impacts to surface water resources. These impacts in combination with past, present and reasonably foreseeable future development in the project area would not cause significant cumulative water impacts. Most of the other projects require little to no additional impervious surfaces. Any development would be required to avoid, minimize or mitigate potential adverse impacts on these resources to a level that is not significant in accordance with Federal and State regulations, including development of a SWPPP, application of appropriate permits, use of BMPs for erosion and sedimentation control, and hazardous and toxic material spill control and remediation.

### **7.3 Biological Resources**

The CAC Complex project would cause minor impacts to vegetation and wildlife communities at West Point. In addition, some of the past, present, and reasonably foreseeable future actions have the potential to impact biological resources at West Point. Any potential significant impacts to rare, threatened or endangered species or vegetation communities would be avoided, minimized or mitigated to a level that is not significant in accordance with Federal and State protection laws. Also, any impacts to jurisdictional wetlands would be avoided, minimized or mitigated to a level that is not significant in accordance with Section 404 of the Clean Water Act, Article 15 of the NYSECL, Article 24 of the NYSECL and NYSDEC 401 Water Quality Certification. Therefore the CAC Complex in combination with past, present and reasonably foreseeable future development in the project area would not cause significant cumulative biological impacts. .

### **7.4 Coastal Resources**

The CAC Complex project would potentially cause significant impacts to coastal resources at West Point. In addition, several of the past, present or reasonably foreseeable future actions have the potential to impact coastal resources at West Point. However, mitigation measures have been developed to avoid impacts or minimize them below the significant level. Any development would comply with the NYSDOS CMP coastal policies, and West Point would complete a federal consistency determination and submit to NYSDOS for concurrence prior to project construction. Therefore, the CAC Complex in combination with past, present and reasonably foreseeable future actions would not cause significant cumulative impacts to coastal resources.

### **7.5 Land Use**

The CAC Complex project would potentially cause significant impacts to the adjacent land use (cemetery). Mitigation measures (e.g. visual and noise screening) have been developed that

would minimize these impacts below the significant level. The vast majority of the past, present and reasonably foreseeable future actions would have little or no impact on land use at West Point. Minor impacts include the construction of new buildings or fencing in undeveloped areas and the replacement of other buildings with grassed areas. Any proposed development or redevelopment would be required to be consistent with the West Point Master Plan for the Year 2007 (USMA, 1998b). Although West Point does not have specific zoning regulations or guidelines, the existing land uses are consistent with uses identified in the USMA Master Plan for the Year 2007 (USMA, 1998b). As a result, the CAC Complex in combination with the past, present, and reasonably foreseeable future actions would not cause significant adverse cumulative impacts to land use at West Point.

## **7.6 Visual Resources**

The CAC Complex project has the potential to cause significant impacts to visual resources at West Point. In addition, several of the past, present, or reasonably foreseeable future actions also have the potential to cause significant impacts to visual resources at West Point. Mitigation measures have been developed to minimize visual impacts from the CAC Complex and other projects below the significance level. Any development would be required to comply with the NHPA for the protection of properties listed or eligible for listing on the NRHP as well as NYSHPO regulations. In addition, where necessary an MOA would be developed through consultation with the NYSHPO to outline mitigations/stipulations to protect visual resources at West Point. Therefore, the CAC Complex in combination with the past, present, and reasonably foreseeable future actions would not cause significant cumulative impacts to visual resources.

## **7.7 Cultural Resources**

The CAC Complex project has the potential to cause significant impacts to cultural resources at West Point. In addition, several of the past, present, or reasonably foreseeable future actions have the potential to cause significant impacts to cultural resources at West Point. Mitigation measures have been developed to avoid impacts or minimize them below the significant level. Any development would be required to comply with the NHPA for the protection of properties listed or eligible for listing on the NRHP as well as NYSHPO regulations. In addition, where necessary an MOA would be developed through consultation with the NYSHPO to outline mitigations/stipulations to protect cultural resources at West Point. Therefore, the CAC Complex in combination with the past, present, and reasonably foreseeable future actions would not cause significant cumulative impacts to cultural resources.

## **7.8 Socioeconomics**

### **7.8.1 Population and Employment**

The CAC Complex project and the past, present and reasonably foreseeable future actions would have no effects to population or employment at the West Point. None of these actions would increase or decrease housing or create any new jobs. Employment of contractors needed to complete all actions would result in a minor temporary beneficial impact to socioeconomic resources within Orange County. Once construction was complete, the employment of contractors would not be necessary and the temporary employment benefit would cease. Therefore, there would be no cumulative impacts to population or employment as a result of the CAC Complex in combination with past, present, and reasonably foreseeable future actions.

### **7.8.2 Community Services**

The CAC Complex project would improve community services at West Point by consolidating recreational activities into a single location that is easily accessible to the major housing areas at West Point. The implementation of past, present and reasonably foreseeable future development would also have long-term beneficial effects to the community services at West Point. Gate and fencing upgrades will improve the security of the residents, students, and employees of West Point. Improvements to the firehouse will enhance safety at the post. Rehabilitation efforts to barracks and older housing units will improve the living conditions for the residents. New academic classrooms and library facilities will improve teaching capabilities for the students at West Point. Community services will benefit from improved parking lot and self help center. Also, recreational opportunities will be enriched by the Stadium and gym upgrades. There would be no adverse cumulative impacts to community services at West Point from the CAC Complex in combination with the past, present, and reasonably foreseeable future actions.

### **7.8.3 Traffic Circulation and Parking**

The implementation of the CAC Complex project in combination with past, present and reasonably foreseeable future development would have minor impacts on traffic and parking at West Point. Traffic would temporarily increase in each project area during the demolition and construction phases of the proposed actions. However, construction-related traffic would stop once construction was complete. During operation, traffic would increase in the vicinity of the CAC Complex. However, impacts associated with new traffic patterns would be minor as this area was the former site of the PX and is accustomed to heavier traffic flow. Traffic patterns may also change near the new library once it is complete. However, the distance of these two facilities is far enough that they should not cause cumulative impacts on traffic patterns at West Point.

## 7.9 Air Quality

The implementation of the CAC Complex project in combination with past, present and reasonably foreseeable future development would have temporary impacts on air quality at the installation. These projects would result in increased direct emissions of exhaust and fugitive dust from construction machinery and construction activities. Temporary construction emissions would be minor and confined primarily to each project site. With exception of the library, the new facilities would not have an effect on air quality during operation. Air quality impacts associated with the library have been addressed in an EIS. There would be no cumulative impacts on air quality from the CAC Complex in combination with past, present, and reasonably foreseeable future actions.

## 7.10 Noise

The implementation of the CAC Complex project in combination with past, present and reasonably foreseeable future development would have temporary adverse direct and indirect impacts on noise at the installation. These projects would result in temporary increased noise during demolition and construction activities. Temporary construction noise would be minor because it typically occurs during daylight hours and would be confined primarily to each project site. In addition, the CAC Complex has the potential for long-term noise impacts to the adjacent cemetery when prospective funeral or memorial services may be held concurrently with other outdoor athletic/recreational events (e.g., soccer or roller hockey) at the CAC Complex. However, the proposed screening and scheduling noise abatement mitigations should decrease the noise impacts to below the significant threshold. Therefore, there would be no cumulative noise impacts from the CAC Complex in combination with past, present, and reasonably foreseeable future actions.

### **7.11 Utility Infrastructure**

The implementation of the CAC Complex in combination with past, present and reasonably foreseeable future development would have minor impacts on utility infrastructure at West Point. There would be some additional demand on the utilities systems for the new CAC Complex and the other projects. However, the existing utilities systems have sufficient capacity to handle these project demands. Therefore, there would be no significant adverse impact to the utilities at West Point from the CAC Complex in combination with past, present, and reasonably foreseeable future actions.

### **7.12 Hazardous Materials and Waste**

The implementation of the CAC Complex project in combination with past, present and reasonably foreseeable future development would have temporary adverse direct and indirect impacts on hazardous materials/waste at West Point. A large amount of waste would be generated from the demolition/rehabilitation projects. To deal with the waste, a Construction/Demolition Waste Management Plan would be developed for each project. Buildings would be surveyed for lead and asbestos prior to demolition/restoration and lead/asbestos materials would be handled and disposed of according to Federal regulations. As long as appropriate regulations and recommended guidelines are complied with, no significant cumulative impacts should occur as a result of the CAC Complex in combination with the other past, present, and reasonably foreseeable future actions.

### **7.13 Health and Safety**

The implementation of the CAC Complex in combination with past, present and reasonably foreseeable future development would have temporary adverse indirect impacts on health and safety at West Point. Construction projects increase the number of contractors at West Point,

which in turn increases the potential for criminal activity. West Point security policies including gate checks would be in effect to minimize security issues. Since the timing of these projects is staggered, it is expected that West Point security would be able to handle minor increases in additional visitors to West Point. Therefore, the CAC Complex in combination with past, present, and reasonably foreseeable future actions would have no significant cumulative health and safety impacts.

#### **7.14 Environmental Justice**

The implementation of the CAC Complex in combination with past, present and reasonably foreseeable future actions would have no effect on Environmental Justice at West Point. With exception for specific housing upgrade projects, all other actions would benefit the entire West Point community, not just a select group. There would be no disproportionate environmental effects to low income or minority populations. Therefore, the CAC Complex in combination with past, present, and reasonably foreseeable future actions would not cause cumulative impacts relating to Environmental Justice.

#### **7.15 Irreversible and Irretrievable Commitment of Resources**

Irreversible and irretrievable commitments of resources are related to the use of nonrenewable resources and the effects that the uses have on future generations. An irreversible resource generally applies to nonrenewable resources that are destroyed or consumed, whereas an irretrievable resource applies to the loss in value of an affected resource such as employee labor or disturbance of a cultural site. Irreversible resources committed to the CAC Complex are limited to the use of fossil fuels/energy during construction (i.e. gasoline, petroleum products) and the land to accommodate space for the proposed project. Irretrievable resources that would be committed to the project include employee labor to plan/construct the CAC Complex.

## **8.0 SUMMARY AND CONCLUSIONS**

### **8.1 Proposed Action**

The proposed action would create a new Community Activities Center Complex that would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. DMWR programs to be included as part of the Community Activity Center Complex include a Community Activity Center, Outdoor Community Athletic Facilities, and a Physical Fitness Center.

### **8.2 Alternatives**

Four alternatives are considered including: (1) the No Action Alternative, (2) the Old PX Site Alternative (the recommended alternative), (3) the H Lot Alternative, and (4) the J Lot Alternative. The No Action Alternative would require no changes to the existing recreational/community facilities but would not resolve the need for larger, more efficient and centralized facilities. The recommended alternative would locate the new CAC Complex on the site of the existing Old PX (Building 683) and adjacent areas. The H Lot and J Lot Alternatives are similar to the Old PX Site Alternative except that the CAC Complex would be located in one of two different potential locations called H Lot and J Lot. These alternative sites are less desirable because H Lot has limited room for the Complex, has inadequate parking, and is not located near the major residential facilities at West Point; and J Lot (the old CPO) may have insufficient parking, is not located adjacent to the major residential/school facilities at West Point, is located within the Cadet Support Zone, and has the potential for impacts to adjacent historic structures.

### **8.3 Anticipated Environmental Effects**

Long term positive impacts to community services at West Point and short-term economic benefits to the local community would occur from the project. These beneficial impacts would be greatest for the Old PX Alternative (recommended alternative) compared to H Lot or J Lot Alternatives because it is centrally located to the major residential areas on post, whereas J Lot or H Lot are not. The recommended alternative has the potential to create minor adverse impacts to geology, soils, vegetative communities, wildlife and habitat, traffic, air quality, health and safety, and hazardous waste and significant adverse impacts to coastal resources, land use, visual resources, cultural resources, and noise. Mitigation measures for these potentially significant impacts have been developed and would be implemented to minimize adverse impacts below the significant level.

### **8.4 Mitigation Measures**

Mitigation measures would be used to minimize potentially significant impacts to environmental resources. Mitigation measures are listed by alternative.

#### **No Action Alternative**

Under the No Action Alternative, no significant environmental impacts are expected; therefore, no mitigation measures are proposed.

#### **Old PX Site Alternative (Recommended Alternative)**

Under the recommended alternative, there are potentially significant environmental impacts to coastal, visual, and cultural resources, land use, and noise and potentially less significant impacts to soils, water resources, and hazardous materials/wastes. The following mitigation measures would be employed to minimize impacts below the significance threshold.

**Soils:** Potential impacts to soils from earth moving/excavation activities and sedimentation/erosion. Mitigation measures include:

- Use of BMPs for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence).
- Preparation of and adherence to a SWPPP; and
- Application for a NYSDEC SPDES General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed.

**Surface Water Resources:** Potential indirect impacts from storm water runoff, sedimentation or erosion. Mitigation measures would include:

- Preparation of and adherence to a SWPPP;
- Application for a NYSDEC SPDES General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed; and
- Use of BMPs for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence).

**Coastal Resources:** Potential significant impacts to coastal resources should the new CAC Complex not comply with NYSDOS Coastal Policies 23 (Cultural Resources) and 24 (Scenic Resources of Statewide Significance). Mitigation measures would include:

- West Point would formally consult with the NYSHPO; an MOA would be prepared if it is determined that siting, constructing and operating the new CAC Complex would cause adverse effects to cultural resources or West Point's designation as a NHL under Coastal Policy #23;

- The CAC Complex would be designed according to the guidelines in Coastal Policy #24 to avoid disrupting the scenic beauty of West Point and its designation as a subunit within the Hudson Highlands SASS; and
- At final design, West Point would submit a Federal Consistency Determination for review and concurrence by the NYSDOS CMP.

**Land Use:** Potential significant impacts to the cemetery located adjacent to the preferred site.

Mitigation measures would include:

- Construction of noise and visual barriers between the new complex and the cemetery. These barriers would include a grassed berm, dense hedgerow of evergreen shrubs or similar plantings, and/or a wall. The type of barrier would be designed with input from the NYSHPO and DPW agronomist.

**Visual Resources:** Potential significant impacts to visual resources if the CAC Complex is not constructed in harmony with the existing structures or landscapes or if important viewsheds at West Point are hindered. Mitigation measures would include:

- West Point would consult with the NYSHPO to develop a MOA that would provide stipulations for siting, constructing and operating the new CAC Complex that would require the architectural design and building materials to blend in with the surrounding structures and ensure that important viewsheds to the Hudson River, adjacent cemetery, and Washington Road were not obstructed; and
- A physical barrier would be constructed between the CAC Complex and the adjacent cemetery to screen visual impacts. The barrier may consist of an evergreen hedgerow,

grassed berm, or wall and would be designed with input from the NYSHPO and the DPW agronomist.

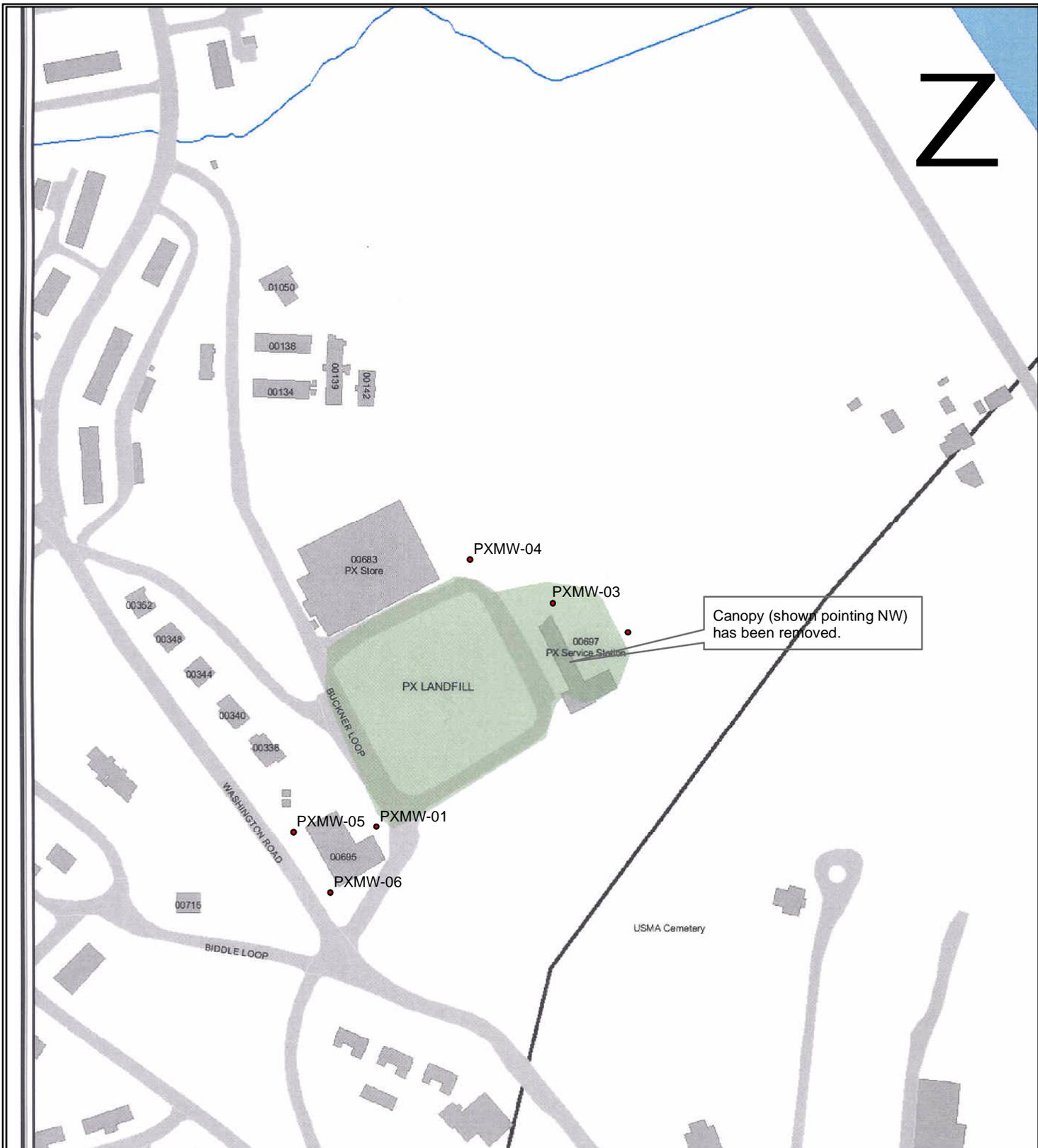
**Cultural Resources:** Potential significant impacts to significant cultural resources on and nearby the preferred site. Mitigation measures would include:

- West Point would consult with the NYSHPO to develop a MOA that would provide stipulations for siting, constructing and operating the new CAC Complex that would require the architectural design and building materials to blend in with the surrounding structures and ensure that important viewsheds to the Hudson River, adjacent cemetery, and Washington Road were not obstructed; and
- Historic documentation as specified by the NYSHPO and National Park Service would be prepared in accordance with the HABS for the historic buildings that would be demolished on the site.

**Noise:** Potential significant noise impacts to adjacent land uses nearby the preferred site.

Mitigation measures would include:

- During construction noise abatement controls such as careful staging of noise intensive construction, limiting simultaneous loud work activities, and minimizing noise level below the New York Noise Regulation guidelines; and avoiding loud construction activities during funerals.
- West Point would construct a noise barrier between the new complex and the cemetery. These barriers would include a grassed berm, dense hedgerow of evergreen shrubs or similar plantings, and/or a wall. The type of barrier would be designed with input from the NYSHPO and DPW agronomist; and



JOB NO: 00P133E-L

## LANDFILL LOCATION AT PREFERRED SITE

WEST POINT COMMUNITY ACTIVITIES CENTER COMPLEX  
UNITED STATES ARMY GARRISON  
WEST POINT, NEW YORK



US Army Corps  
of Engineers  
New York District

MARCH 2005

NOT TO SCALE

### Legend

• Monitoring Wells

FIGURE 4-8

- Outdoor CAC Complex activities would be shut down and monitored during funerals to avoid noise conflicts. The shut-down of CAC Complex activities would be coordinated through effective communication by the Mortuary Affairs Division of the Directorate of Logistics and the Building Commandant.

**Hazardous Materials and Wastes:** Potential impacts from demolition of structures containing lead based paint/asbestos or from construction over the inactive landfill below the PX parking lot.

Mitigation measures would include:

- A survey for lead and asbestos for buildings proposed for demolition. Lead based paint and asbestos would be removed or managed in accordance with applicable regulations and by EPA-certified firm/workers prior to demolition; and
- All New York State applicable regulations (6NYCRR Part 360-2.15(k)(9) and Part 373-2.7(g) for construction over closed landfills would be adhered to if any construction would occur on the inactive landfill below the old PX parking lot.

#### **Other Building Sites Alternative**

Under the Other Building Sites Alternative, there are potentially significant environmental impacts to coastal, visual, and cultural resources and potentially less significant impacts to soils, water resources, noise, air quality, traffic/parking, health/safety, and hazardous materials/wastes. The following mitigation measures would be employed to minimize impacts below the significant threshold.

**Soils:** Potential impacts to soils from earth moving/excavation activities and sedimentation/erosion. Mitigation measures include:

- Use of BMPs for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence).
- Preparation of and adherence to a SWPPP; and
- Application for a NYSDEC SPDES General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed.

**Surface Water Resources:** Potential indirect impacts from storm water runoff, sedimentation or erosion. Mitigation measures would include:

- Use of BMPs for sediment erosion control as outlined in the NYS Standards and Specifications for Erosion and Sediment Control (e.g., seeding, silt fence);
- Preparation of and adherence to a SWPPP; and
- Application for a NYSDEC SPDES General Construction Permit (GP-02-01) for storm water discharges prior to construction; all permit conditions would be followed.

**Coastal Resources:** Potential significant impacts to coastal resources should new CAC Complex not comply with NYSDOS coastal policy 23 (Cultural Resources) or 24 (Scenic Resources of Statewide Significance). Mitigation measures would include:

- West Point would formally consult with the NYSHPO; an MOA would be prepared if it is determined that sighting, constructing and operating the new CAC Complex would cause adverse effects to cultural resources or West Point's designation as a NHL under Coastal Policy #23;
- The CAC Complex would be designed according to the guidelines in coastal policy #24 to avoid disrupting the scenic beauty of West Point and its designation as a subunit within the Hudson Highlands SASS; and

- At final design, West Point would submit a coastal policies consistency determination for review and concurrence by the NYSDOS CMP.

**Visual Resources:** Potential significant impacts to visual resources if the CAC Complex is not constructed in harmony with the existing structures or landscapes or if important viewsheds at West Point are hindered. Mitigation measures would include:

- West Point would consult with the NYSHPO to develop a MOA that would provide stipulations for sighting, constructing and operating the new CAC Complex that would require the architectural design and building materials to blend in with the surrounding structures and ensure that important viewsheds were not obstructed.

**Cultural Resources:** Potential significant impacts to significant cultural resources on and nearby Lot J. Mitigation measures would include:

- West Point would consult with the NYSHPO; if to develop a MOA that would provide stipulations for sighting, constructing and operating the new CAC Complex to avoid any significant impacts to cultural resources or West Point's designation as a NHL; and
- Historic documentation as specified by the NYSHPO and National Park Service would be prepared in accordance with the HABS for the historic buildings that would be demolished on the site.

**Hazardous Materials and Wastes:** Potential impacts from demolition of structures containing lead based paint/asbestos at J Lot or from construction over the inactive landfill at H Lot. Mitigation measures would include:

- A survey for lead and asbestos for buildings proposed for demolition. Lead based paint and asbestos would be removed or managed in accordance with applicable regulations and by EPA-certified firm/workers prior to demolition; and
- All New York State applicable regulations (6NYCRR Part 360-2.15(k)(9) and Part 373-2.7(g) for construction over closed landfills would be adhered to if any construction would occur on the inactive landfill below the H Lot.

## **8.5 Conclusion**

The activities as proposed would improve community services at West Point by consolidating the Community Activity Center and Community Fitness Center into a new facility that would centralize many of Community Recreation Division's functions into a single center to give it greater visibility, improved operational efficiency, and the opportunity to reach out to more of the West Point community. The greatest benefit would occur if the Old PX Site Alternative (recommended alternative) were selected since it is located near the major residential facilities at West Point, whereas the other alternatives are not. Environmental impacts associated with the proposed action would be minor or mitigation measures would be implemented to minimize any potentially significant environmental impacts below the significant level. Therefore, an Environmental Impact Statement is not required.

## **8.6 Document Availability**

This EA and FNSI were made available for a 30-day public review period from June 24, 2005 through July 25, 2005 at the following locations:

West Point Community Library  
Building 622  
U.S. Military Academy  
West Point, New York



Town Clerk  
Town of Highland  
254 Main Street  
Highland Falls, New York

Highland Falls Public Library  
298 Main Street  
Highland Falls, New York

Village Clerk  
Village of Highlands  
303 Main Street  
Highland Falls, New York

One comment letter was received during the public review and comment period. This letter was from the USEPA and recommended the use of alternative/green building materials throughout the project. The EPA stated they did not anticipate the implementation of the project to result in significant adverse impacts, and therefore, did not object to the project.

The point-of-contact for further information is:

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Directorate of Public Works  
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West Point, New York 10996  
845/938-4129  
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## 9.0 REFERENCES

- Adams, J. 1997. Letter communication on December 16 from J. Adams, Historic Sites Restoration Coordinator, Historic Preservation Field Services Bureau, New York State Office of Parks, Recreation, and Historic Preservation, Peebles Island, New York, to E. Rood, Chief, Environmental Management Division, Department of the Army, United States Military Academy, West Point, New York. Cited in NEA, 2000.
- Barbour, J.G. 1998. Preliminary Inventory of Vernal Pools: United States Military Academy, West Point, New York. Prepared for United States Military Academy, West Point, New York. Cited in USMA, 2002.
- Barbour, J.G. 2001. West Point Rare Plant Survey. Prepared for United States Military Academy, West Point, New York. Cited in USMA, 2002.
- Beemer, J.A. 1997. Endangered Species Management Plan for the Shortnose Sturgeon (*Acipenser brevirostrum*). United States Military Academy at West Point, New York. 6 p. Cited in USMA, 2002.
- Beemer, J.A. 2002a. The USMA Fish Stocking Report. United States Military Academy, West Point, New York Military Reservation. The United States Military Academy, West Point, New York.
- Beemer, J.A. 2002b. Endangered Species Management Plan for the Bald Eagle (*Haliaeetus leucocephalus*) on the Properties at the United States Military Academy. United States Military Academy, West Point, New York Military Reservation, United States Military Academy West Point, New York. Cited in USMA, 2002.
- Biological Survey, New York State Museum. 1993. Rare and Endangered Species Survey, U.S. Military Academy, West Point, New York. Albany, NY. 300 pp. Cited in USMA, 2002.
- Boyce Thompson Institute (BTI). 1977. An Atlas of the Biologic Resources of the Hudson Estuary. Estuarine Study Group, Boyce Thompson Institute, Yonkers, NY. Cited in USMA, 2002.
- Colburn, E.A., Ed. 1993. Certified: A Citizen's Step-by-Step Guide to Protecting Vernal Pools. Massachusetts Audubon Society, Lincoln, MA. 110 pp. Cited in USMA, 2002.
- Cubbison, D. 2003. Memorandum of Record Regarding: Native American Tribes Associated with the USMA. USMA, West Point, New York.
- Curran, H.A., Captain, and P.S. Justis. 1970. Field Guide to Geology of the West Point Area. United States Military Academy West Point, New York. Cited in USMA, 2002.
- Donofrio, G. 2001. Letter communication on June 19 from G. Donofrio, Historic Sites Restoration Coordinator, New York State Office of Parks, Recreation and Historic Preservation, Historic Preservation Field Services Bureau, Waterford, New York, to Patrice Halin, Directorate of Housing and Public Works, United States Military Academy, West Point, New York.
- EA Engineering, Science and Technology. 1996. Decision Document: Camp Buckner Skeet and Trap Range. U.S. Military Academy. West Point, New York. Prepared for Dept. of Army, U.S. Army Corps of Engineer, Baltimore District. Contract No. DADA31-94-D-0025. Cited in USMA, 2002.

- Engineer Intelligence Study. 1958. Military Geology of the West Point Area, New York. No. 210. Department of the Army, Washington, DC. Cited in USMA, 1992.
- Federal Emergency Management Agency. 1987. Flood Insurance Rate Map, Town of Highlands, New York, Orange County, Panel No. 3612510005C. US Department of Housing and Urban Development, National Flood Insurance Program, Federal Emergency Management Agency, Washington, DC. Cited in NEA, 2000.
- Galloway, G.E. Col. 1988. West Point 2002 Facilities Improvement Plan. Interim Report. Cited in USMA, 2002.
- Geo-Marine, Inc. 2001. Integrated Cultural Resources Management Plan. Prepared for United States Military Academy, West Point, New York.
- Halin, P. 1999. Personal communication on December 15 between P. Halin, Cultural Resources, USMA, West Point, New York, and S. Compton, Northern Ecological Associates, Inc., Canton, New York. Cited in Northern Ecological Associates, Inc. (NEA). 2000.
- Helenek, H.L. 1971. An Investigation of the Origin, Structure and Metamorphic Evolution of Major Rock Units in the Hudson Highlands. Ph.D. dissertation, Brown University, Providence, Rhode Island. Cited in Curran and Justis, 1974.
- Houle, C. 2003. Letter communication on July 30 from C. Houle, Information Services, New York Natural Heritage Program, Albany, New York, to C. Santiago Bass, P.W.S., Certified Ecologist, MATRIX Environmental & Geotechnical Services, Inc., Florham Park, New Jersey.
- Jaffe, H.W. and E.B. Jaffe. 1973. Bedrock Geology of the Monroe Quadrangle, Orange County, New York. Map and Chart Series No. 20. New York State Museum and Science Service, Albany, New York. Cited in Curran and Justis, 1974.
- Kakerback, B. 1995. Ecological communities of the West Point Military Reservation. United States Military Academy, Department of Natural Resources. Cited in USMA, 2002.
- Kassin, L. 2003. Letter communication on July 30 from L. Kassin, Agency Program Aide, New York State Department of Environmental Conservation, New Paltz, New York, to C. Santiago Bass, P.W.S., Certified Ecologist, MATRIX Environmental & Geotechnical Services, Inc., Florham Park, New Jersey.
- Ketcham, B. 2003. Letter communication on March 3, from B. Ketcham, Information Services, New York Natural Heritage Program, Albany, New York, to C. Santiago Bass, P.W.S., Certified Ecologist, MATRIX Environmental & Geotechnical Services, Inc., Florham Park, New Jersey.
- Kurkul, P.A. 2000. Letter communication on March 17 from P.A. Kurkul, Regional Administrator, United States Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Region, Gloucester, MA, to S. Compton, Managing Environmental Scientist, Northern Ecological Associates, Inc., Canton, New York. Cited in NEA, 2000.
- McMaster, B.N., C.D. Hendry, K.C. Govro, D.F. McNeill, C.R. Neff, and K.A. Civitarese. 1984. Installation Assessment of the United States Military Academy, West Point and Sub-installations Stewart Army Support and Galeville Training Site, NY. Report No. 346. Prepared for the United States Military Academy, West Point. Environmental Science and Engineering, Inc., Gainesville, FL. Cited in USMA, 2002.

- National Park Service (1984). Historic Structures Inventory, U.S. Military Academy, West Point, New York. Volume 2. Prepared by Robie S. Lange, National Park Service.
- New York State Department of Environmental Conservation (NYSDEC) and New York State Office of Parks, Recreation and Historic Preservation. 1995. Conserving Open Space in New York State. 54 pp. Cited in USMA, 2002.
- New York State Department of Environmental Conservation (NYSDEC). 2003. Draft New York State Standards and Specifications for Erosion and Sediment Control, March 2003. Empire State Chapter of the Soil and Water Conservation Service. Syracuse, New York.
- New York State Department of Environmental Conservation (NYSDEC). 2003. State Pollutant Discharge Elimination System (SPDES) General Permit GP-02-01 for Storm Water Discharges from Construction Activities (formerly GP-93-06).
- New York State Department of Labor (NYSDOL). 2002. Local Area Unemployment Statistics. [http://www.labor.state.ny.us/labor\\_market/LMI\\_business/laus/search.htm](http://www.labor.state.ny.us/labor_market/LMI_business/laus/search.htm). Accessed August 21, 2002. Cited in USMA, 2002.
- New York State Department of Transportation (DOT). 1992. Orange County Base Map. New York State County Base Map Series, New York State Department of Transportation, Albany, New York. Cited in NEA, 2000.
- New York State Museum. 1994. Rare and endangered species survey, United States Military Academy, West Point, New York. Prepared for the United State Military Academy. January 20, 1994. Cited in USMA, 2002.
- New York State Standards and Specifications for Erosion and Sediment Control, April 1997, Empire State Chapter of the Soil and Water Conservation Society, (<http://www.dec.state.ny.us/website/dow/toolbox/escstandards/index.html>)
- Northern Ecological Associates, Inc. (NEA). 2000. Final Environmental Assessment, West Point School Upgrade. U.S. Military Academy. West Point, Orange County, New York. Prepared for U.S. Army Corps of Engineers, New York District. Contract No. DACW51-97-D-0010. Delivery Order 0068.
- O'Brien, D. 2001. Draft Environmental Baseline Study for the Transfer of a Natural Gas Distribution System United States Military Academy West Point, NY. September 2001.
- Offield, T.W. 1967. Bedrock Geology of the Goshen-Greenwood Lake Area, New York. Map and Chart Series No. 9. New York State Museum and Science Service, Albany, New York. Cited in Curran and Justis, 1974.
- Olsson, D.S. 1981. Soil Survey of Orange County, New York. United States Department of Agriculture, Natural Resources Conservation Service in cooperation with Cornell University Agricultural Experiment Station. National Cooperative Soil Survey, United States Department of Agriculture. Cited in USMA, 2002.
- Pan American Consultants. 2002. Phase I Cultural Resource Survey For the Proposed Gross Olympic Center, U.S. Military Academy, West Point, Orange County, New York. Prepared for Barry A. Vittor & Associates under contract to: U.S. Army Corps of Engineers, New York District under Contract No. DACW51-97-D-0009. January 2002.
- Ralston, Jim. 1997. Personal communication. January 17, 1997. Cited in USMA, 2002.

- Reschke, C. 1990. Ecological Communities of New York State. New York Natural Heritage Program, New York Department of Environmental Conservation. Cited in USMA, 2002.
- Reith, C. B., Green, W., Snow, D. R., Lloyd, T. C., and J. Hammer. 1995. United States Military Academy Cultural Resources Management Plan. Prepared for: United States Army Environmental Center Natural Resources Division Legacy Program; prepared by: The Research Foundation of SUNY State University of New York at Albany; under contract to United States Department of Defense Legacy Resource Management Program Washington, DC.
- Rusanowsky, Diane. 2003. Letter communication on September 23, 2003, from D. Rusanowsky, Reviewing Biologist, National Marine Fisheries Service, Milford, Connecticut to C. Santiago Bass, P.W.S., Certified Ecologist, MATRIX Environmental & Geotechnical Services, Inc. Florham Park, New Jersey.
- Stegville, J.V. 1999. Letter communication on November 8 from J. Stegville, Engineering Geologist II, New York State Department of Environmental Conservation, Albany, New York to J. Csekitz, Northern Ecological Associates, Inc., Canton, New York. Cited in NEA, 2000.
- Stilwell, D.A. 2003. Letter communication on February 28 from D.A. Stilwell, Field Supervisor, United States Fish and Wildlife Service (USFWS), Cortland, New York to C. Santiago Bass, P.W.S. Certified Ecologist, MATRIX Environmental & Geotechnical Services, Inc., Florham Park, New Jersey.
- United States Army Corps of Engineers (USACE). 1993. West Point Wetland Inventory, Summer 1993. Prepared for Natural Resources Office, United States Military Academy. United States Army Corps of Engineers, New York District. Cited in USMA, 2002.
- United States Army Corps of Engineers (USACE). 2002. Historic Landscape Management Plan for the U.S. Military Academy at West Point, New York, Final Report, February 2002. U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory. Champaign, Illinois.
- United States Department of the Army (USDOA). 1988. Regulation AR-200-2, Environmental Effects of Army Actions. Headquarters Department of the Army Washington D.C. December 23, 1988.
- United States Department of Commerce, Economics and Statistics Administration, Bureau of the Census (USDOC). 1990a. General Population and Housing Characteristics, 1990, for Orange County, New York. U.S. Department of Commerce, Bureau of the Census, Washington, D.C.  
<[http://factfinder.census.gov/servlet/BasicFactsTable?\\_lang=en&vt\\_name+DEC\\_1990\\_SF1\\_DP1&geo\\_id+05000US36071.html](http://factfinder.census.gov/servlet/BasicFactsTable?_lang=en&vt_name+DEC_1990_SF1_DP1&geo_id+05000US36071.html)>. Accessed August 21, 2002. Cited in USMA, 2002.
- United States Department of Commerce, Economics and Statistics Administration, Bureau of the Census (USDOC). 2000a. Profile of General Demographic Characteristics, 2000, for Orange County, New York. U.S. Department of Commerce, Bureau of the Census, Washington, D.C.  
<[http://factfinder.census.gov/bf\\_lang=en\\_vt\\_name+DEC\\_2000\\_SF1\\_U\\_DP!\\_geo\\_id+05000US36071.html](http://factfinder.census.gov/bf_lang=en_vt_name+DEC_2000_SF1_U_DP!_geo_id+05000US36071.html)>. Accessed August 21, 2002. Cited in USMA, 2002.

- United States Department of Commerce, Economics and Statistics Administration, Bureau of the Census (USDOC). 2000b. State and County Quick Facts: Orange County, New York. U.S. Census, Bureau, Washington, D.C. <<http://quickfacts.census.gov/qfd/states/36/36071.html>>. Revised May 30, 2002. Accessed August 21, 2002. Cited in USMA, 2002.
- United States Department of the Interior (USDI), National Park Service. 1994. National Registry of Natural Landmarks. US Department of the Interior, National Park Service, Wildlife and Vegetation Division, Washington, DC. Cited in NEA, 2000.
- United States Environmental Protection Agency (USEPA). 1999. Facility Location Information Facts Sheet, Environfacts Warehouse Website. <http://www.epa.gov/enviro>. Cited in USMA, 2002.
- United States Military Academy (USMA). 1980a. Draft Environmental Impact Statement. Ongoing Operations of the United States Military Academy, West Point, Stewart Army Subpost, and the Galeville Training Site. United States Military Academy West Point, New York. Cited in USMA, 2002.
- United States Military Academy (USMA). 1980b. Draft Environmental Impact Statement Appendices. Ongoing Operations of the United States Military Academy, West Point, Stewart Army Subpost, and the Galeville Training Site. United States Military Academy West Point, New York. Cited in USMA, 2002.
- United States Military Academy (USMA). 1984. Installation Assessment of US Military Academy. United States Military Academy, West Point, New York. Cited in USMA, 2002.
- United States Military Academy (USMA). 1994a. Work Plan and Chemical Data Acquisition Plan RCRA Facility Assessment of Ten Landfills. The United States Military Academy, West Point, New York.
- United States Military Academy (USMA). 1994b. Fish and Wildlife Management Cooperative Plan for the United States Military Academy, West Point, New York. Park IV of the Natural Resources Management Plan for the United States Military Academy. Prepared by the Natural Resources Branch, Directorate of Engineering and Housing, United States Military Academy, West Point, New York. Cited in USMA, 2002.
- United States Military Academy (USMA). 1996. Final Environmental Assessment for the Expansion and Development of the Stony Lonesome Community Center, USMA, West Point, New York. United States Military Academy, Directorate of Housing and Public Works, West Point, New York. Cited in USMA, 2002.
- United States Military Academy (USMA). 1998. Draft Integrated Natural Resources Management Plan: 1998 through 2002. West Point, New York.
- United States Military Academy (USMA). 1998b. The USMA Master Plan for the Year 2007 (Draft). West Point, New York. Cited in Northern Ecological Associates, Inc. (NEA). 2000.
- United States Military Academy (USMA). 2001. Integrated Cultural Resources Management Plan (Final). Prepared by Geo-Marine, Inc, Plano, Texas. Prepared for The United States Military Academy, West Point, New York.
- United States Military Academy (USMA). 2002a. Final Integrated Natural Resources Management Plan: 2003 through 2007. The United States Military Academy, West Point, New York.

United States Military Academy (USMA). 2002b. Historic Landscape Management Plan for the U.S. Military Academy at West Point, New York. ERDC/CERL SR-02-01, February 2002. Prepared by the U.S. Army Engineer Research and Development Center Construction Engineering Research Laboratory. Champaign, Illinois.

United States Military Academy (USMA). 2002c. Technical Memorandum Design Report Community Activity Center Complex U.S. Military Academy West Point, New York. Prepared under the direction of: Corps of Engineers, New York District; prepared by: STV Incorporated under Contract No. DACA51-00-D-0007 #8. December 2002.



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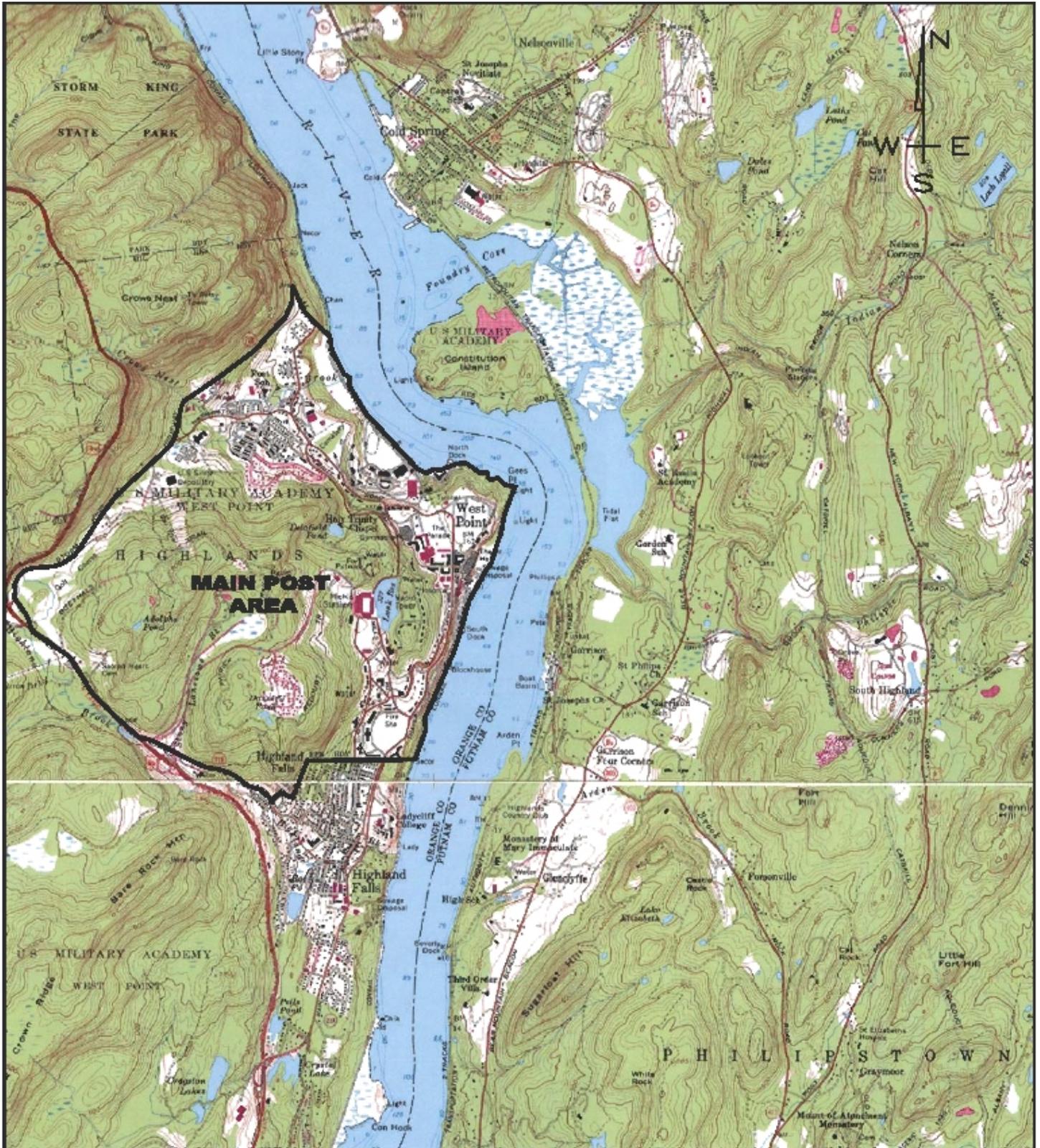
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## FIGURES



US Army Corps  
of Engineers  
New York District  
New York District

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York



**LOCATION MAP  
MAIN POST  
UNITED STATES ARMY GARRISON AT WEST POINT**



**U.S. Army Corps  
of Engineers**  
New York District

JOB NO.: 00P133E - L

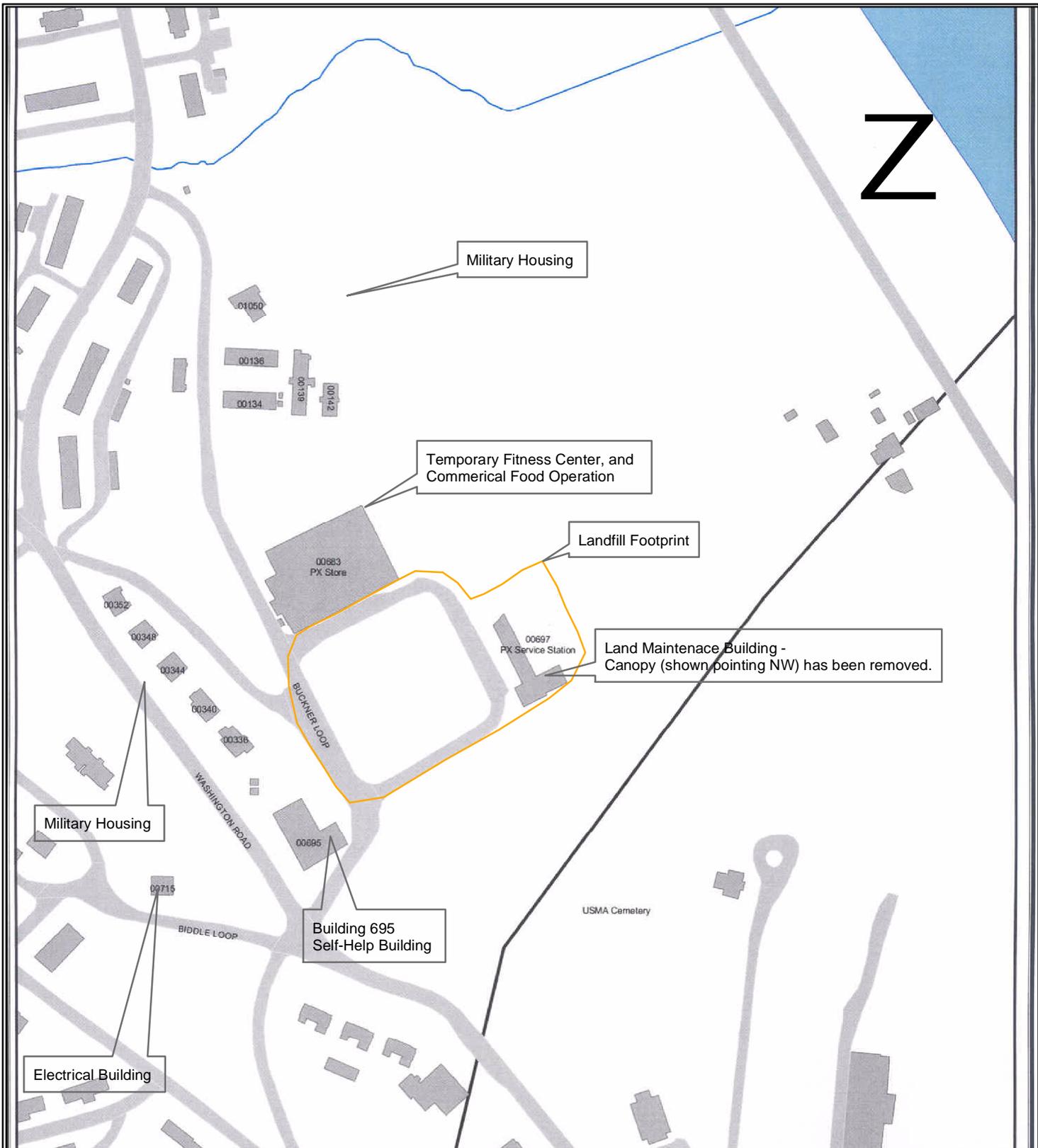
FILENAME: FIGURE 1

DATE: MARCH 2005

**WEST POINT COMMUNITY ACTIVITIES CENTER  
UNITED STATES ARMY GARRISON  
WEST POINT, NEW YORK**

SCALE: NTS

FIGURE NO.: FIGURE 1-1



JOB NO: 00P133E-L

## EXISTING CONDITIONS AT PREFERRED LOCATION

**WEST POINT COMMUNITY ACTIVITIES CENTER COMPLEX  
UNITED STATES ARMY GARRISON  
WEST POINT, NEW YORK**

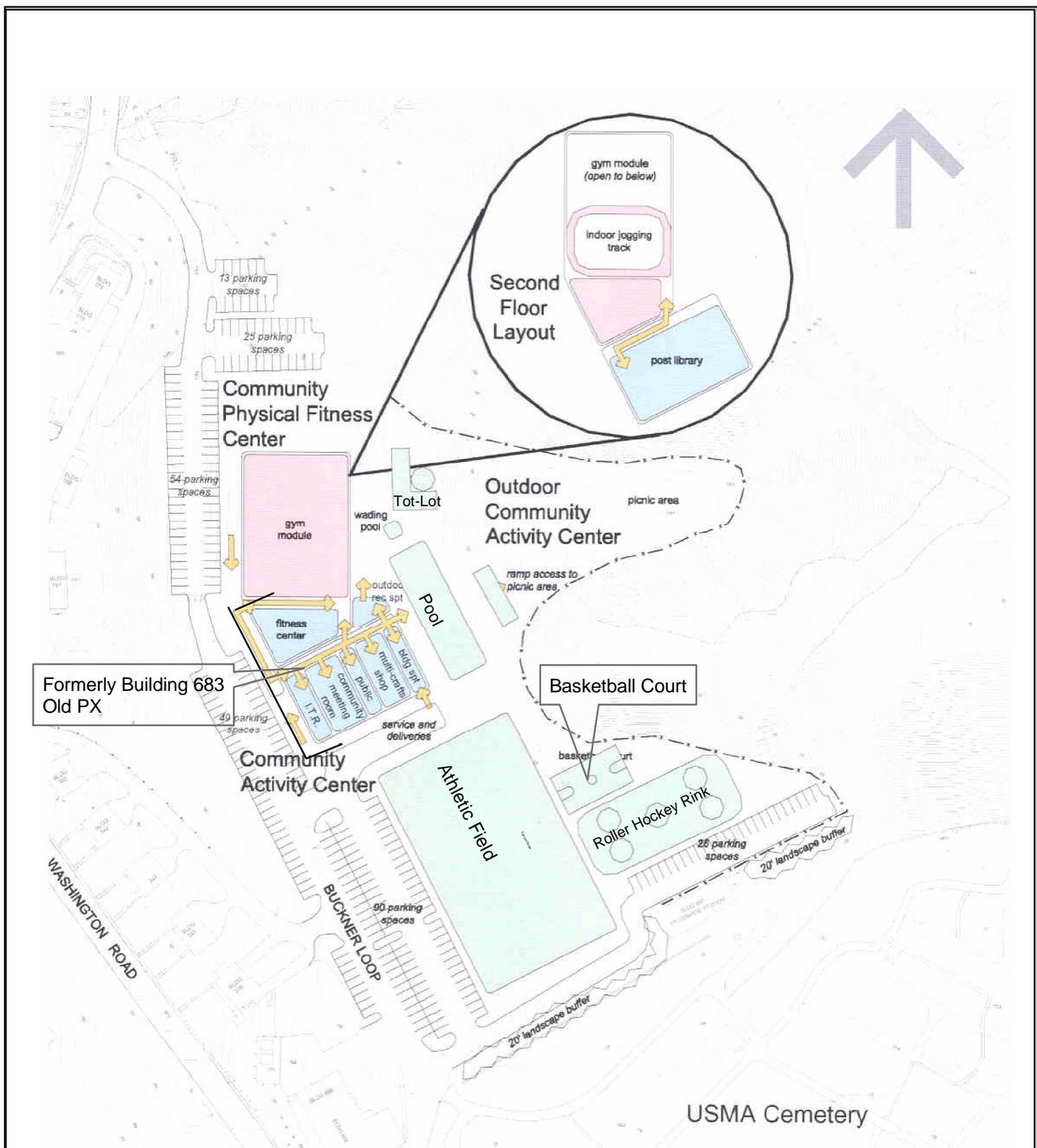


US Army Corps  
of Engineers  
New York District

MARCH 2005

NOT TO SCALE

FIGURE 2-1



JOB NO: 00P133E-L

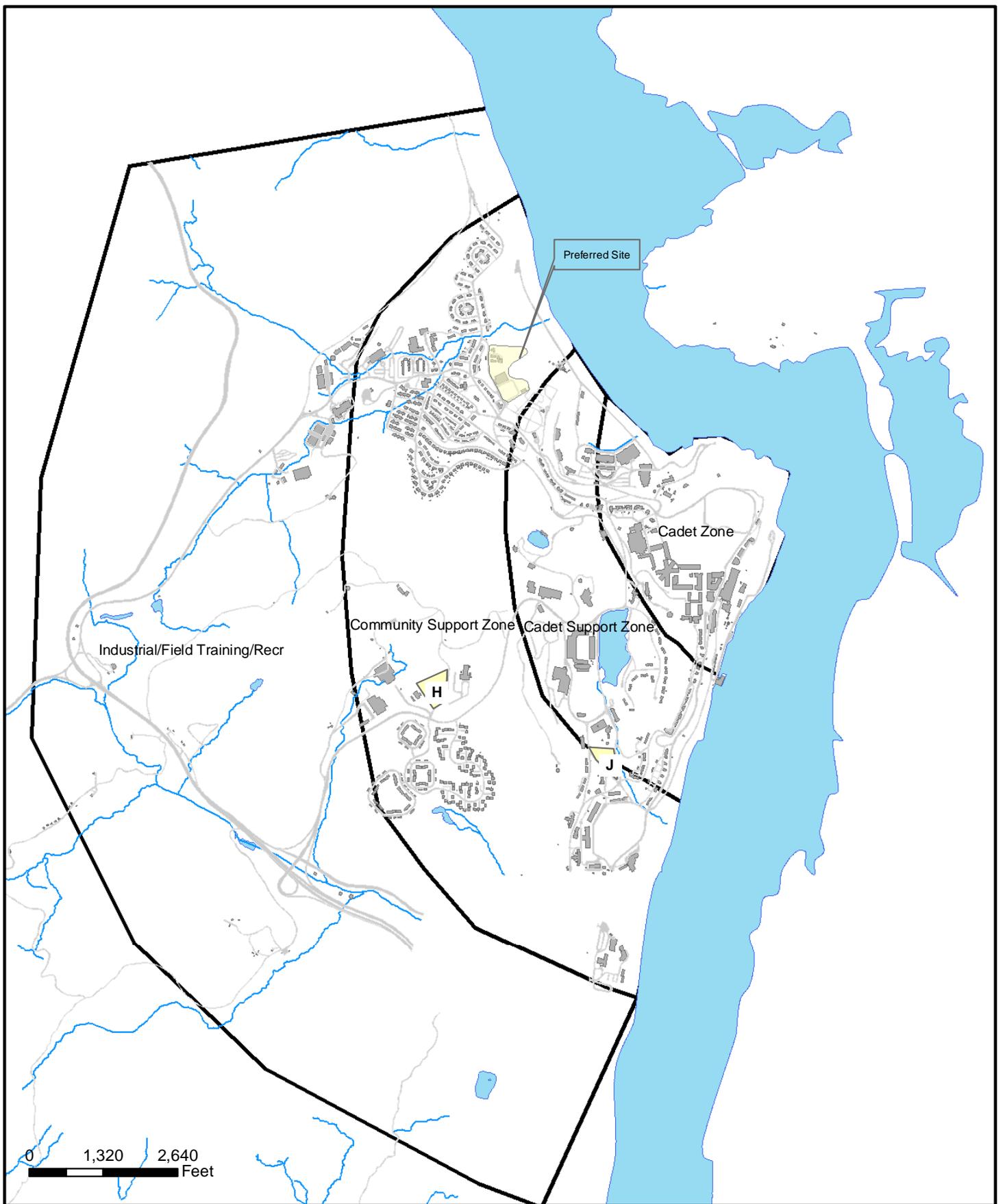
**PROPOSED DESIGN OF NEW  
 COMMUNITY ACTIVITIES CENTER COMPLEX  
 WEST POINT COMMUNITY ACTIVITIES CENTER COMPLEX  
 UNITED STATES ARMY GARRISON  
 WEST POINT, NEW YORK**



MARCH 2005

NOT TO SCALE

FIGURE 2-2



## Location of Alternative Sites

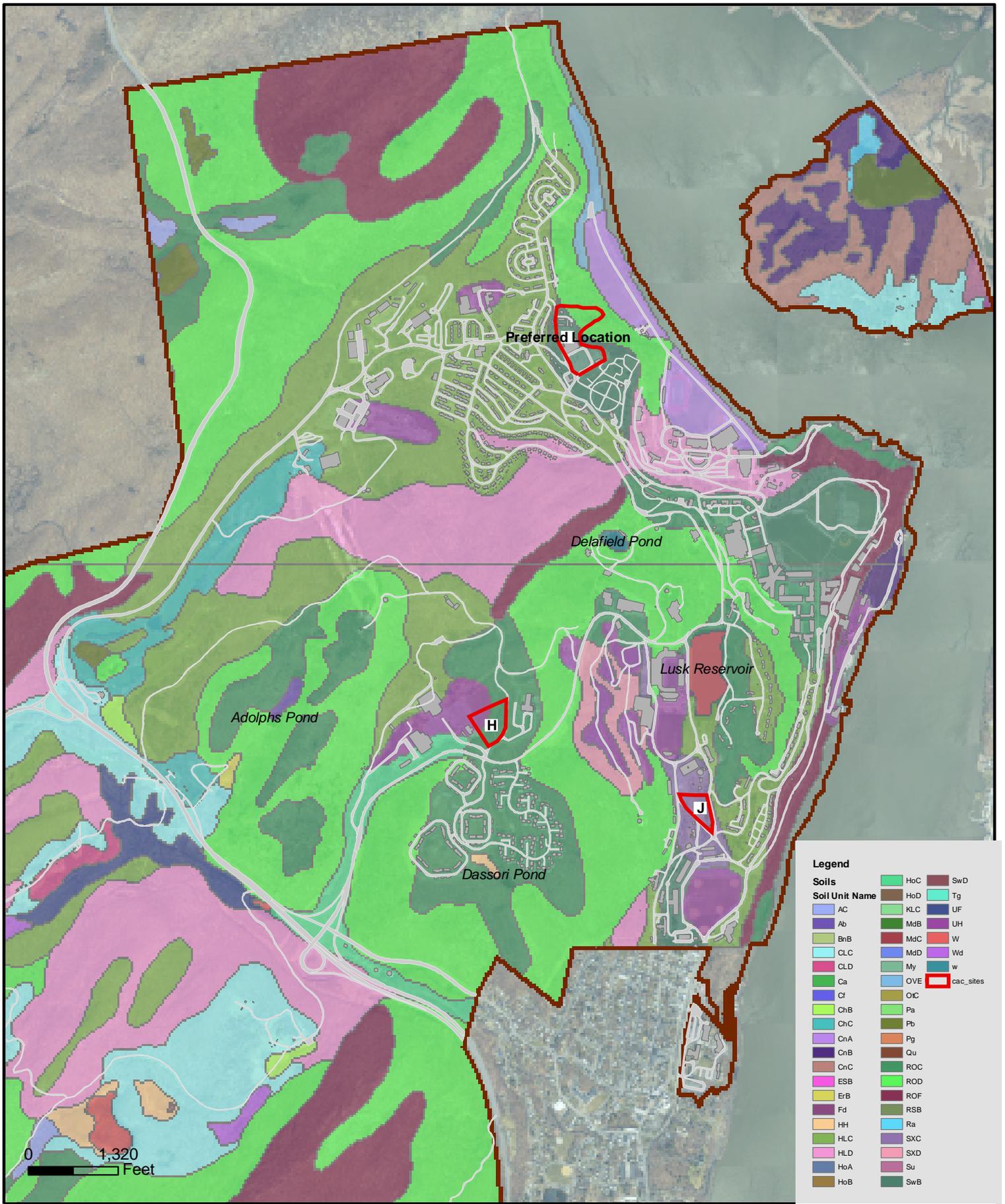
West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



US Army Corps  
 of Engineers®  
 New York District



Figure 2-3



**Legend**

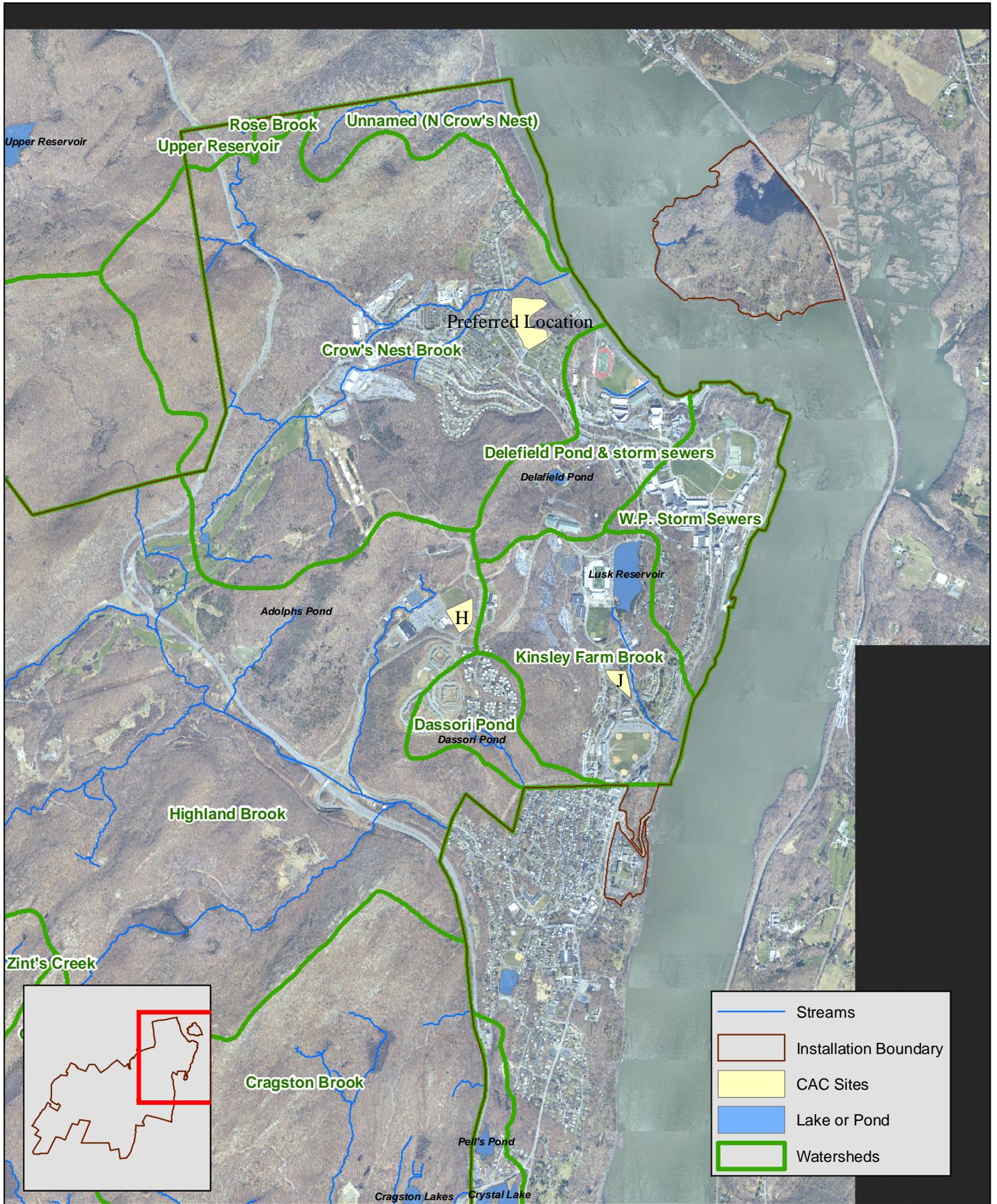
Soils	Soil Unit Name
HoC	SwD
HoD	Tg
KLC	UF
MdB	UH
MdC	W
MdD	Wd
My	w
OVE	cac_sites
OC	
Pa	
Pb	
Pg	
Qu	
ROC	
ROD	
ROF	
RSB	
Ra	
SXC	
SXD	
Su	
SwB	

### Soils Map

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



Figure 4-1



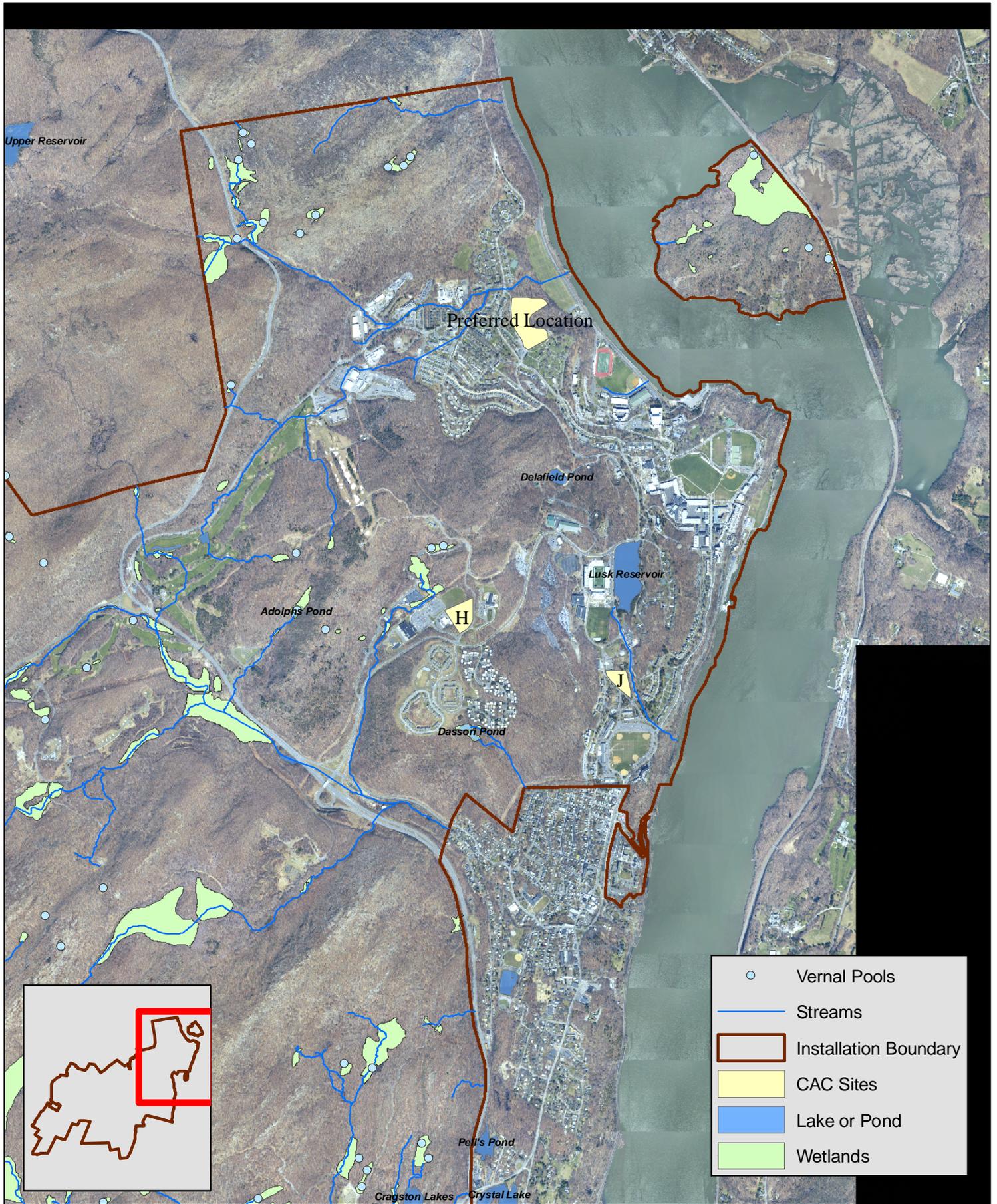
# Drainage Map

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



Figure 4-2





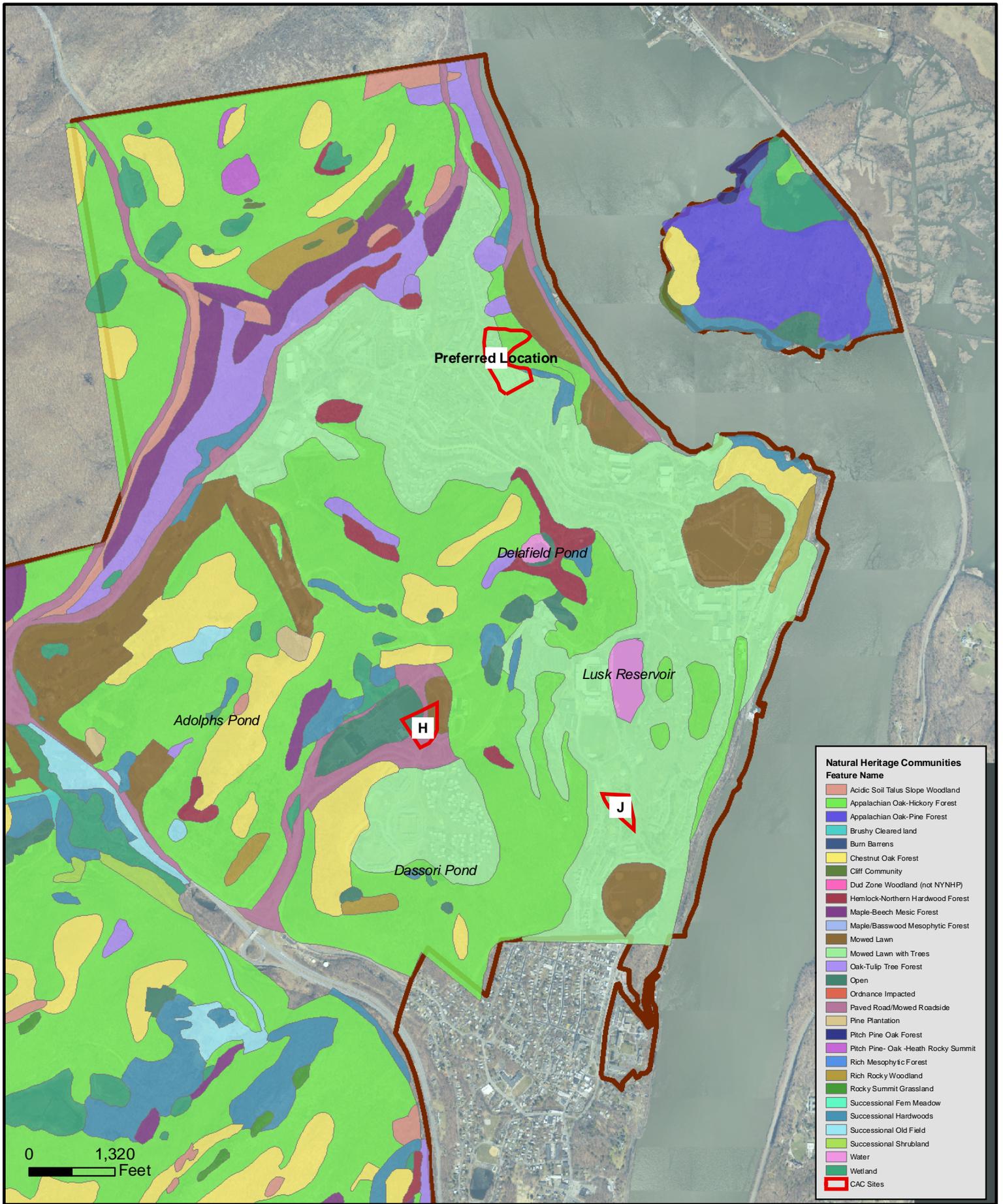
0 0.25 0.5 Miles

## Surface Waters

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



Figure 4-3



# Vegetation Communities Map

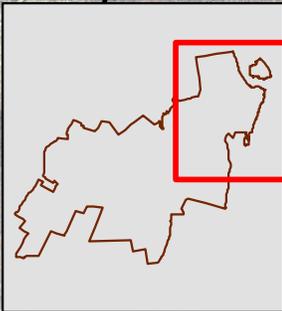
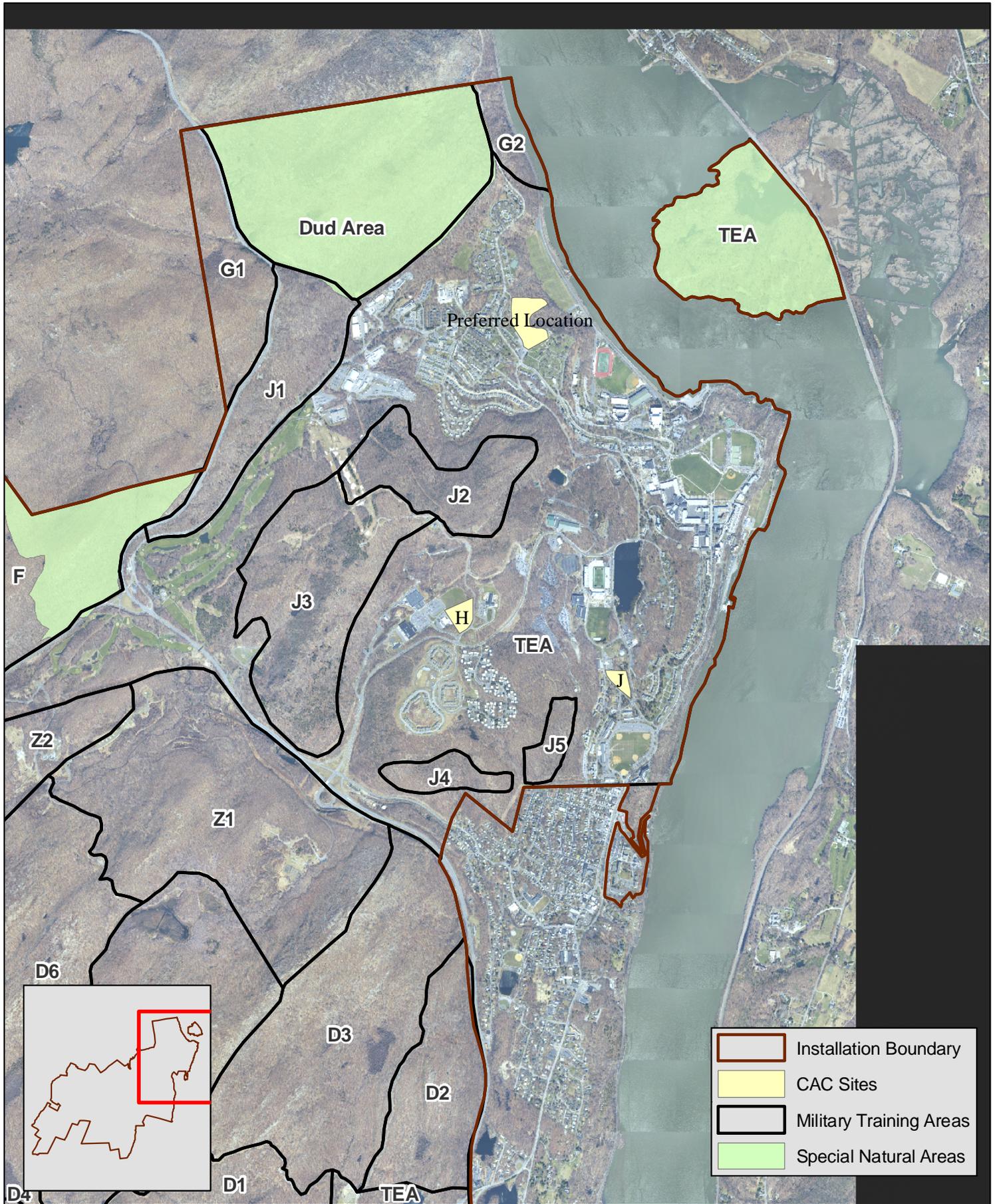
West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



US Army Corps  
 of Engineers®  
 New York District



Figure 4-4



0 0.25 0.5 Miles

### Special Natural Areas

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York

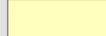
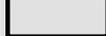
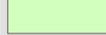
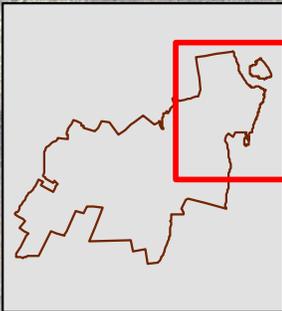
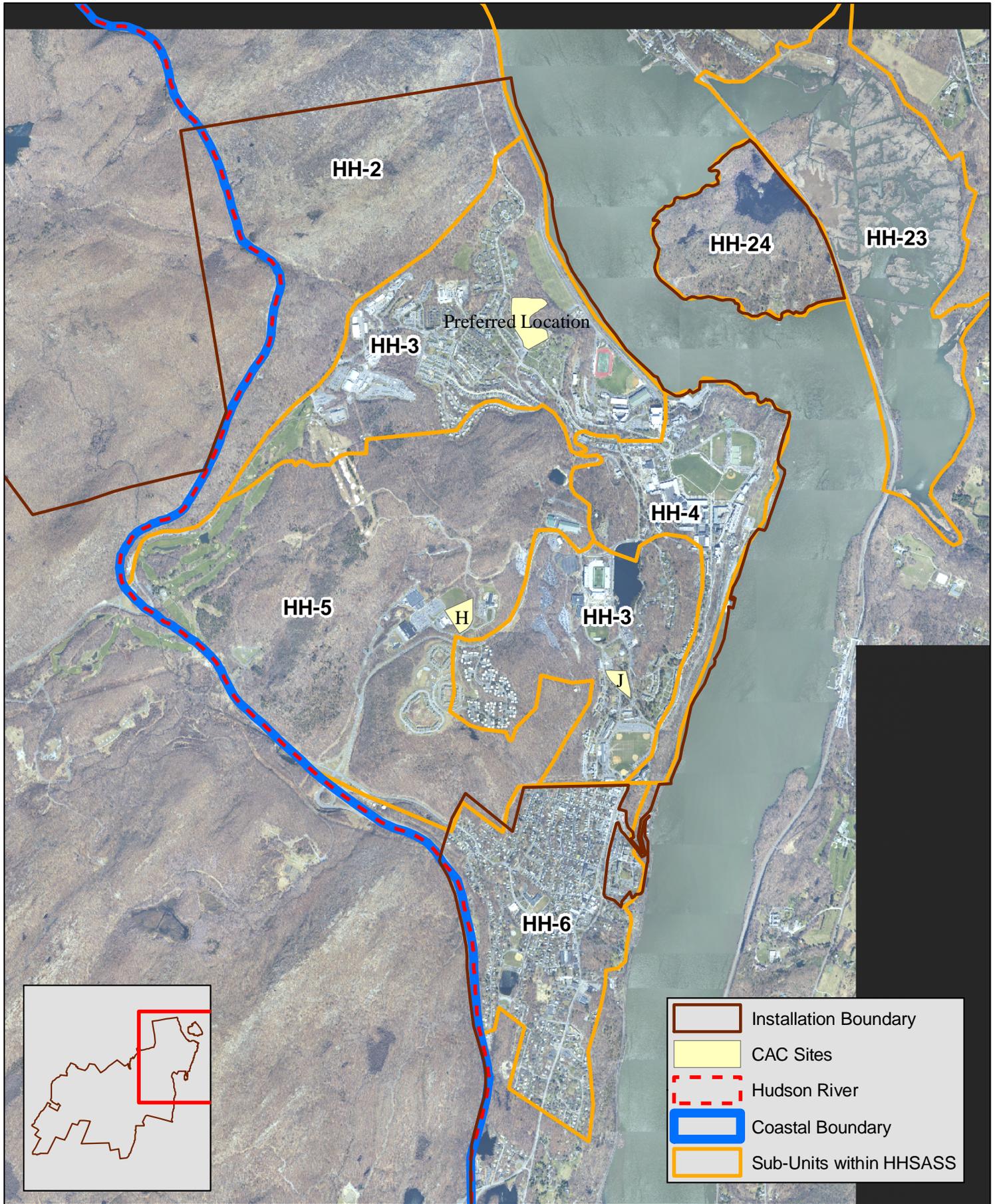
-  Installation Boundary
-  CAC Sites
-  Military Training Areas
-  Special Natural Areas



Figure 4-5



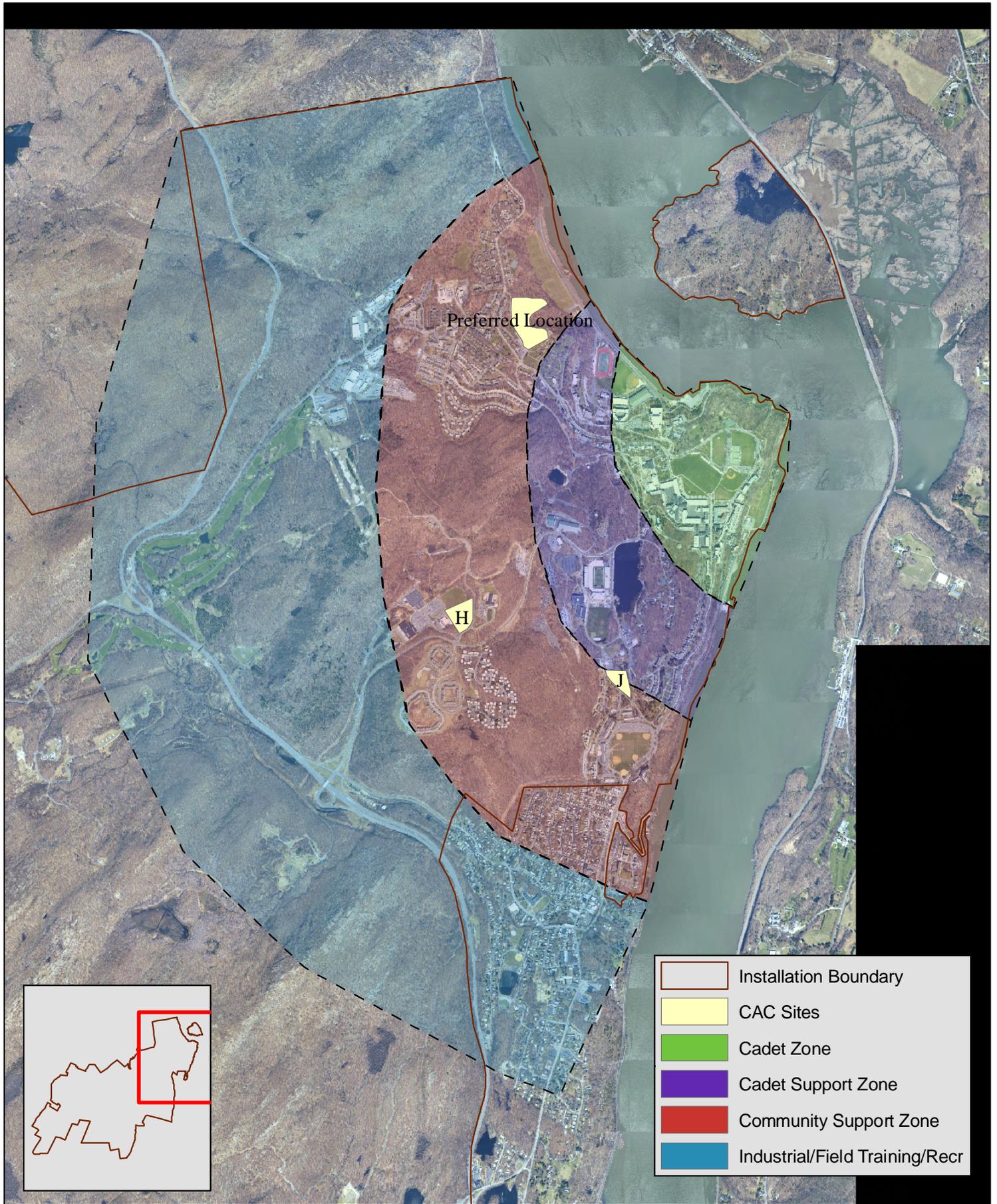
0 0.25 0.5 Miles

### Coastal Zone

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



Figure 4-6



0 0.25 0.5 Miles

## Land Use

West Point Community Activities Center  
 United States Army Garrison  
 West Point, New York



Figure 4-7

**APPENDIX A**

**NATIVE AMERICAN TRIBES ASSOCIATED WITH WEST POINT**



US Army Corps  
of Engineers  
New York District  
NEW YORK, NEW YORK

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

## MEMORANDUM FOR RECORD

**Douglas R. Cubbison**

Acting NEPA Coordinator  
Acting Cultural Resources Manager  
U.S. Military Academy  
Directorate of Housing and Public Works (EP&SD)  
Building 667 Ruger Road  
West Point, NY 10996  
845-938-3522  
Fax 845-938-2529  
Cell 914-805-9269  
E-mail: [yd5777@exmail.usma.army.mil](mailto:yd5777@exmail.usma.army.mil)

Date: Wednesday, August 08, 2001, as Revised.  
Most Current Revision July 10, 2003

**Subject: Native American Tribes Associated with the United States Military Academy**

I have previously reviewed the U.S. Army Corps of Engineers, Saint Louis District, Mandatory Center of Expertise for the Curation and Management of Archaeological Collections, "Collections Summary for United States Military Academy, New York" U.S. Army NAGPRA Compliance Project, Technical Report No. 55 (U.S. Army Environmental Center, Environmental Compliance Division: March 1996). Pages 4-5 of this Report provide "Native American Tribes Associated with the United States Military Academy." I believe that this Report provides an inaccurate assessment of the Native American Tribes with which the U.S. Military Academy should be performing consultation.

This brief assessment was compiled from several days' research at the U.S. Military Academy Library.<sup>1</sup> Anthropology and archaeology are not disciplines taught at West Point, and the library is accordingly limited. However, I believe that even a more intensive anthropological/archaeological investigation would reach the same conclusions.

---

### **Historic Summary**

European contact in the Hudson Valley occurred in September 1609, when Dutch explorer Henry Hudson ascended the river that now bears his name to within sight of modern Albany. The Dutch followed up Hudson's initial exploration in 1614, establishing a trading post near modern-day south Albany.<sup>2</sup> Trade with Native Americans in the Hudson Valley was apparently well established by 1624, for in that year

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<sup>1</sup> This treatise has subsequently been expanded and portions verified through other sources, which have been appropriately incorporated into the narrative and notes.

<sup>2</sup> An interesting account of the linguistic challenges facing Hudson and the Native Americans that he contacted is recounted in Lois M. Feister, "Linguistic Communication between the Dutch and Indians in New Netherland, 1609-1664." *Ethnohistory* 20, Issue 1 (Winter 1973), pp. 25-38.

Dutch kaolin smoking pipes and marine shell beads began to appear in Mohawk Indian sites.<sup>3</sup>

At the time that Hudson sailed up the Hudson, three Native American nations maintained an interest in the west bank of the river.<sup>4</sup> The Lenni Lenape, or Delaware, was established in numerous villages on the lower Hudson. One source notes that these Delaware spoke in the Munsee (or Minsis) dialect.<sup>5</sup> Orange County (New York) historian E.M. Rutenber noted that a Minsis village was located near Cornwall, New York, establishing a northern boundary for Delaware influence that would have extended into the Hudson Highlands and West Point vicinity.<sup>6</sup> The upper Hudson valley was occupied by the Mahican nation. Early Dutch trade was predominantly with the Mahican. The Dutch subsequently made two land purchases in the western upper Hudson Valley, in 1630 and 1631, from the Mahican.<sup>7</sup> The third nation was the Mohawk tribe of the Iroquois Confederation. At European contact, the Mohawks were settled on the eastern portion of the modern Mohawk River.<sup>8</sup> The Hudson Highlands appears to have served as a buffer zone that separated the three nations, or as a resource exploitation zone utilized by all three nations.<sup>9</sup>

Almost immediately, competition for the fur trade began to foster competition between the Mohawks, the Mahican and the Delaware; a struggle in which the Mohawks would eventually emerge victorious.<sup>10</sup>

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<sup>3</sup> Dean R. Snow, *The Iroquois* (Cambridge, Massachusetts and Oxford, United Kingdom: Blackwell Publishers, 1994), p. 79-80, 90. However, it should be noted that recent research suggests earlier Mohawk-Dutch trade contacts. For this, refer to Wayne Lenig, "Patterns of Material Culture During the Early Years of New Netherland Trade." *Northeast Anthropology* 58 (Fall 1999), pp. 47-74.

<sup>4</sup> This general interpretation is apparently derived from E.M. Rutenber, *History of the Indian Tribes of Hudson's River, Their Origins, Manners and Customs; Tribal and Sub-Tribal Organizations; Wars, Treaties, Etc., Etc.* (Albany, New York: J. Munsell, 1872), pp. 34-35.

<sup>5</sup> C. A. Weslager, *The Delaware Indians, A History* (New Brunswick, New Jersey: Rutgers University Press, 1972), p. 102; and Julian Harris Salomon, *Indians of the Lower Hudson Region, The Munsee* (New City, New York: Historical Society of Rockland County, 1982), pp. 5, 14.

<sup>6</sup> Rutenber, *The Indian Tribes of Hudson's River*, pp. 93-97, 218-222, 377-381.

<sup>7</sup> George T. Hunt, *The Wars of the Iroquois, A Study in Intertribal Trade Relations* (Madison: The University of Wisconsin Press, 1960), p. 31; Snow, *The Iroquois*, p. 81; Daniel K. Richter, *The Ordeal of the Longhouse, The Peoples of the Iroquois League in the Era of European Colonization* (Chapel Hill: The University of North Carolina Press, 1992), pp. 53-55; and Bruce G. Trigger, "The Mohawk-Mahican War (1624-1628): The Establishment of a Pattern" *Canadian Historical Review* 52, No 3 (September 1971), p. 281. Trigger suggests that the Mahican were selling land from which they had been driven by the Mohawk, that they no longer occupied but "retained title for."

<sup>8</sup> It should be noted that no Mohawk villages were located within the Hudson Highlands. All known 17<sup>th</sup> century Mohawk villages are located within the confines of the Mohawk River Valley. For this, see Donald A. Rumrill, "An Interpretation and Analysis of the Seventeenth Century Mohawk Nation: Its Chronology and Movements" *The Bulletin and Journal of Archaeology for New York State Archaeological Society* 90 (1985), pp. 1-30; Donald A. Rumrill, "The Mohawk Glass Trade Bead Chronology: ca. 1560-1785" *Beads, Journal of the Society of Bead Researchers* 3 (1991), pp. 5-46; and David B. Guldenzopf, *The Colonial Transformation of Mohawk Iroquois Society*. State University of New York at Albany: PhD Thesis, 1986, pp. 14-25.

<sup>9</sup> This is the author's premise, and is deserving of considerably more study.

<sup>10</sup> It should be noted that this competition extended considerably beyond the Mohawk, Mahican and Delaware nations and Fort Orange. These were the three combatants in the upper Hudson Valley region

With the Mahican and Mohawk living in close proximity, and the Mahican placed to interdict Mohawk-Dutch trade, the first conflict erupted between these two nations. Most sources suggest that the Mohawk nation, likely acting as an agent for the Iroquois Confederation, saw an early opportunity to engage in trade with the Europeans with the eventual aim of dominating the fur trade by serving as regional middlemen. For years the Mohawk had been engaged in a protracted struggle with the Algonquian Indians of the Saint Lawrence Valley to control the French fur trade. In 1622 the Mohawk had agreed to a truce with the Algonquians, finalizing a treaty in 1624.<sup>11</sup> That year a vicious Mohawk-Mahican war erupted.<sup>12</sup> In 1626 a small number of Dutchmen joined with the Mahican in a raid on the Mohawks. In an engagement with the Mohawk three of the Dutchmen were captured and tortured to death.<sup>13</sup> This defeat appears to have broken the Mahican resistance. By 1628, the Mohawk concluded the war by crushing the Mahican nation, forcing the Mahican to abandon the western bank of the Hudson River to the Mohawk.<sup>14</sup> The Mahican re-located to the Connecticut River valley and the eastern bank of the Hudson.<sup>15</sup> From this year well into the later part of the 18<sup>th</sup> century (for approximately 150 years) the Mohawk nation, and through them the Iroquois Confederation, would control the Indian fur trade that flowed into Albany.<sup>16</sup>

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only. For a comprehensive discussion of this topic, refer to the exhaustive study by Francis Jennings, *The Ambiguous Iroquois Empire, The Covenant Chain Confederation of Indian Tribes with English Colonies* (New York: W. W. Norton & Company, 1984).

<sup>11</sup> Trigger, "The Mohawk-Mahican War," p. 279; and Jennings, *The Ambiguous Iroquois Empire*, pp. 48-50. Jennings, typically extremely cautious in utilizing secondary sources, relies upon Trigger's interpretation of the Mohawk-Mahican War and its ramifications.

<sup>12</sup> Trigger, "The Mohawk-Mahican War," p. 279.

<sup>13</sup> Various reported. Per Trigger, a party of Dutchmen being defeated in 1626 with three captured and killed, appears to be most reliable. See *Ibid.* This date is originally provided in "Wassenaer's Historical Verhael" in J. F. Jameson, *Narratives of New Netherland, 1609-1664* (New York: Charles Scribner's Sons, 1909), pp. 84-85.

<sup>14</sup> Trigger, "The Mohawk-Mahican War," p. 281. This date is originally provided in "Wassenaer's Historical Verhael" in Jameson, *Narratives of New Netherland*, p. 89; and "Letter of Reverend Jonas Michaelius," in Jameson, *Narratives of New Netherland*, p. 131. Concurring opinions are expressed by Donald Lenig, "Of Dutchmen, Beaver Hats and Iroquois" in Robert E. Funk and Charles F. Hayes III, editors, *Current Perspectives in Northeastern Archaeology, Essays in Honor of William A. Ritchie* (Researches and Transactions of the New York State Archaeological Association, Volume 17, no. 1, 1977), pp. 71-84; Karl H. Schlesier, "Epidemics and Indian Middlemen: Rethinking the Wars of the Iroquois, 1609-1653" *Ethnohistory* 23, No. 2 (Spring 1976), p. 132; and Charles T. Gehring and William A. Starna, "Dutch and Indians in The Hudson Valley: The Early Period" *The Hudson Valley Regional Review* 9, no. 2 (1992), pp. 1-25.

<sup>15</sup> Allen W. Trelease, *Indian Affairs in Colonial New York: The Seventeenth Century* (1960), pp. 46-48; and Richter, *Ordeal of the Longhouse*, pp. 55-56.

<sup>16</sup> Trigger, "The Mohawk-Mahican War," p. 281. For concurring studies, see Howard Vernon, "The Dutch, The Indians and the Fur Trade in the Hudson Valley, 1609-1664" and Laurence M. Hauptman, "The Dispersal of the River Indians: Frontier Expansion and Indian Dispossession in the Hudson Valley" in Laurence M. Hauptman and Jack Campisi, editors, *Neighbors and Intruders: An Ethnohistorical Exploration of the Indians of Hudson's Rivers* (Ottawa: National Museums of Canada, 1978), 197-209 and 242-260.

Some Dutch accounts suggest that several of the more northern Delaware communities had been placed under the Mohawk sphere of influence early in the 17<sup>th</sup> Century.<sup>17</sup> With the removal of the Mahican Indians from the western bank of the Hudson River in 1628, the Delaware most likely retreated to the south to the Delaware River valley (into modern Pennsylvania), attempting to distance themselves from the Mohawk. Not particularly warlike according to some accounts, the northern elements of the Delaware nation were rapidly subjugated by the considerably more warlike Mohawk nation and Iroquois Confederation. Attacks by Seneca war parties on the Delaware were recorded in 1661. Another source notes that when William Penn arrived to establish Pennsylvania in 1682, that the Delaware had already placed themselves under the protection of the Iroquois Confederation. With this act, the Iroquois had symbolically made the Delaware “women,” precluding them from going to war, negotiating treaties, or even managing their own lands.<sup>18</sup> By the middle of the seventeenth century, the Delaware had clearly been driven from the Hudson Valley.<sup>19</sup>

Unfortunately for the Mohawk, by establishing themselves as the trading partners of the Dutch at modern Albany, they exposed themselves to smallpox and other debilitating European diseases. A smallpox epidemic reached the Mohawk in 1634, devastating the population. Some sources suggests a reduction in population from 7,740 to 2,830 (a nearly two thirds mortality rate) in a period of probably less than one hundred days.<sup>20</sup> For all practical purposes, the pre-European Mohawk culture had been destroyed. The resultant Mohawk nation was to be significantly impacted by European cultures and technology.

---

## Recommended Native American Consultation

### Mohawk Nation

- 1.) The Mohawk Community of Kanatsiohareke has recently been established in the Mohawk Valley, near Johnstown. Although this community has not yet achieved status as a Federally Recognized Native American Community, we may wish to include them for consultation purposes, particularly given their proximity to the U.S. Military Academy.
- 2.) Saint Regis Band of Mohawk Indians of New York (the Federally Recognized Native American government representing the Mohawk Nation in the United States).

### Mahican Nation

- 1.) Following the defeat of the Mahican Nation in 1628, they were driven to the east bank of the Hudson River. Accordingly, recommend adding Mohegan Indian Tribe of Connecticut (a Federally Recognized Native American Tribe).

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<sup>17</sup> Weslager, *The Delaware Indians*, p. 103.

<sup>18</sup> Rutenber discusses these negotiations between the Iroquois and Delaware at some length. Rutenber, *The Indian Tribes of Hudson's River*, 64-70.

<sup>19</sup> Weslager, *The Delaware Indians*, pp. 103, 179-182.

<sup>20</sup> Snow, *The Iroquois*, pp. 94-100; and Richter, *The Ordeal of the Longhouse*, pp. 58-60.

2.) Stockbridge-Munsee Community of Mohican Indians of Wisconsin (per March, 1996 report).

Delaware Nation

1.) No changes from March, 1996 report (Delaware Nation adequately addressed).

**APPENDIX B**

**THREATENED AND ENDANGERED SPECIES CORRESPONDENCE**



US Army Corps  
of Engineers  
New York District  
NEW YORK DISTRICT

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

# New York State Department of Environmental Conservation

## Region 3, Division of Environmental Permits

21 South Putt Corners Road, New Paltz, NY 12561-1696

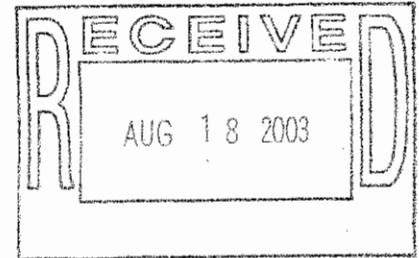
(845) 256-3054 FAX (845) 255-3042

Website: [www.dec.state.ny.us](http://www.dec.state.ny.us)



Erin M. Crotty  
Commissioner

August 12, 2003



CELINE SANTIAGO BASS PWS  
MATRIX ENVIRONMENT  
215 RIDGEDALE AVE  
FLORHAM PARK NJ 07932

Re: United States Military Academy at West Point  
West Point, Orange County

Dear Ms. Bass:

The New York State Department of Environmental Conservation (DEC) has received your inquiry dated July 23, 2003 regarding the above-referenced site. We have reviewed the maps provided and offer the following comments regarding the proposed community center over an existing building footprint:

### Threatened & Endangered Species

Our records indicate that several State-listed plant species have been recorded in the vicinity of the site. The following is a partial list of the following plant species that potentially may be found on the site:

Common Name	Scientific Name	NYS Listing
Large Twayblade	<i>Liparis lilifolia</i>	Threatened
Mead's Sedge	<i>Carex meadii</i>	Endangered
Rattlebox	<i>Crotalaria sagittalis</i>	Endangered

Please contact Mr. Jack Isaacs at the DEC Bureau of Habitat (Telephone: 845-256-3087) for more information on these species and the potential need for site-specific surveys prior to undertaking a project.

### State Protected Streams

The stream you indicated currently is Crow's Nest, a named tributary to the Hudson River, Water Index No. H-81, Class C. A Use & Protection of Waters permit is not required to physically disturb the bed or banks of this stream, however, any project undertaken should not contravene the water quality standards of the creek. Care must be taken to stabilize the disturbed areas promptly after construction, and all necessary precautions must be taken to prevent contamination of the stream by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

### State Freshwater Wetlands

Your project/site is not within a New York State protected Freshwater Wetland (see enclosed map). Please contact your local town officials and the United States Army Corps of Engineers in New York City, telephone (212) 264-0185, for any permitting they might require.

### Archaeological Resources

This is a National Register Site. For additional information concerning historic resources, you should contact OPRHP Field Service Bureau, P.O. Box 189, Waterford, NY 12188-0189, telephone (518)-237-8643.

Critical Environmental Areas

Based on our records, the project site does not contain a critical environmental area.

Please note that this letter only addresses the presence of the following resources: rare, threatened, endangered, or special concern species; significant habitats and natural communities; NYS Protected Streams; NYS Freshwater Wetlands; archaeological resources; and critical environmental areas. Other permits from DEC 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 one year unless you are otherwise notified.

If you have any questions about this information, please call me at (845) 256-3184.

Sincerely,



Lee Kassin  
Agency Program Aide

Enclosure

cc: J. Isaacs, BOH

**NOTE:**

Stormwater discharges which either:

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

now require a Stormwater (SPDES) permit from this Department. Your project may be covered under one of two Statewide General Permits or may require an individual permit. To obtain a copy of the General Permit please call 518-402-8109. 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, (form available from this office or DEC Website at [www.dec.state.ny.us](http://www.dec.state.ny.us)).

**FINAL FRESHWATER WETLANDS MAP**  
 ORANGE COUNTY

Prepared pursuant to Article 24 of the  
 Environmental Conservation Law

NYS Department of Environmental Conservation

FILED DATE: MAR 25 1987

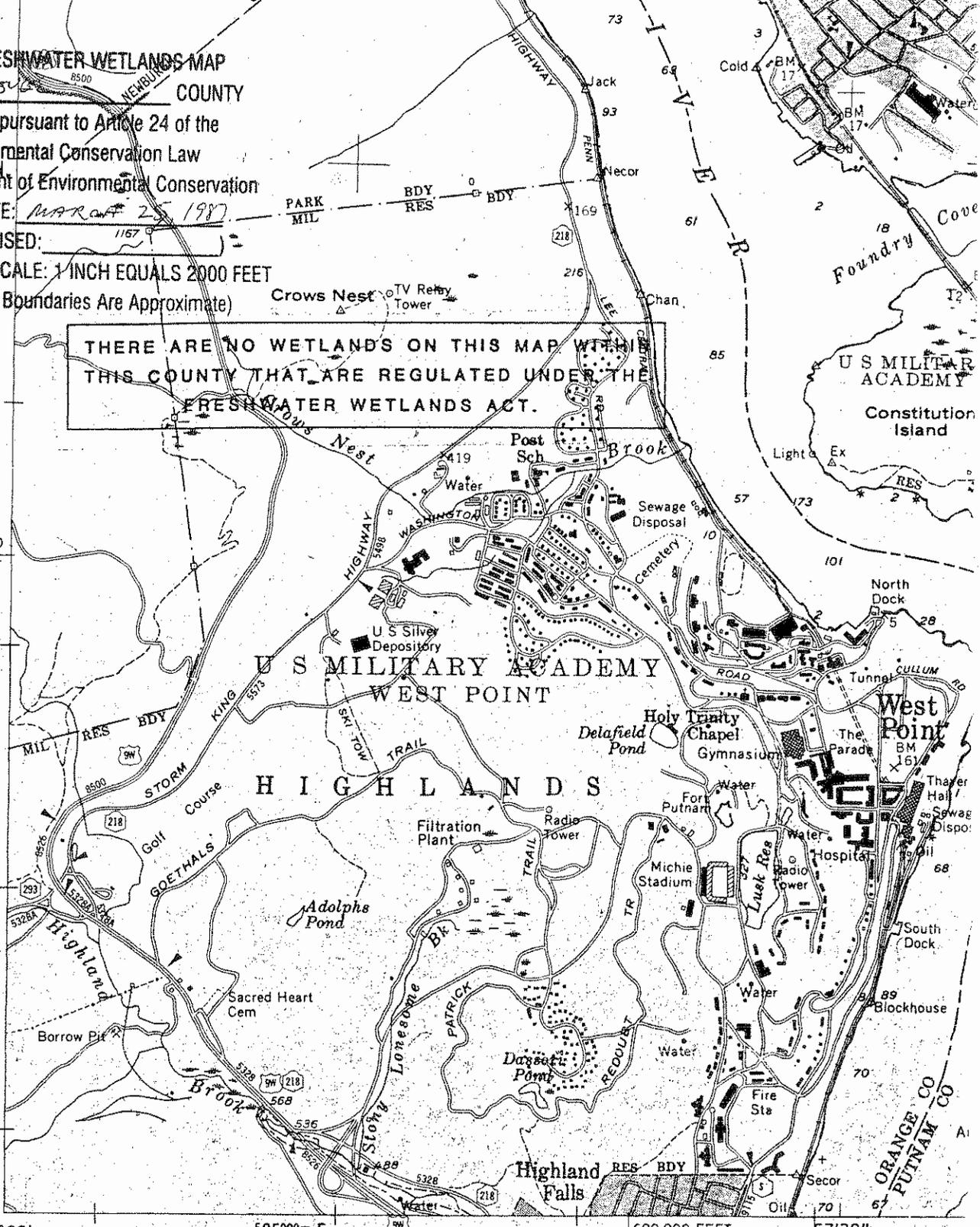
(LAST REVISED: \_\_\_\_\_)

APPROXIMATE SCALE: 1 INCH EQUALS 2000 FEET

(All Wetland Boundaries Are Approximate)

THERE ARE NO WETLANDS ON THIS MAP WITHIN THIS COUNTY THAT ARE REGULATED UNDER THE FRESHWATER WETLANDS ACT.

510 000  
 FEET



41° 22' 30"

74° 00'

585000m. E.

600 000 FEET

57' 30"

POPOLOPEN  
 LAKE

Prepared and published in 1973 by the New York State Department of Transportation, in cooperation with the U.S. Department of Transportation, Federal Highway Administration.

Map base from 1957 U.S. Geological Survey 7.5-minute quadrangle.

Map revisions made using 1970 aerial photography, construction plans, official records and other sources. Features revised include: highways and other transportation facilities; civil boundaries; recreation sites; hydrography; and buildings. Grey tint indicates intensely developed areas in which only landmark buildings are shown.

Revisions may not comply with National Map Accuracy Standards.

Correspondence concerning this and other maps of the Department



Betw  
 Merc

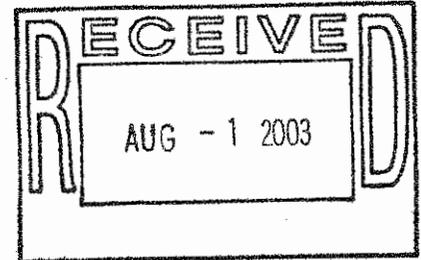
**New York State Department of Environmental Conservation  
Division of Fish, Wildlife & Marine Resources**

**New York Natural Heritage Program**  
625 Broadway, Albany, New York 12233-4757  
**Phone:** (518) 402-8935 • **FAX:** (518) 402-8925  
**Website:** www.dec.state.ny.us



July 30, 2003

Celine Santiago Bass  
Matrix Environmental & Geotech Services  
215 Ridgedale Ave  
Florham Park, NJ 07932



Dear Ms. Bass:

In response to your recent request, we have reviewed the New York Natural Heritage Program databases with respect to the Environmental Assessment for the proposed building of a New Community Center, site as indicated on the map you provided, located in the U. S. Military Academy at West Point, located in Orange County, New York State..

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and may not be released to the public without permission from the New York Natural Heritage Program.

Your project location is within, or adjacent to, a designated Significant Coastal Fish and Wildlife Habitat. This habitat is part of New York State's Coastal Management Program (CMP), which is administered by the NYS Department of State (DOS). Projects which may impact the habitat are reviewed by DOS for consistency with the CMP. For more information regarding this designated habitat and applicable consistency review requirements, please contact:

Greg Capobianco or Steven C. Resler      - (518) 474-6000  
NYS Department of State  
Division of Coastal Resources and Waterfront Revitalization  
41 State Street, Albany, NY 12231

The presence of rare species may result in your project requiring additional permits, permit conditions, or review. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should NOT be substituted for on-site surveys that may be required for environmental impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,



Charlene Houle  
Information Services  
NY Natural Heritage Program

Encs.

cc: Reg. 3, Wildlife Mgr.  
Reg. 3, Fisheries Mgr.  
Peter Nye, Endangered Species Unit

# Natural Heritage Report on Rare Species and Ecological Communities

Prepared 29 July 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields. We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.

* County ** TOWN	Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Detailed Location	General Habitat and Quality	Office Use
* COLUMBIA, PUTNAM, RENSSELAER, ROCKLAND, ORANGE, NEW YORK, DU ** MOUNT PLEASANT, SAUGERTIES, BETHLEHEM, CITY OF RENSSELAER, CITY OF NEW YORK, FISHKILL, CITY OF NEW Y	<i>Acipenser brevirostrum</i> SHORTNOSE STURGEON Fish	ENDANGERED G3 S1 LE		HUDSON RIVER The lower Hudson River from The Battery in New York City at its junction with Upper New York Bay, upstream to the Federal Dam in Troy and a portion of Schoharck Creek	For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager or NYS DEC Endangered Species Unit at 518-402-8859.	4107368 BOF
* ORANGE ** CORNWALL, HIGHLANDS, WOODBURY	<i>Carex meadii</i> MEADS SEDGE Vascular Plant	ENDANGERED G4G5 SH	H NO DATE	WEST POINT West Point.		4107348
	<i>Crotalaria sagittalis</i> RAATTLEBOX Vascular Plant	ENDANGERED G5 S1	H NO DATE	WEST POINT West Point.		4107348

# Natural Heritage Report on Rare Species and Ecological Communities

Prepared 29 July 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields. We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.

\* County  
\*\* Town

Scientific Name,  
COMMON NAME, &  
Group Name

NY Legal Status,  
Heritage Ranks, &  
Federal Status

Location

Office  
Use

\* ORANGE

\*\* HIGHLANDS

*Crotalus horridus*  
TIMBER RATTLESNAKE  
Reptile

THREATENED  
G4 S3

Documented within 1.5 miles of project site. Animals can move 1.5 miles or more from documented locations. For information, please contact the NYS DEC Regional Wildlife Manager or NYS DEC Endangered Species Unit at 518-402-8859.

4107348  
S  
ESU

# Natural Heritage Report on Rare Species and Ecological Communities

Prepared 29 July 2003 by NY Natural Heritage Program, NYS DEC, Albany, New York

This report contains SENSITIVE information that should be treated in a sensitive manner -- Please see cover letter. Refer to the Users' Guide for explanations of codes, ranks, and fields. We do not always provide maps of locations of species most vulnerable to disturbance, nor of some records whose locations and/or extents are not precisely known or are too large to display.

* County	** Town	Scientific Name, COMMON NAME, & Group Name	NY Legal Status, Heritage Ranks, & Federal Status	EO Rank & Last Seen	Detailed Location	General Habitat and Quality	Office Use
* ORANGE		<i>Liparis liliifolia</i> LARGE TWAYBLADE Vascular Plant	THREATENED G5 S1	H 1883-06-09	WEST POINT West Point		4107348
** WOODBURY, HIGHLANDS, CORNWALL							
** WOODBURY, HIGHLANDS, CORNWALL		<i>Tachipteryx thoreyi</i> GRAY PETALTAIL Dragonfly/Damselfly	UNPROTECTED - SPECIAL CONCERN G4 S2		WEST POINT West Point	For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager or NYS DEC Endangered Species Unit at 518-402-8859.	4107348 ESU
* ORANGE, PUTNAM, WESTCHESTER, ROCKLAND							
** HIGHLANDS, CORNWALL, PHILIPSTOWN, CORTLANDT							
ANADROMOUS FISH CONCENTRATION AREA Other			UNPROTECTED S3	E 1986	HUDSON RIVER MILE 44-56 The Hudson River from Cornwall south to Dunderberg Mountain, river mile 44-56.	12 mile section of deep turbulent narrow river.	4107338 S

# USERS GUIDE TO NY NATURAL HERITAGE DATA

**NATURAL HERITAGE PROGRAM:** The Natural Heritage Program is an ongoing, systematic, scientific inventory whose goal is to compile and maintain data on the rare plants and animals native to New York State, and significant ecological communities. The data provided in the report facilitate sound planning, conservation, and natural resource management and help to conserve the plants, animals and ecological communities that represent New York's natural heritage.

**DATA SENSITIVITY:** The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should not be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

**NATURAL HERITAGE REPORTS** (may contain any of the following types of data):

**COUNTY NAME:** County where the occurrence of a rare species or significant ecological community is located.

**TOWN NAME:** Town where the occurrence of a rare species or significant ecological community is located.

**USGS 7 1/2' TOPOGRAPHIC MAP:** Name of 7.5 minute US Geological Survey (USGS) quadrangle map (scale 1:24,000).

**SIZE (acres):** Approximate acres occupied by the rare species or significant ecological community at this location. A blank indicates unknown size.

**SCIENTIFIC NAME:** Scientific name of the occurrence of a rare species or significant ecological community.

**COMMON NAME:** Common name of the occurrence of a rare species or significant ecological community.

**ELEMENT TYPE:** Type of element (i.e. plant, animal, significant ecological community, other, etc.)

**LAST SEEN:** Year rare species or significant ecological community last observed extant at this location.

**EO RANK:** Comparative evaluation summarizing the quality, condition, viability and defensibility of this occurrence. Use with LAST SEEN.

A-E = Extant: A=excellent, B=good, C=marginal, D=poor, E=extant but with insufficient data to assign a rank of A - D.

F = Failed to find. Did not locate species, but habitat is still there and further field work is justified.

H = Historical. Historical occurrence without any recent field information.

X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.

? = Unknown.

Blank = Not assigned.

**NEW YORK STATE STATUS (animals):** Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

**E = Endangered Species:** any species which meet one of the following criteria:

1) Any native species in imminent danger of extirpation or extinction in New York.

2) Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

**T = Threatened Species:** any species which meet one of the following criteria:

1) Any native species likely to become an endangered species within the foreseeable future in NY.

2) Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.

**SC = Special Concern Species:** those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York. Unlike the first two categories, species of special concern receive no additional legal protection under Environmental Conservation Law section 11-0535 (Endangered and Threatened Species).

**P = Protected Wildlife (defined in Environmental Conservation Law section 11-0103):** wild game, protected wild birds, and endangered species of wildlife.

**U = Unprotected (defined in Environmental Conservation Law section 11-0103):** the species may be taken at any time without limit; however a license to take may be required.

**G = Game (defined in Environmental Conservation Law section 11-0103):** any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

**NEW YORK STATE STATUS (plants):** The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.

**E = Endangered Species:** listed species are those with:

1) 5 or fewer extant sites, or

2) fewer than 1,000 individuals, or

3) restricted to fewer than 4 U.S.G.S. 7 1/2 minute topographical maps, or

4) species listed as endangered by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

**T = Threatened:** listed species are those with:

1) 6 to fewer than 20 extant sites, or

2) 1,000 to fewer than 3,000 individuals, or

3) restricted to not less than 4 or more than 7 U.S.G.S. 7 and 1/2 minute topographical maps, or

4) listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

**R = Rare:** listed species have:

1) 20 to 35 extant sites, or

2) 3,000 to 5,000 individuals statewide.

- V = Exploitably vulnerable: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.  
U = Unprotected; no state status.

**NEW YORK STATE STATUS** (communities): At this time there are no categories defined for communities.

**FEDERAL STATUS** (plants and animals): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527.

(blank) = No Federal Endangered Species Act status.

LE = The element is formally listed as endangered.

LT = The element is formally listed as threatened.

E/SA = The element is treated as endangered because of similarity of appearance to other endangered species or subspecies.

PE = The element is proposed as endangered.

PT = The element is proposed as threatened.

C = The element is a candidate for listing.

(LE) = If the element is a full species, all subspecies or varieties are listed as endangered; if the element is a subspecies, the full species is listed as endangered.

(LE-LT) = The species is formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.

(LT-C) = The species is formally listed as threatened in part of its range, and as a candidate for listing in the other part; or, one or more subspecies or varieties is listed as threatened, and the others are candidates for listing.

(LT-(T/SA)) = One or more subspecies or populations of the species is formally listed as threatened, and the others are treated as threatened because of similarity of appearance to the listed threatened subspecies or populations.

(PS) = Partial status: the species is listed in parts of its range and not in others; or, one or more subspecies or varieties is listed, while the others are not listed.

**GLOBAL AND STATE RANKS** (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Intraspecific taxa are also assigned a taxon rank to reflect the intraspecific taxon's rank throughout the world. ? = Indicates a question exists about the rank. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

#### GLOBAL RANK:

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.  
G2 = Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.  
G3 = Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.  
G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.  
G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.  
GH = Historically known, with the expectation that it might be rediscovered.  
GX = Species believed to be extinct.

#### STATE RANK:

- S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.  
S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.  
S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.  
S4 = Apparently secure in New York State.  
S5 = Demonstrably secure in New York State.  
SH = Historically known from New York State, but not seen in the past 15 years.  
SX = Apparently extirpated from New York State.  
SZ = Present in New York State only as a transient migrant.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B) populations and the non-breeding populations (N), respectively, of the species.

**TAXON (T) RANK:** The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.

T1 through T5 = See Global Rank definitions above.

Q = Indicates a question exists whether or not the taxon is a good taxonomic entity.

**OFFICE USE:** Information for use by the Natural Heritage Program.

DIVISION OF ENVIRONMENTAL PERMITS

June 2001

REGION	COUNTIES	REGIONAL PERMIT ADMINISTRATORS
1	Nassau & Suffolk  Telephone: (631) 444-0365	John Pavacic NYS-DEC BLDG. 40 SUNY at Stony Brook Stony Brook, NY 11790-2356
2	New York City (Boroughs of Manhattan, Brooklyn, Bronx, Queens, & Staten Island)  Telephone: (718) 482-4997	John Cryan NYS-DEC One Hunters Point Plaza 47-40 21st Street Long Island City, NY 11101-5407
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester  Telephone: (845) 256-3054	Margaret Duke (Peg) NYS-DEC 21 South Putt Corners Road New Paltz, NY 12561-1696
4	Albany, Columbia, Greene, Montgomery, Rensselaer & Schenectady  Telephone: (518) 357-2069	William Clarke NYS-DEC 1150 North Wescott Road Schenectady, NY 12306-2014
4 (sub-office)	Delaware, Otsego & Schoharie  Telephone: (607) 652-7741	John Feltman NYS-DEC Route 10 HCR#1, Box 3A Stamford, NY 12167-9503
5	Clinton, Essex, Franklin & Hamilton  Telephone: (518) 897-1234	Richard Wild NYS-DEC Route 86, PO Box 296 Ray Brook, NY 12977-0296
5 (sub-office)	Fulton, Saratoga, Warren & Washington  Telephone: (518) 623-1281	Thomas Hall* NYS-DEC County Route 40 PO Box 220 Warrensburg, NY 12885-0220
6	Jefferson, Lewis & St. Lawrence  Telephone: (315) 785-2245	Brian Fenlon NYS-DEC State Office Building 317 Washington Street Watertown, NY 13601-3787
6 (sub-office)	Herkimer & Oneida  Telephone: (315) 793-2555	J. Joseph Homburger* NYS-DEC State Office Building 207 Genesee Street Utica, NY 13501-2885

7	Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga & Tompkins	Ralph Manna NYS-DEC 615 Erie Blvd. West (Env. Permits Room 206) Syracuse, NY 13204-2400
7 (sub-office)		Michael Barylski* NYS-DEC 1285 Fisher Avenue Cortland, NY 13045-1090
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne & Yates	Peter Lent NYS-DEC 6274 East Avon Lima Road Avon, NY 14414-9519
9	Allegany, Cattaraugus, Chautauqua, Erie, Niagara & Wyoming	Steve Doleski NYS-DEC 270 Michigan Avenue Buffalo, NY 14203-2999
9 (sub-office)		Ken Taft* NYS-DEC 182 East Union, Suite 3 Allegany, NY 14706-1328

\* Deputy Regional Permit Administrator

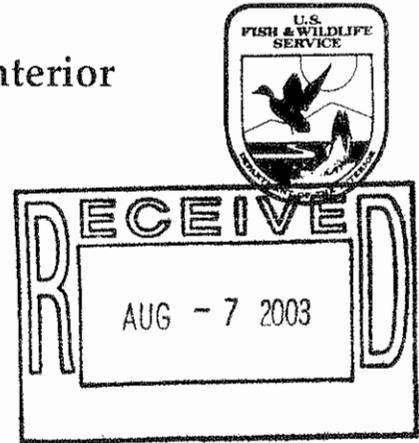


# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

3817 Luker Road  
Cortland, NY 13045

August 4, 2003



Ms. Celine Santiago Bass, P.W.S.  
Certified Ecologist  
Matrix Environmental & Geotechnical Services  
215 Ridgedale Avenue  
Florham Park, NJ 07932

Dear Ms. Bass:

This responds to your letter of July 23, 2003, requesting information on the presence of endangered or threatened species in the vicinity of the proposed construction of a new community center on the existing footprint in the Town of Highland, Orange County, New York..

Except for occasional transient individuals, no Federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). Therefore, no further Endangered Species Act coordination or consultation with the U.S. Fish and Wildlife Service (Service) is required. 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.

The above comments pertaining to endangered species under our jurisdiction are provided pursuant to the Endangered Species Act. This response does not preclude additional Service comments under other legislation.

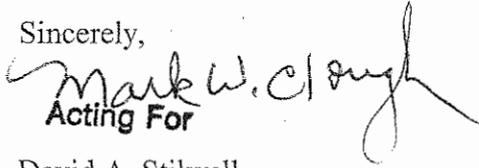
For additional information on fish and wildlife resources or State-listed species, we suggest you contact the appropriate New York State Department of Environmental Conservation regional office(s),\* and:

New York State Department of Environmental Conservation  
New York Natural Heritage Program Information Services  
625 Broadway  
Albany, NY 12233  
(518) 402-8935

We are not aware of any Federally designated wildlife preserves or wild, recreational, or scenic rivers at or in the vicinity of the project site.

If you require additional information or assistance please contact Michael Stoll at  
(607) 753-9334.

Sincerely,



Mark W. Clough

Acting For

David A. Stilwell  
Field Supervisor

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

cc: NYSDEC, New Paltz, NY (Environmental Permits)  
NYSDEC, Albany, NY (Natural Heritage Program)  
COE, New York, NY



July 23, 2003

New York State Department of Environmental Conservation  
21 South Putt Corners Road  
New Paltz, NY 12561

**RE: United States Military Academy at West Point  
West Point, Orange County, New York**

To Whom It May Concern:

MATRIX Environmental & Geotechnical Services, Inc. (MATRIX) is conducting an Environmental Assessment for the above referenced project. Consequently, we are requesting available information regarding endangered and/or threatened species, critical or proposed critical habitats, wetlands, national wildlife refuges, wilderness areas, wild and scenic river corridors, heritage trust reserves and / or National and State parks which have the potential to be impacted by the proposed project.

The proposed project is located at the U.S. Military Academy at West Point, West Point, Orange County, New York. Please refer to the attached USGS Map for the project site's location. The applicant proposes to build a new community center over an existing building footprint.

Should you have any further questions or require additional information, please do not hesitate to contact me. Thank you for your time and assistance in this matter.

Sincerely,  
MATRIX Environmental & Geotechnical Services, Inc.

Celine Santiago Bass, P.W.S.  
Certified Ecologist

Enclosure

F:\2000 Projects\00P133E - West Point Community Center\EA\West Point NYSDEC T&E.doc

**MATRIX  
ENVIRONMENTAL &  
GEOTECHNICAL  
SERVICES**

215 Ridgedale Avenue  
Florham Park NJ 07932  
973-660-0400  
973-660-0606 Fax  
WBE, DBE, 8(a)



July 23, 2003

New York State Department of Environmental Conservation  
New York Natural Heritage Program Information Services  
625 Broadway  
Albany, NY 12233

**RE: United States Military Academy at West Point  
West Point, Orange County, New York**

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Should you have any further questions or require additional information, please do not hesitate to contact me. Thank you for your time and assistance in this matter.

Sincerely,  
MATRIX Environmental & Geotechnical Services, Inc.

Celine Santiago Bass, P.W.S.  
Certified Ecologist

Enclosure

F:\2000 Projects\00P133E - West Point Community Center\EA\West Point NYSDEC Regional T&E.doc

**MATRIX  
ENVIRONMENTAL &  
GEOTECHNICAL  
SERVICES**

215 Ridgedale Avenue

Florham Park NJ 07932

973-660-0400

973-660-0606 Fax

WBE, DBE, 8(a)



July 23, 2003

United States Fish and Wildlife Service  
New York Field Office  
3817 Luker Rd.  
Cortland, NY 13045

**RE: United States Military Academy at West Point  
West Point, Orange County, New York**

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Sincerely,  
MATRIX Environmental & Geotechnical Services, Inc.

Celine Santiago Bass, P.W.S.  
Certified Ecologist

Enclosure

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**MATRIX  
ENVIRONMENTAL &  
GEOTECHNICAL  
SERVICES**

215 Ridgedale Avenue  
Florham Park NJ 07932  
973-660-0400  
973-660-0606 Fax  
WBE, DBE, 8(a)

**APPENDIX C**

**LIST OF AGENCIES AND PERSONS CONSULTED  
AND SUPPORTING INFORMATION**



US Army Corps  
of Engineers  
New York District  
WEST POINT, NEW YORK

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

APPENDIX C

LIST OF AGENCIES AND PERSONS CONSULTED  
AND SUPPORTING INFORMATION

Name of Contact Agency	Information Requested	Date Contacted	Date Responded
Charlene Houle Natural Heritage Program	Threatened & endangered species, and significant habitats	7/23/03	7/30/03
Patricia A. Kurkul National Marine Fisheries Service	Biologically important resources, Magnuson-Stevens Fishery Conservation and Management Act	7/23/03	9/23/03
David A. Stilwell US Fish and Wildlife Service	Threatened & endangered species, and significant habitats	7/23/03	8/4/03
Lee Kassin NYS Department of Environmental Conservation	Threatened & endangered species and significant habitats	7/23/03	8/12/03



US Army Corps  
of Engineers  
New York District  
New York District

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

**APPENDIX D**  
**DISTRIBUTION LIST**



US Army Corps  
of Engineers  
New York District  
NEW YORK DISTRICT

**Environmental Assessment for Community Activities Center**  
**United States Army Garrison**  
**West Point, New York**

**APPENDIX D**  
**DISTRIBUTION LIST**

Ms. Laura Dean  
Advisory Council on Historic Preservation  
Old Post Office Building  
Eastern Area  
1100 Pennsylvania Avenue, NW, Suite 809  
Washington, DC 20004

National Trust for Historic Preservation  
Attn: Ms. Marilyn Fenollosa  
7 Faneuil Hall Marketplace, 4th Floor  
Boston, MA 02109

U.S. Army Environmental Center  
Attn: Mr. Larry Mango, SFIM-AEC-EQ  
Bldg E4435  
5179 Hoadley Road  
Aberdeen Proving Ground, Maryland 21010-5401

U.S. Environmental Protection Agency  
Region II, Environmental Review Section,  
Strategic Planning & Multi-Media Programs Branch  
290 Broadway  
New York, NY 10007-1876  
Attn: Ms. Grace Musumeci

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

Ms. Margaret Duke  
New York State Department of Environmental Conservation  
Region 3, Division of Regulatory Affairs  
21 South Putt Corners Road  
New Paltz New York 12561-1696

Mr. Jefferey Anzevino  
Scenic Hudson, Inc.  
9 Vassar Street



US Army Corps  
of Engineers  
New York District  
NEW YORK DISTRICT

**Environmental Assessment for Community Activities Center**  
**United States Army Garrison**  
**West Point, New York**

Poughkeepsie, New York 12601

Executive Director  
Hudson Highlands Land Trust  
P.O. Box 226  
Garrison, NY 10524

Mr. Robert Chicks  
President  
Stockbridge-Munsee Nation of Wisconsin  
P.O. Box 70  
Bowler, Wisconsin 54416

Mr. Steven C. Resler  
Supervisor of Consistency Review and Analysis  
New York Coastal Management Program  
Department of State  
41 State Street  
Albany, New York 12231-0001

The Greenway Conservancy for the Hudson River Valley, Inc.  
and  
The Hudson River Valley National Heritage Area  
and  
Hudson River Valley Greenway Communities Council  
Attn: Barbara Kendall, Executive Director  
Capitol Building, Room 254  
Albany, New York 12224

The Nature Conservancy  
Eastern New York Chapter  
Conservation Office  
200 Broadway, 3rd Floor  
Troy, New York 12180

Mrs. Suzanne Moskola  
Community Library  
Building 622  
United States Military Academy  
West Point, New York 10996

Julia L. Butterfield Memorial Library  
Routes 301 & 9D  
Cold Spring, New York 10516

Desmond-Fish Library  
P.O. Box 265  
Routes 403 and 9D



US Army Corps  
of Engineers  
New York District  
NEW YORK DISTRICT

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

Garrison, New York 10524  
Attn: Carol Donick

Installations Management Agency  
Northeast Regional Office  
ATTN: SFIM-NE-ER (Potter)  
5A North Gate Road  
Ft. Monroe, VA 23651



US Army Corps  
of Engineers  
New York District  
New York District

Environmental Assessment for Community Activities Center  
United States Army Garrison  
West Point, New York

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*Final Environmental Assessment*